

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

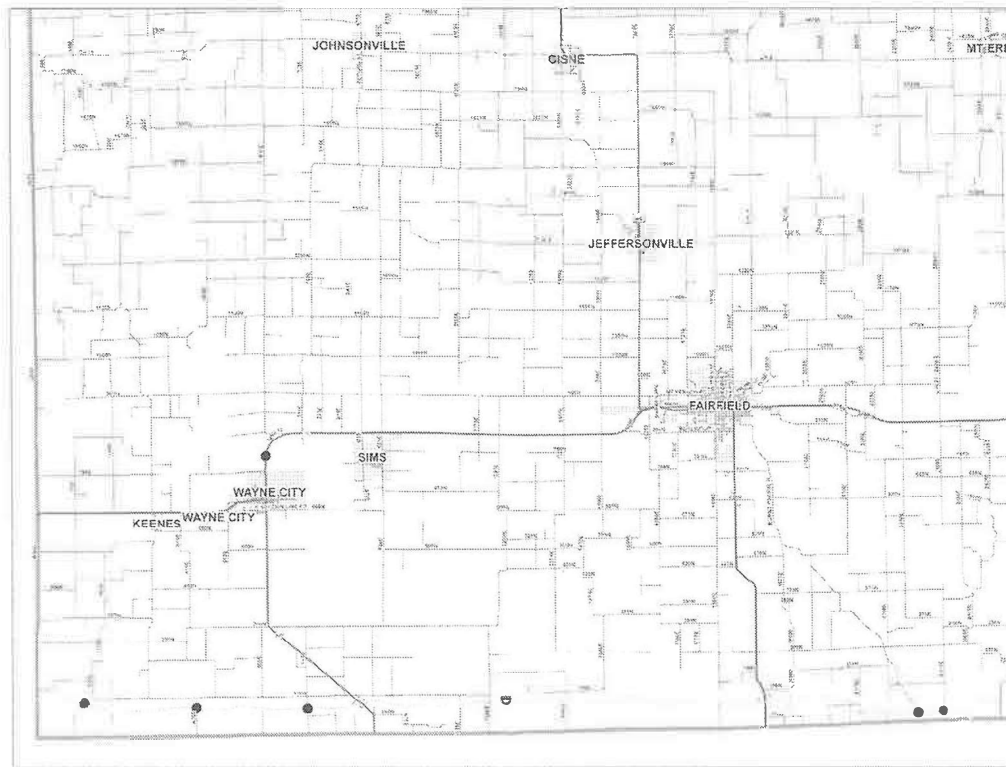
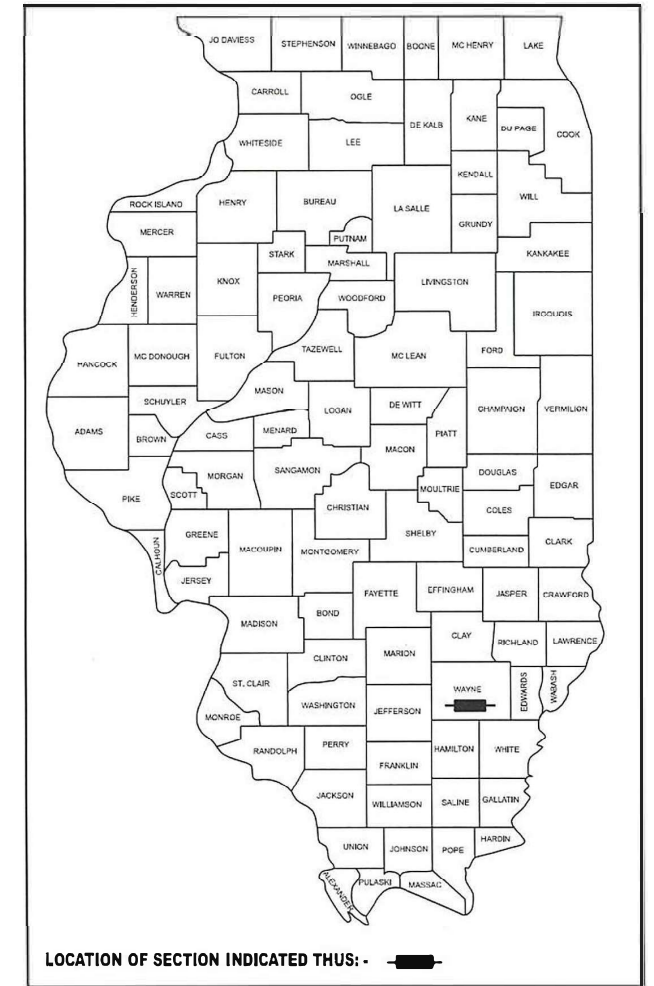
PROPOSED  
HIGHWAY PLANS

FAI 64, FAP 821 (I-64, IL 15)  
SECTION D7 BRIDGE PAINTING 2024-2  
BRIDGE PAINTING  
WAYNE COUNTY

C-97-144-23

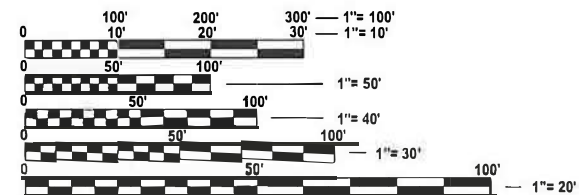
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	1
		ILLINOIS	CONTRACT NO. 74C67	

D-97-113-23



GROSS LENGTH = N/A FT. = N/A MILE  
NET LENGTH = N/A FT. = N/A MILE

FOR INDEX OF SHEETS, SEE SHEET NO. 2



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 EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER: MATT BOWER  
PROJECT MANAGER: STACY ANDERSON

CONTRACT NO. 74C67

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED January 31 2024  
Jeffrey P. Myer  
REGIONAL ENGINEER

March 22, 2024  
Steph M. A...  
ENGINEER OF DESIGN AND ENVIRONMENT

March 22, 2024  
Steph M. A...  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

**GENERAL NOTES**

THE PROPOSED PROJECT IS LOCATED AT 6 LOCATIONS: IL 15 AND I-64 IN WAYNE COUNTY.

THE WORK INCLUDED IN THIS SECTION CONSISTS OF CLEANING AND PAINTING THE BRIDGE AS SPECIFIED IN THE PLANS AND SPECIAL PROVISIONS.

THE STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED AS SPECIFIED IN THE PLANS AND THE SPECIAL PROVISIONS.

ALL DECK DRAINS SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/U. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THEIR OWN EXPENSE AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

ONLY STRUCTURAL STEEL IS TO BE PAINTED. ALL OTHER SURFACES WILL BE PROTECTED FROM BEING PAINTED. ALL PAINT AND OVERSPRAY WILL BE REMOVED AT THE CONTRACTOR'S EXPENSE.

THE SSPC QP1 AND QP2 PAINTING CONTRACTOR CERTIFICATION WILL BE REQUIRED FOR THIS PROJECT.

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, GENERAL NOTES, LOCATION DESCRIPTIONS
3	SUMMARY OF QUANTITIES
4-6	LOCATION MAPS
7-29	EXISTING STRUCTURE PLANS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER THE LAST NUMBERED SHEET:

000001-08	STANDARD SYMBOLS, ABBREVIATIONS, & PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
643001-02	SAND MODULE IMPACT ATTENUATORS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24' FROM PAVEMENT EDGE
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24' FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701201-05	LANE CLOSURE, 2L, 2W, FOR SPEEDS >= 45 MPH
701400-12	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701402-12	LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
701901-09	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

**LOCATION #1**

BRIDGE #1  
 ROUTE: FAP 821  
 MARKED: IL 15  
 SECTION: 96-17BR-2  
 STATION: 967+65  
 STRUCTURE NUMBER: 096-0003, CARRYING IL 15 OVER SKILLET FORK WAYNE COUNTY

COLOR OF THE FINISH COAT SHALL BE GREEN, MUNSELL 10B 3/6.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All structural steel, on all beams, bearings, and diaphragms, within 5' (measured along the beam) of the abutments and any expansion joints shall be cleaned by SSPC-SP10- Near White Metal Blast Cleaning. The outside and bottoms of both fascia beams, for the entire length of the beams, shall be cleaned in their entirety by SSPC-SP10- Near White Metal Blast Cleaning.

The designated areas cleaned per Near White Metal Blast Cleaning - SSPC-SP10 shall be painted according to the requirements of Paint System 1 - OZ/E/U.

NO air monitors will be required at this location.

**LOCATION #2**

BRIDGE #2  
 ROUTE: FAI RT 64  
 MARKED: IL RTE64  
 SECTION: 96-1HB-1  
 STATION: 3381+08.10  
 STRUCTURE NUMBER: 096-0033, CARRYING FAS-1879 (CH-13) OVER FAI-64 WAYNE COUNTY

COLOR OF THE FINISH COAT SHALL BE GRAY, MUNSELL 5B 7/1.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All structural steel, on all beams, bearings, and diaphragms, shall be cleaned by SSPC-SP10- Near White Metal Blast Cleaning. The outside and bottoms of both fascia beams, for the entire length of the beams, shall be cleaned in their entirety by SSPC-SP10- Near White Metal Blast Cleaning.

The designated areas cleaned per Near White Metal Blast Cleaning - SSPC-SP10 shall be painted according to the requirements of Paint System 1 - OZ/E/U.

NO air monitors will be required at this location.

**LOCATION #3**

BRIDGE #3  
 ROUTE: FAI RT 64  
 MARKED: IL RTE64  
 SECTION: 96-1BR-2  
 STATION: 3539+48.95  
 STRUCTURE NUMBER: 096-0034, CARRYING TR-134 OVER FAI-64 WAYNE COUNTY

COLOR OF THE FINISH COAT SHALL BE GRAY, MUNSELL 5B 7/1.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All structural steel, on all beams, bearings, and diaphragms, shall be cleaned by SSPC-SP10- Near White Metal Blast Cleaning. The outside and bottoms of both fascia beams, for the entire length of the beams, shall be cleaned in their entirety by SSPC-SP10- Near White Metal Blast Cleaning.

The designated areas cleaned per Near White Metal Blast Cleaning - SSPC-SP10 shall be painted according to the requirements of Paint System 1 - OZ/E/U.

NO air monitors will be required at this location.

**LOCATION #4**

BRIDGE #4  
 ROUTE: FAI RT 64  
 MARKED: IL RTE64  
 SECTION: 96-H2B-1  
 STATION: 3693+17.29  
 STRUCTURE NUMBER: 096-0035, CARRYING TR202 OVER FAI-64 WAYNE COUNTY

COLOR OF THE FINISH COAT SHALL BE GRAY, MUNSELL 5B 7/1.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All structural steel, on all beams, bearings, and diaphragms, shall be cleaned by SSPC-SP10- Near White Metal Blast Cleaning. The outside and bottoms of both fascia beams, for the entire length of the beams, shall be cleaned in their entirety by SSPC-SP10- Near White Metal Blast Cleaning.

The designated areas cleaned per Near White Metal Blast Cleaning - SSPC-SP10 shall be painted according to the requirements of Paint System 1 - OZ/E/U.

NO air monitors will be required at this location.

**LOCATION #5**

BRIDGE #5  
 ROUTE: FAI RT 64  
 MARKED: IL RTE64  
 SECTION: 96-4BR-3  
 STATION: 4853+07.84  
 STRUCTURE NUMBER: 096-0037, CARRYING CH6 OVER FAI-64 WAYNE COUNTY

COLOR OF THE FINISH COAT SHALL BE GRAY, MUNSELL 5B 7/1.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All structural steel, on all beams, bearings, and diaphragms, shall be cleaned by SSPC-SP10- Near White Metal Blast Cleaning. The outside and bottoms of both fascia beams, for the entire length of the beams, shall be cleaned in their entirety by SSPC-SP10- Near White Metal Blast Cleaning.

The designated areas cleaned per Near White Metal Blast Cleaning - SSPC-SP10 shall be painted according to the requirements of Paint System 1 - OZ/E/U.

One air monitors will be required at this location.

**LOCATION #6**

BRIDGE #6  
 ROUTE: FAI RT 64  
 MARKED: IL RTE64  
 SECTION: 96-4BR-4  
 STATION: 4588+25.48  
 STRUCTURE NUMBER: 096-0038, CARRYING TR536 OVER FAI-64 WAYNE COUNTY

COLOR OF THE FINISH COAT SHALL BE GRAY, MUNSELL 5B 7/1.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All structural steel, on all beams, bearings, and diaphragms, shall be cleaned by SSPC-SP10- Near White Metal Blast Cleaning. The outside and bottoms of both fascia beams, for the entire length of the beams, shall be cleaned in their entirety by SSPC-SP10- Near White Metal Blast Cleaning.

The designated areas cleaned per Near White Metal Blast Cleaning - SSPC-SP10 shall be painted according to the requirements of Paint System 1 - OZ/E/U.

NO air monitors will be required at this location.

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REV. - MS

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PLOT SCALE = \$SCALE\$		CHECKED -	REVISED -			CONTRACT NO. 74C67					
PLOT DATE = 3/6/2024		DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO
ILLINOIS FED. AID PROJECT											

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0047		
67100100	MOBILIZATION	L SUM	1	1		
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	10	10		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	1		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1500	1500		
70400125	PINNING TEMPORARY CONCRETE BARRIER	EACH	100	100		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	4500	4500		
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	5	5		
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	15	15		
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		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0047		
Z0007103	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 3	L SUM	1	1		
Z0007104	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 4	L SUM	1	1		
Z0007105	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 5	L SUM	1	1		
Z0007106	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 6	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		
Z0010504	CLEANING AND PAINTING STEEL BRIDGE NO. 4	L SUM	1	1		
Z0010505	CLEANING AND PAINTING STEEL BRIDGE NO. 5	L SUM	1	1		
Z0010506	CLEANING AND PAINTING STEEL BRIDGE NO. 6	L SUM	1	1		

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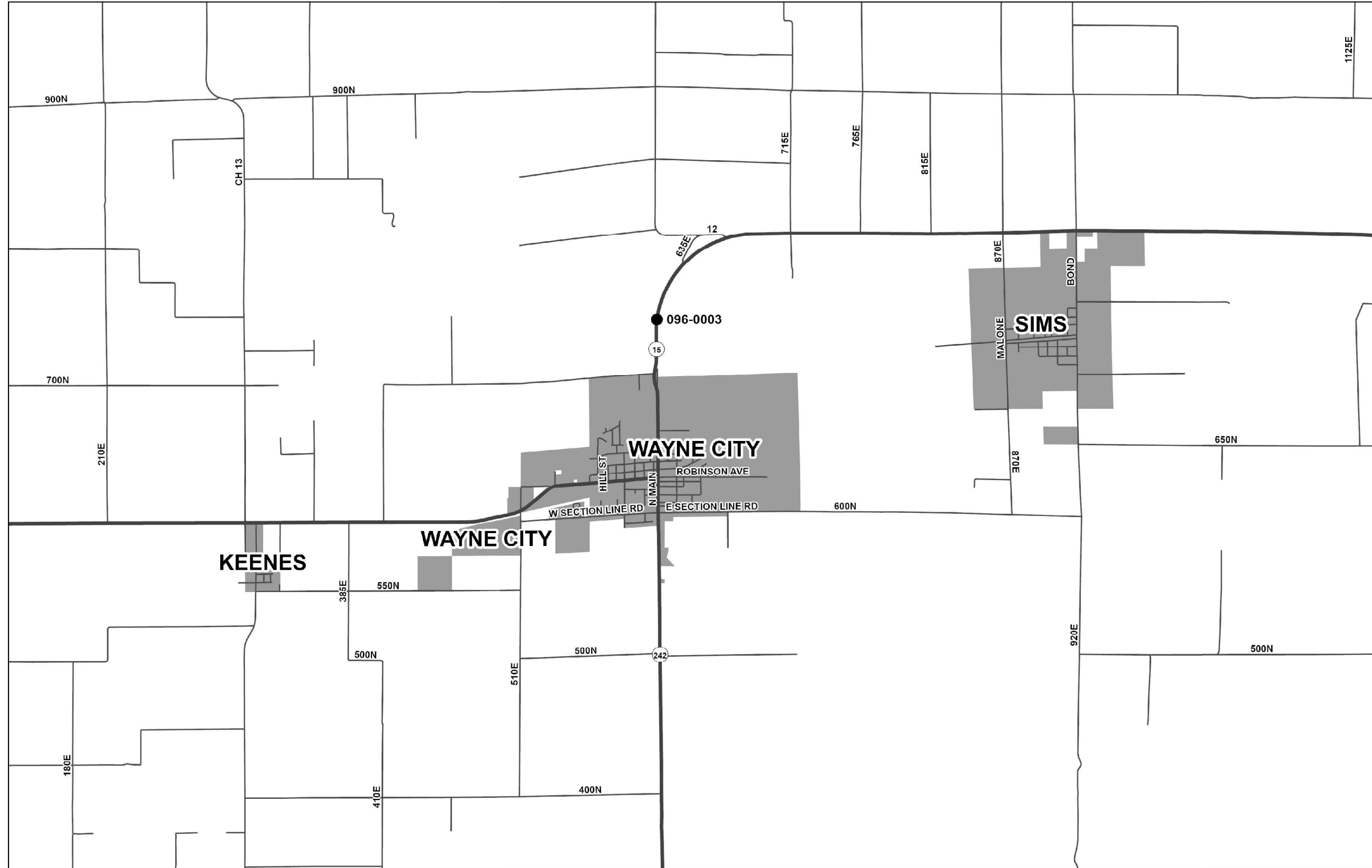
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PLOT DATE = 1/16/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	3
CONTRACT NO. 74C67				
ILLINOIS FED. AID PROJECT				



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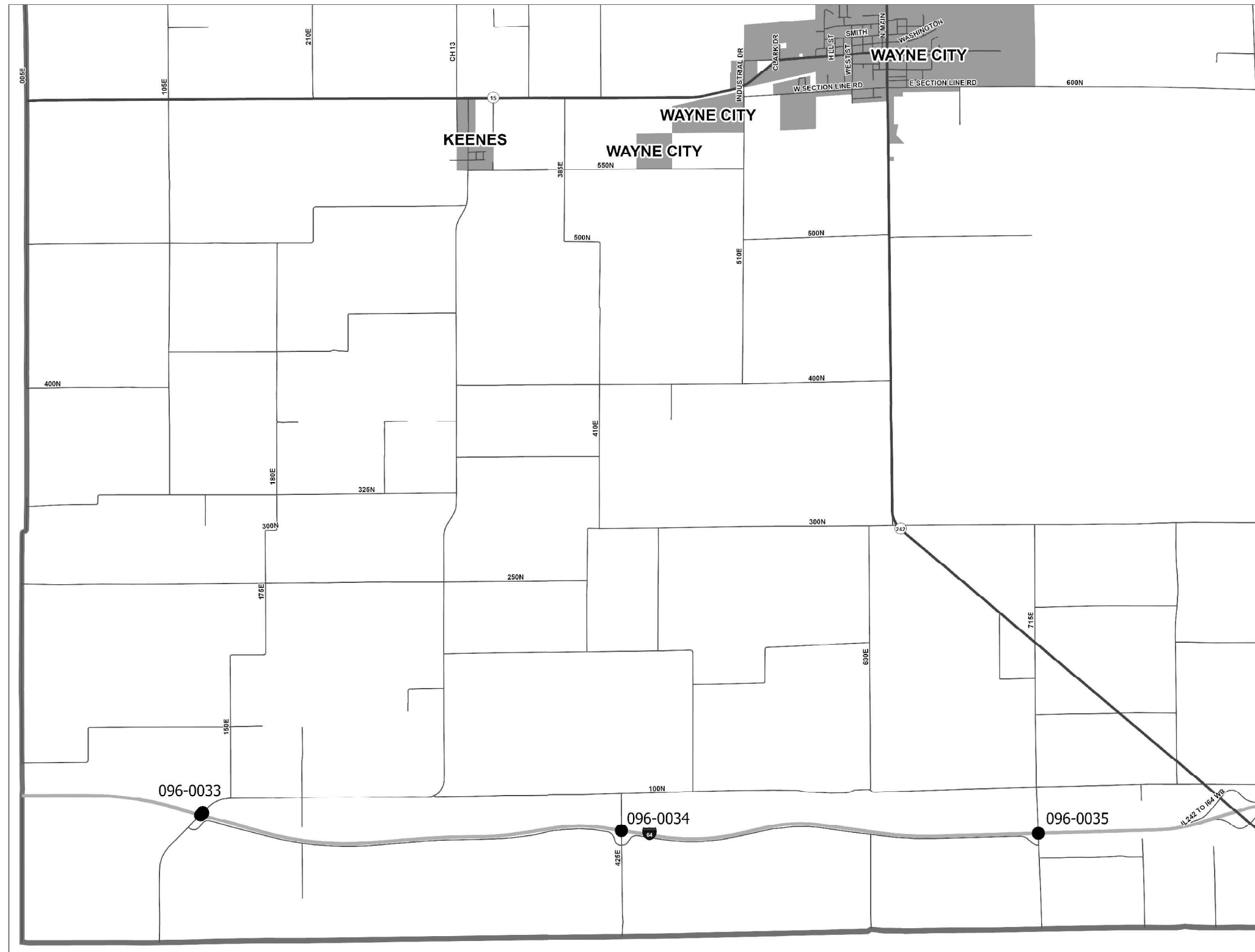
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PLOT DATE = 1/30/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>LOCATION 1</b>			
<b>096-0003</b>			
SCALE:	SHEET	OF	SHEETS
		STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	4
CONTRACT NO. 74C67				
ILLINOIS FED. AID PROJECT				

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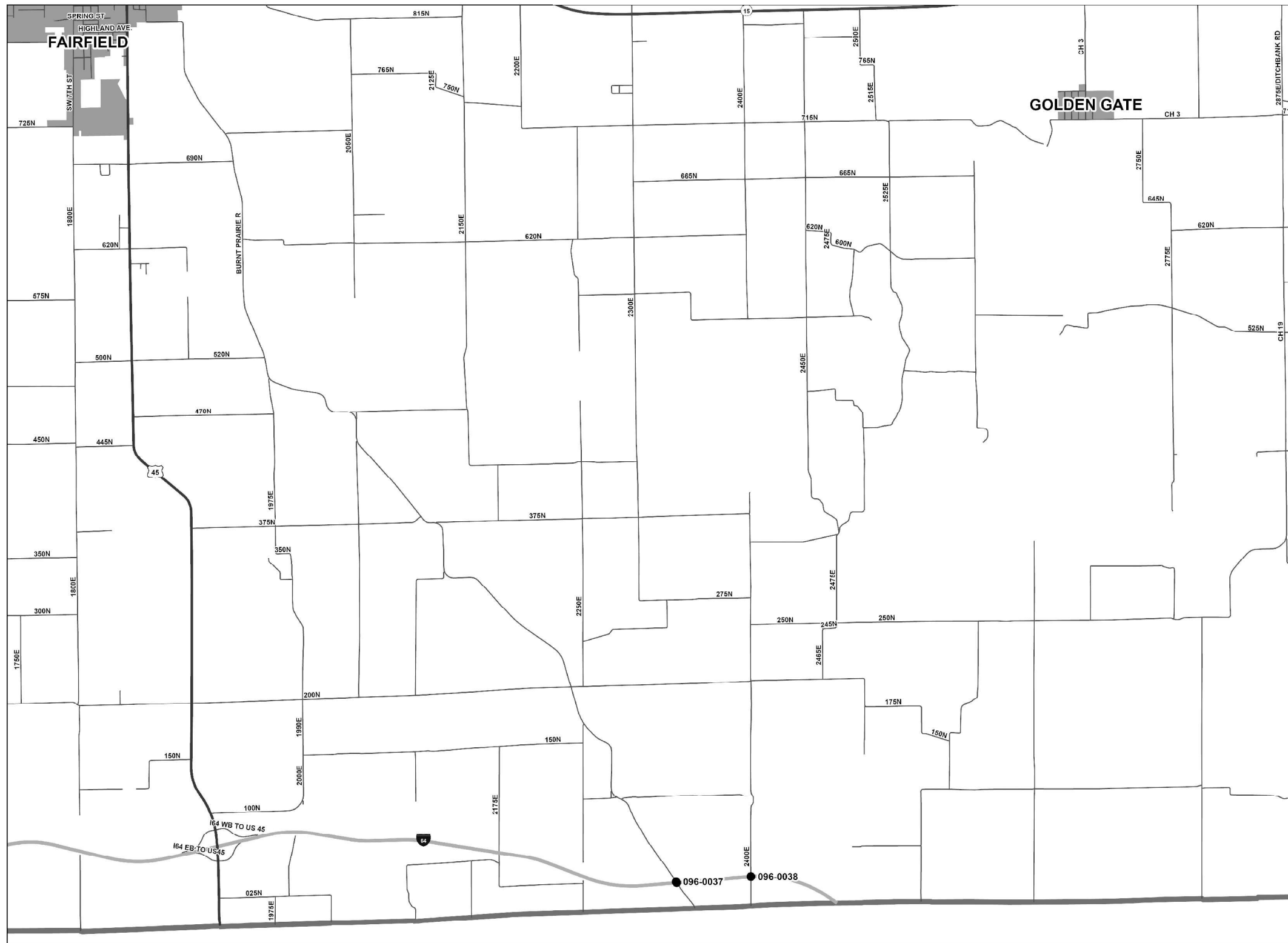
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	DRAWN -	REVISED -
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PLOT DATE = 1/30/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**LOCATION 2 - 4  
 096-0033, 34, 35**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	5
CONTRACT NO. 74C67			ILLINOIS FED. AID PROJECT	



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PLOT DATE = 1/30/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**LOCATION 5 & 6  
 096-0037 & 38**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	6
CONTRACT NO. 74C67				
ILLINOIS FED. AID PROJECT				

BM. Brass Monument Gaging Station @ S.E. Corner of Hubbard Elev. 412.54

Existing Structure: SN 096-0003. Three span (59'-5"-69'-5"-59'-5") R.C. deck on continuous steel I-beams. 191'-10 1/4" x 33'-8". Solid R.C. piers and spill-thru abuts. Remove existing superstructure; widen substructure. Use staged construction to maintain one lane of traffic at all times. No salvage of removed material.

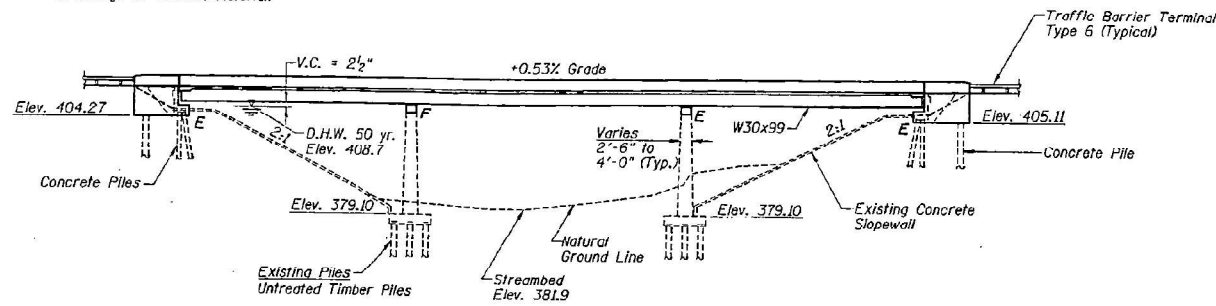
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 821	17BR-2	WAYNE	76	24
STA. _____ TO STA. _____		ILLINOIS FED. AID PROJECT		

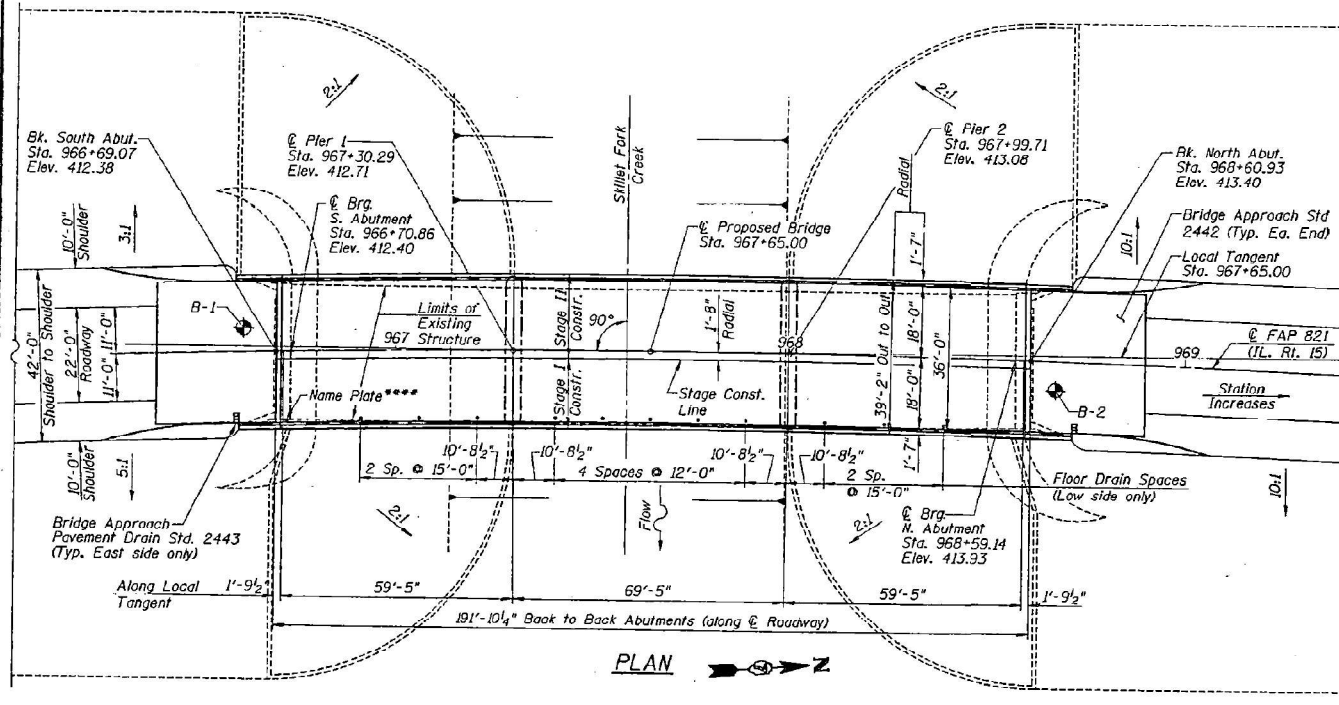
Bridge Sheet 1 of 21 Sheets

GENERAL NOTES

See Bridge Sheet 2  
For General Notes.



ELEVATION

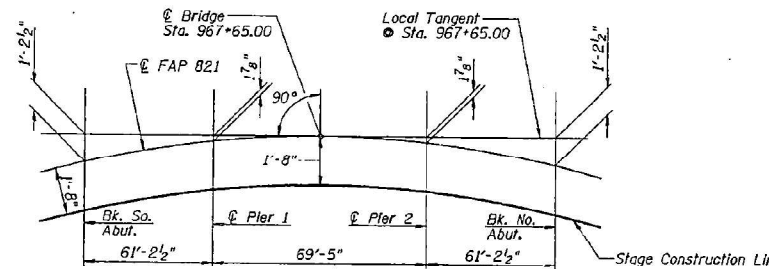


PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Superstructures	Cu. Yd.	216.8		216.8
Concrete Structures	Cu. Yd.		59.3	59.3
Reinforcement Bars (Epoxy Coated)	Pounds	53,820	7,550	61,370
Name Plates	Each	1		1
Floor Drains	Each	11		11
Furnishing Concrete Piles	Foot		439	439
Driving Concrete Piles	Foot		439	439
Test Piles, Concrete	Each		1	1
Structure Excavation	Cu. Yd.		310	310
Removal of Existing Superstructures	Each	1		1
Structural Steel	L.S.	1		1
Elastomeric Bearings (Type I)	Each		12	12
Elastomeric Bearings (Type II)	Each		6	6
Preformed Joint Seal, 2 1/2"	Foot	39		39
Preformed Joint Seal, 4"	Foot	39		39
Concrete Removal	Cu. Yd.		22.9	22.9
Bar Splicers	Each	603	36	639
Protective Coat	Sq. Yd.	174		174
Bridge Deck Grooving	Sq. Yd.	758		758
Bridge Seal Sealer	Sq. Ft.	215		215
Stud Shear Connectors	Each	3,096		3,096
Temporary Bridge Rail	Foot	192		192

\* Quantity is for top & inside of parapet only



HORIZONTAL OFFSET SKETCH

WATERWAY INFORMATION

Drainage Area = 464 Sq. Mi. Low Grade Elev. = 409.82 @ Sta. 954+00

Flood	Freq. Yr.	Opening, Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
		Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	0003	10,995	2,970	2,970				
	0062	10,975	3,512	3,512				
	0001	5,155	1,558	1,558	408.7	0.4	0.4	409.1
	TOTAL	28,575	8,040	8,040				
	Base	0003	11,530	3,015	3,015			
0062	12,475	3,890	3,890					
0001	5,595	1,620	1,620	409.8	0.4	0.4	410.2	
TOTAL	33,130	8,525	8,525					
Overtopping	0003	11,305	3,000	3,000				
	0062	12,210	3,700	3,700				
	0001	5,485	1,590	1,590	409.3	0.5	0.5	409.8
	TOTAL	31,440	8,290	8,290				

NOTE: Total O's also include flow which overtops upstream levees & is conveyed by S.N. 096-0004. 050 = 1,450 cfs 0100 = 3,530 cfs 070 = 2,440 cfs

DESIGN SPECIFICATIONS

1992 AASHTO & 1993 Interim 1983 Seismic Retrofitting Guidelines For Highway Bridges FHWA/RO-83-007 1993 AASHTO Guide Specifications For Horizontally curved Bridges.

DESIGN STRESSES (New Constr.)

FIELD UNITS  
f'c = 3,500 p.s.i.  
fy = 60,000 p.s.i. (Reinforcement)  
Fy = 50,000 p.s.i. (Structural Steel M270 - GR50)  
f'c = 800 p.s.i. (Exist. Substructure)  
fs = 20,000 p.s.i. (Exist. Reinforcement)

LOADING HS 20-44

Allow 25 lbs./sq.ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Category B  
Bedrock Acceleration Coefficient 0.09  
Site Coefficient 1.2

HORIZONTAL CURVE DATA

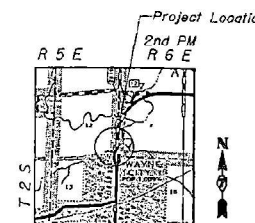
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D=1°30"  
T=3812.80'  
R=3813.83'  
L=5992.96'  
E=1577.26'  
P.I.=Sta. 999+38.12  
P.E.=0.02 ft./ft. (Exist.)  
0.034 ft./ft. (Prop.)

Entire Bridge and approaches fully super-elevated.

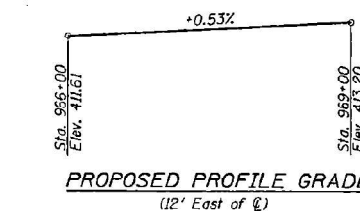
STATION 967+65.00  
BUILT 199 BY  
STATE OF ILLINOIS  
F.A.P. RT. 821 + SEC. 17BR-2  
LOADING HS20  
STR. NO. 096-0003

NAME PLATE

See Std. 2113  
Clean & relocate existing Name Plate next to the new Name Plate. (Coast incidental to Name Plates).



LOCATION PLAN  
NTS



PROPOSED PROFILE GRADE  
(12' East of Q)



Expires: 11/30/94

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
GENERAL PLAN AND ELEVATION  
FAP 821 (IL RTE 15) OVER SKILLET FORK  
WAYNE COUNTY, SEC 17BR-2, STA. 967+65  
S.N. 096-0003

SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_  
DATE: 11/2/94

DRAWN BY: LANDREY  
DESIGNED BY: BRADFORD  
CHECKED BY: BANE

GREENE & BRADFORD, INC.  
OF SPRINGFIELD  
REGISTERED PROFESSIONAL ENGINEERS  
ILLINOIS LICENSE NO. 091-083376

COMPUTER FILE NO.  
93032GPE-20

FAP 821 (IL RTE 15) WAYNE COUNTY

MODEL: Default  
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USER NAME	DESIGNED	REVISIONS
stacy.anderson	-	-
	DRAWN	REVISIONS
	CHECKED	REVISIONS
	DATE	REVISIONS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0003

SCALE: SHEET OF SHEETS STA. TO STA.

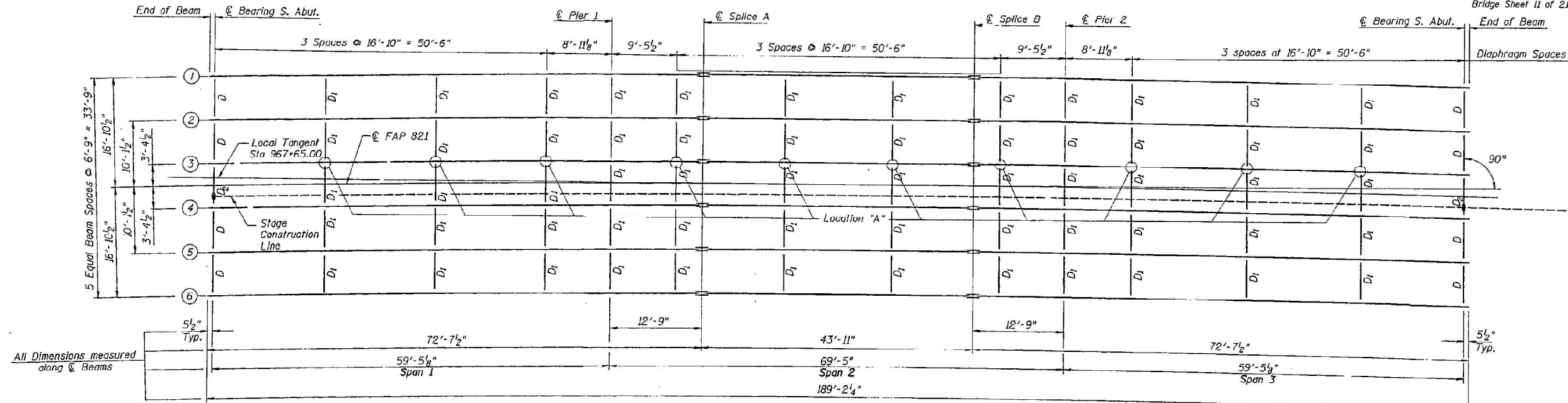
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	7
CONTRACT NO. 74C67				
ILLINOIS		FED. AID PROJECT		





STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 821	17BR-2	WAYNE	75	34
STA.	TO STA.	ILLINOIS FED. AID PROJECT		
111.000	111.000	BRIDGE SHEET 11 OF 21 SHEETS		



FRAMING PLAN  
All beams W30x99 (NTR)

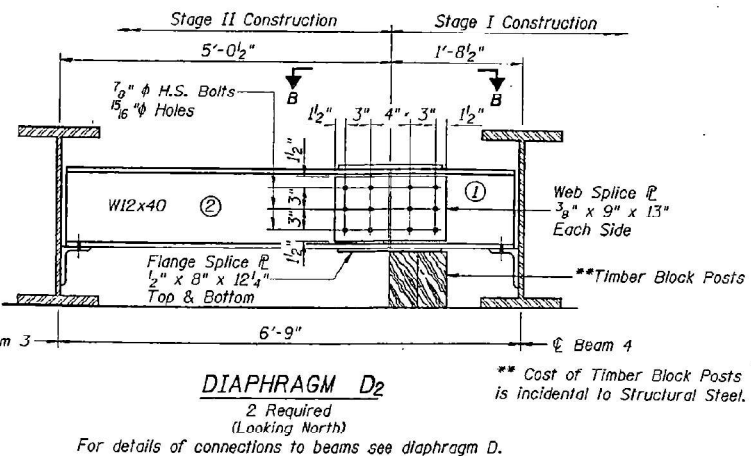
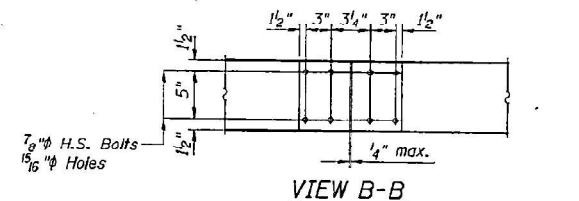
Note: All longitudinal dimensions are along each Beam.  
All transverse dimensions are radial.

BEAM	RADIUS (FT.)
1	3836.705
2	3829.955
3	3823.205
4	3816.455
5	3809.705
6	3802.955

OFFSETS FROM LOCAL TANGENT @ 967+65.00

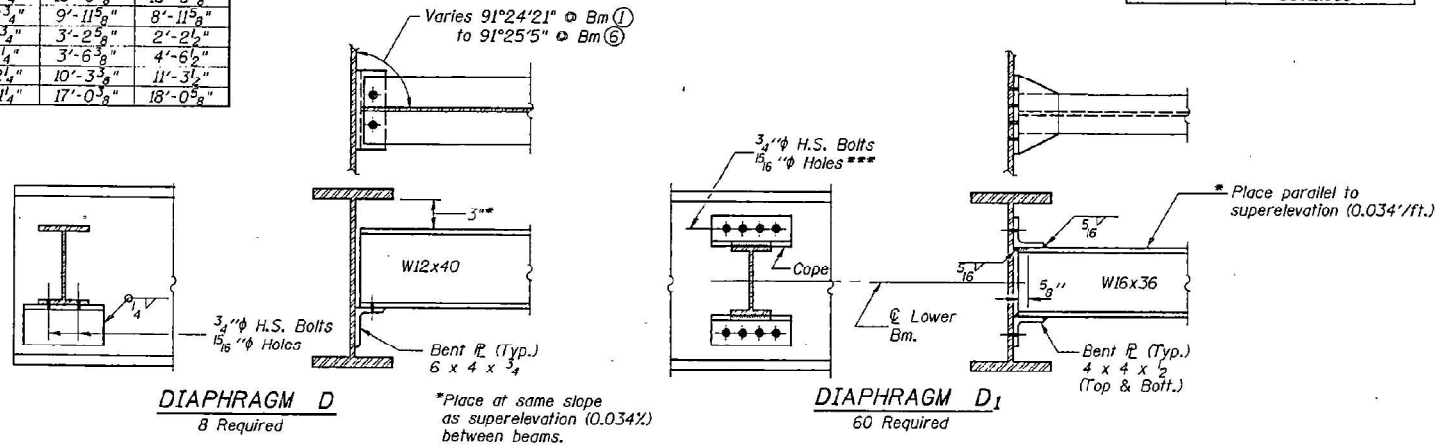
BM	LOC	<math>\phi</math> Brg S. Abut.	<math>\phi</math> Pier 1	Splice A	Splice B	<math>\phi</math> Pier 2	<math>\phi</math> Brg N. Abut.
1		15'-8 3/8"	16'-8 3/8"	16'-9 3/8"	16'-9 3/8"	16'-8 3/8"	15'-8 3/8"
2		8'-11 5/8"	9'-11 5/8"	10'-0 3/4"	10'-0 3/4"	9'-11 5/8"	8'-11 5/8"
3		2'-2 1/2"	3'-2 3/8"	3'-3 3/8"	3'-3 3/8"	3'-2 3/8"	2'-2 1/2"
4		4'-6 1/2"	3'-6 3/8"	3'-5 1/4"	3'-5 1/4"	3'-6 3/8"	4'-6 1/2"
5		11'-3 1/2"	10'-3 3/8"	10'-2 1/4"	10'-2 1/4"	10'-3 3/8"	11'-3 1/2"
6		18'-0 3/8"	17'-0 3/8"	16'-11 1/4"	16'-11 1/4"	17'-0 3/8"	18'-0 3/8"

\*\*\*Use 1 1/2" x 1 1/2" slotted holes in Bent R 4X4X 1/2 at "A" only. Provide 5/16" plate washers for slotted holes. Bolts shall be finger tightened prior to the deck pour for Stage II Constr. Tighten bolts after deck is poured.



DIAPHRAGM D2 CONSTRUCTION SEQUENCE

- 1.) Order Diaphragm D2 in two sections with lengths of 1'-7 3/4" and 4'-11 3/4".
- 2.) Attach section ① of Diaphragm to Beam 4 and top flange splice R during Stage I Construction.
- 3.) Place Timber Block Posts between section ① of diaphragm and abutment bearing seat.
- 4.) Attach section ② of diaphragm to both Beam 3 and top flange splice R during Stage II Construction.
- 5.) Attach web splice plates to sections ① and ② of diaphragms.
- 6.) Remove Timber Block Posts.
- 7.) Attach bottom flange splice plate to sections ① and ② of diaphragms.



ILLINOIS DEPARTMENT OF TRANSPORTATION  
**STRUCTURAL STEEL**  
FAP 821 (IL RTE. 15) OVER SKILLET FORK  
WAYNE COUNTY, SEC 17BR-2, STA. 967+65.00  
S.N. 036-0033

REVISIONS  
NAME DATE

SCALE: VERT. HORIZ.  
DATE: 9/12/94

DRAWN BY: LANDREY  
DESIGNED BY: BRADFORD  
CHECKED BY: ARIFF

GREENE & BRADFORD, INC.  
OF SPRINGFIELD  
REGISTERED PROFESSIONAL ENGINEERS  
AND ARCHITECTS  
ILLINOIS LICENSE NO. 021-115889

COMPUTER FILE NO.  
93032S1-1

FAP 821 (IL RTE 15) WAYNE COUNTY

USER NAME = stacy.anderson	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0003

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	9
CONTRACT NO. 74C67				
ILLINOIS FED. AID PROJECT				

MODEL: Default  
FILE NAME: c:\pwworkspace\stacyanderson\93032S1.dgn

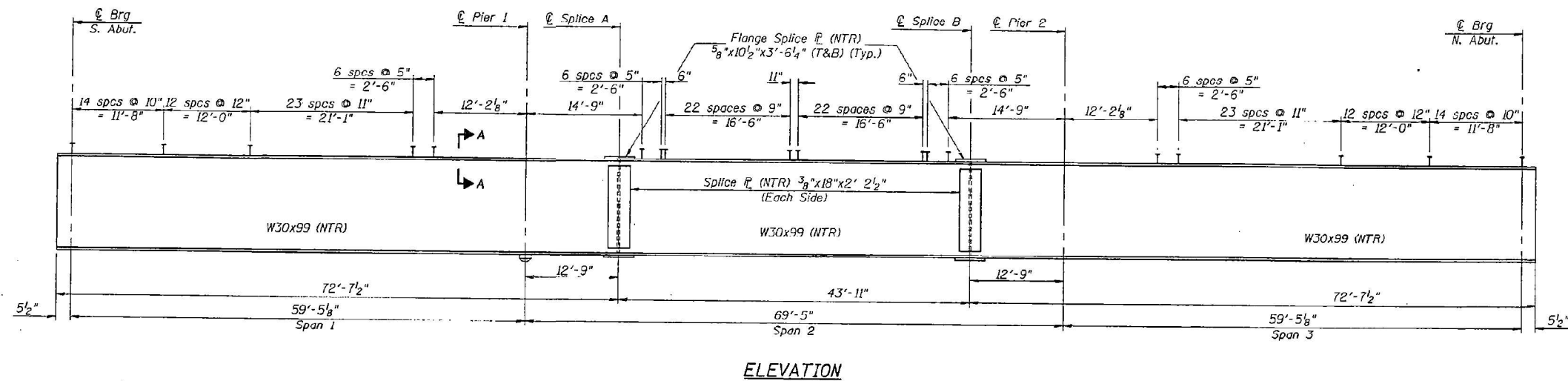
DESIGNED BY: BRADFORD  
CHECKED BY: ARIFF  
DRAWN BY: LANDREY

APPROVED BY: BANE

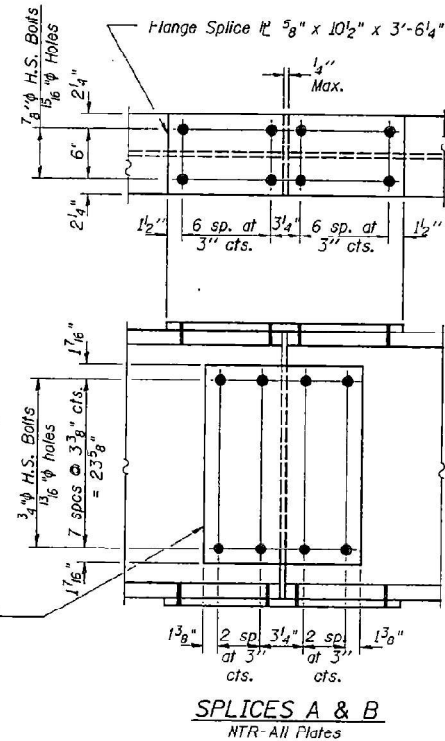
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 821	17BR-2	WAYNE	16	35
STA.	TO STA.			
ILL. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

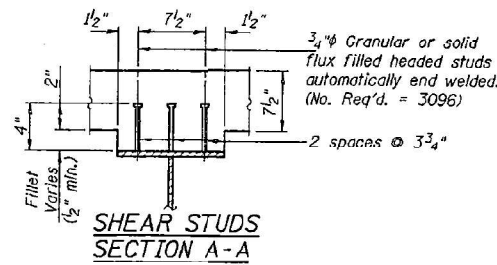
Bridge Sheet 12 of 21 Sheets



ELEVATION



SPLICES A & B  
NTR - All Plates



SHEAR STUDS  
SECTION A-A

TOP OF BEAM ELEVATIONS\*

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
Center Bearing South Abut.	412.25	412.02	411.79	411.56	411.33	411.10
Center Pier 1	412.56	412.34	412.11	411.88	411.65	411.42
Center Splice A	412.63	412.41	412.18	411.95	411.72	411.49
Center Splice B	412.86	412.63	412.40	412.17	411.95	411.72
Center Pier 2	412.93	412.70	412.47	412.24	412.02	411.79
Center Bearing North Abut.	413.25	413.02	412.79	412.56	412.33	412.10

\*For fabrication use only

NTR = Notch Toughness Requirement

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**STRUCTURAL STEEL**  
FAP 821 (IL RTE. 15) OVER SKILLET FORK  
WAYNE COUNTY, SEC 17BR-2, STA. 967+45.00  
S.N. 096-0003

SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_  
DATE: 9/12/94

DRAWN BY: LANDREY  
DESIGNED BY: BRADFORD  
CHECKED BY: ARIF

GREENE & BRADFORD, INC.  
OF GREENSBORO

COMPUTER FILE NO.  
9303252-1

I-2-D 2-26-93

FAP 821 (IL RTE 15) WAYNE COUNTY

MODEL: Default  
FILE NAME: c:\pwworkspace\stefanmak0893577\0774067-sh-plan.dgn

DRAWN BY: LANDREY  
CHECKED BY: ARIF  
DESIGNED BY: BRADFORD  
APPROVED BY: BANE

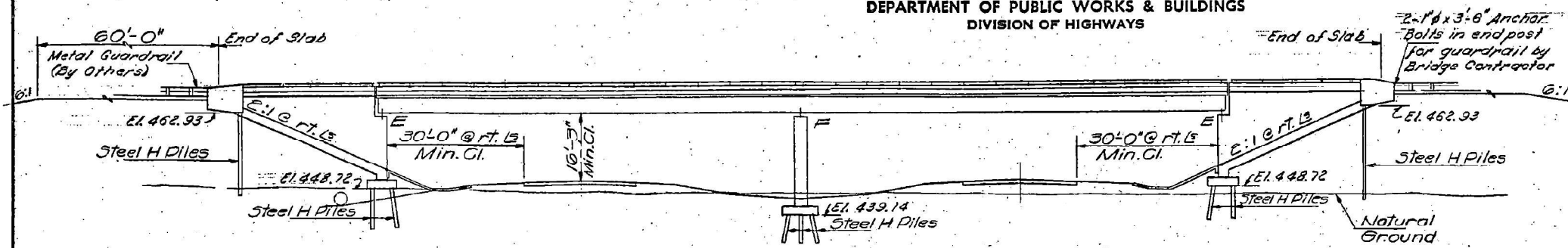
USER NAME = stacy.anderson	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING STRUCTURE PLANS 096-0003</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 100,000' / in.	DRAWN -	REVISED -			VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	10	
PLOT DATE = 1/30/2024	CHECKED -	REVISED -			CONTRACT NO. 74C67					
	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO

ILLINOIS FED. AID PROJECT

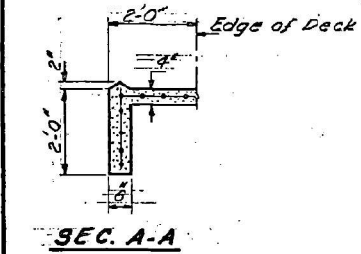
B.M. #17 U.S.G.S. Mon. long station mark  
Sta. 59+79 C.H. 13 34.2' Lt. El. 449.24

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
64	96186	WAYNE	28	7	14 SHEETS

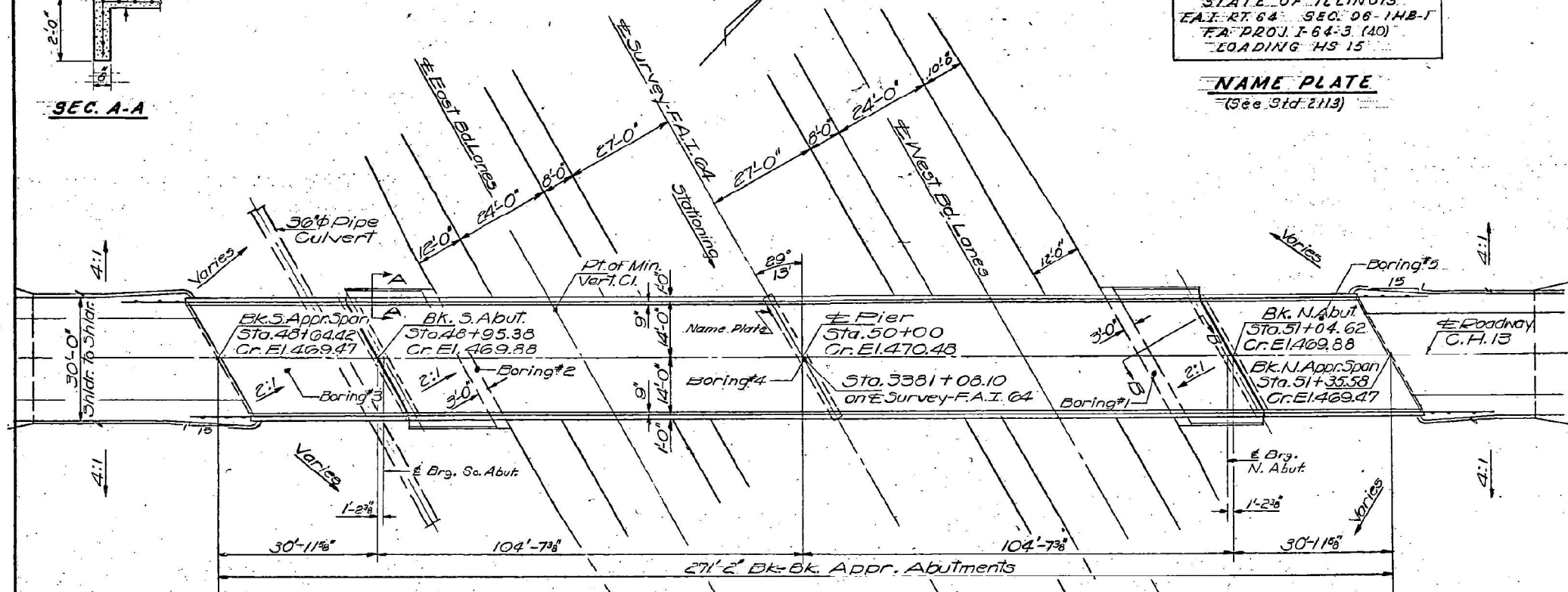


ELEVATION

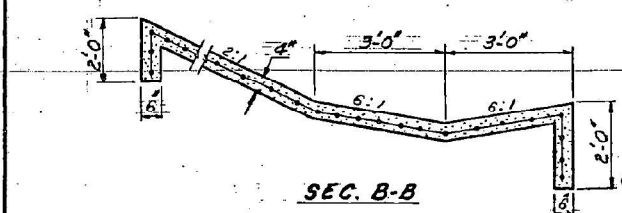


STATION 3381+08.10  
BUILT 19 BY  
STATE OF ILLINOIS  
E.A.I. RT. 64 SEC. 96-1HB-1  
F.A. PROJ. I-64-3 (40)  
LOADING HS 15

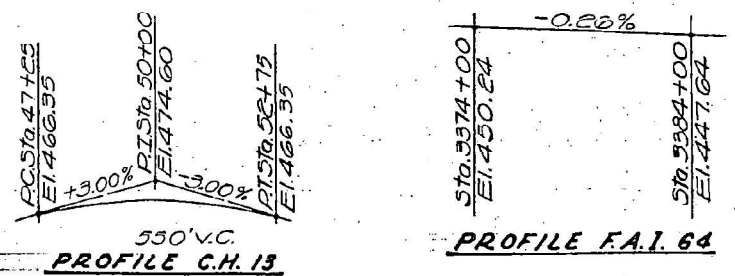
NAME PLATE  
(See Std. 2113)



PLAN



SEC. B-B



DESIGN STRESSES

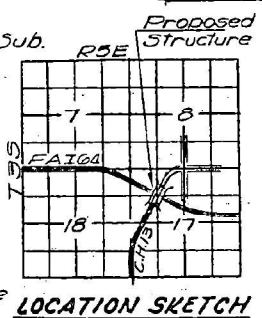
FIELD UNITS

$f_c = 1200$  psi. Deck Slab  
 $f_c = 1400$  psi. Curb, Parapet, Sub.  
 $f_s = 20,000$  psi. Reinf.  
 $f_s = 20,000$  psi. Struct.  
 $V_c = 75$  psi. Flgs.  
 $n = 10$

PREC. PRESTR. UNITS

$f_c = 5000$  psi.  
 $f_{ti} = 1000$  psi.  
 $f_b = 248,000$  psi. Strands  
 $f_{si} = 173,000$  psi. Strands  
Allowable Fut. W.S. 25"/ft  
Allowable  $\Delta \leq 1/1600$  Composite

LOADING HS15-44



LOCATION SKETCH

GENERAL NOTES

All reinforcement bars shall be lapped 24 dia. unless otherwise shown.  
Fastenings shall be high strength bolts. Bolts 3/4", open holes 1 1/8" unless otherwise noted.  
The Basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.  
Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.  
Anchor bolts shall be set before bolting cross frames over supports.  
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58 lb. per 100 sq. ft.  
The Contractor shall drive C steel test piles (10BP42) in permanent locations at the Pier and South Abutment as directed by the Engineer before ordering the remainder of piles. Drive all piles to refusal.  
An alternate strand pattern using Extra High Strength Prestressing strand (270 K.S.I.) is permitted.  
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.  
The concrete joint section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Hardrock Concrete.  
Calculated plan weight of Structural Steel - 201,000 lb.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Class A Excavation for Structures	Cu. Yds.		47	47
Protective Coat	Sq. Yds.	1005		1005
Class X Concrete	Cu. Yds.	265.4	234.6	500.0
Precast Prestressed Concrete T-Beam (36")	Lin. Ft.	118		118
Structural Steel	L.S.	0.4		0.4
Stud Shear Connectors	Ea.	2160		2160
Aluminum Lathing	Lin. Ft.	531		531
Reinforcement Bars	Lbs.	59410	28140	87550
Steel Piles (10BP42)	Lin. Ft.		2083	2083
Test Piles Steel (10BP42)	Ea.		2	2
Name Plates	Ea.		1	1
Slope Wall (4")	Sq. Yds.		207	207
Bridge Seat Sealant	L.S.		1	1

GENERAL PLAN & ELEVATION

PROJ. I-64-3 (40) 86  
C.H. 13 OVER F.A.I. RT. 64  
F.A.I. RT. 64 SEC. 96-1HB-1  
WAYNE COUNTY  
STA. 3381+08.10

DESIGNED Charles P. Shuman  
CHECKED Patrick S. G.  
DRAWN J. Kessler  
CHECKED Patrick S. G.  
JANUARY 21 1970  
EXAMINED  
PASSED  
APPROVED  
DESIGNED BY BRIDGE AND TRAFFIC DIVISION  
DESIGNED BY BRIDGE DIVISION  
CHIEF BRIDGE ENGINEER

USER NAME = stacy.anderson  
PLOT SCALE = 100,000' / in.  
PLOT DATE = 1/30/2024

DESIGNED -  
DRAWN -  
CHECKED -  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0033

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
VAR D7 BRIDGE PAINTING 2024-2 WAYNE 29 11  
ILLINOIS FED. AID PROJECT CONTRACT NO. 74C67

MODEL: Default  
FILE NAME: c:\pwworkspace\stefanmak\0983577\0774067-sh-plan.dgn

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	14MB1	WAYNE	28	9

14 SHEETS

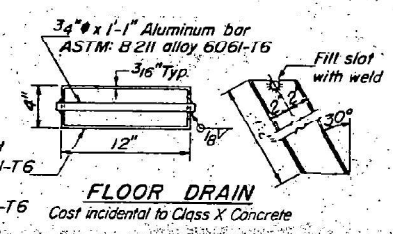
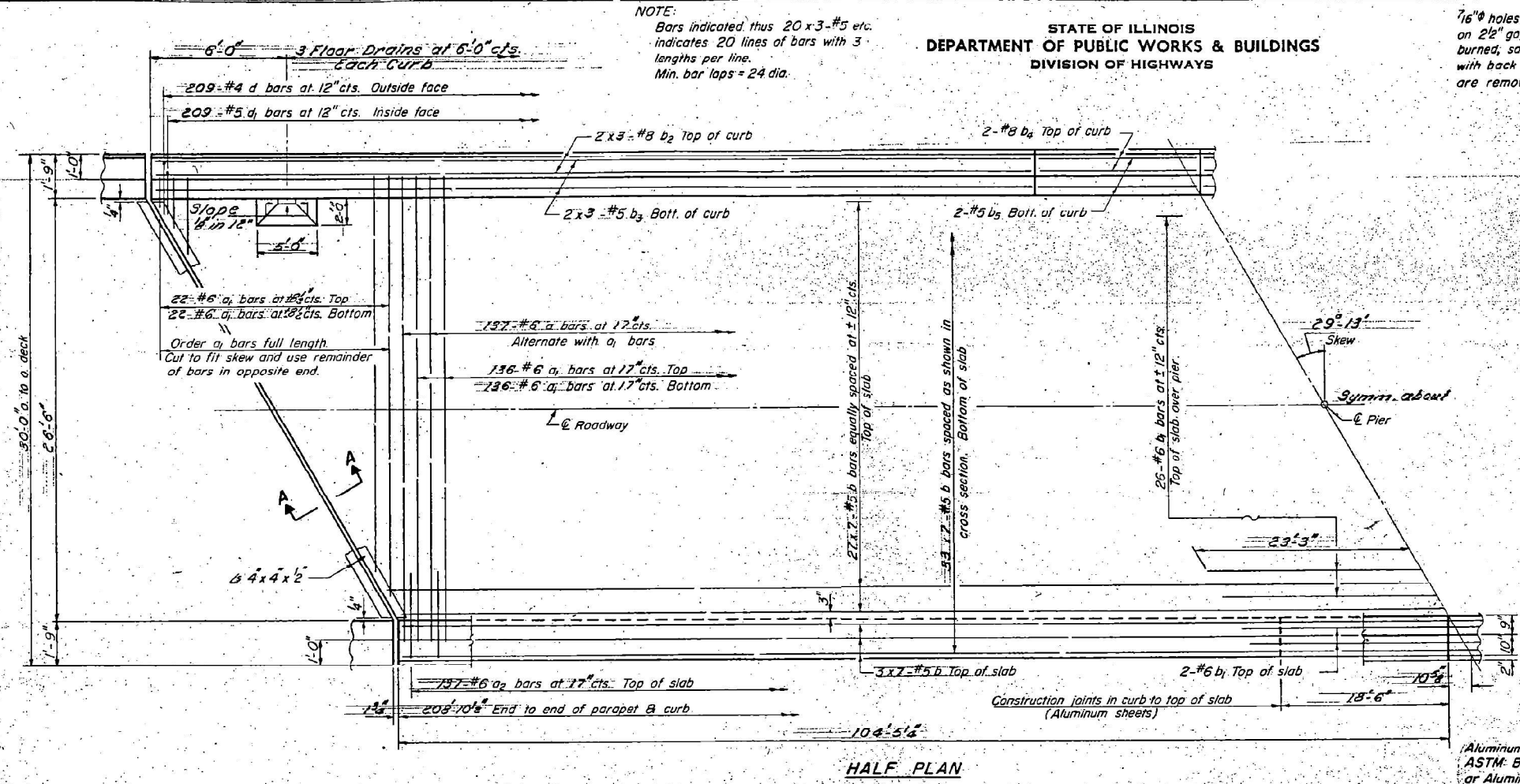
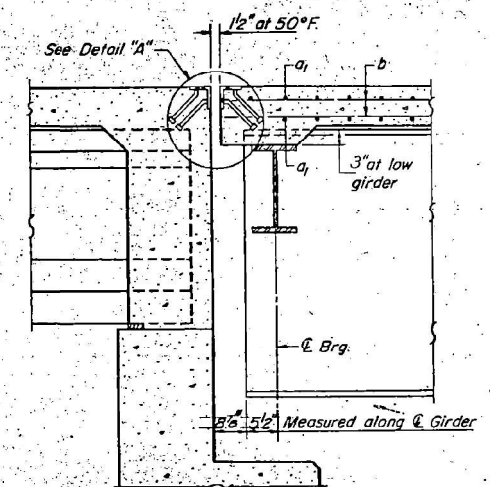
NOTE:  
Bars indicated thus 20 x 3-#5 etc.  
indicates 20 lines of bars with 3  
lengths per line.  
Min. bar laps = 24 dia.

7/16" holes at 12" cts. for 3/8" bolts set  
on 2 1/2" gage line. All bolts shall be  
burned, sawed or clipped off flush  
with back of angles after forms  
are removed.

7/16" vent holes at 12" cts.  
set on 1 3/8" gage line.

3/4" x 8" GR. 1020 STL. granular or  
solid flux filled headed studs  
automatically end welded.  
(3" x 3" studs at 12" alternate cts.)

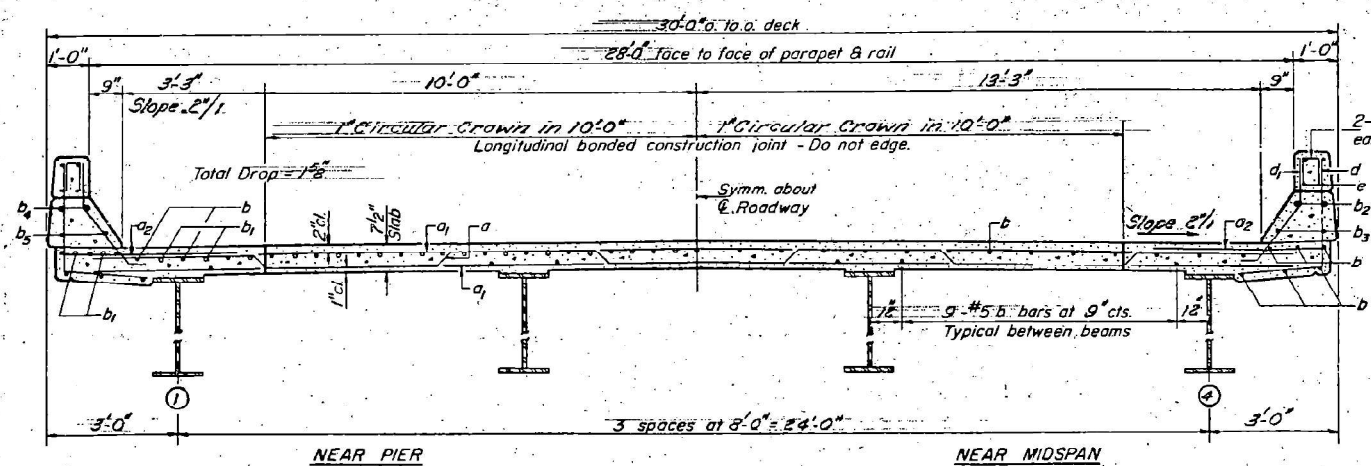
DETAIL "A"



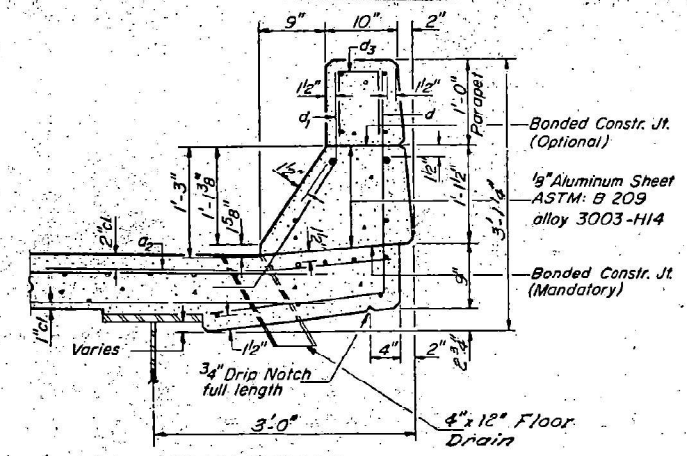
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	137	#6	29'0"	
a <sub>1</sub>	316	#6	28'0"	
a <sub>2</sub>	274	#6	4'0"	
b	462	#5	31'0"	
b <sub>1</sub>	30	#6	46'6"	
b <sub>2</sub>	28	#8	30'0"	
b <sub>3</sub>	24	#5	29'6"	
b <sub>4</sub>	8	#8	18'5"	
b <sub>5</sub>	2	#5	18'3"	
d	418	#4	4'6"	
d <sub>1</sub>	418	#5	3'3"	

Reinforcement Bars Lbs. 438,10  
Class X Concrete Cu. Yds. 176.2  
Structural Steel Lbs. 201,000



NOTE: For placement of bars d<sub>1</sub> and  
e thru e<sub>2</sub> see sheet # 7



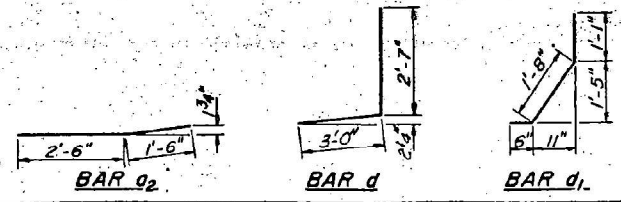
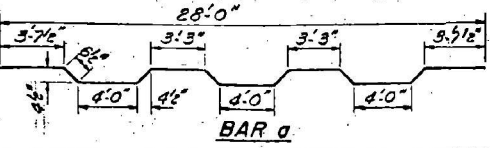
\*Weight of bearing assemblies with lead  
plates and anchor bolts are included  
as Structural Steel. Wt. = 4020#

Parapet Reinforcement and Class X  
Concrete are billed on sheet # 7

DESIGNED *Charles P. Green*  
CHECKED *Paul S. W.*  
DRAWN *J. K.*  
CHECKED *Paul S. W.*

EXAMINED *Carl Hummer*  
PASSED  
APPROVED

JUN 21 1970



SUPERSTRUCTURE  
MAIN SPANS  
F.A.I. RT. 64 SEC. 96-1HB-1  
WAYNE COUNTY  
STATION 3381+08.10

MODEL: Default  
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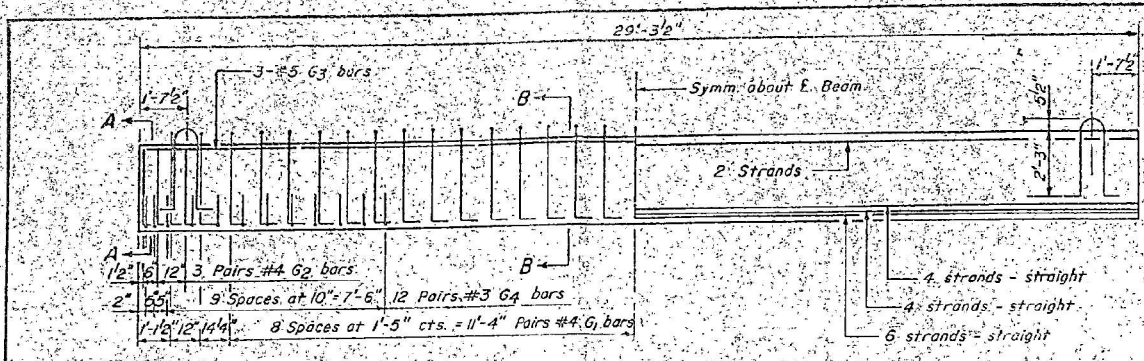
USER NAME = stacy.anderson	DESIGNED -	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/30/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0033

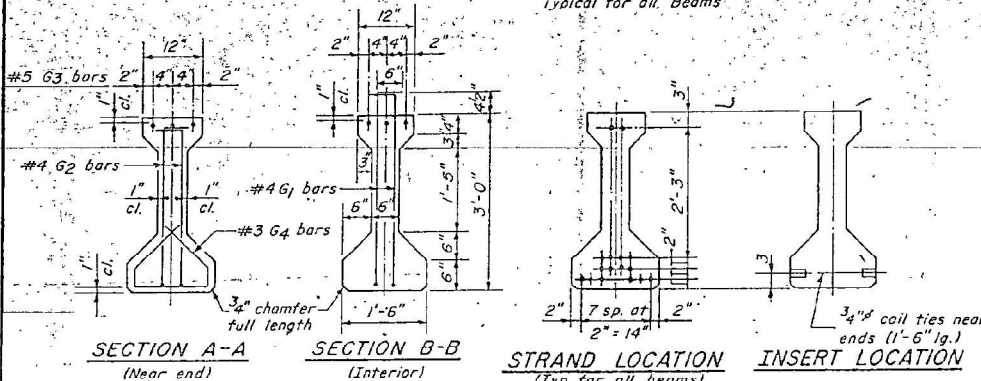
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D7 BRIDGE PAINTING 2024-2		WAYNE	29	12
CONTRACT NO. 74C67			ILLINOIS FED. AID PROJECT	



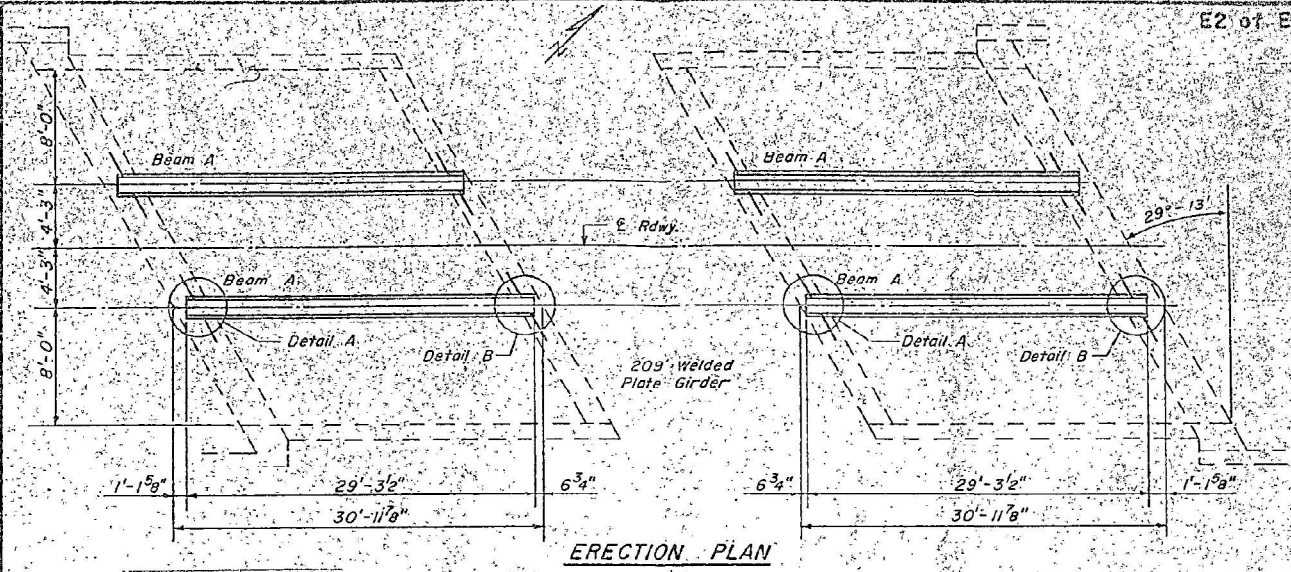
**ELEVATION**

Showing Reinforcing and Prestressing Strands Typical for all Beams



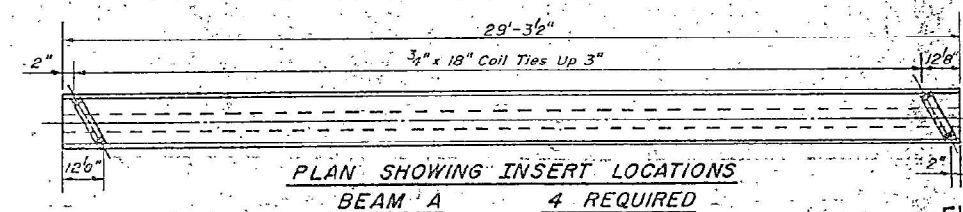
SECTION A-A (Near end) SECTION B-B (Interior) STRAND LOCATION (Typ. for all beams) INSERT LOCATION

SHEET	SHOP NO.
3 of 4	CE-53A-71
FINAL 36" BEAM - DETAILS	



**ERECTION PLAN**

Note: For vertical locations of Inserts, see Sheets 1 & 3.

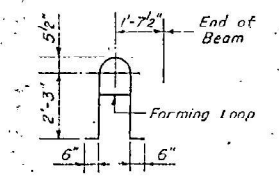


PLAN SHOWING INSERT LOCATIONS BEAM A 4 REQUIRED

Date Poured	
1	
2	
3	
4	

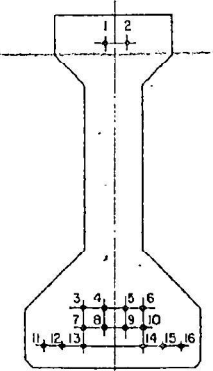
  

SHEET	SHOP NO.
2 of 4	CE-53A-71
FINAL ERECTION PLAN & BEAM A	



**LIFTING LOOP**  
Make from 2 #16 Strands 8 Required

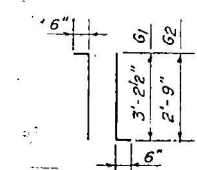
Strands in each cut must be cut in all beams of that form bed before progressing to next strand release sequence.



Cut in order shown.

CUT	STRANDS
1	3-6-11-16
2	4-5-12-15
3	7-10
4	8-9
5	1-14
6	2-13

**#3 G4 BAR**  
192 Required



**#4 G1 BARS**  
168 Required  
**#4 G2 BARS**  
48 Required

**SHOP - BILL OF MATERIAL**

(Does not include #16 Strands)

Bar	Size	Length	Shape	One Beam	Job Total	Remarks
G1	#4	4'-2 1/2"	L	12	168	
G2	4	3'-9"	L	12	48	
G3	5	29'-0"		3	12	
G4	3	2'-7"	L	48	192	
Reinforcing Bars				Pounds	285	1144
Concrete (5000 psi.)				Cu.Yds.	2.69	10.76
3/4" x 18" Coil Tie				Each	2	8
Lifting Loop (2-#16 Strands)				Each	2	8

\* For Inserts see "Superior Concrete Accessories, Inc. or Equal."

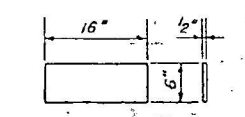
SHEET	SHOP NO.
4 of 4	CE-53A-71
FINAL SHOP BILL, LOOP & REINF.	

**GENERAL NOTES**

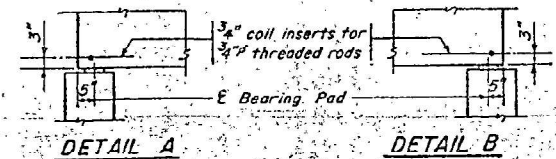
THIS JOB IS STATE INSPECTED.  
Beams to be poured at Centralia Plant.  
Loading HS15-44.  
All wire strands shall be #7-16's stressed to 21,700 lbs. each. All strands shall be non-galvanized extra high strength stress-relieved (ASTM A-416) 270 kps.  
Concrete shall be 5,000 psi. at 28 days, see Illinois Highway STD. Specs. Section 505.06.  
All Coil Loops, Ties and Rods by Superior Concrete Accessories, Inc. or Equal.  
Reinforcement bars shall conform to ASTM A-615.

**FIELD - BILL OF MATERIAL**

Item	Unit	No.
Beams A (Wt. 10,980 lbs. Each)	Each	4
Fabric Bearing Pads 6" x 1/2" x 1'-4"	Each	8
3/4" x 2'-0" Coil Rods (T.F.L.)	Each	16



**FABRIC BRG. PAD**  
Alert  
8 Required



DETAIL A DETAIL B

APPROVED  
The Main Dimensions and Materials Only  
FEB 4 1972  
CREW  
District of Eastern Ill.

**FILE SET**

DATE	REVISIONS	NO.	PRINT RECORD
1-22-72	NEW STRAND PATTERN - USE EXTRA-HIGH STRENGTH STRANDS	1	DATE NO. TO
		1-6-72	2 ILL
		1-6-72	1 GFS
		1-22-72	2 ILL
		1-22-72	1 RB LAYOUT HPC-1-3-72
		2-1-72	9 ILL DRAWN TER 1-4-72
		2-1-72	19 GFS CHECKED HPC 1-5-72
			APPROVED GFS 1-6-72

STATE CONTRACT NO. 28253	STATE JOB NO. C-97-257-70	NELSEN CONCRETE PRODUCTS, INC. CHAMPAIGN, ILL. CENTRALIA EAST ST. LOUIS EVANSVILLE INDIANA SHOP #10 CE-53A-71
IIB: LIN. FT. PRECAST PRESTRESSED CONCRETE I-BEAMS: 36		SHOOTS: 1 OF 4
C.H. 15 OVER F.A.I. RT. 64 WAYNE COUNTY STA. 3381+08.10		ERECTION DETAILS

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PLOT DATE = 1/30/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0033

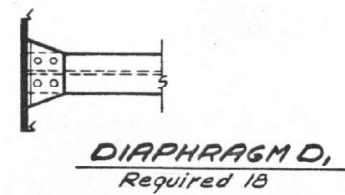
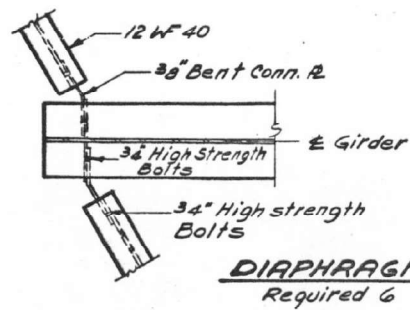
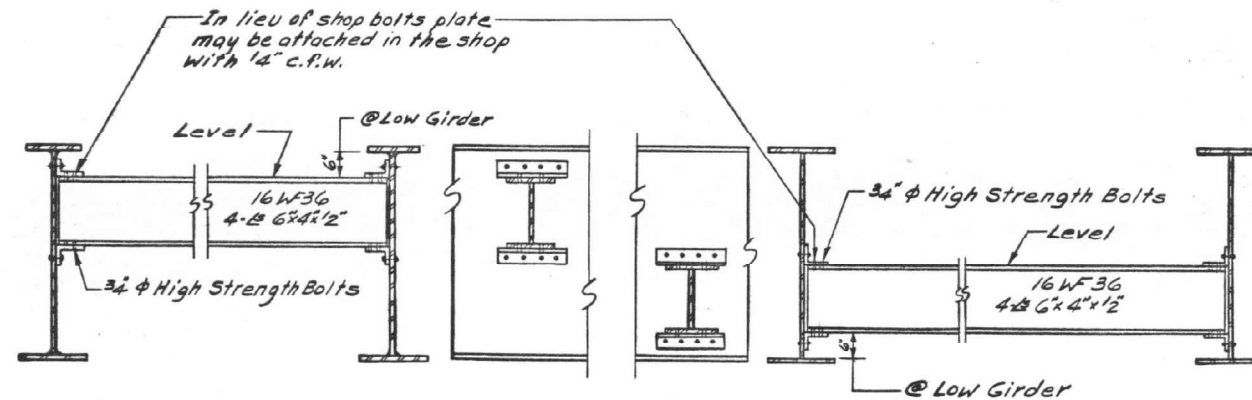
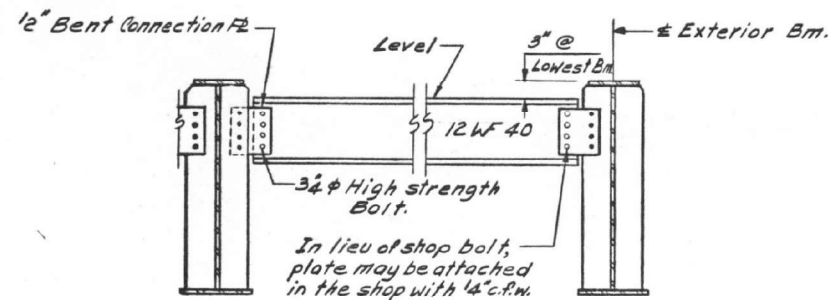
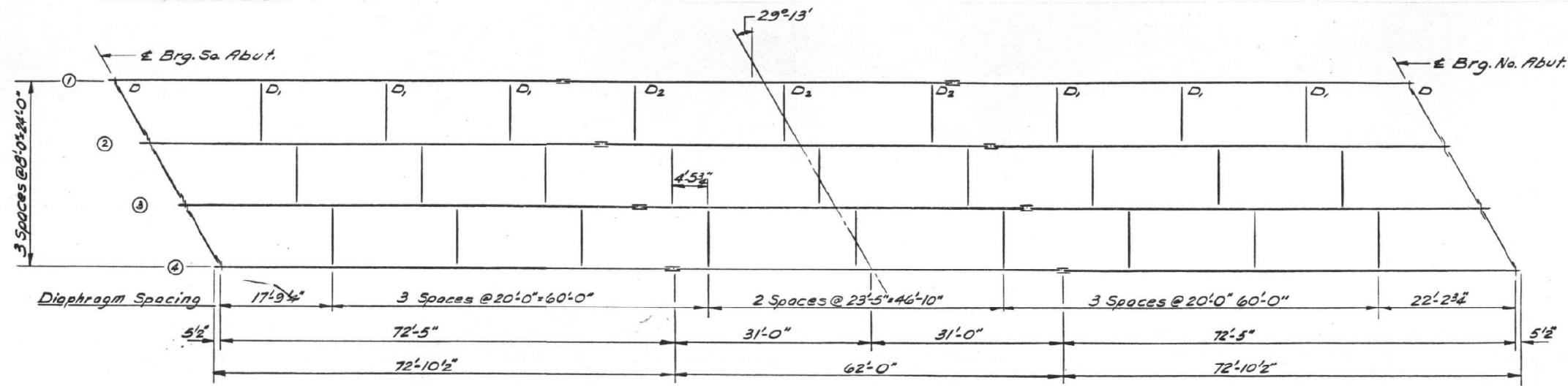
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	13
CONTRACT NO. 74C67				
ILLINOIS FED. AID PROJECT				

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P.A. 64	PA-140-1	WAYNE	28	15
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 9  
14 SHEETS



DESIGNED *Charles Olson*  
CHECKED *Prakash S. G.*  
DRAWN *Leona Heeren*  
CHECKED *Prakash S. G.*

EXAMINED *[Signature]* JAN. 21 1970  
PASSED  
APPROVED *[Signature]*  
CHIEF HIGHWAY ENGINEER

TOP OF WEB ELEVATION				
	Girder 1	Girder 2	Girder 3	Girder 4
South Abutment	469.01	469.16	469.21	469.16
E Splice Span 1	469.54	469.66	469.67	469.58
Pier	469.56	469.67	469.67	469.56
E Splice Span 2	469.58	469.67	469.66	469.54
North Abutment	469.16	469.21	469.16	469.01

For Fabrication Only

**DIAPHRAGM LAYOUT & DETAILS**  
F.A. RT. 64 SEC. 96-14B-1  
WAYNE COUNTY  
STATION 3381+08.10

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PLOT DATE = 1/30/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0033

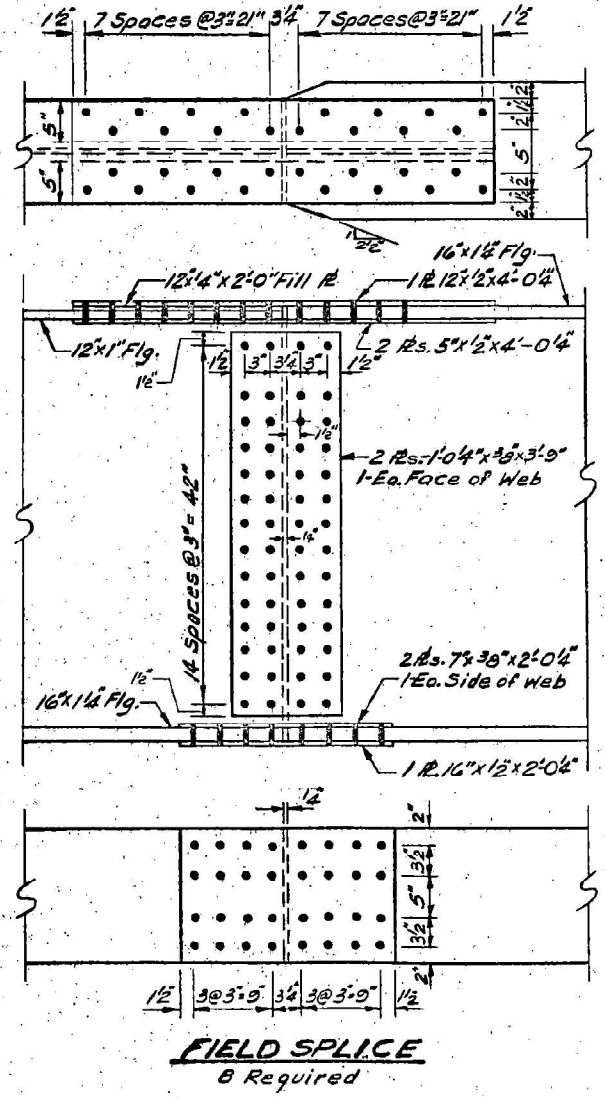
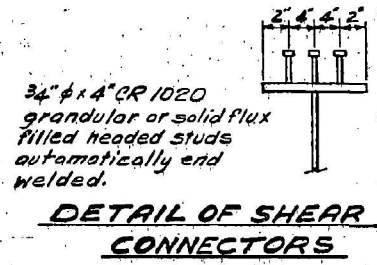
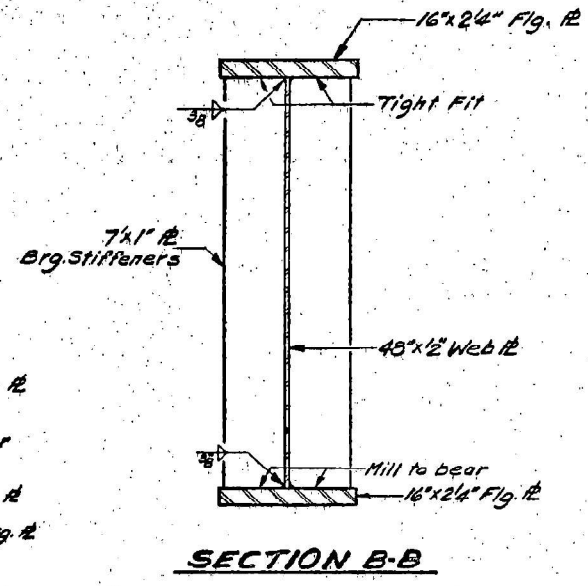
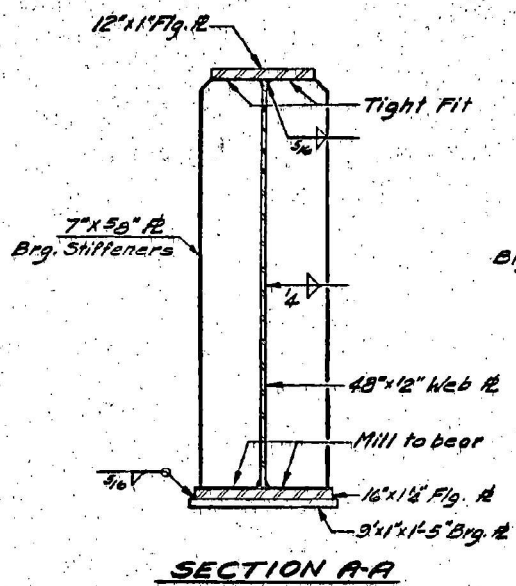
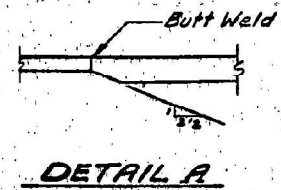
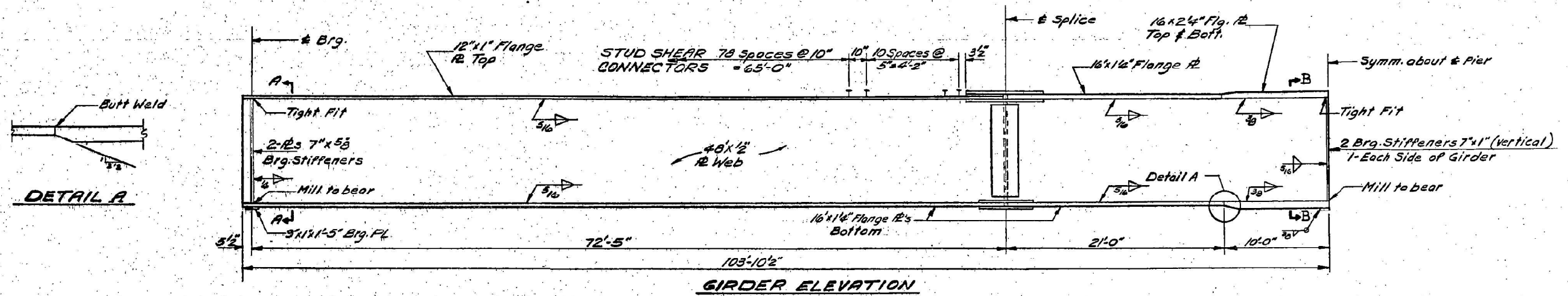
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	14
CONTRACT NO. 74C67			ILLINOIS FED. AID PROJECT	

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

ROUTE NO.	SECTION	PROJECT	TOTAL SHEETS	SHEET NO.
16-118-1	WAYNE		28	16
FED. AID PROJECT				

SHEET NO. 10  
14 SHEETS



**SPLICE & R GIRDER  
DETAILS**  
F.A. RT. 6A SEC. 96-118-1  
WAYNE COUNTY  
STATION 3381+08.10

DESIGNED	Charles P. [Signature]	EXAMINED	[Signature]	JAN. 21 1970
CHECKED	Paul [Signature]	PASSED	[Signature]	
DRAWN	Leona Heeren	APPROVED	[Signature]	
CHECKED	Paul [Signature]			

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PLOT DATE = 1/30/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0033

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	15
CONTRACT NO. 74C67				
ILLINOIS FED. AID PROJECT				

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

B.M. #29 Spike in 14" Oak Sh. 3539+21  
F.A.I. RT. 64 184' Lt. Elev. 419.40

**GENERAL NOTES**

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Fasteners shall be high strength bolts. Bolts  $\frac{3}{8}$ " & open holes  $\frac{1}{16}$ " & unless otherwise noted.

The basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.

Field welding of construction accessories will not be permitted in the bottom of flange of beams or girders nor on the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Anchor bolts shall be set before bolting diaphragms over supports. Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 sq.ft.

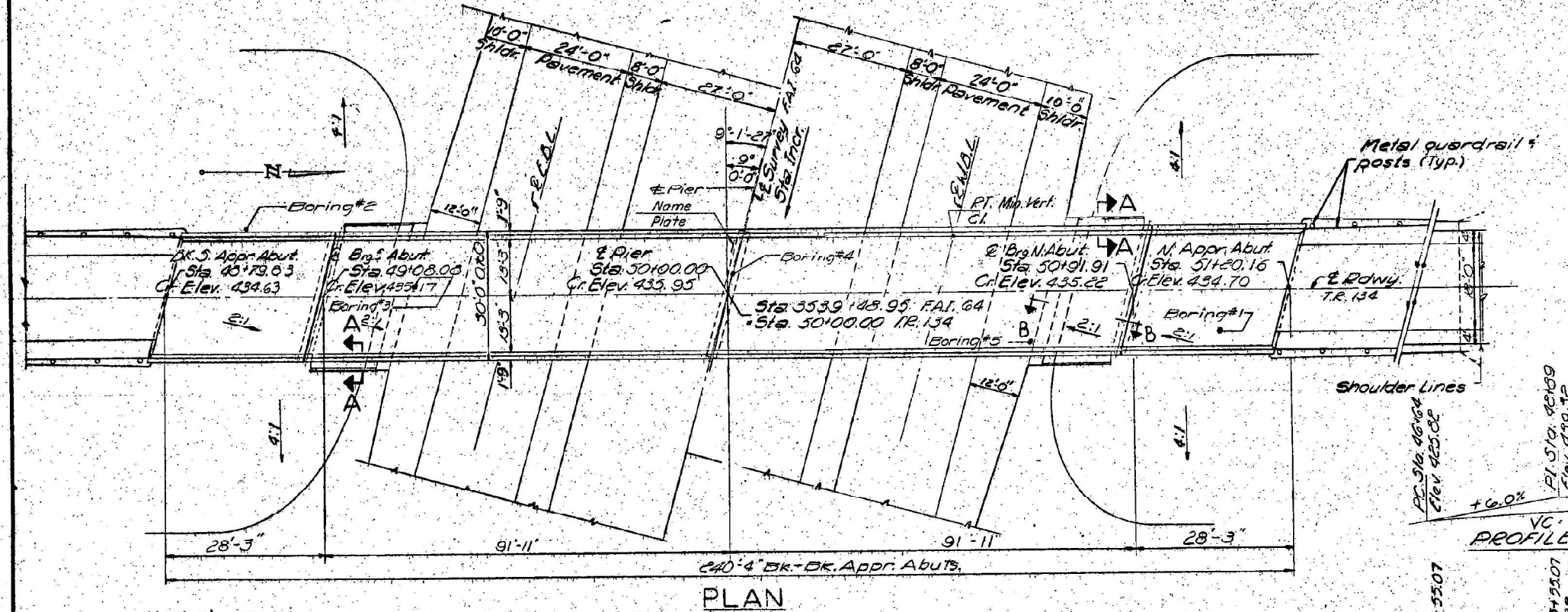
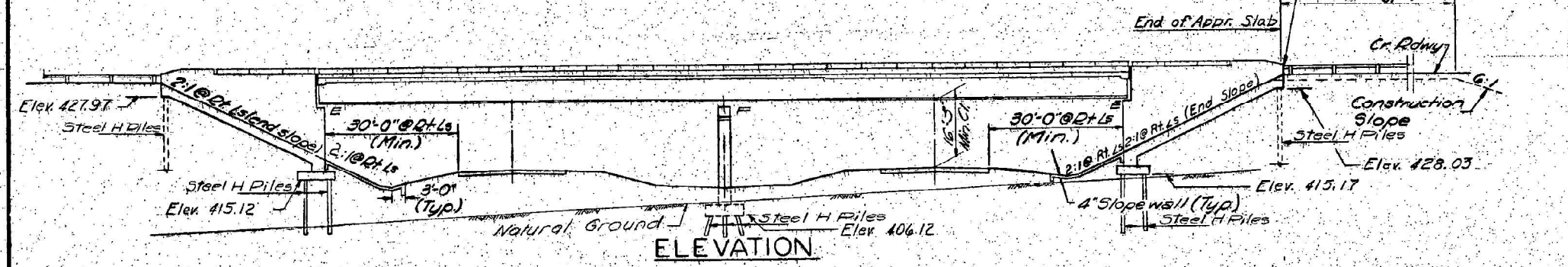
Class A Excavation for structures includes excavation for slope wall. An alternate strand pattern using Extra High Strength Prestressing strand (270 k.s.i.) is permitted.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

The Contractor shall drive 3 Steel Test Piles (BBP36) in permanent locations, one at N. Abut., one at the Pier, and one at S. Approach, as directed by the Engineer before ordering the remainder of piles.

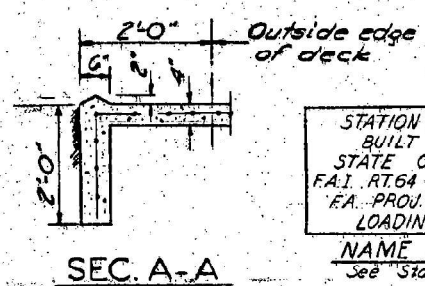
All steel piles shall be driven to refusal. The calculated weight of structural steel is 15,250 Lbs.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.



**TOTAL BILL OF MATERIAL**

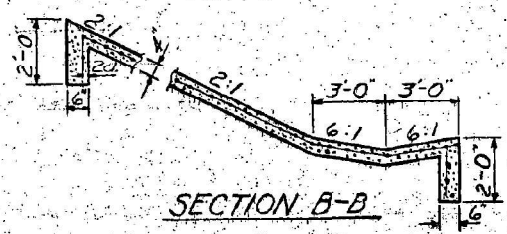
Item	Unit	Super	Sub	Total
Cl. A Excn for Structures	Cu. Yds.		47	47
Protective Coat	Sq. Yds.	885		885
Class X Concrete	Cu. Yds.	233.5	191.2	424.7
F# E. PPC. I-Bm. (36")	Lin. Ft.	210		210
Structural Steel	L.S.	0.30		0.30
Stud Shear Connectors	Each	1152		1152
Aluminum Railing	Lin. Ft.	439		439
Reinforcement Bars	Lbs.	52,190	15,580	67,770
Steel Piles (BBP36)	Lin. Ft.		1361	1361
Test Piles Steel (BBP36)	Each		3	3
Name Plates	Each		1	1
Slope Wall (4")	Sq. Yds.		180	180
Preformed Jt Sealer	Lin. Ft.		61	61



STATION 3539+48.95  
BUILT 19 BY  
STATE OF ILLINOIS  
F.A.I. RT. 64 SEC. 96-1182  
F.A. PROJ. I-64-3(40)  
LOADING H5 15  
NAME PLATE  
See Std. 2113

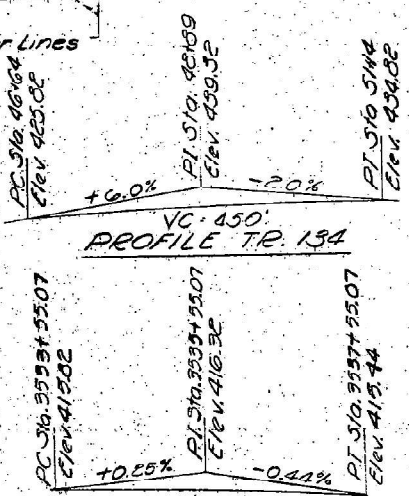
DESIGNED James Hamilton  
CHECKED Mark Smith  
DRAWN C.E. Wilkins  
CHECKED J.S.

EXAMINED [Signature]  
DATE Dec 12 1988  
APPROVED [Signature]



**DESIGN STRESSES**

**PRECAST PRESTRESSED UNITS**  
 $f_c = 5,000$  psi.  
 $f_{ci} = 4,000$  psi.  
 $f'_s = 248,000$  psi (Strands  $\frac{7}{16}$ "  
 $f_{sl} = 173,000$  psi (Strands  $\frac{5}{16}$ "  
**FIELD UNITS**  
 $f_c = 1,200$  psi Deck Slab  
 $f_c = 1,400$  psi Sub, Curb, Parapet  
 $f_s = 20,000$  psi Reinf. Struct.  
 $V_c = 75$  psi Ftgs.  
 $n = 10$  Allowable & Deflection 4/1200  
 LOADING H5 15-44



PROJ. I-64-3(40)86  
GENERAL PLAN + ELEVATION  
TR. 134 OVER F.A.I. RT. 64  
F.A.I. RT. 64 SEC. 96-1182  
WAYNE COUNTY  
STATION 3539+48.95

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0034

SCALE: SHEET OF SHEETS STA. TO STA.

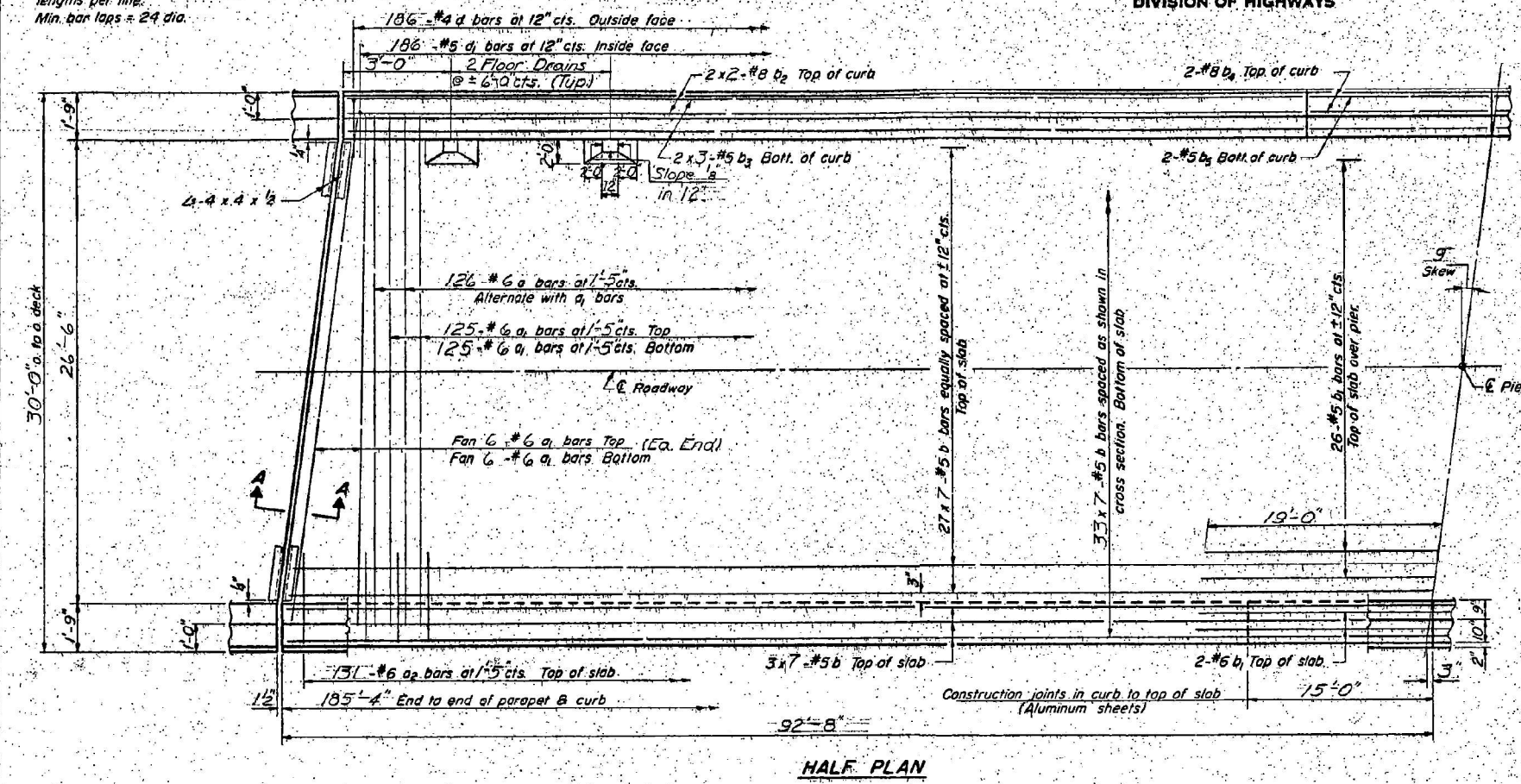
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VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	16
CONTRACT NO. 74C67			ILLINOIS FED. AID PROJECT	



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

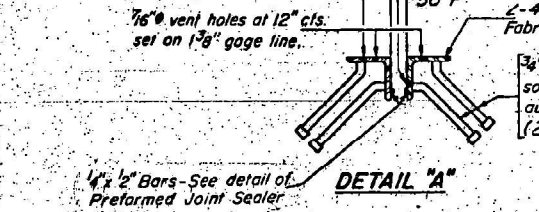
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
96-11B-2	WAYNE	27	10
			13 SHEETS

NOTE:  
Bars indicated thus 20 x 3-#5 etc.  
indicates 20 lines of bars with 3  
lengths per line.  
Min. bar laps = 24 dia.

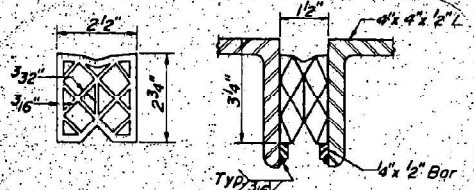


HALF PLAN

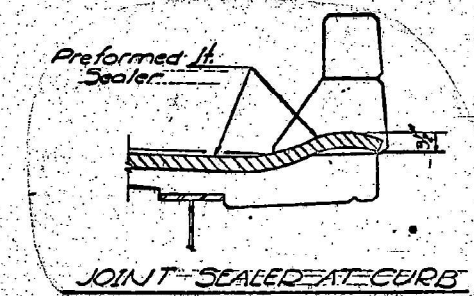
7/8" holes at 12" cts. for 3/8" bolts set  
on 2 1/2" gage line. All bolts shall be  
burned, sawed or clipped off flush  
with back of angles after forms  
are removed.



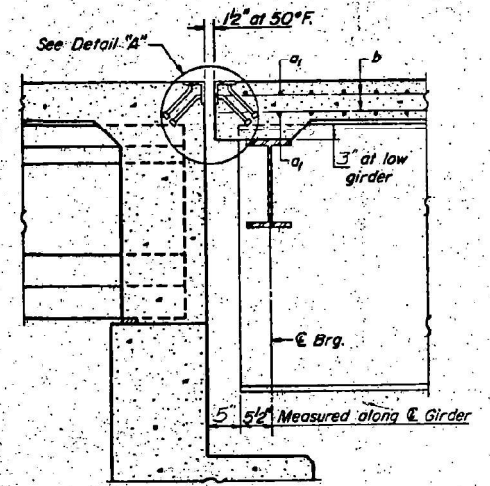
DETAIL "A"



PREFORMED JOINT SEALER



JOINT SEALED AT CURB

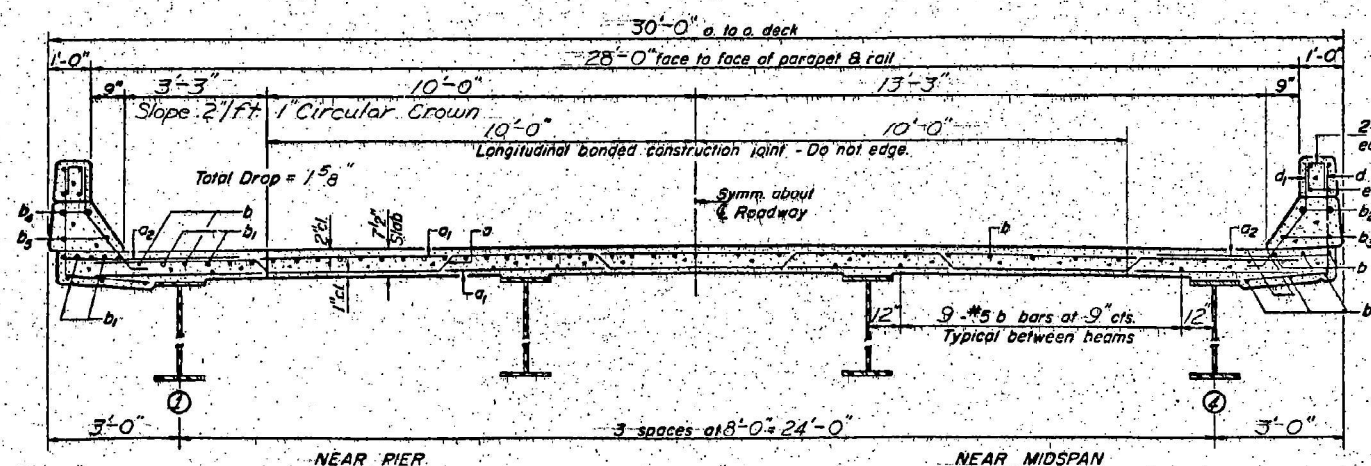


SECTION A-A

BILL OF MATERIAL

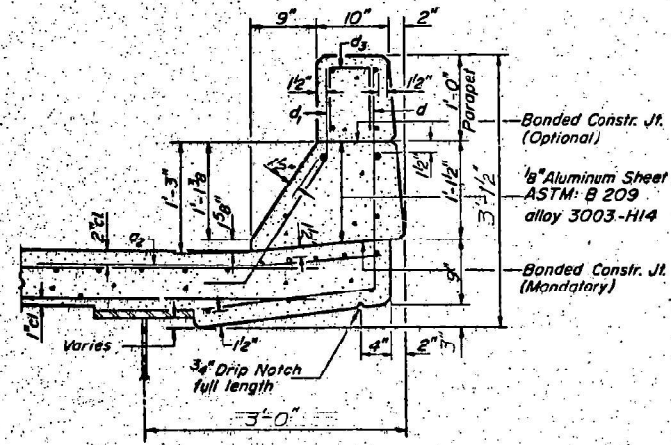
Bar	No.	Size	Length	Shape
a	126	#6	29'-6"	—
a <sub>1</sub>	274	#6	28'-6"	—
a <sub>2</sub>	262	#6	4'-0"	—
b	462	#5	27'-9"	—
b <sub>1</sub>	30	#6	38'-0"	—
b <sub>2</sub>	16	#8	39'-9"	—
b <sub>3</sub>	24	#5	26'-9"	—
b <sub>4</sub>	8	#8	14'-9"	—
b <sub>5</sub>	8	#5	14'-9"	—
d	372	#4	4'-6"	J
d <sub>1</sub>	372	#5	3'-3"	J
Reinforcement Bars				Lbs. 39,150
Class X Concrete				Cu. Yds. 157.6
* Structural Steel				Lbs. 151,250

\* Weight of bearing assemblies with lead plates and anchor bolts are included as Structural Steel. Wt. = 4530 lbs.  
Parapet Reinforcement and Class X Concrete are billed on sheet #7.



CROSS SECTION

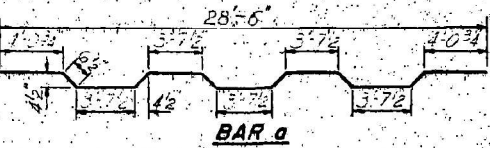
NOTE: For placement of bars d<sub>3</sub> and e thru e<sub>3</sub> see sheet #7



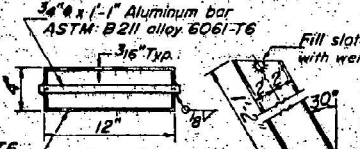
CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete.

DESIGNED *James Hamilton*  
CHECKED *Harold Suple*  
DRAWN *C.E. Wilkins*  
CHECKED *J.L.S.*  
EXAMINED *DEC 13 1968*  
PASSED *W.G. Berman*  
APPROVED *V.E. Staff*



BAR a

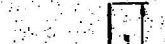


FLOOR DRAIN

Cost of Floor Drain shall be incidental to Class X Concrete.



BAR a<sub>2</sub>



BAR d



BAR d<sub>1</sub>

SUPERSTRUCTURE  
F.A.I. RT. 64 SEC. 96-11B-2  
WAYNE COUNTY  
STA. 3539+4895

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

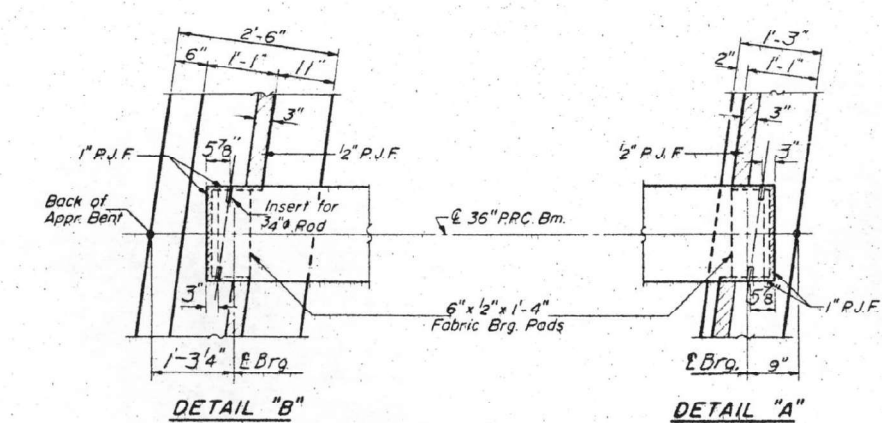
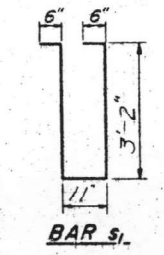
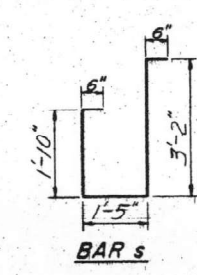
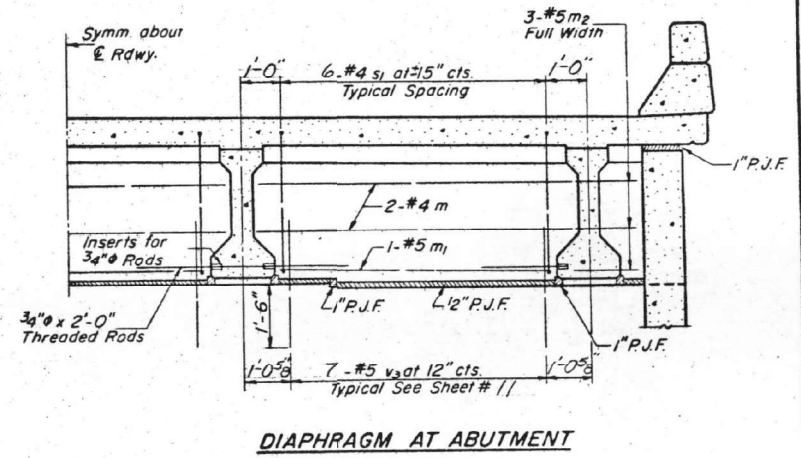
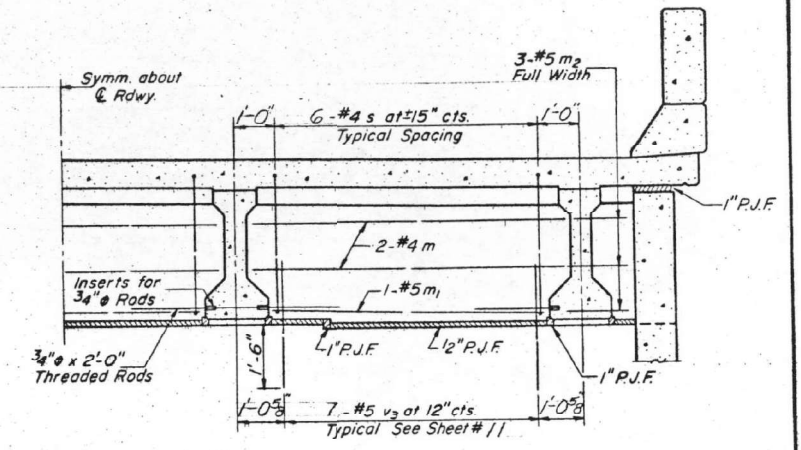
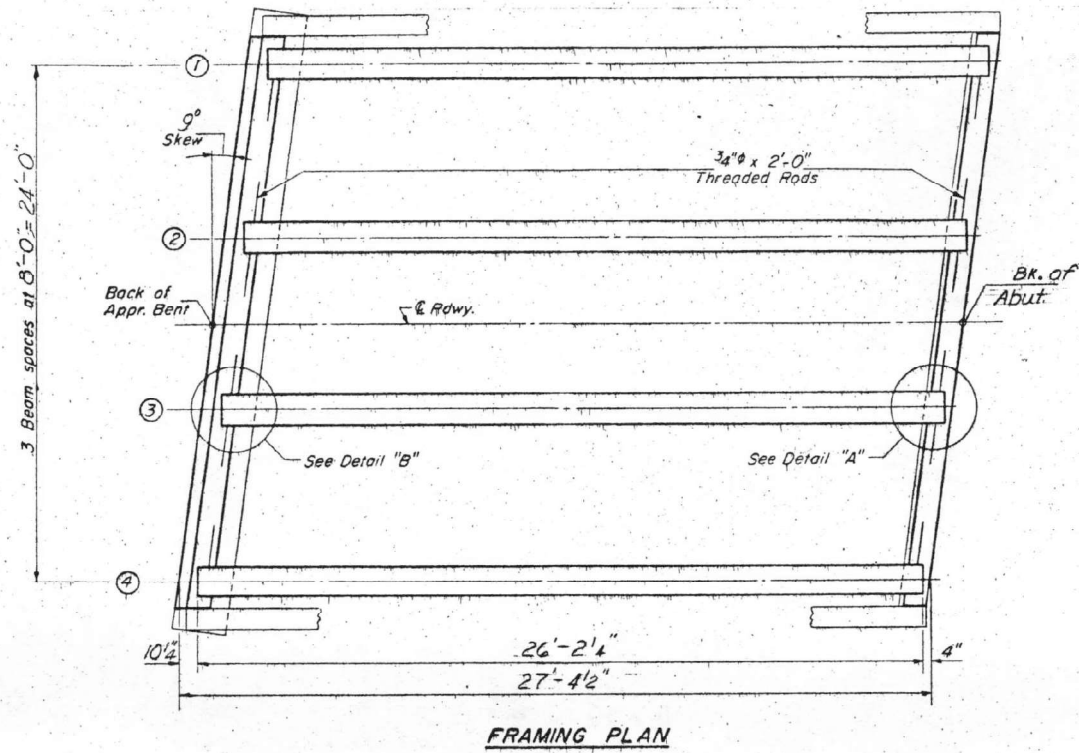
EXISTING STRUCTURE PLANS  
096-0034

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	17
			CONTRACT NO. 74C67	
		ILLINOIS FED. AID PROJECT		

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

ROUTE NO.	SECTION	QUANTITY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5 13 SHEETS
64	96-1HB-2	WAYNE	27	12	
FED. AID PROJECT					



NOTES:  
Bars s thru s1, and m thru m2 are billed with Approach Slab Bill of Material on sheets # 4  
Bar v2 is billed with Abutment Bill of Material on sheet # 11  
See sheet # 4 for sections thru abutment and approach bent diaphragms.

DESIGNED	James Hamilton	EXAMINED	DEC. 12 1968 C. E. Thumman
CHECKED	Harold Singh	PASSED	W. E. Beaman
DRAWN	C. E. Wilkins	APPROVED	V. E. Adoff
CHECKED	J. S.		

SB-4-L (S15) 4-22-68

FRAMING PLAN  
FAI RT 64 SEC. 96-1HB-2  
WAYNE COUNTY  
STATION 3539+4895

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	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0034

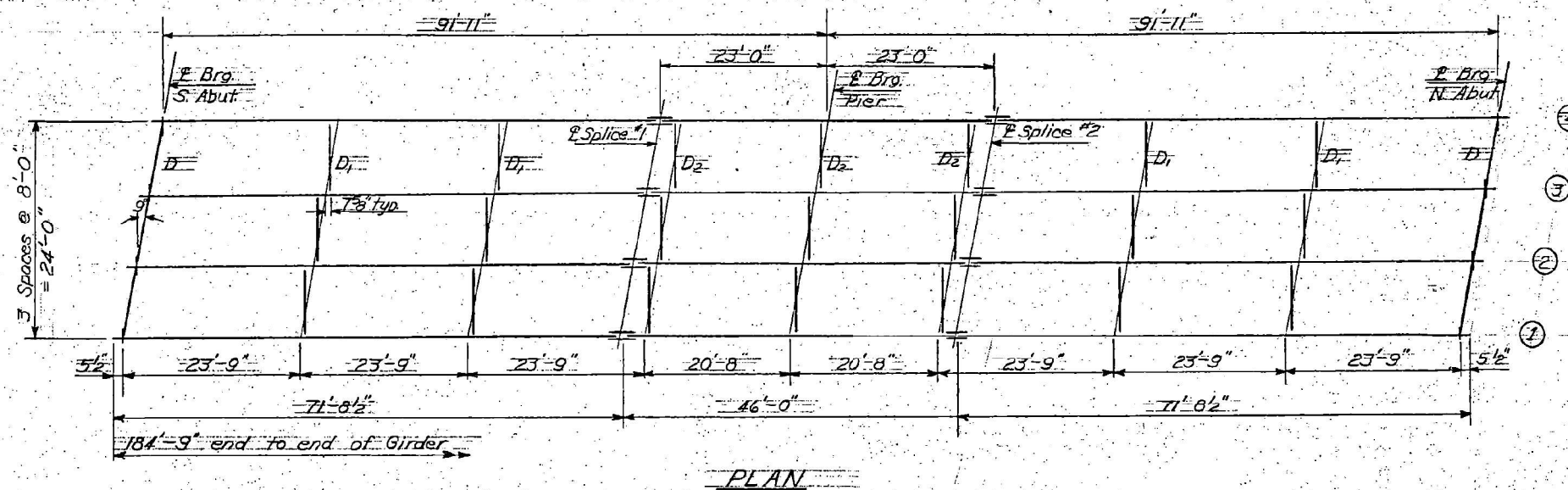
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	18
CONTRACT NO. 74C67				
ILLINOIS FED. AID PROJECT				

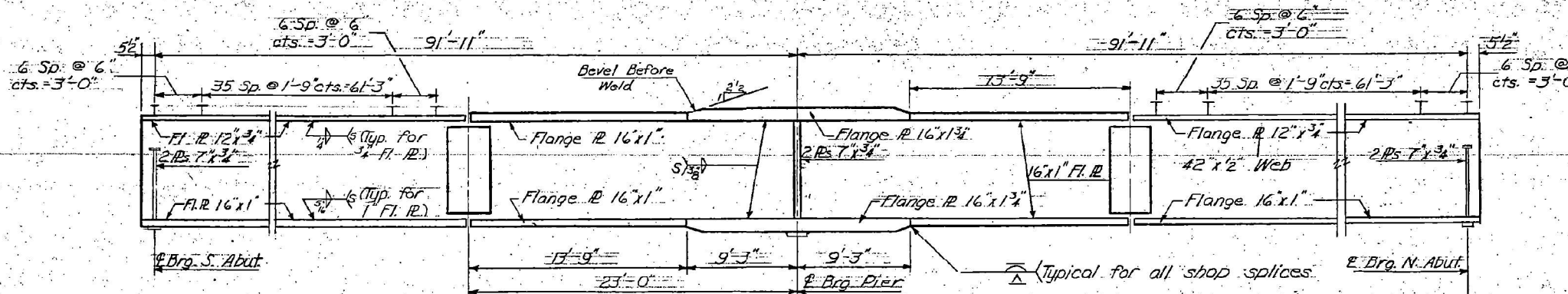
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	96-11B-2	WAYNE	27	15

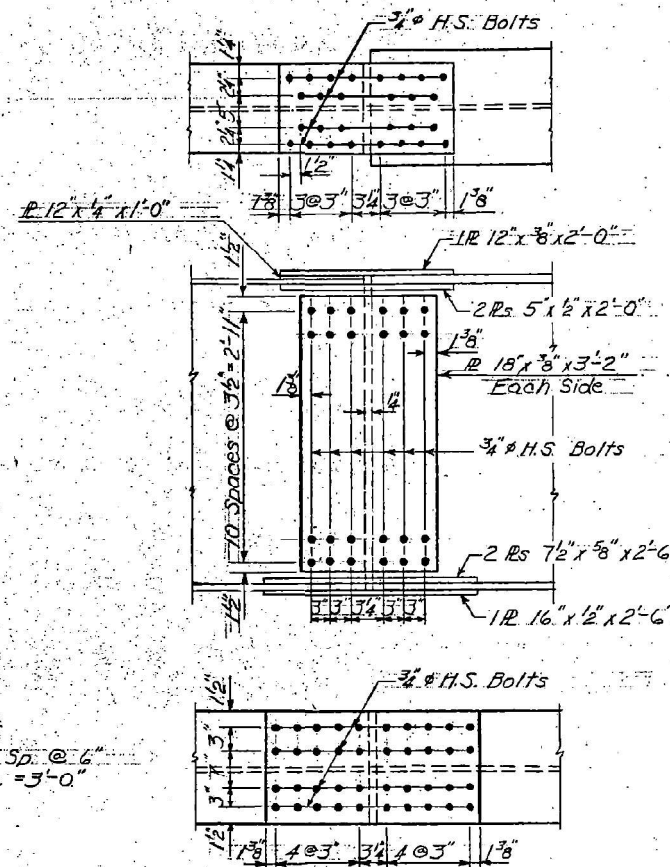
13 SHEETS



PLAN

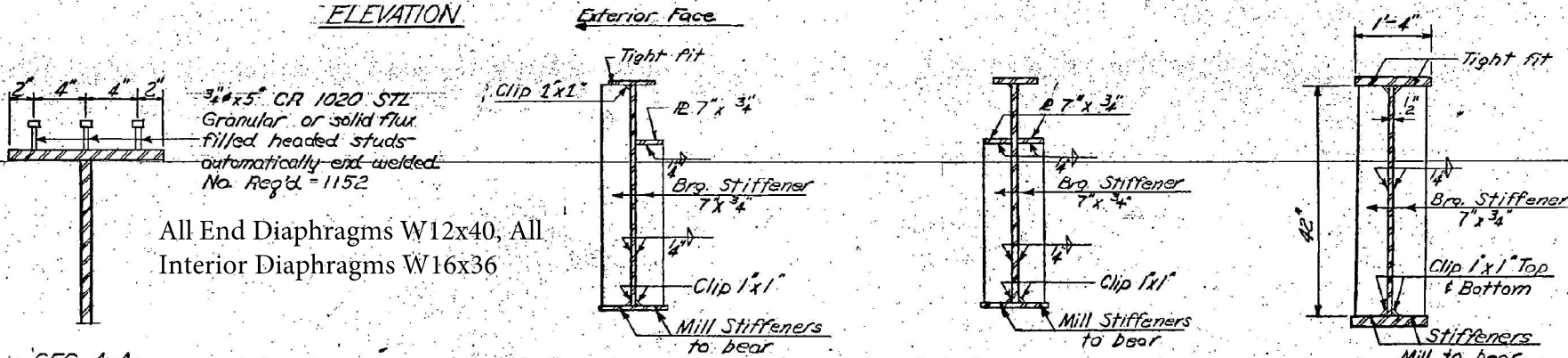


ELEVATION



FIELD SPLICE DETAILS

NOTE: See Sh. 9 for other details



All End Diaphragms W12x40, All Interior Diaphragms W16x36

SEC. A-A

AT EXTERIOR GIRDER SECTION AT ABUTMENTS

AT INTERIOR GIRDER SECTION AT ABUTMENTS

SECTION AT PIER

DESIGNED	James Hamilton	EXAMINED	Dec. 12 1968
CHECKED	Harold Smith	PASSED	
DRAWN	Chuck Wilkins	APPROVED	
CHECKED	M.S.		

STRUCTURAL STEEL  
F.A.I. RT. 64 SEC. 96-11B-2  
WAYNE COUNTY  
STA 3539+48.95

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		DATE	-	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0034

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	19

CONTRACT NO. 74C67

B.M. #2 22' Lt. Sta. 51+56 (T.R. 202)  
Railroad spike in power pole El. 424.39

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

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.  
Fasteners shall be high strength bolts. Bolts 7/8" open holes 1 1/8" unless otherwise noted.

The basic lead zinc chromate paint system shall be used for shop and field painting of structural steel.

Field welding of construction accessories will not be permitted in the bottom of flange of beams or girders nor on the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

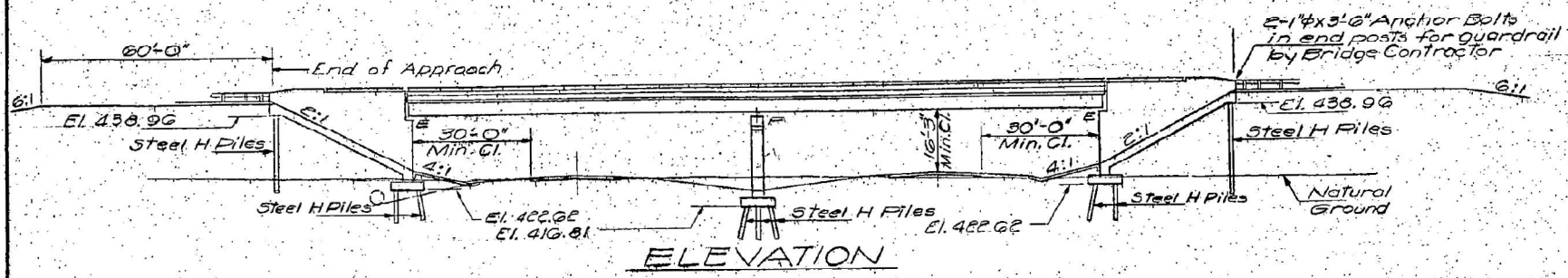
Anchor bolts shall be set before riveting diaphragms over supports.  
Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 5.8# per 100 sq. ft.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

The contractor shall drive three steel test piles in permanent locations one at the South Approach Bent, one at the Pier, and one at the North Abut. as directed by the Engineer before ordering the remainder of piles.

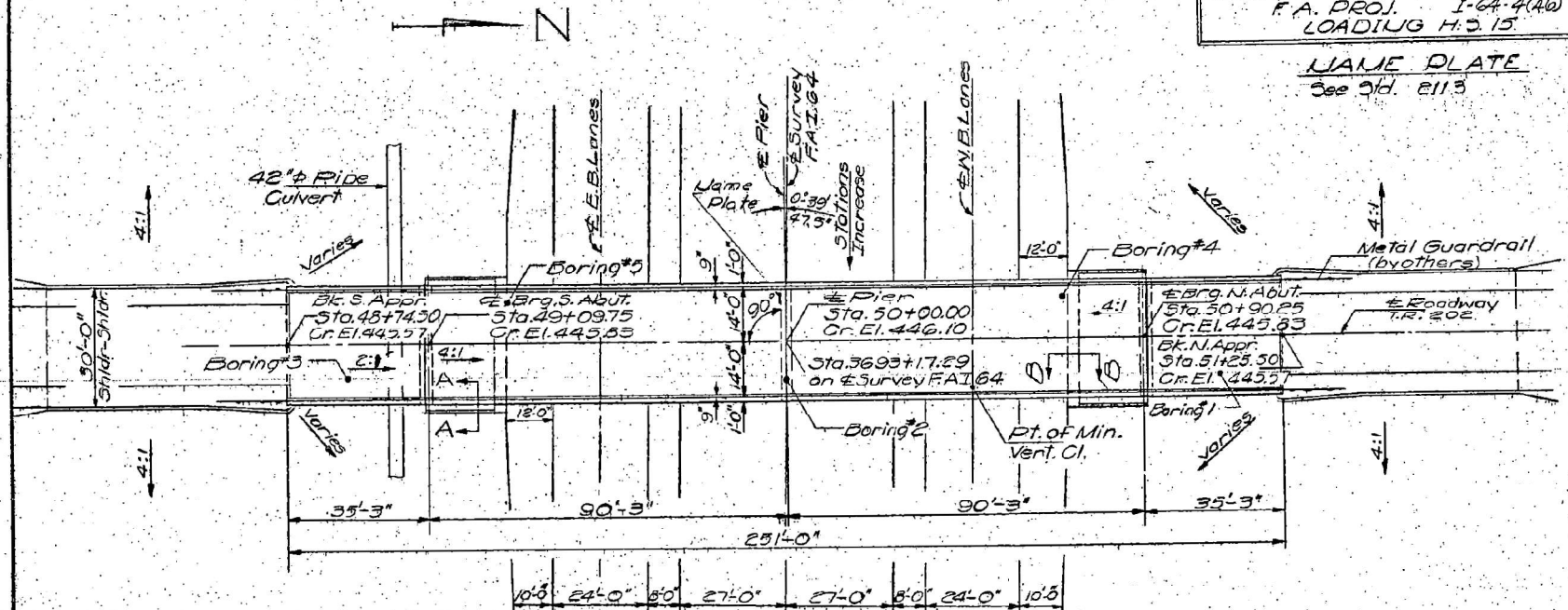
The calculated plan weight for structural steel is 151,340 lbs.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to Handrail Concrete.



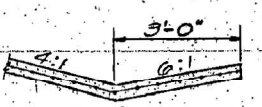
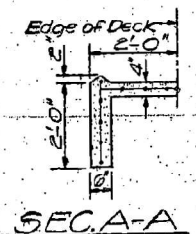
STATION 3693+17.29  
BUILT 19 BY  
STATE OF ILLINOIS  
F.A.I. RT. 64 SEC. 96-2HB-1  
F.A. PROJ. 1-64-4(A)  
LOADING H.3.15

NAME PLATE  
See 3rd. E113



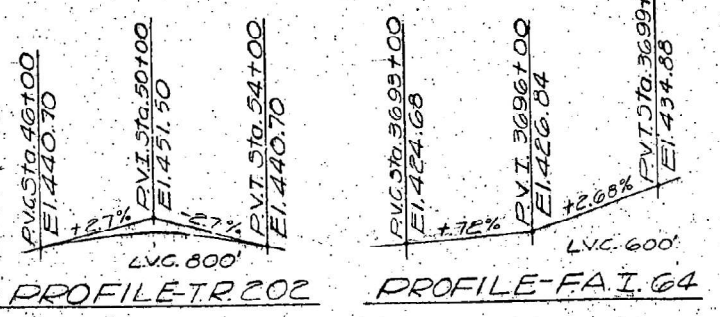
TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Class X Concrete	Cu. Yds.	244.7	219.7	464.4
Reinforcement Bars	Lbs.	53,950	18,670	72,620
Structural Steel	L.S.	0.30		0.30
Furnishing & Erecting Precast Prestressed Concrete I-Beams (3C)	Lin. Ft.	266.3		266.3
Aluminum Railing	Lin. Ft.	460		460
Stud Shear Connectors	Each	1,392		1,392
Preformed Jt. Sealer	Lin. Ft.	60		60
Protective Coat	Sq. Yds	923		923
Slope Wall 4"	Sq. Yds		105	105
Class A Excavation for Structure	Cu. Yds.		140	140
Steel Piles (BBP 3G)	Lin. Ft.		1050	1050
Test Piles Steel (BBP 3G)	Each		3	3
Name Plates	Each		1	1



SEC. A-A

SEC. B-B



PROFILE-T.R. 202

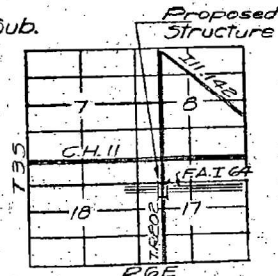
PROFILE-F.A.I. 64

DESIGN STRESSES

FIELD UNITS  
 $f_c = 1200$  psi. Deck Slab  
 $f_c = 1400$  psi. Gurb, Parapet, Sub.  
 $f_s = 20,000$  psi. Reinf.  
 $f_s = 20,000$  psi. Struct.  
 $V_c = 75$  psi. Ftgs.  
 $n = 10$

PRECAST PRESTRESSED UNITS

$f_c = 5000$  psi.  
 $f_{ci} = 4000$  psi.  
 $f_s = 248,000$  psi. Strands  
 $f_{si} = 173,600$  psi. Strands  
 Allowable  $F_{t, N.S.}$  25%  
 Allowable  $E \Delta$  5/600 Composite



LOCATION SKETCH

GENERAL PLAN & ELEVATION  
 T.R. 202 OVER F.A.I. RT. 64  
 F.A.I. ROUTE 64  
 SECTION 96-2HB-1  
 WAYNE COUNTY  
 STATION 3693+17.29

DESIGNED: Suresh T. Desai  
 CHECKED: S.S.  
 DRAWN: J. SCHUELLER  
 CHECKED:

EXAMINED: Nov. 1 1968  
 PASSED:  
 APPROVED:

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USER NAME = stacy.anderson	DESIGNED -	REVISED -
PLOT SCALE = 100.000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/30/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0035

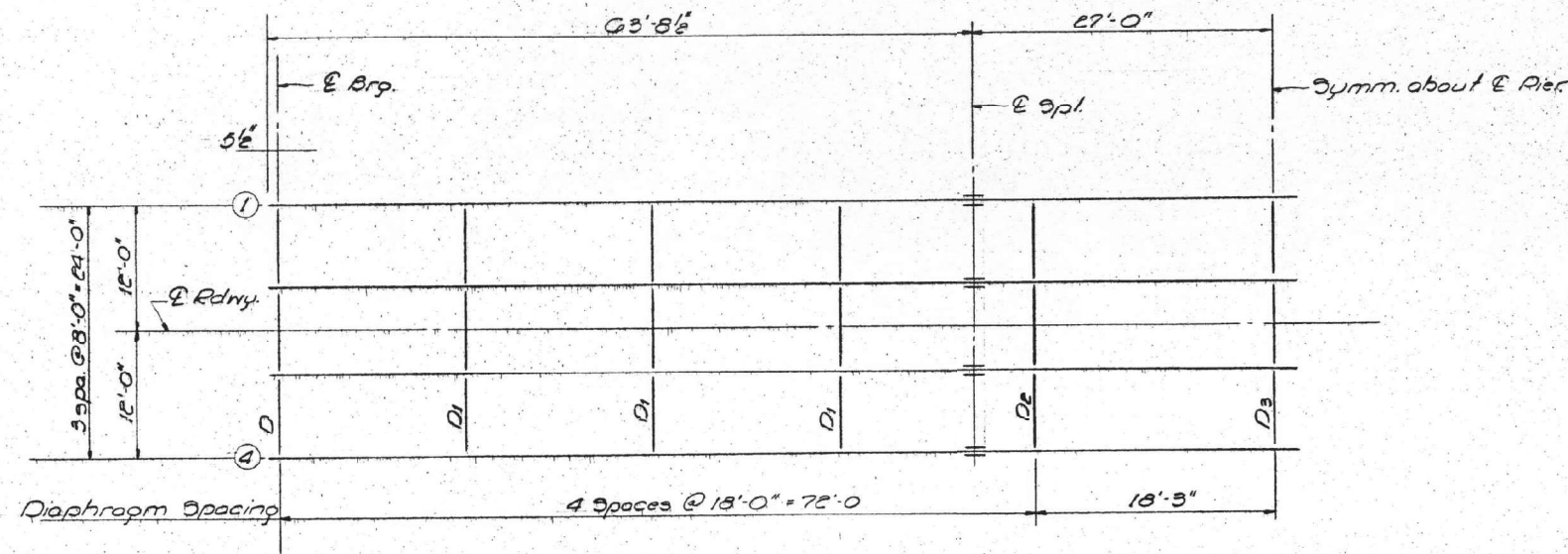
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	20
CONTRACT NO. 74C67			ILLINOIS FED. AID PROJECT	

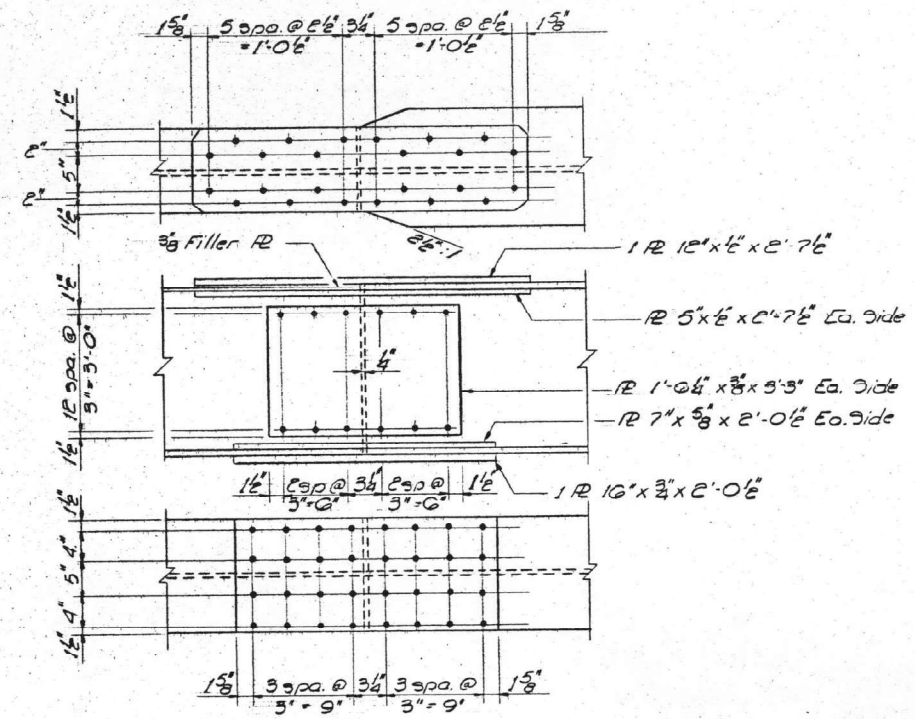


STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

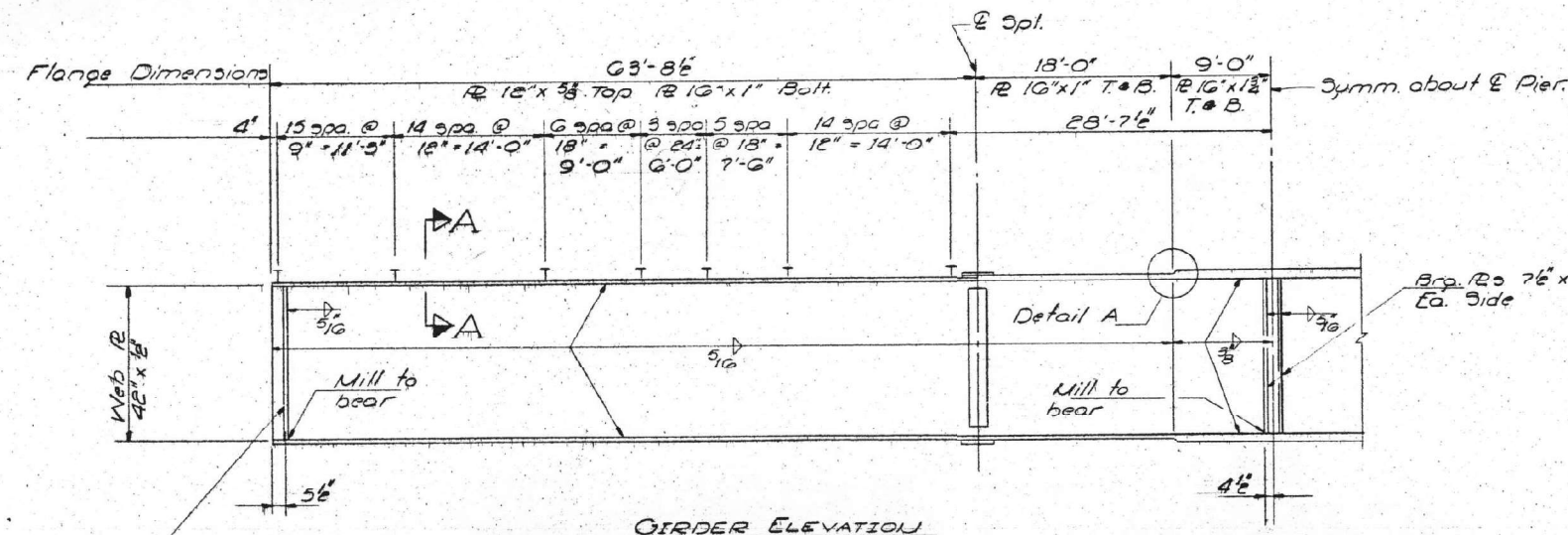
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P.A. 64	76-001	WAYNE	32	15
SHEET NO. 6				
13 SHEETS				



FRAMING PLAN



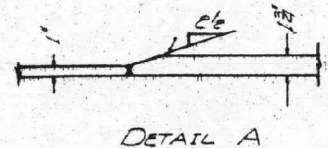
DETAIL OF SPLICE  
(All H.S. Bolts 3/4")



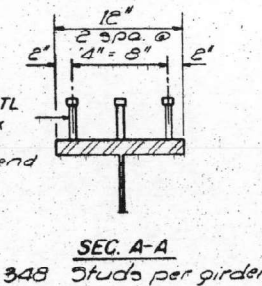
GIRDER ELEVATION

TOP OF WEB ELEVATIONS

	Girders 1&4	Girders 2&3
E Brps No 3 Abut.	445.03	445.13
E Splice 1, E G Pier	445.22	445.32



DETAIL A



SEC. A-A  
348 Studs per girder.

STRUCTURAL STEEL  
F.A.I. RT. 64 SEC. 96-2HB-1  
WAYNE COUNTY  
STA. 3093+17.29

DESIGNED	Suresh T. Desai	EXAMINED	Nov 1 1968
CHECKED	J. Schieller	PASSED	[Signature]
DRAWN	J. Schieller	APPROVED	[Signature]
CHECKED	[Signature]		

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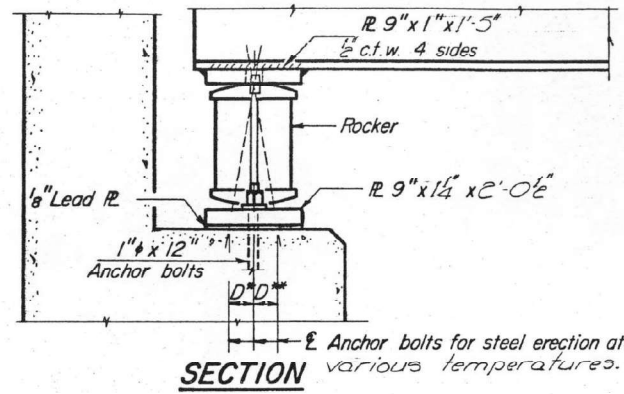
USER NAME = stacy.anderson	DESIGNED -	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/30/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0035

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	22
CONTRACT NO. 74C67				
ILLINOIS FED. AID PROJECT				



SECTION

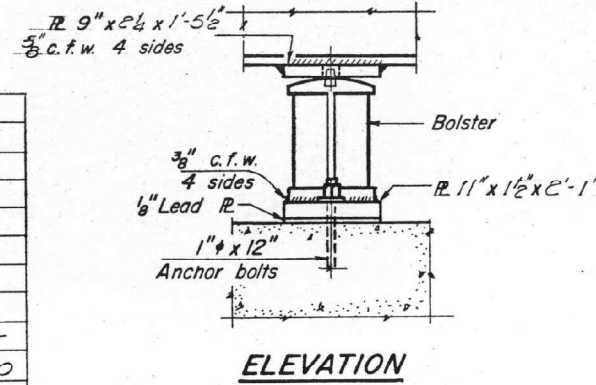
STRESS TABLE

Max. Moments - Ft. Kips.

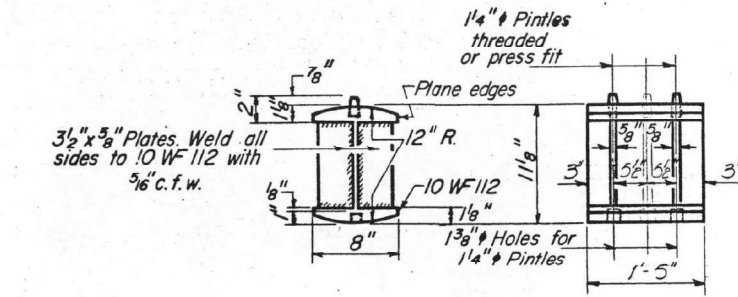
STEEL	.4L	Pier
D.L.	472.9	-1178.0
COMPOSITE		
S.D.C.	239.9	-362.7
L.L.+IMP	755.1	-587.4
TOTAL	1467.9	-2128.1

Shear - Kips.

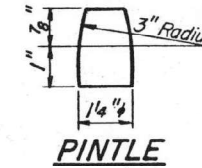
	Abut.	.2L	.4L	Pier
S.D.L	13.76	6.05	-0.46	21.80
L.L.+IMP	42.58	31.18	20.38	45.25
TOTAL	56.34	37.23	19.92	67.05



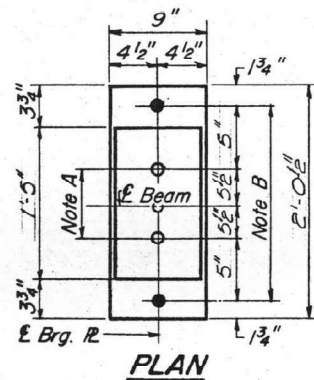
ELEVATION



ROCKER

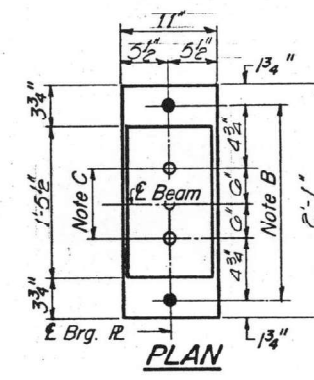
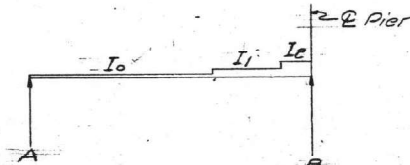


PINTLE



PLAN AT ABUTMENT

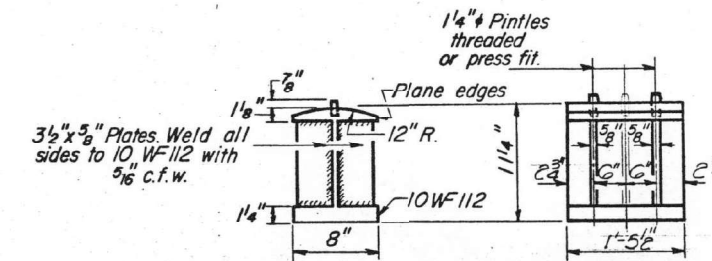
I STEEL:  
I<sub>o</sub> = 13,128 in<sup>4</sup>  
I<sub>1</sub> = 17,887 in<sup>4</sup>  
I<sub>e</sub> = 29,883 in<sup>4</sup>  
I<sub>comp.</sub> = 36,196 in<sup>4</sup>



PLAN AT PIER

NOTE C

1 3/8" Holes 1" deep in top R. only for 1/4" pintles.

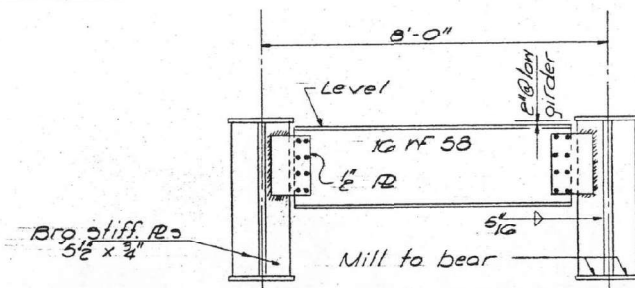


BOLSTER

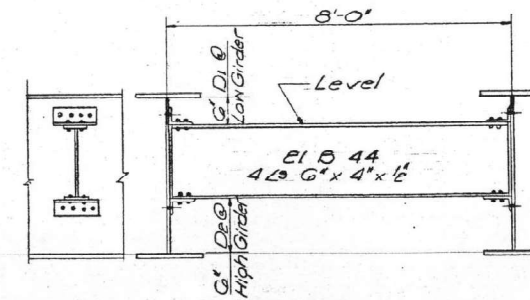
NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- D\* (Side of brg. away from fixed brg.)  
D\* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.  
D\*\* (Side of brg. toward fixed brg.)  
D\*\* = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.
- After beams have been erected and dimensions D\* or D\*\* determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

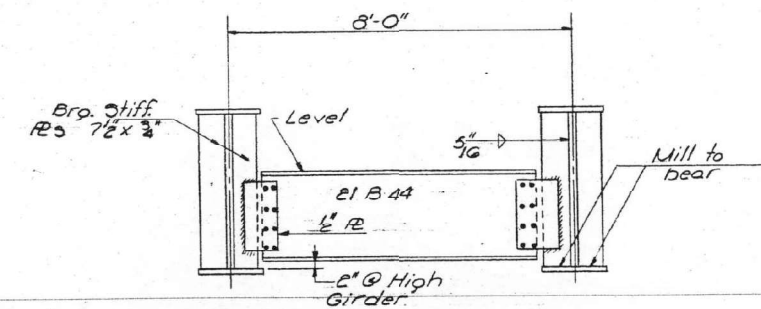
BEARING ASSEMBLY DETAILS



DIAPHRAGM D (G Required)



DIAPHRAGMS D1 & D2  
D1 is Required  
D2 is G Required



DIAPHRAGM D3 (3 Required)

DESIGNED	Suresh T. Desai	EXAMINED	Nov. 1 1968
CHECKED	[Signature]	PASSED	[Signature]
DRAWN	J. SCHNELLER	APPROVED	[Signature]
CHECKED	[Signature]		

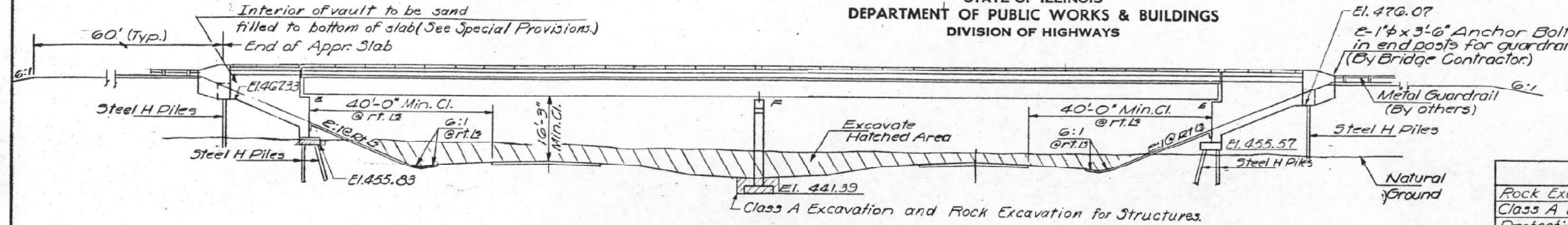
BEARING & DIAPHRAGMS  
FAI RT. G4 SEC. 96-2NB-1  
WAYNE COUNTY  
STA. 3693+17.29

I-2-B 9-1-65

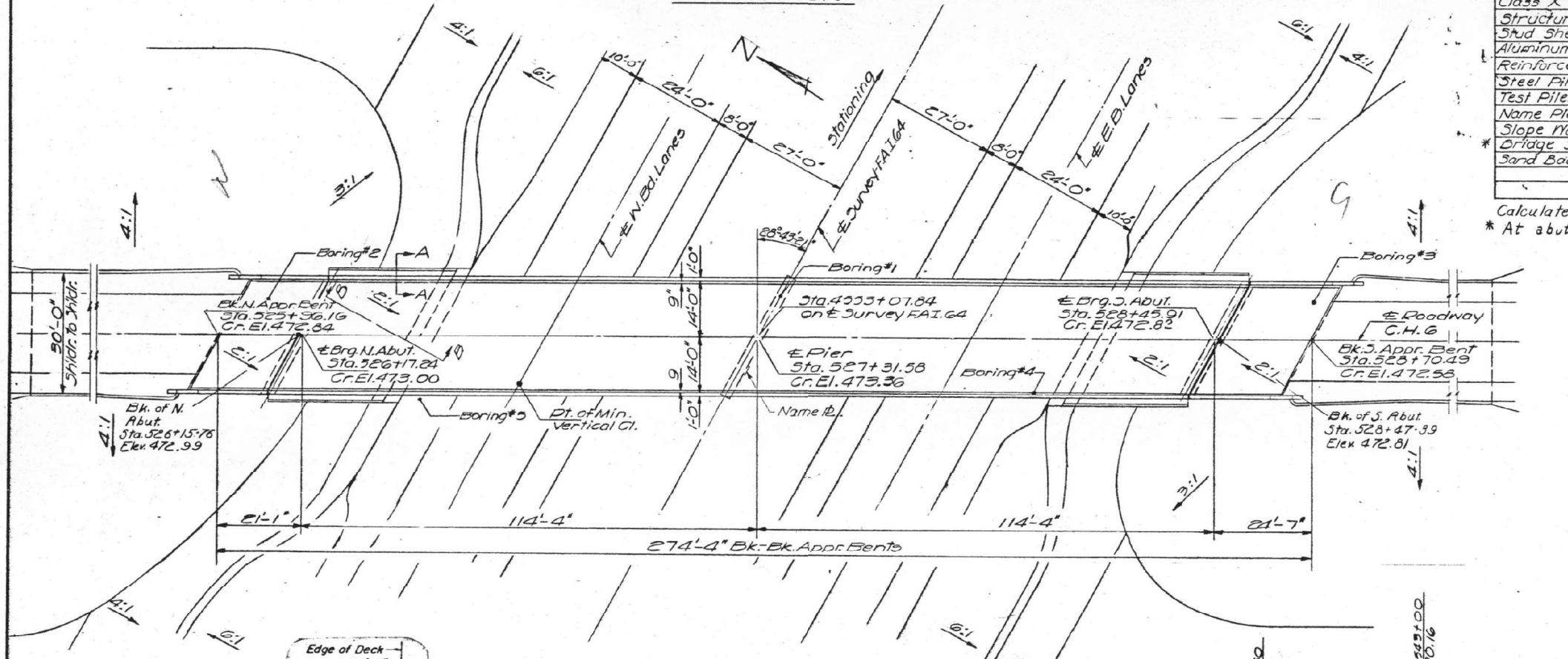
B.M. #34 124' Lt. Sta. 4549+00 ± F.A.I. 64  
 Conc. nail in S side of 12" Tree. El. 466.18  
 No existing structure.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
65	94-4HB-3	WAYNE	28	7
SHEET NO. 1 12 SHEETS				



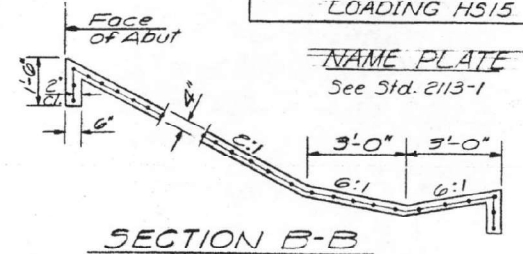
ELEVATION



PLAN



SECTION A-A



SECTION B-B

STATION 4553 + 07.84  
 BUILT 197 BY  
 STATE OF ILLINOIS  
 F.A.I. RT. 64 SEC. 90-4HB-3  
 F.A.P. PROJ. I-64-4(42)  
 LOADING HS15

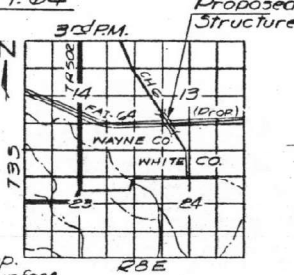
NAME PLATE  
 See Std. 2113-1

PROFILE - F.A.I. RT. 64

DESIGN STRESSES  
 $f_c = 1200$  psi. Deck Slab  
 $f_c = 1400$  psi. Gurb, Parapet, Sub.  
 $f_s = 20,000$  psi. Reinf.  
 $f_s = 20,000$  psi. Struct  
 $V_c = 75$  psi. Ftgs.  
 $n = 10$

Allowable  $L/1200$  Deflection  $L/1200$  Comp.  
 Allow 25 lb./ft<sup>2</sup> for future wearing surface

LOADING HS15-44



LOCATION SKETCH

GENERAL PLAN & ELEVATION  
 PROJ. I-64-4(42) 107  
 C.H.G OVER F.A.I. RT. 64  
 SECTION 904HB-3  
 WAYNE COUNTY  
 STATION 4553+07.84

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Rock Excavation for Struct.	Cu. Yds.		10	10
Class A Excavation for Struct.	Cu. Yds.		100	100
Protective Coat	Sq. Yds.	970		970
Class X Concrete	Cu. Yds.	268.8	224.9	493.7
Structural Steel	Lump Sum	0.27		0.27
Stud Shear Connectors	Each	1320		1320
Aluminum Railing	Lin. Ft.	537		537
Reinforcement Bars	Lbs.	62720	24410	87130
Steel Piles (B.B.P.30)	Lin. Ft.		650	650
Test Piles Steel (B.B.30)	Each		2	2
Name Plates	Each		1	1
Slope Wall (4')	Sq. Yds.		320	320
Bridge Seat Sealant	Lump Sum			0.34
Sand Back-Fill	Cu. Yds.		170	170

Calculated plan weight of Structural Steel - 223,470 Lbs.  
 \* At abutments only

GENERAL NOTES

- All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
- Fasteners shall be high strength bolts. Bolts 3/4" open holes 15/16", unless otherwise noted.
- The basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.
- Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
- Anchor bolts shall be set before boxing cross frames over supports.
- Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58# per 100 sq. ft.
- The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
- The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
- Class A Excavation for structures includes excavation for slope wall.
- The contractor shall drive two steel test piles in permanent locations, one at N. Appr. Bent and one at N. Abut. as directed by the Engineer before ordering the remainder of piles.

DESIGNED R. C. Mathews  
 CHECKED Study Spitzer  
 DRAWN Jacobs  
 CHECKED S. J.

JANUARY 23 1970  
 EXAMINED [Signature]  
 PASSED [Signature]  
 APPROVED [Signature]

USER NAME = stacy.anderson	DESIGNED -	REVISED -
PLOT SCALE = 1/100,000" / 1"	DRAWN -	REVISED -
PLOT DATE = 1/30/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
 096-0037

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	24
CONTRACT NO. 74C67				

ILLINOIS FED. AID PROJECT

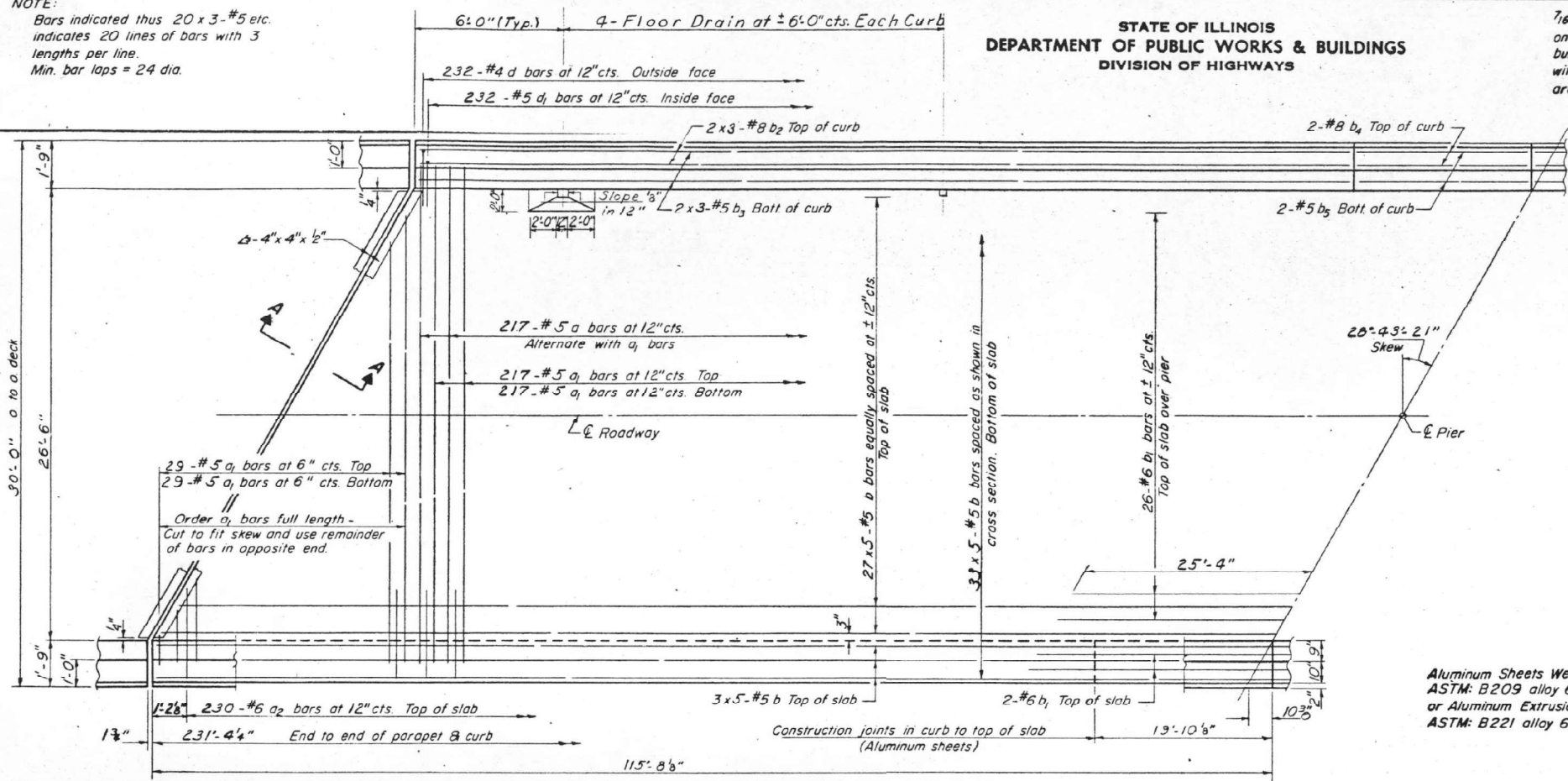
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STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

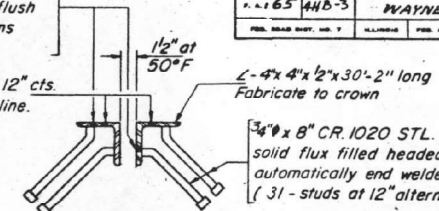
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA RT 65	4HB-3	WAYNE	28	11
SHEET NO. 5 12 SHEETS				

NOTE:  
Bars indicated thus 20 x 3-#5 etc.  
indicates 20 lines of bars with 3  
lengths per line.  
Min. bar laps = 24 dia.

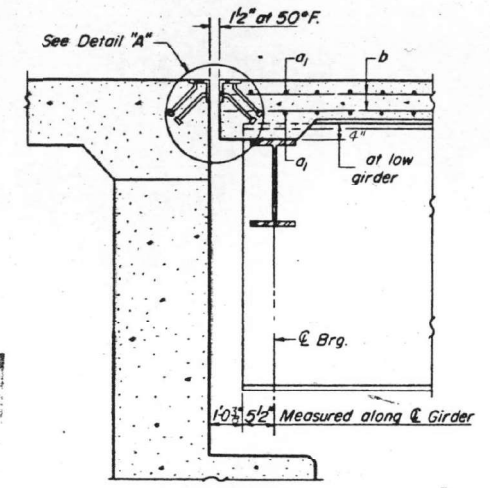


7/16" holes at 12" cts. for 3/8" bolts set on 2 1/2" gage line. All bolts shall be burned, sawed or clipped off flush with back of angles after forms are removed.

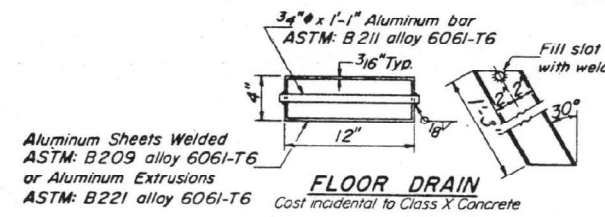
7/16" vent holes at 12" cts. set on 1-3/8" gage line.



DETAIL "A"

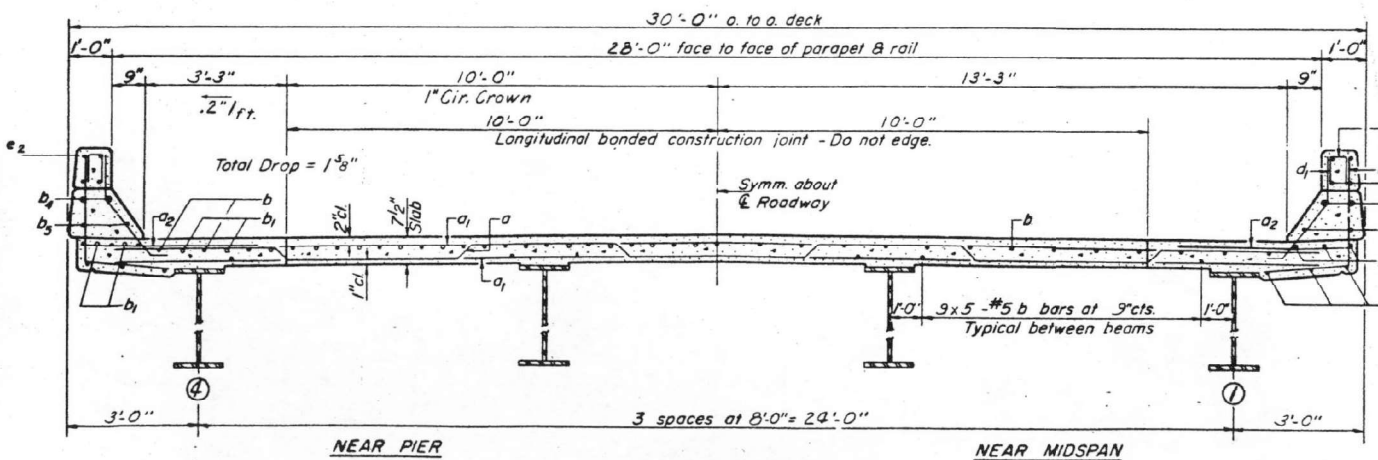


SECTION A-A



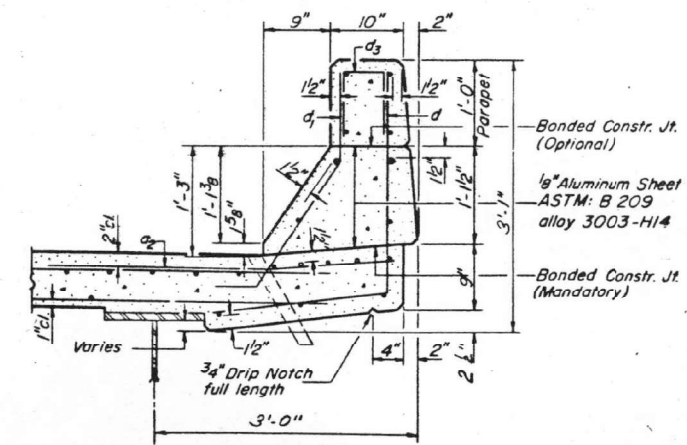
FLOOR DRAIN

HALF PLAN



CROSS SECTION (Looking South)

NOTE: For placement of bars d<sub>3</sub> and e thru e<sub>3</sub> see sheet # 6

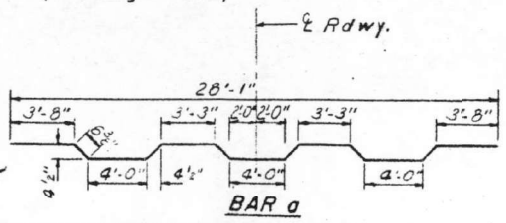


CURB SECTION

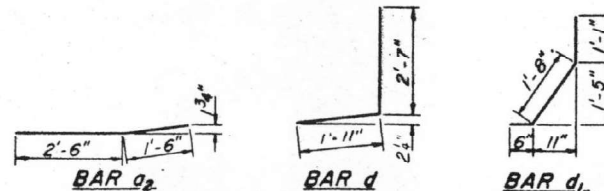
Cost of Aluminum Sheets shall be incidental to Class X Concrete.

DESIGNED	R. u. mathum	EXAMINED	Jan. 22 1970
CHECKED	Stouley du Te...	PASSED	W. B. Baumann
DRAWN	F. Coffin	APPROVED	Richard H. Galtman
CHECKED	S. L.		

S-4-L(15° thru 30°) 4-22-68



BAR a



BAR d<sub>2</sub>

BAR d

BAR d<sub>1</sub>

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	217	#5	29'-0"	~
a <sub>1</sub>	492	#5	28'-0"	~
a <sub>2</sub>	460	#6	4'-0"	~
b	330	#5	47'-3"	~
b <sub>1</sub>	30	#6	57'-8"	~
b <sub>2</sub>	24	#8	34'-0"	~
b <sub>3</sub>	24	#5	33'-4"	~
b <sub>4</sub>	8	#8	19'-7"	~
b <sub>5</sub>	8	#5	19'-7"	~
d	464	#4	4'-0"	J
d <sub>1</sub>	464	#5	3'-3"	J
Reinforcement Bars				Lbs. 48000
Class X Concrete				Cu. Yds. 193
Stud Shear Connector				Ea. 1320

Weight of bearing assemblies with lead plates and anchor bolts are included as Structural Steel. Est. Wt. = 3904

Parapet Reinforcement and Class X Concrete are billed on sheet # 6

SUPERSTRUCTURE  
MAIN SPAN  
FA RT. 64-SEC. 96-4HB-3  
WAYNE COUNTY  
STA. 4553+07.34

MODEL: Default  
FILE NAME: c:\pwworkspace\stefanmak\0893577\0714067-shr-plan.dgn

USER NAME = stacy.anderson	DESIGNED -	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/30/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0037

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	25
CONTRACT NO. 74C67				
ILLINOIS FED. AID PROJECT				



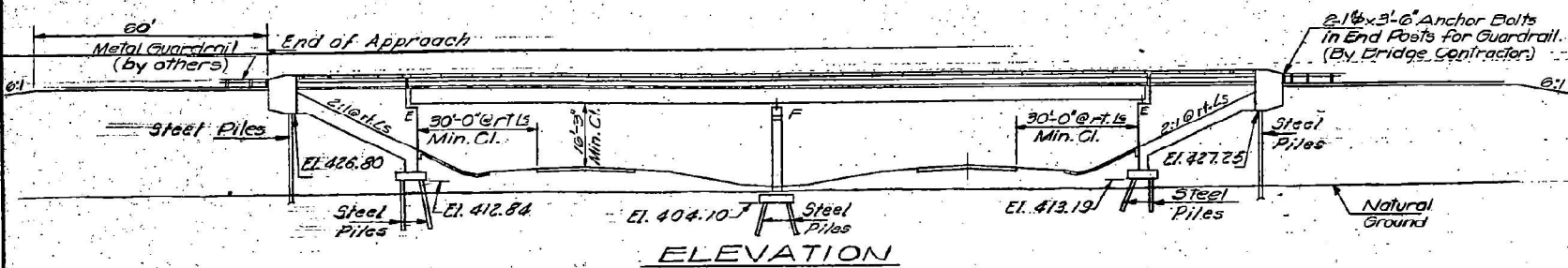
B.M. #97-144 R.I. Sta. 4587+38 F.A.I. 64  
Concrete Nail in North Side of 12" Tree.  
El. 412.35

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
96-4HB-4	WAYNE	27	7	15 SHEETS

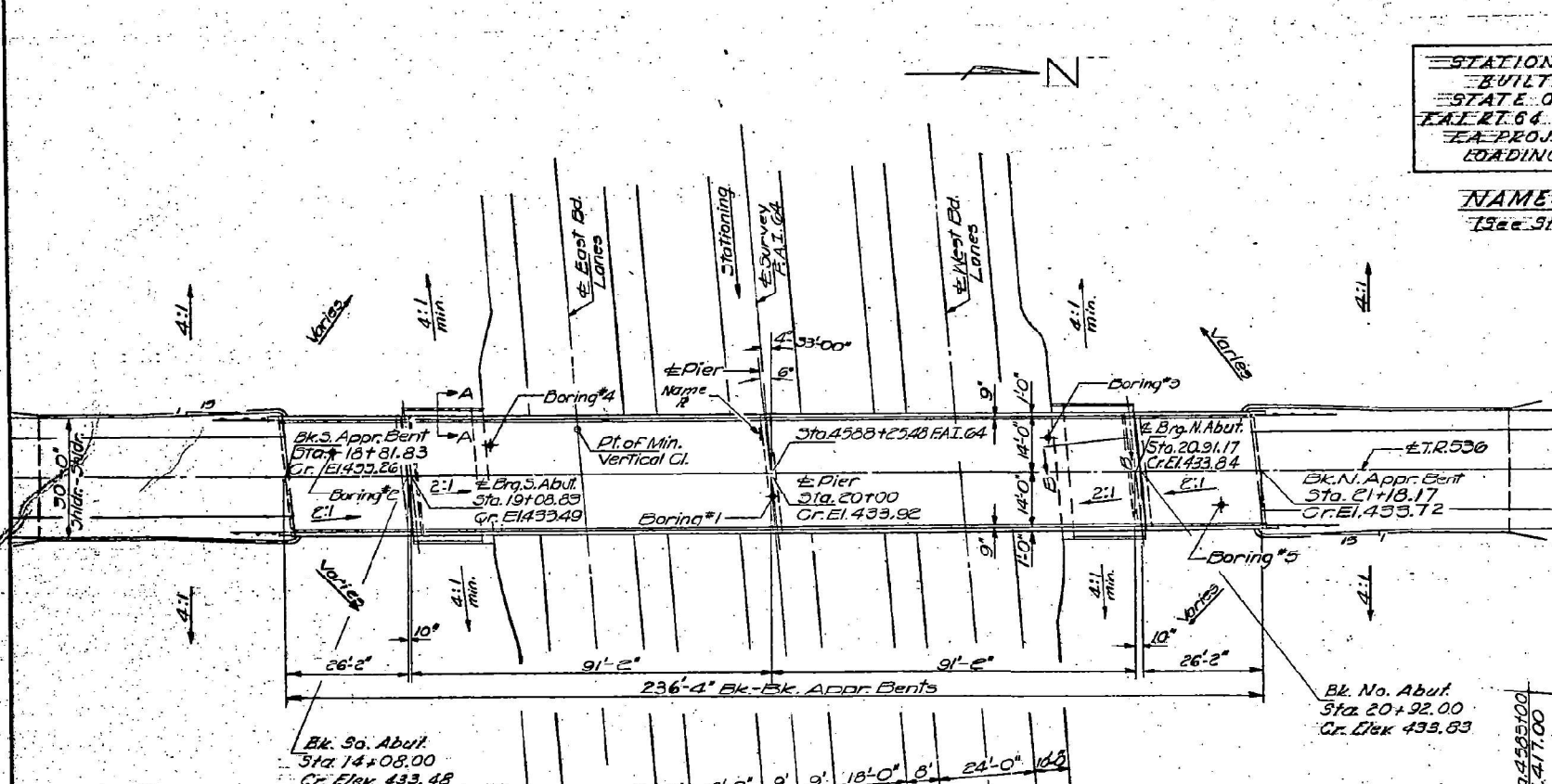
GENERAL NOTES

- All reinf. bars shall be lapped 24 dia. unless otherwise shown.
- Field connections shall be bolted using high strength bolts. Bolts, 2", open holes 1/2" except as noted.
- Diaphragm connections may be adapted to shop welding subject to approval by the Engineer.
- The basic lead silico chromate paint system shall be used for shop and field painting of Structural Steel.
- Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engr.
- Anchor bolts shall be set before bolting diaphragms over supports.
- Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58 lb. per 100 sq. ft.
- The Contractor shall drive two steel test piles one at the So. Appr. Bent & one at the pier in a permanent location as directed by the Engr. before ordering the remainder of piles.
- An alternate strand pattern using Extra High Strength Prestressing strand (270 K.S.I.) is permitted.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
- The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
- Drive all piles to refusal.
- Calculated plan weight of Structural Steel: 154,930 Lbs.



STATION 4588+25.48  
BUILT 197 BY  
STATE OF ILLINOIS  
FA.R.T. 64 SEC. 96-4HB-4  
EA PROJ. I-64-A (42)  
LOADING HS 15

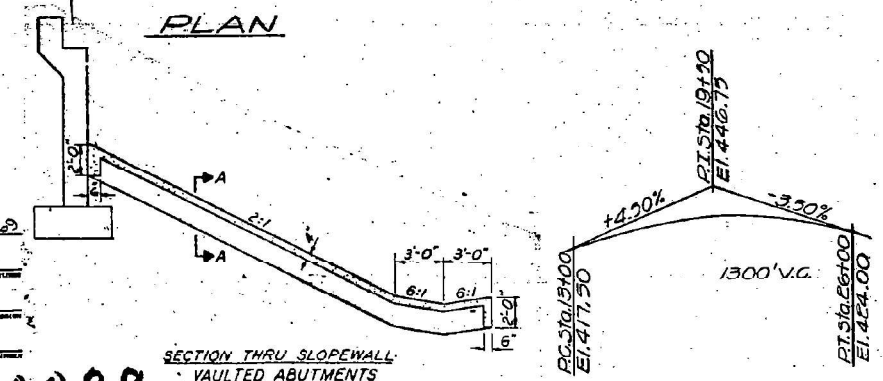
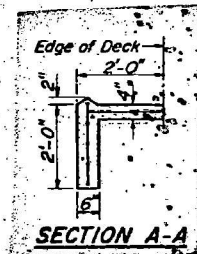
NAME PLATE  
See Std. 2113-1



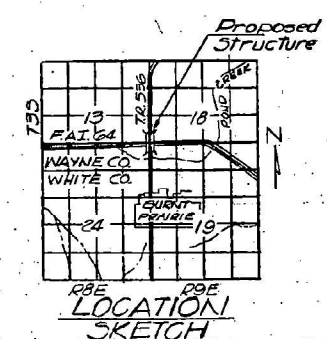
TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Class A Excav for Structures	Cu. Yds.			45.0
Protective Coat	Sq. Yds.	875		875
Class X Concrete	Cu. Yds.	2273	192.9	420.2
Prec. Prest. Conc. I-Beam (36")	Lin. Ft.	100		100
Structural Steel	L.S.			0.18
Stud Shear Connectors (3/8")	Each	1128		1128
Aluminum Railing	Lin. Ft.	463		463
Reinforcement Bars	Lbs.	53840	24,030	77,870
Steel Piles (JOB P42)	Lin. Ft.		1797	1797
Test Piles Steel (JOB P42)	Each		2	2
Name Plates	Each		1	1
Slope Wall (4")	Sq. Yds.			200
Preformed Joint Sealer	Lin. Ft.	60		60

PROFILE-F.A.I. 64



DESIGN STRESSES  
FIELD UNITS  
f<sub>s</sub> = 1200 psi Deck Slab  
f<sub>c</sub> = 1400 psi Curb, Parapet, Sub.  
f<sub>s</sub> = 20,000 psi Reinforcement  
f<sub>s</sub> = 20,000 psi Structural  
v<sub>c</sub> = 75 psi. Ftgs.  
n = 10  
Allowable Δ > 1/1000 Composite  
Allowable Future W.O. 25%  
PRECAST PRESTRESSED UNITS  
f<sub>c</sub> = 5000 psi.  
f<sub>ci</sub> = 4000 psi.  
f<sub>s</sub> = 248,000 psi Strands  
f<sub>sl</sub> = 173,600 psi Strands  
LOADING HS 15-44



REEL 7-68

GENERAL PLAN & ELEVATION  
PROJ. I-64-A (42) 107  
T.R. 536 OVER F.A.I. 64  
F.A.I. ROUTE 64  
SECTION 96-4HB-4  
WAYNE COUNTY  
STATION 4588+25.48

REEL 7-

DESIGNED VINAYA SHARMA  
GENE MCCORMICK  
CHECKED DON BRIDGEWATER  
DRAWN JAS JK  
GENE MCCORMICK  
CHECKED DON BRIDGEWATER

NOVEMBER 12 1969  
EXAMINED  
PASSED  
APPROVED

096-0038

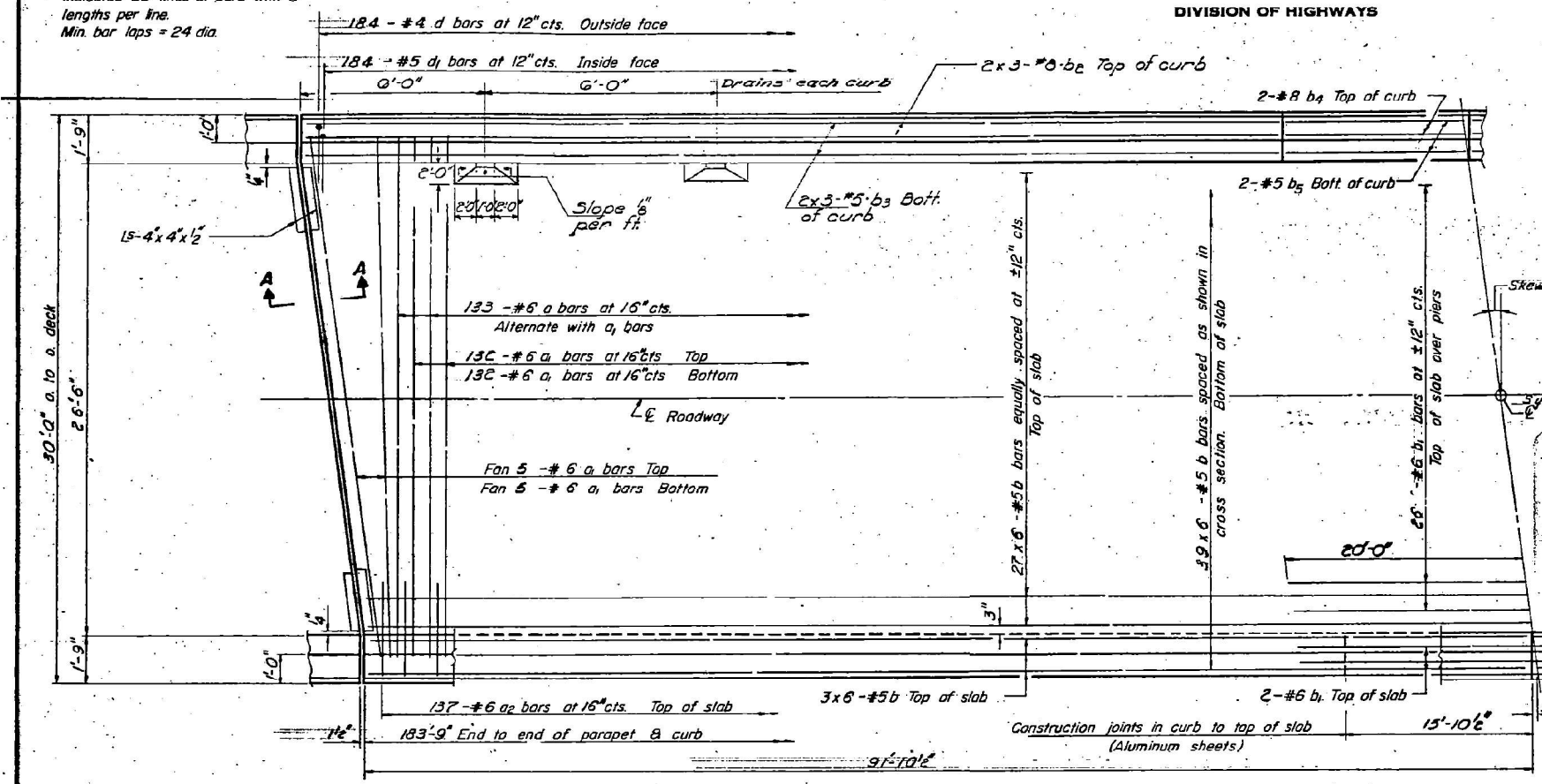
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USER NAME = stacy.anderson	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS 096-0038	F.A. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO. VAR D7 BRIDGE PAINTING 2024-2 WAYNE 29 27
PLOT SCALE = 100,000' / in.	CHECKED -	REVISED -	SCALE: SHEET OF SHEETS STA. TO STA.		CONTRACT NO. 74C67
PLOT DATE = 1/30/2024	DATE -	REVISED -			ILLINOIS FED. AID PROJECT

**NOTE:**  
 Bars indicated thus 20-x3-#5 etc.  
 indicates 20 lines of bars with 3  
 lengths per line.  
 Min. bar laps = 24 dia.

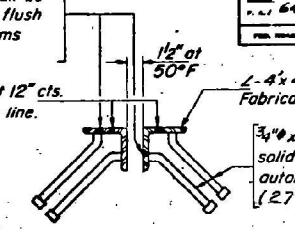
STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
 DIVISION OF HIGHWAYS

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-96-4HB-4	WAYNE	27	18	12
SHEET NO. 12 15 SHEETS				



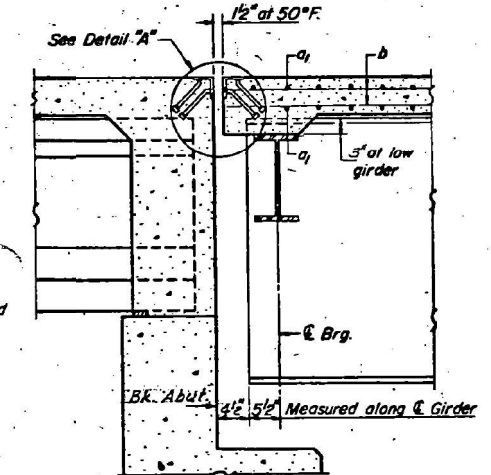
HALF PLAN

1/2" holes at 12" cts. for 3/8" bolts set on 2 1/2" gage line. All bolts shall be burned, sawed or clipped off flush with back of angles after forms are removed.

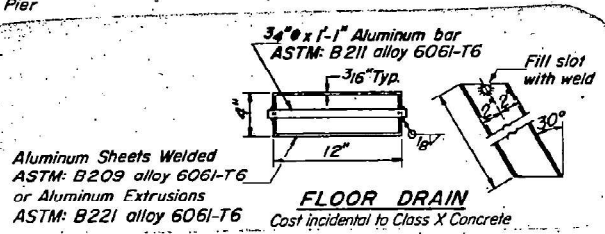


DETAIL 'A'

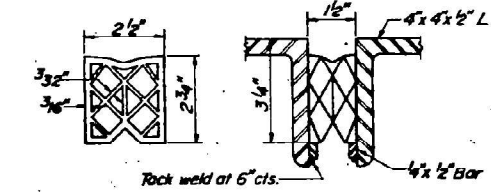
3/4" x 8" CR. 1020 STL. granular or solid flux filled headed studs automatically end welded. (27-studs at 12" alternate cts.)



SECTION A-A



FLOOR DRAIN



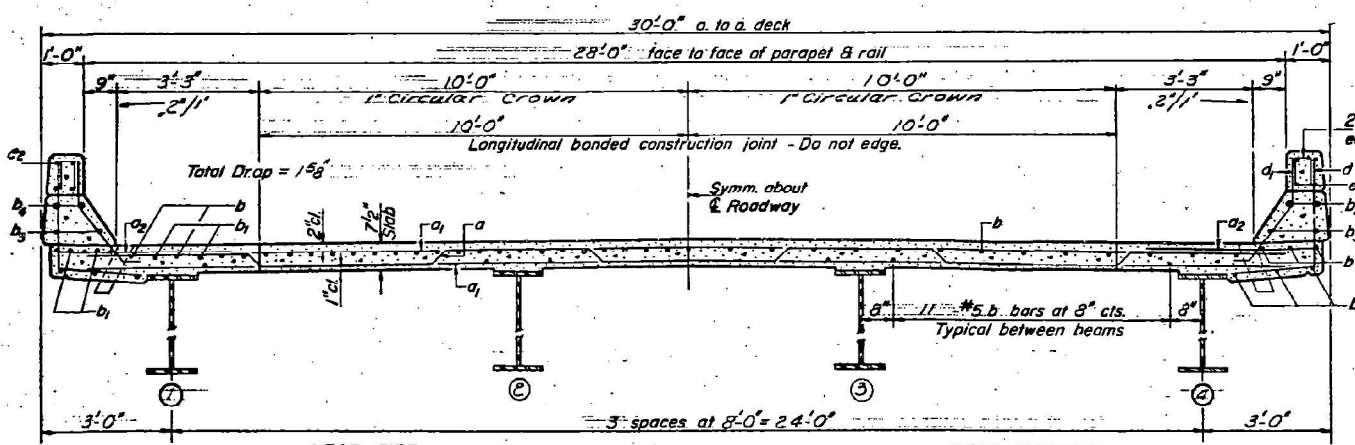
PREFORMED JOINT SEALER

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	133	#6	29'-0"	~
a1	284	#6	28'-0"	~
a2	274	#6	4'-0"	~
b	432	#5	31'-8"	~
b1	30	#6	40'-0"	~
b2	24	#8	26'-9"	~
b3	24	#5	26'-3"	~
b4	8	#8	15'-7"	~
b5	8	#5	15'-7"	~
d	368	#4	4'-7"	J
d1	368	#5	3'-3"	J
Reinforcement Bars			Lbs.	40,660
Class X Concrete			Cu. Yds.	154.9
Stud Shear Conn.			Ca.	1128

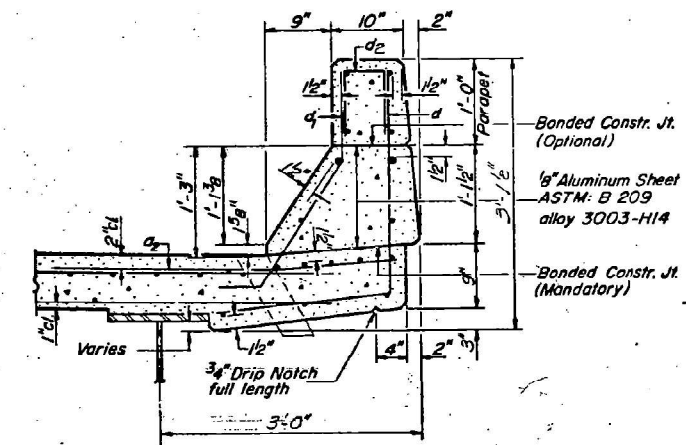
Weight of bearing assemblies with lead plates and anchor bolts are included as Structural Steel. Est. Wt. = 3,330/lbs.

Parapet Reinforcement and Class X Concrete are billed on sheet # 13.



CROSS SECTION  
 Looking North

NOTE: For placement of bars d1 and e, e2 see sheet # 13.



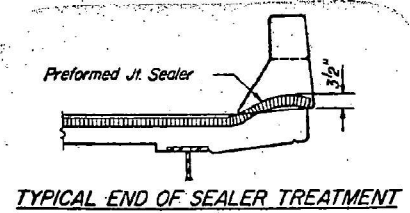
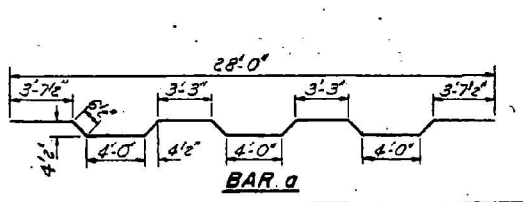
CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete.

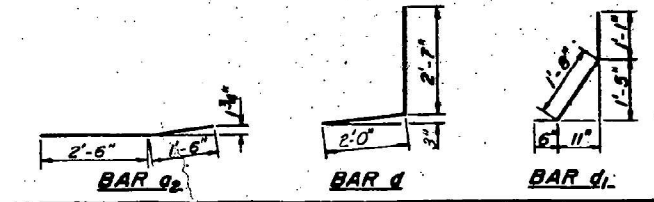
DESIGNED VINAYA SHARMA  
 CHECKED GENE MCCORMICK  
 DRAWN GM  
 CHECKED DON BRIDGWATER

EXAMINED  
 PASSED  
 APPROVED

Nov. 12 1968



TYPICAL END OF SEALER TREATMENT

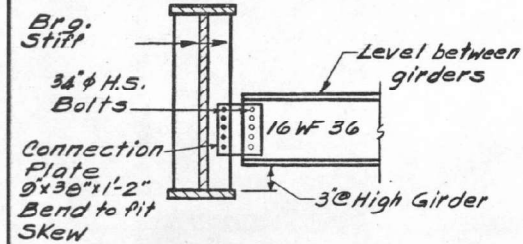
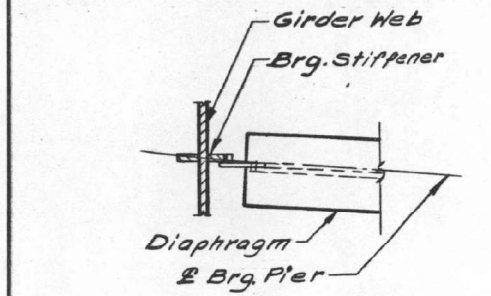
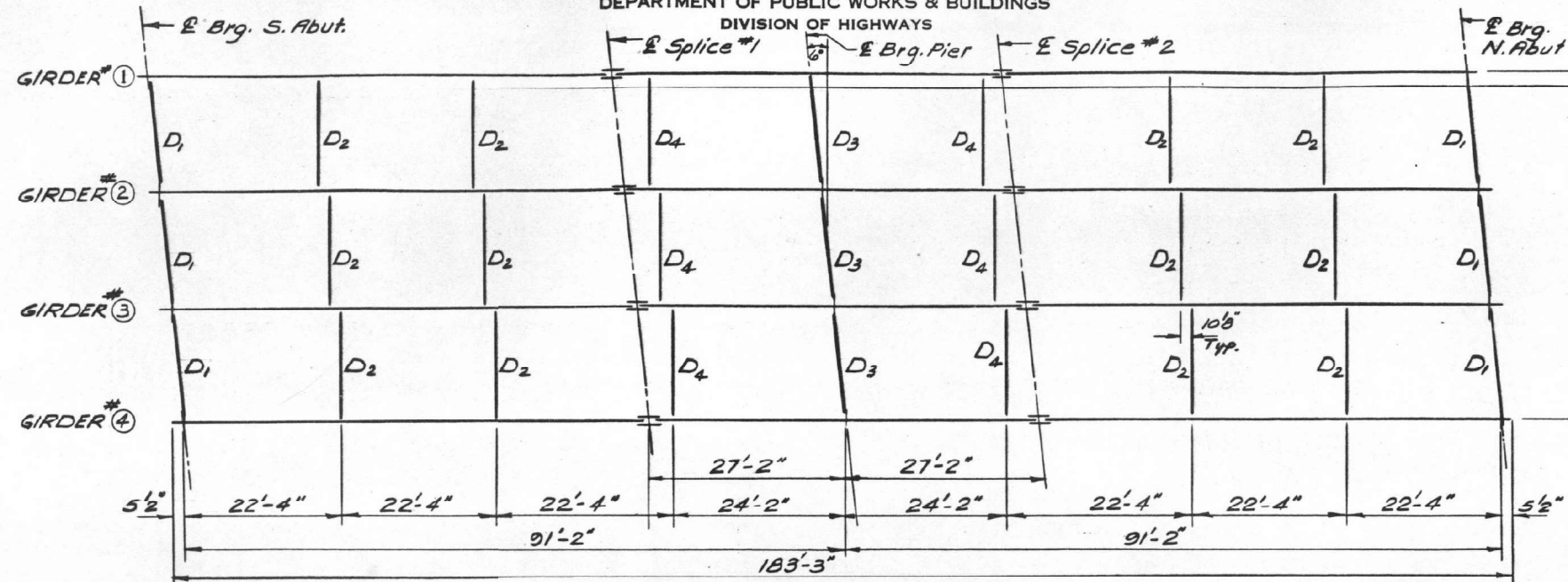


SLAB DETAILS-MAIN SPANS  
 E.A.I. RT. 64 SEC. 96-4HB-4  
 WAYNE COUNTY  
 STATION 4588+25.48

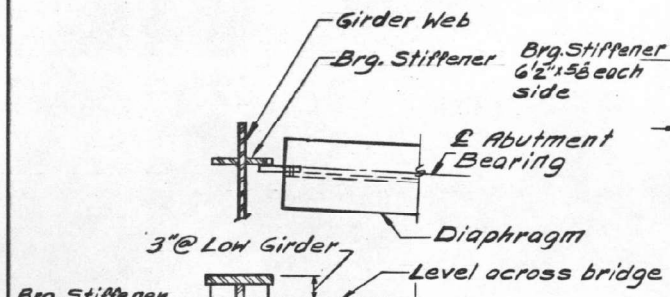
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S-4-R(515) 4-22-68

USER NAME = stacy.anderson	DESIGNED -	REVISED -	EXISTING STRUCTURE PLANS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -	096-0038	VAR	D7 BRIDGE PAINTING 2024-2	WAYNE	29	28
PLOT SCALE = 100,000' / in.	CHECKED -	REVISED -	SCALE:	CONTRACT NO. 74C67				
PLOT DATE = 1/30/2024	DATE -	REVISED -	SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				



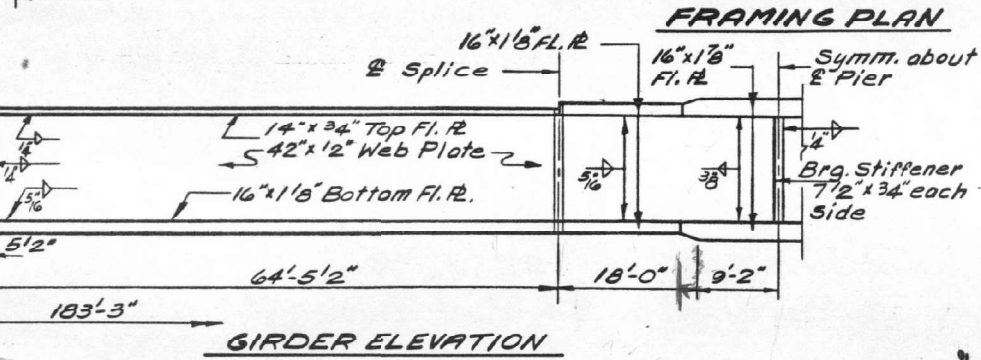
**DIAPHRAGM D<sub>3</sub>**  
Required - 3



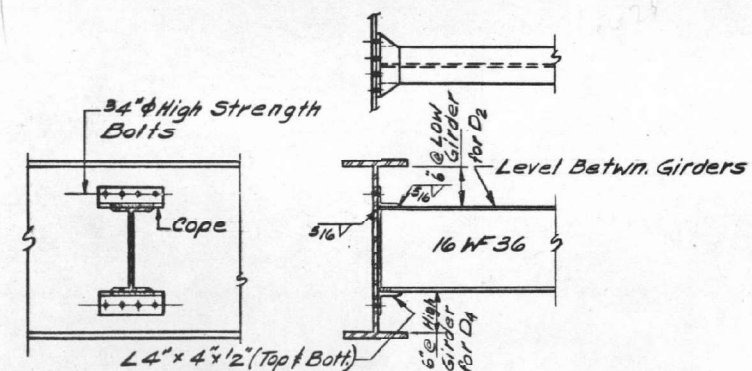
**DIAPHRAGM D<sub>1</sub>**  
Required - 6



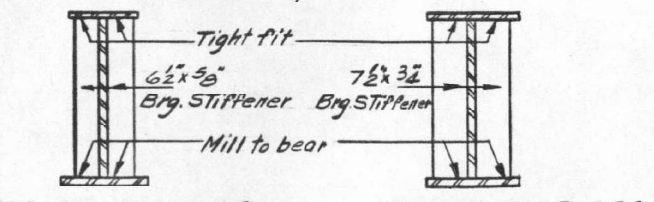
**DIAPHRAGM D<sub>2</sub> & D<sub>4</sub>**  
12 D<sub>2</sub> Required  
6 D<sub>4</sub> Required



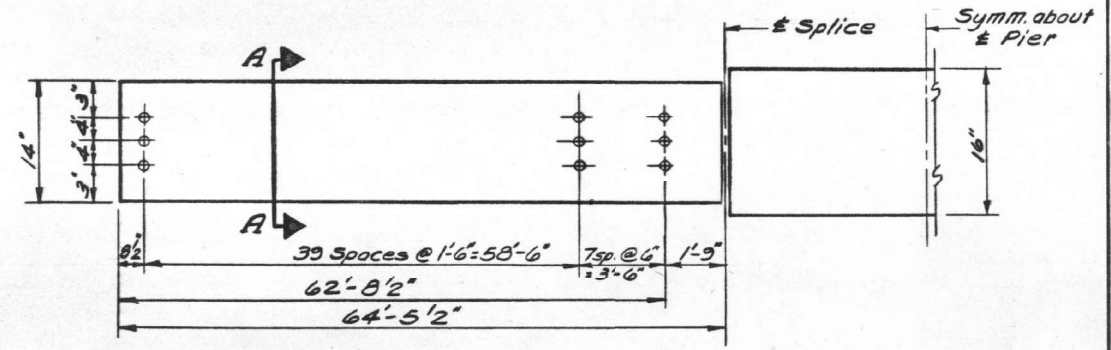
**GIRDER ELEVATION**



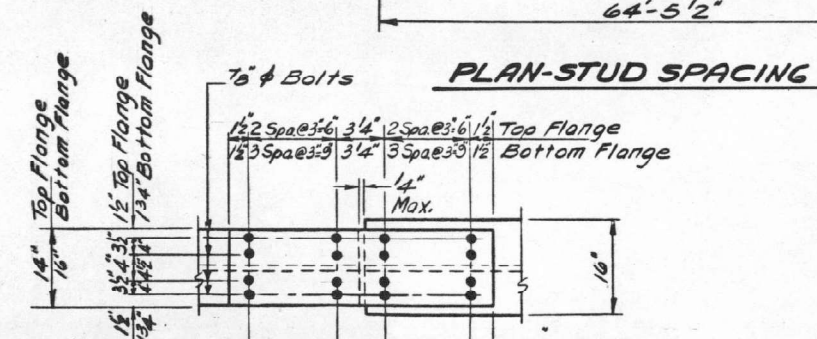
**DIAPHRAGM D<sub>2</sub> & D<sub>4</sub>**



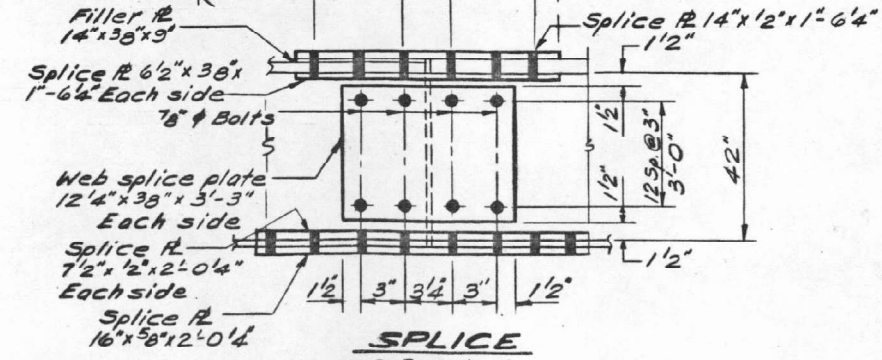
**SEC. AT ABUT. BRG. STIFFENER**      **SEC. AT PIER BRG. STIFFENER**



**PLAN-STUD SPACING**



**SHOP FL. SPLICE DETAIL**



**SPLICE**  
8 Required

**STRUCTURAL STEEL-LAYOUT & DETAILS**  
F.A.I. RT. 64 SEC. 96-4 HB-4  
WAYNE COUNTY  
STA. 4588+25.48

DESIGNED VINAYA SHARMA	EXAMINED Nov. 12 19 65
CHECKED GENE MCCORMICK	PASSED
DRAWN Leona Heeren	APPROVED
CHECKED DON BRIDGEWATER	

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USER NAME = stacy.anderson	DESIGNED -	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/30/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
096-0038

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D7 BRIDGE PAINTING 2024-2	WAYNE	29	29	
ILLINOIS			CONTRACT NO. 74C67	