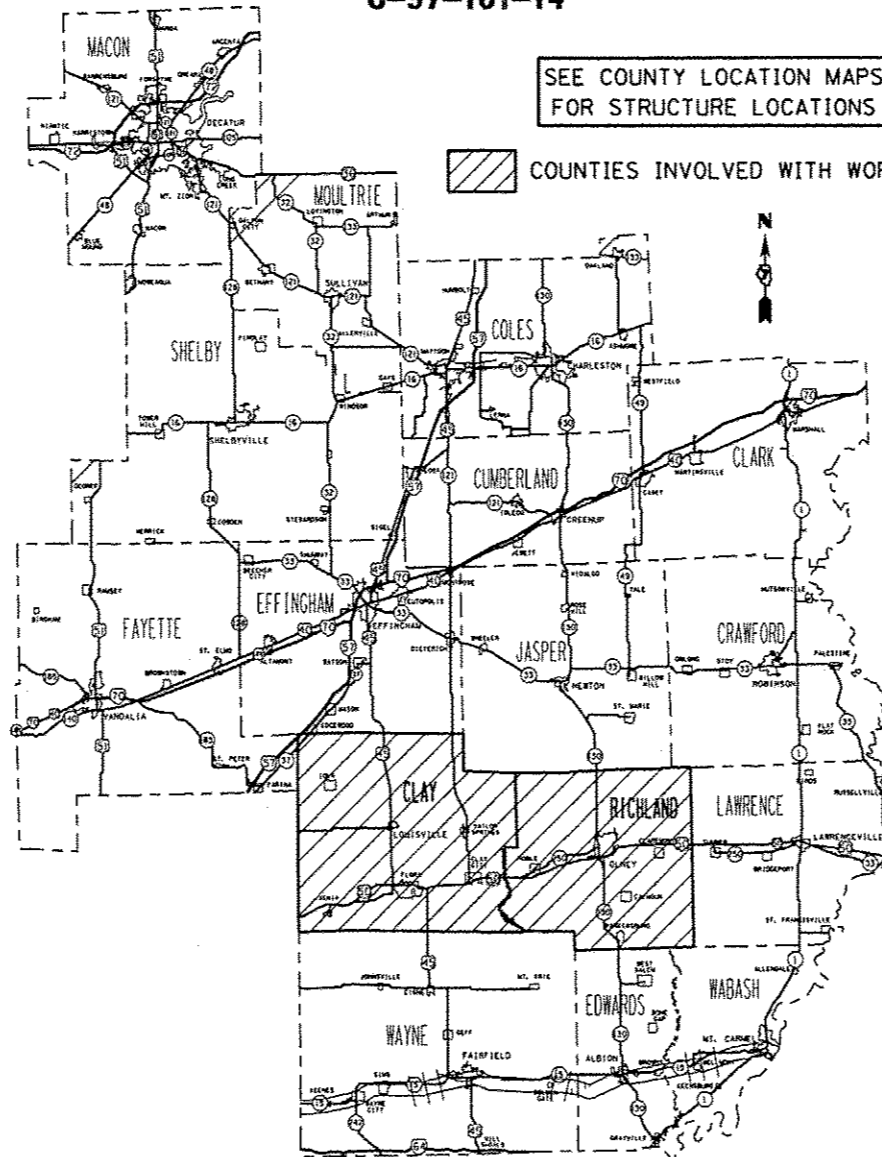


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

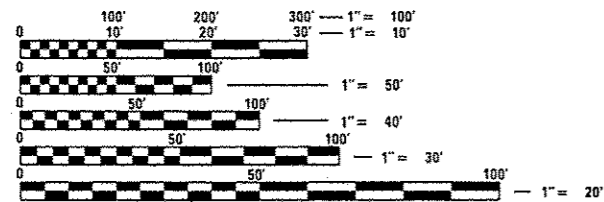
**F.A.P. ROUTE 327 (U.S. RTE. 50) & F.A.S. ROUTE 1720 (IL. RTE. 250)
SECTION D7 BRIDGE PAINTING 2015-2
PROJECT
BRIDGE PAINTING
RICHLAND & CLAY COUNTIES**

C-97-101-14



SEE COUNTY LOCATION MAPS
FOR STRUCTURE LOCATIONS

COUNTIES INVOLVED WITH WORK



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: TOM RONAN
PROJECT MANAGER: TOM RONAN
PHONE: (217)-342-8320
CONTRACT NO. 74698

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D7 BRIDGE PAINTING 2015-2		ILLINOIS	15	1
CONTRACT NO. 74698				

* F.A.P. RTE. 327 & F.A.S. RTE. 1720
** RICHLAND & CLAY

D-97-052-14



COUNTIES INVOLVED WITH BRIDGE PAINTING

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 5 20 14
Roger L. Orishell
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Oct 17 20 14
John D. Baranzelli PE
ENGINEER OF DESIGN AND ENVIRONMENT

Oct 17 20 14
Omer Osman PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>ITEM</u>
1	COVER SHEET
2	INDEX OF SHEETS & GENERAL NOTES
3	LOCATION DESCRIPTIONS
4	SUMMARY OF QUANTITIES
5-14	EXISTING STRUCTURE PLANS
15	LOCATION MAPS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 15:

<u>STD. NO.</u>	<u>DESCRIPTION</u>
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701001-02	OFF-ROAD OPERATIONS, 2L2W, 15' MINIMUM AWAY FROM PAVEMENT EDGE
701006-05	OFF-ROAD OPERATIONS, 2L2W, 15' AWAY TO EDGE OF PAVEMENT
701101-04	OFF-ROAD OPERATIONS, MULTI-LANE, LESS THAN 15' TO EDGE OF PAVEMENT
701106-02	OFF-ROAD OPERATIONS, MULTI-LANE, MORE THAN 15' AWAY
701201-04	LANE CLOSURE, 2L2W, DAY ONLY
701901-03	TRAFFIC CONTROL DEVICES

GENERAL NOTES

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2012; THE SUPPLEMENTAL SPECIFICATIONS, THE RECURRING SPECIAL PROVISIONS, AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

THE PROPOSED PROJECT IS LOCATED AT 2 LOCATIONS IN RICHLAND COUNTY AND ONE LOCATION IN CLAY COUNTY IN DISTRICT 7.

THE WORK INCLUDED IN THIS SECTION CONSISTS OF CLEANING AND PAINTING THE BRIDGES 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 OP1 AND OP2 PAINTING CONTRACTOR CERTIFICATION WILL BE REQUIRED FOR THIS PROJECT.

• F.A.P. RTE. 327 & F.A.S. RTE. 1720
•• RICHLAND & CLAY

FILE NAME =	USER NAME = steffanrk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS AND GENERAL NOTES	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\psidot\steffanrk\08403552\07	74698-shr-index.dgn	DRAWN -	REVISED -			•	D7 BRIDGE PAINTING 2015-2	••	15	2	
Default	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -			CONTRACT NO. 74698		ILLINOIS FED. AID PROJECT			
	PLOT DATE = 8/12/2014	DATE -	REVISED -			SCALE: N/A	SHEET 1 OF 1 SHEETS	STA.	TO STA.		

BRIDGE LOCATION DESCRIPTIONS

LOCATION #1

ROUTE: FAP 327
 MARKED: US 50
 SECTION: 5, 2VB2
 STATION: 102+56.50
 STRUCTURE NUMBER: 080-0005

TYPE OF BRIDGE: Wide Flange I-Beams-3 Spans (5 Beams)
 LOCATION: Two miles east of the Junction of Illinois Route 130
 FEATURE CARRIED/SPANNED: US 50 over the CSXT railroad

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, including beams, bearings and diaphragms, within 5' (measured along the beam) of the abutments shall be cleaned by SSPC-SP10- Near White Metal Blast Cleaning. Both fascia beams, in their entirety, shall be cleaned 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 monitor will be required at this location.

LOCATION #2

ROUTE: FAS 1720
 MARKED: ILL 250
 SECTION: 5BR
 STATION: 68+35
 STRUCTURE NUMBER: 080-0022

TYPE OF BRIDGES: Wide Flange I-Beams-3 Spans (5 Beams)
 LOCATION: 1.5 miles west of Diney
 FEATURE CARRIED/SPANNED: ILL 250 over the Fox River

COLOR OF THE FINISH COAT SHALL BE REDDISH BROWN, MUNSELL 2.5YR 3/4.

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, including beams, bearings and diaphragms, within 15' (measured along the beam) of the abutments shall be cleaned 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.

Four air monitors will be required at this location.

LOCATION #3 & #4

ROUTE: FAP 327
 MARKED: US 50
 SECTION: 8, 2B
 STATION: 801+80
 STRUCTURE NUMBERS: 013-0002 & 013-0003

TYPE OF BRIDGES: Wide Flange I Beams-3 Spans (7 Beams)
 LOCATION: 0.2 miles east of the Junction of US 45 South
 FEATURE CARRIED/SPANNED: US 50 EB & WB over Elm River

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

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 within 5' (measured along the beam) of the abutments and any expansion joints at piers, including beams, bearings and diaphragms, shall be cleaned by SSPC-SP10- Near White Metal Blast Cleaning. The entire outside and bottom of the bottom flange of both fascia beams, for the entire length of the beams, shall be cleaned 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.

Three air monitors will be required at this location.

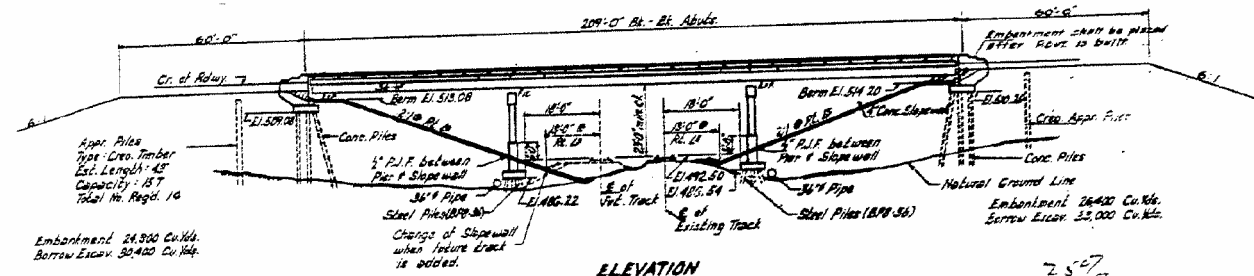
* F.A.P. RTE. 327 & F.A.S. RTE. 1720
 ** RICHLAND & CLAY

FILE NAME *	USER NAME * stafffernk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE LOCATION DESCRIPTIONS				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0:\pv\work\p\idoc\stafffernk\02483552.D	74690-shr\index.dgn	DRAWN -	REVISED -		SCALE: N/A	SHEET 1	OF 1	SHEETS	STA.	TO STA.	**	15	3
	PLOT SCALE * 1/8"=1'-0"	CHECKED -	REVISED -		CONTRACT NO. 74698								
Default	PLOT DATE * 8/12/2014	DATE -	REVISED -		ILLINOIS FED. AID PROJECT								

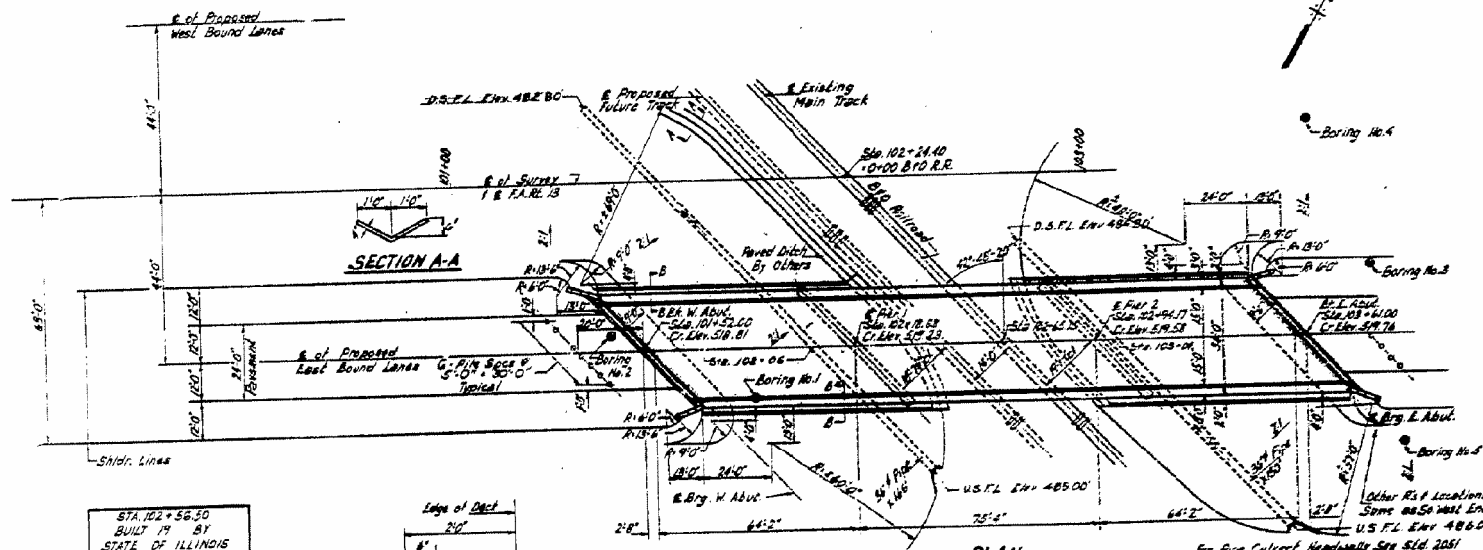
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

DATE	PROJECT	SECTION	SHEET NO.	TOTAL SHEETS
	RICHLAND	1B	6	10 SHEETS

B.M. Spike in root of 24" oak 272 ft. W. of Sta. 107+00. L.S. 494.14

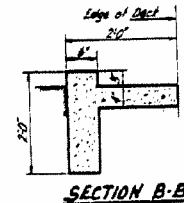


ELEVATION



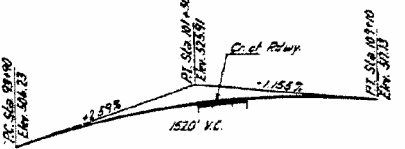
PLAN

STA. 102+56.50
BUILT 19 81
STATE OF ILLINOIS
F.A. RT. 13 SEC. 4-2VB-2
F.A. PROJ. 70-141
LOADING H20-S16
NAME PLATE
See Std 213



SECTION B-B

DESIGNED	JAN 27 1961
DRAWN	<i>[Signature]</i>
CHECKED	<i>[Signature]</i>
APPROVED	<i>[Signature]</i>



PROFILE OF F.A. RT. 13

GENERAL NOTES

Class X Concrete shall be used throughout. The concrete floor slab shall be finished in accordance with Article 519 of the Standard Specifications.

Slope walls shall be reinforced with welded wire fabric 4"x4" mesh, #2 wire, weighing 50 lbs per 100 sq. ft. Cut off wall is included in quantity of slope wall.

Course aggregate which is to be used in parapet handrails and end posts must be free of chert, flint, limonite, lignite and soft sandstone.

Rivets 3/4" open holes 3/4", unless noted.

Railings shall be adjusted to true alignment after parapets have been poured.

All fasteners, anchors, bearing plates, lead plates, shim plates, pins and anchor bolts shall be fabricated and set in accordance with Article 511 of the Standard Specifications and are included in quantity of Structural Steel (Est. No. 4936724) and are included in quantity of Structural Steel (Est. No. 4936724). Anchor bolts shall be set before riveting diaphragms over supports.

Expansion guards shall be fabricated and erected in accordance with Article 511(d) of the Standard Specifications and are included in quantity of Structural Steel.

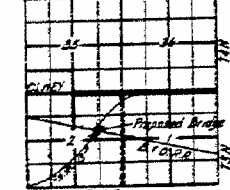
Except as otherwise provided, all Structural Steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Articles 56.1 to 56.5 inclusive of the Standard Specifications.

All paint shall be furnished and applied by the Contractor.

The exposed surfaces of the expansion guards shall be given two shop coats of red lead paint.

The Contractor shall drive one concrete test pile at S. Abut. and one steel test pile at pier 1 in permanent location as directed by the Engineer before ordering remainder of work.

Piers at abutments shall be driven in holes prepared to natural ground line in accordance with Article 50.9 of the Standard Specifications.



LOCATION SKETCH

TOTAL BILL OF MATERIAL

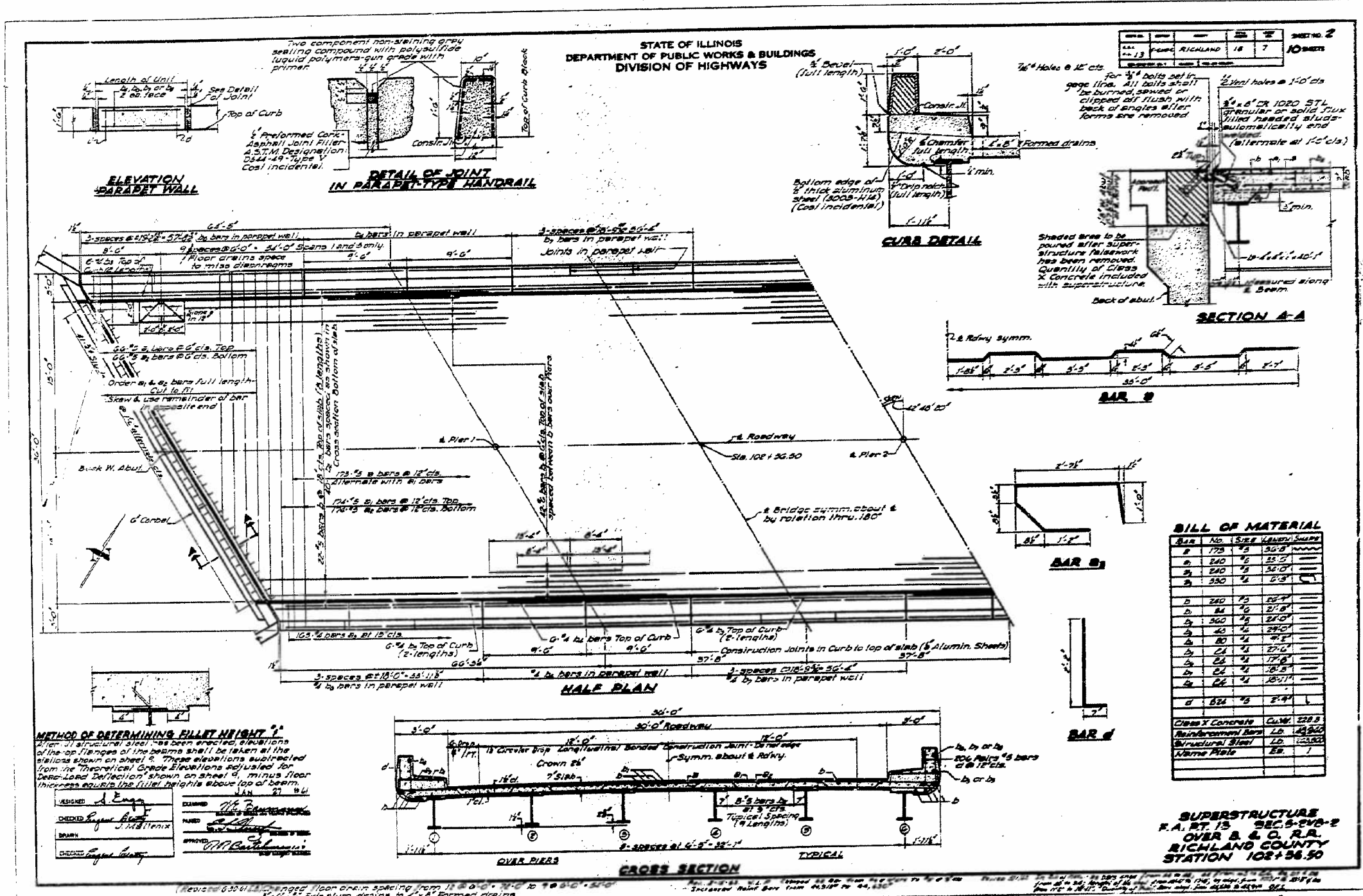
ITEM	QUANTITY	UNIT	PRICE	TOTAL
Bottom Embankment	26,400	Cu. Yds.	0.80	21,120.00
Class X Concrete	218.8	Cu. Yds.	37.1	8,117.56
Structural Steel	243,820	Lbs.	0.45	109,779.00
Aluminum Paint	419	Sq. Yds.	22.50	9,427.50
Reinforcement Bars	48,960	Lbs.	0.02	979.20
Concrete Piles	1,132	Lbs.	1.75	1,981.00
Steel Piles (Concrete)	1	Each	1,980	1,980.00
Steel Piles (Steel)	1	Each	1	1.00
Steel Piles (Steel)	1	Each	1	1.00
Steel Piles	50	Sq. Yds.	6.25	312.50
Steel Plates	1	Lbs.	7.6	7.60
Structural Steel	243,820	Lbs.	0.45	109,779.00
Structural Steel	243,820	Lbs.	0.45	109,779.00

DESIGN STRESSES

16,100 psi Super F 548
14,750 psi. F 548
14,200 psi. F 548
14,100 psi. F 548

LOADING H20-S16-44

PROJ. 70-141
F.A. RT. 13 SEC. 4-2VB-2
RICHLAND COUNTY
STA. 102+56.50



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

PROJECT NO.	080-0005	SHEET NO.	3
SECTION	PAINTING	DATE	12/15/2015
LOCATION	RICHLAND & CLAY		

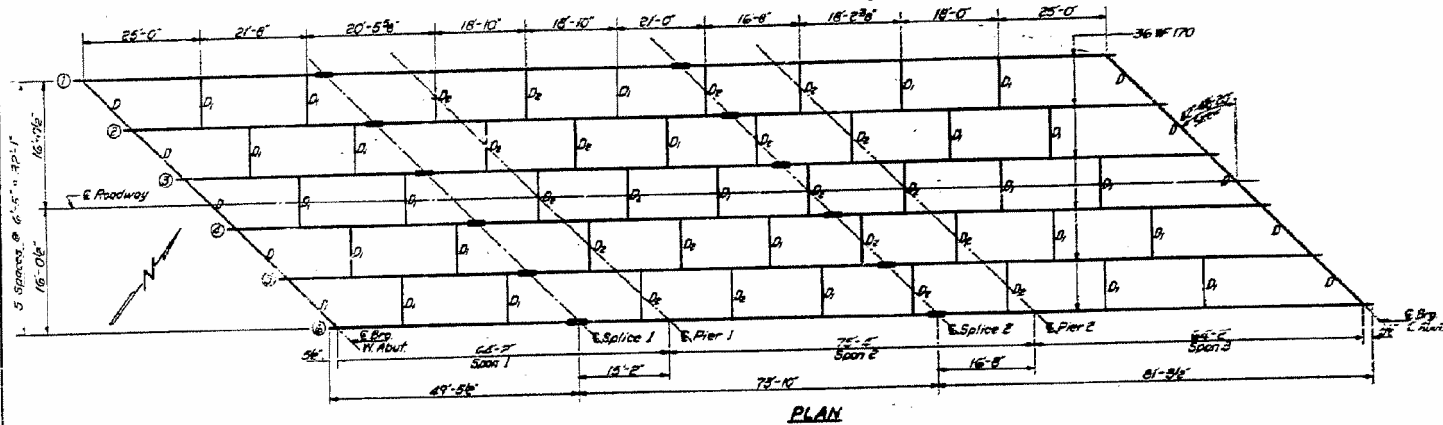


TABLE OF "T" DIMENSIONS

Span Location	Bm 1	Bm 2	Bm 3	Bm 4	Bm 5	Bm 6
E. Brg. W. Abut.	5'	56'	64'	7'	64'	56'
E. Brg. E. Abut.	5'	64'	54'	58'	54'	54'

ELEVATION TOP OF BEAM FLANGE

Span Location	Bm 1	Bm 2	Bm 3	Bm 4	Bm 5	Bm 6
E. Brg. W. Abut.	51793	51810	51822	51826	51828	51824
E. Splice 1	51822	51829	51849	51853	51849	51839
E. Pier 1	51830	51846	51857	51860	51856	51846
E. Splice 2	51861	51877	51886	51889	51884	51873
E. Splice 3	51868	51883	51892	51895	51890	51879
E. Brg. E. Abut.	51878	51901	51916	51917	51911	51899

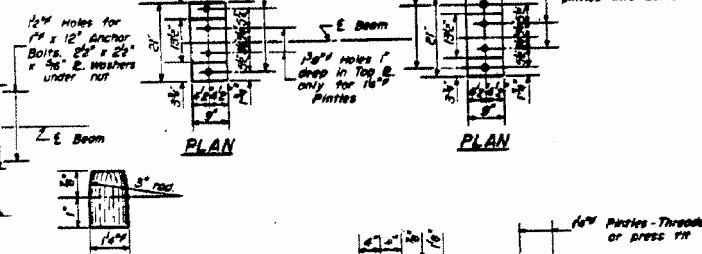
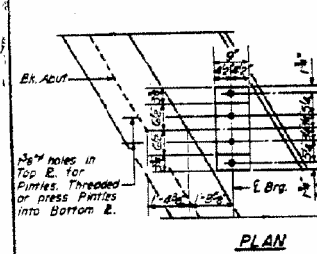
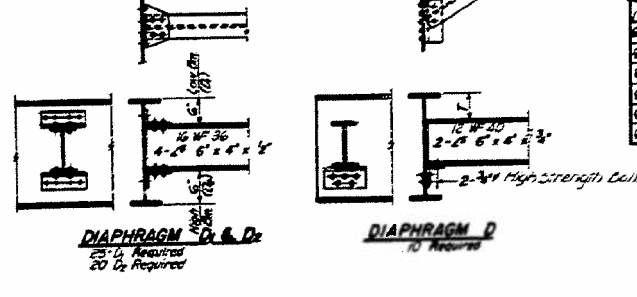
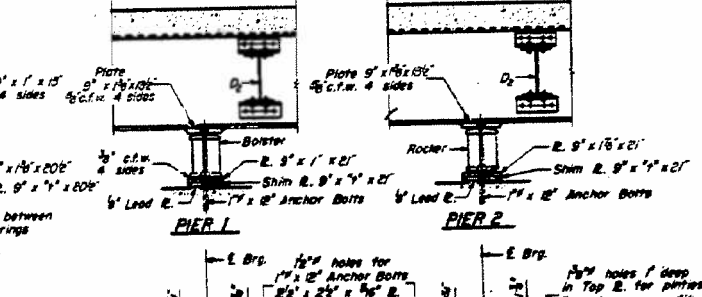
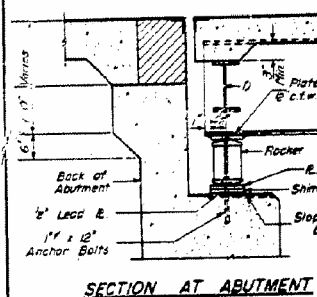
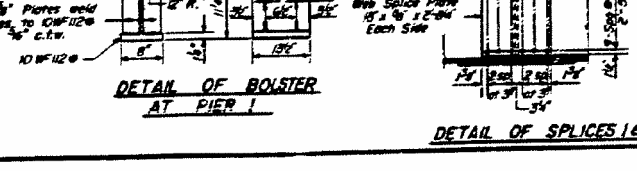
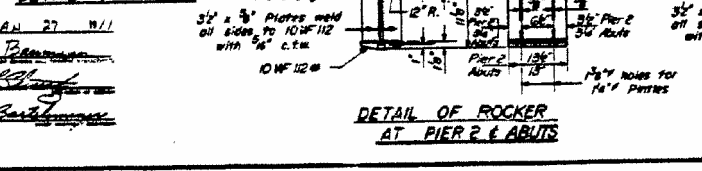


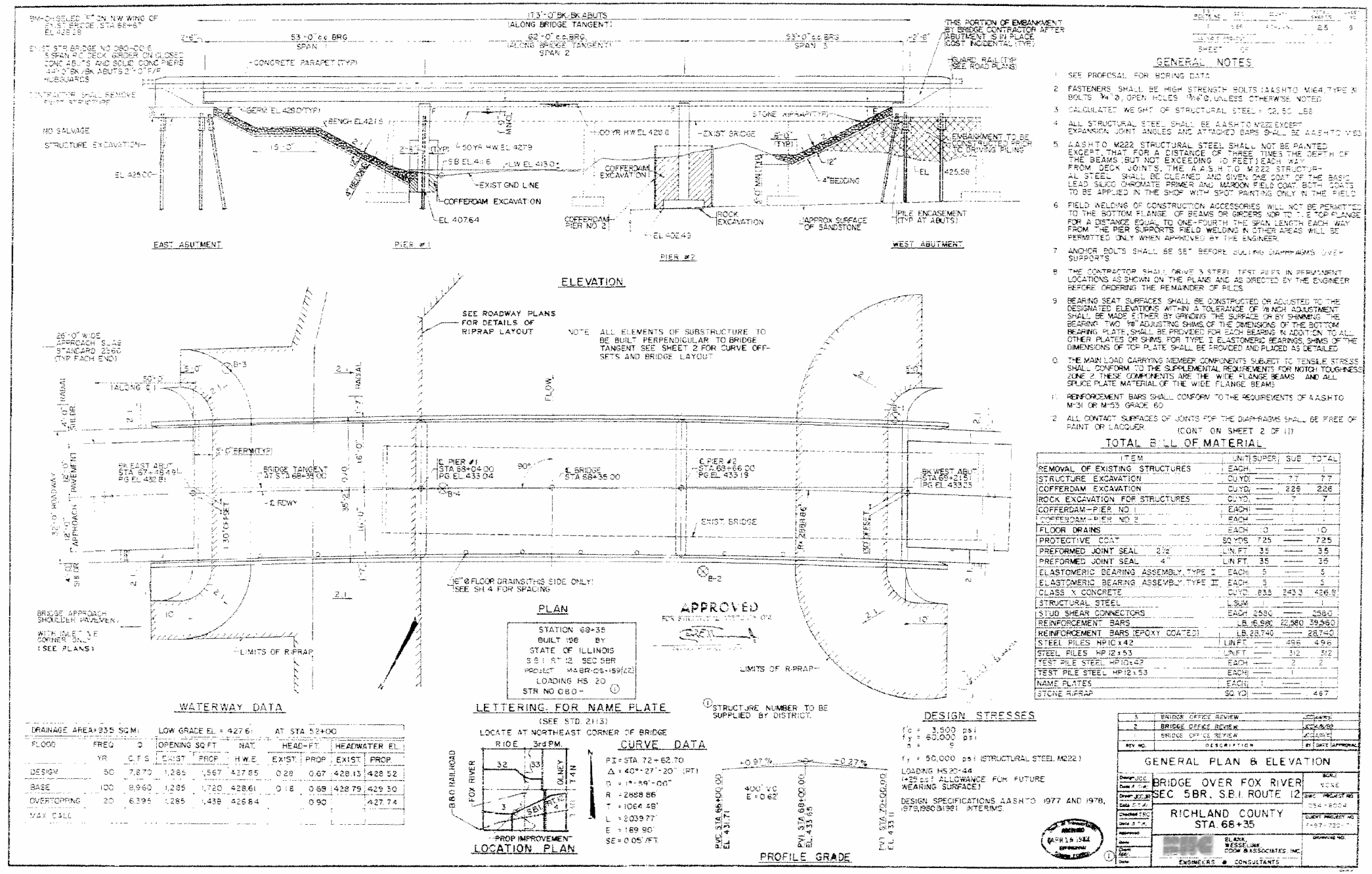
TABLE OF "Y" DIMENSIONS

Location	W. Abut.	Pier 1	Pier 2	E. Abut.
Bm 1	0'	0'	0'	0'
Bm 2	0'	0'	0'	0'
Bm 3	0'	16'	34'	0'
Bm 4	12'	14'	34'	16'
Bm 5	48'	0'	0'	36'
Bm 6	0'	0'	0'	0'

DESIGNED: J. E. ...
CHECKED: ...
DRAWN: W. A. Sausman
DATE: JAN 27 11/1



STRUCTURAL STEEL
PART 13 SEC 5-210-2
OVER B.O.R.R.
RICHLAND COUNTY
STA. 102+56.50



GENERAL NOTES

- SEE PROPOSAL FOR BORING DATA
- FASSTERS SHALL BE HIGH STRENGTH BOLTS (AASHTO M163 TYPE 4) BOLTS 3/8" OPEN HOLES UNLESS OTHERWISE NOTED
- CALCULATED WEIGHT OF STRUCTURAL STEEL = 22,500 LBS
- ALL STRUCTURAL STEEL SHALL BE AASHTO M222 EXCEPT EXPANSION JOINT ANGLES AND ATTACHED BARS SHALL BE AASHTO M222
- AASHTO M222 STRUCTURAL STEEL SHALL NOT BE PAINTED EXCEPT THAT FOR A DISTANCE OF THREE TIMES THE DEPTH OF THE BEAMS, BUT NOT EXCEEDING 10 FEET (EACH WAY) FROM DECK JOINTS, THE A.A.S.H.T.O. M222 STRUCTURAL STEEL SHALL BE CLEANED AND GIVEN ONE COAT OF THE BASIC LEAD SILIC CHROMATE PRIMER AND MASON FELD COAT. BOTH COATS TO BE APPLIED IN THE SHOP WITH SPOT PAINTING ONLY IN THE FIELD
- FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GRIDERS 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 CASTING DIAPHRAGMS OVER SUPPORTS
- THE CONTRACTOR SHALL DRIVE A STEEL TEST PILE IN PERMANENT LOCATIONS AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES
- BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8" EACH ADJUSTMENT SHALL BE MADE EITHER BY SPRINKLING THE SURFACE OR BY CHAMFERING THE BEARING. TWO 1/8" ADJUSTING SHIMS OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS FOR TYPE I ELASTOMERIC BEARINGS. SHIMS OF THE DIMENSIONS OF TOP PLATE SHALL BE PROVIDED AND PLACED AS DETAILED.
- THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS (ZONE 2). THESE COMPONENTS ARE THE WIDE FLANGE BEAMS AND ALL SPUR PLATE MATERIAL OF THE WIDE FLANGE BEAMS
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 OR M33 GRADE 60
- ALL CONTACT SURFACES FOR THE DIAPHRAGMS SHALL BE FREE OF PAINT OR LACQUER. (CONT. ON SHEET 2 OF 11)

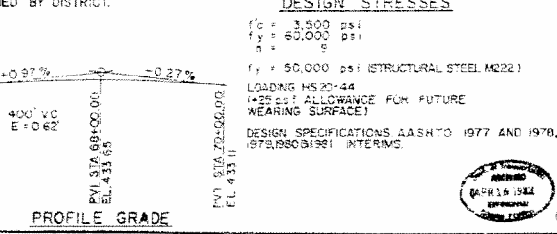
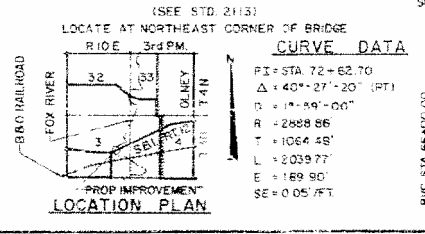
TOTAL BILL OF MATERIAL

ITEM	UNITS	SUPER	SUB	TOTAL
REMOVAL OF EXISTING STRUCTURES	EACH			
STRUCTURE EXCAVATION	CUYD		7.7	7.7
COFFERDAM EXCAVATION	CUYD		226	226
ROCK EXCAVATION FOR STRUCTURES	CUYD		7	7
COFFERDAM-PIER NO. 1	EACH			
COFFERDAM-PIER NO. 2	EACH			
FLOOR DRAINS	EACH	10		10
PROTECTIVE COAT	SQ YDS	725		725
PREFORMED JOINT SEAL	LN. FT.	35		35
PREFORMED JOINT SEAL	LN. FT.	35		35
ELASTOMERIC BEARING ASSEMBLY TYPE I	EACH	3		3
ELASTOMERIC BEARING ASSEMBLY TYPE II	EACH	3		3
CLASS X CONCRETE	CUYD	835	243.3	426.9
STRUCTURAL STEEL	SUM			
STEEL SHEAR CONNECTORS	EACH	2890		2890
REINFORCEMENT BARS (EPOXY COATED)	LB.	16,980	22,580	39,560
REINFORCEMENT BARS (EPOXY COATED)	LB.	28,740		28,740
STEEL PILES HP12x53	LN. FT.	456	49.6	49.6
STEEL PILES HP12x53	LN. FT.	312	512	512
TEST PILE STEEL HP12x53	EACH	2		2
TEST PILE STEEL HP12x53	EACH	1		1
NAME PLATES	EACH	1		1
STONE RIPRAP	SQ YD			487

WATERWAY DATA

LOW GRADE EL = 427.6' AT STA 52+00

FLOOD FREQ	YR	C.F.S	EXIST	PROP	H.W.	EXIST	PROP	EXIST	PROP	HEADWATER EL
DESIGN	50	7,870	1,285	1,567	427.85	0.29	0.67	428.13	428.52	
BASE	100	8,960	1,285	1,720	428.61	0.18	0.68	428.79	429.30	
OVERTOPPING	20	6,195	1,285	1,438	426.64		0.90		427.74	



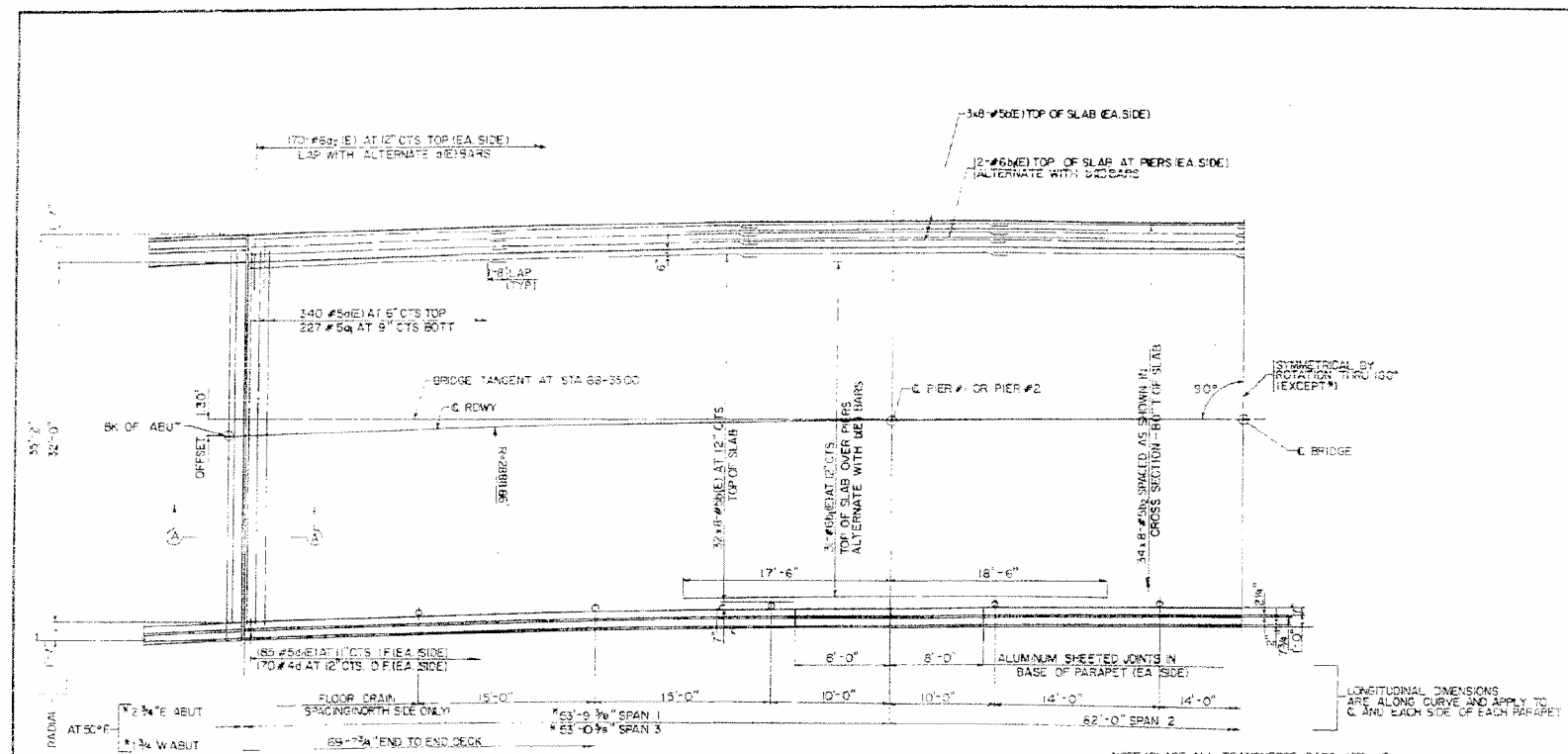
NO.	DESCRIPTION	DATE	BY	APPROVAL
1	BRIDGE OFFICE REVIEW			
2	BRIDGE OFFICE REVIEW	12/2/2014		
3	BRIDGE OFFICE REVIEW	12/2/2014		

GENERAL PLAN & ELEVATION

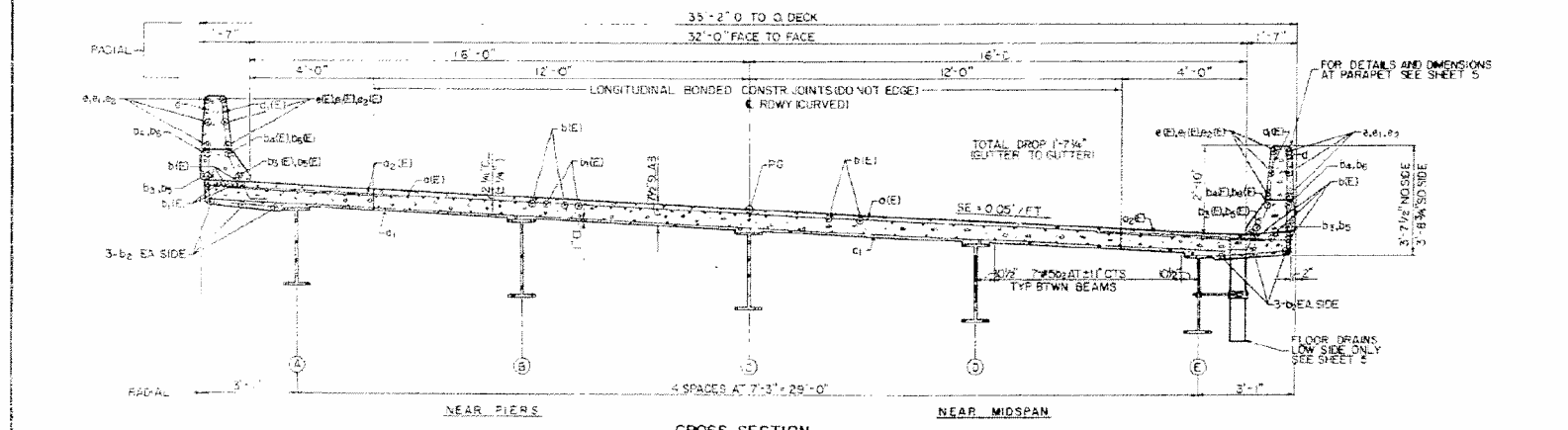
BRIDGE OVER FOX RIVER
 SEC 5BR, S.B.I. ROUTE 12

RICHLAND COUNTY
 STA. 68+35

EL. 624. WESSELBAR
 CODE & ASSOCIATES, INC.
 ENGINEERS & CONSULTANTS



HALF PLAN



CROSS SECTION

SUPERSTRUCTURE BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
D1E	340	#5	34'-6"	
D1	227	#5	31'-0"	
D2E	340	#5	4'-0"	
D2	304	#5	32'-5"	
D3E	70	#5	36'-0"	
D3	272	#5	22'-8"	
D4E	12	#5	23'-8"	
D4	10	#5	24'-5"	
D5E	8	#5	24'-5"	
D5	8	#5	21'-5"	
D6E	8	#5	21'-5"	
D6	8	#5	21'-5"	
E	340	#4	8'-5"	
F	370	#5	3'-11"	
G	36	#4	5'-0"	
H1E	36	#4	15'-0"	
H1	24	#4	7'-5"	
H2E	24	#4	7'-5"	
H2	18	#4	15'-11"	
H3E	18	#4	15'-11"	

CLASS II CONCRETE CLASS 183 S
 REINFORCEMENT BARS 185 16,380
 REINFORCEMENT BARS (EPOXY COATED) 185 28,740
 FLOOR DRAINS EACH 10
 PREFORMED JOINT SEAL (2 1/2") LINEY 35
 PREFORMED JOINT SEAL (4") RAFTY 35

REINFORCEMENT BARS DESIGNATED IEI SHALL BE EPOXY COATED SEE SPECIAL PROVISIONS. BENT BARS DETAILED ON SHEET 5.

1	BRIDGE OFFICE REVIEW	10/20/08
2	BRIDGE OFFICE REVIEW	10/20/08
REV NO	DESCR. / FILE NO.	BY DATE / APPROVAL
SUPERSTRUCTURE		
Project NO	BRIDGE OVER FOX RIVER	SCALE
Client	SEC 5 BR, S.B. ROUTE 12	AS SHOWN
Drawn		DATE 10/20/08
Checked		DATE 10/20/08
Design		DATE 10/20/08
Drawn		DATE 10/20/08
Checked		DATE 10/20/08
Design		DATE 10/20/08
Drawn		DATE 10/20/08
Checked		DATE 10/20/08
Design		DATE 10/20/08

FILE NAME =	USER NAME = steffenk	DESIGNED -	REVISED -
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	PLOT DATE = 8/12/2014	DATE -	REVISED -

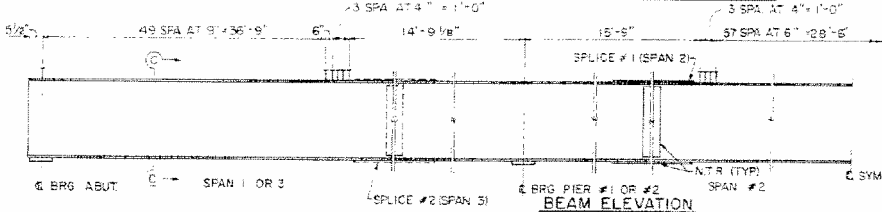
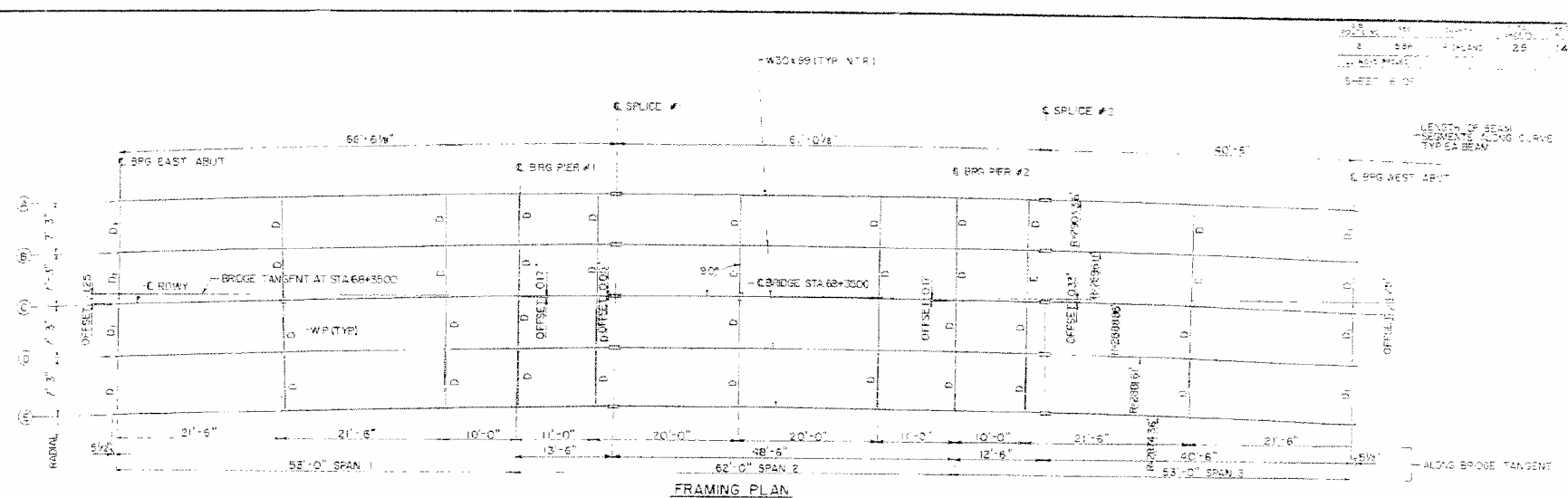
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN
STRUCTURE 080-0022
SCALE: N/A SHEET 5 OF 10 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
• 07	BRIDGE PAINTING 2015-2	••	15	9
CONTRACT NO. 74698				

• F.A.P. RTE. 327 & F.A.S. RTE. 1720
•• RICHLAND & CLAY

ILLINOIS FED. AID PROJECT



NOTES:
 1 C BRG AT EACH ELEMENT OF SUBSTRUCTURE & SPLICES TO BE PERPENDICULAR TO BRIDGE TANGENT
 2 DIAPHRAGMS D TO BE SET IN LINE IN RADIAL FACE 'ON', AS SHOWN
 3 NTR INDICATES NOTCH TOUGHNESS REQUIREMENT

TOP OF BEAM ELEVATIONS*

BEAM	C BRG EAST ABUT.	C BRG PIER #1	C SPLICE #1	C BRG PIER #2	C SPLICE #2	C BRG WEST ABUT.
A	432.88	433.06	433.11	433.21	433.23	433.29
B	432.52	432.70	432.75	432.85	432.87	432.92
C	432.15	432.33	432.38	432.46	432.50	432.56
D	431.79	431.97	432.02	432.12	432.14	432.20
E	431.13	431.31	431.36	431.75	431.78	431.82

*FOR FABRICATION ONLY

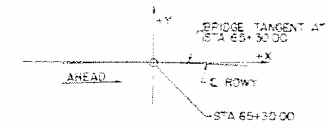
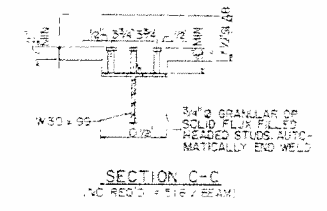
BEAM COORDINATES
(VALUES IN FT SEE DIAGRAM BELOW)

BEAM	COORD	C BRG EAST ABUT.	C BRG PIER #1	C SPLICE #1	C BRG PIER #2	C SPLICE #2	C BRG WEST ABUT.
A	X	-84.000	-31.000	-17.500	31.000	43.500	84.000
	Y	13.285	14.335	14.447	14.335	14.174	3.285
B	X	-84.000	-31.000	-17.500	31.000	43.500	84.000
	Y	6.032	7.064	7.97	7.064	6.923	6.032
C	X	-84.000	-31.000	-17.500	31.000	43.500	84.000
	Y	1.222	0.166	0.053	0.166	0.322	1.222
D	X	-84.000	-31.000	-17.500	31.000	43.500	84.000
	Y	8.475	7.417	7.303	7.417	7.578	8.475
E	X	-84.000	-31.000	-17.500	31.000	43.500	84.000
	Y	-15.728	-14.667	-14.553	-14.667	-14.829	-15.728

	0.4 SPAN 1	PIERS	0.5 SPAN 2
I _x	(in ⁴) 3990	3990	3990
I _c	(in ⁴) 12435		12435
S _x	(in ³) 269	269	269
S _c	(in ³) 429		429
Q	(in ²) 810	1155	810
I _x NR	(in ⁴) 2153	4981	1571
I _c NR	(in ⁴) 960	2222	701
S _x NR	(in ³) 345		345
S _c NR	(in ³) 918		918
M _x NR	(k-ft) 783.8	477.0	791.1
M _y NR	(k-ft) 219.5	131.0	207.6
TOTAL	(k-ft) 1095.1	608.0	1015.6
I _x COMP	(in ⁴) 3063	2712	284.1
I _c TOTAL	(in ⁴) 4023	4934	3542
VR	(k) 332		4.1

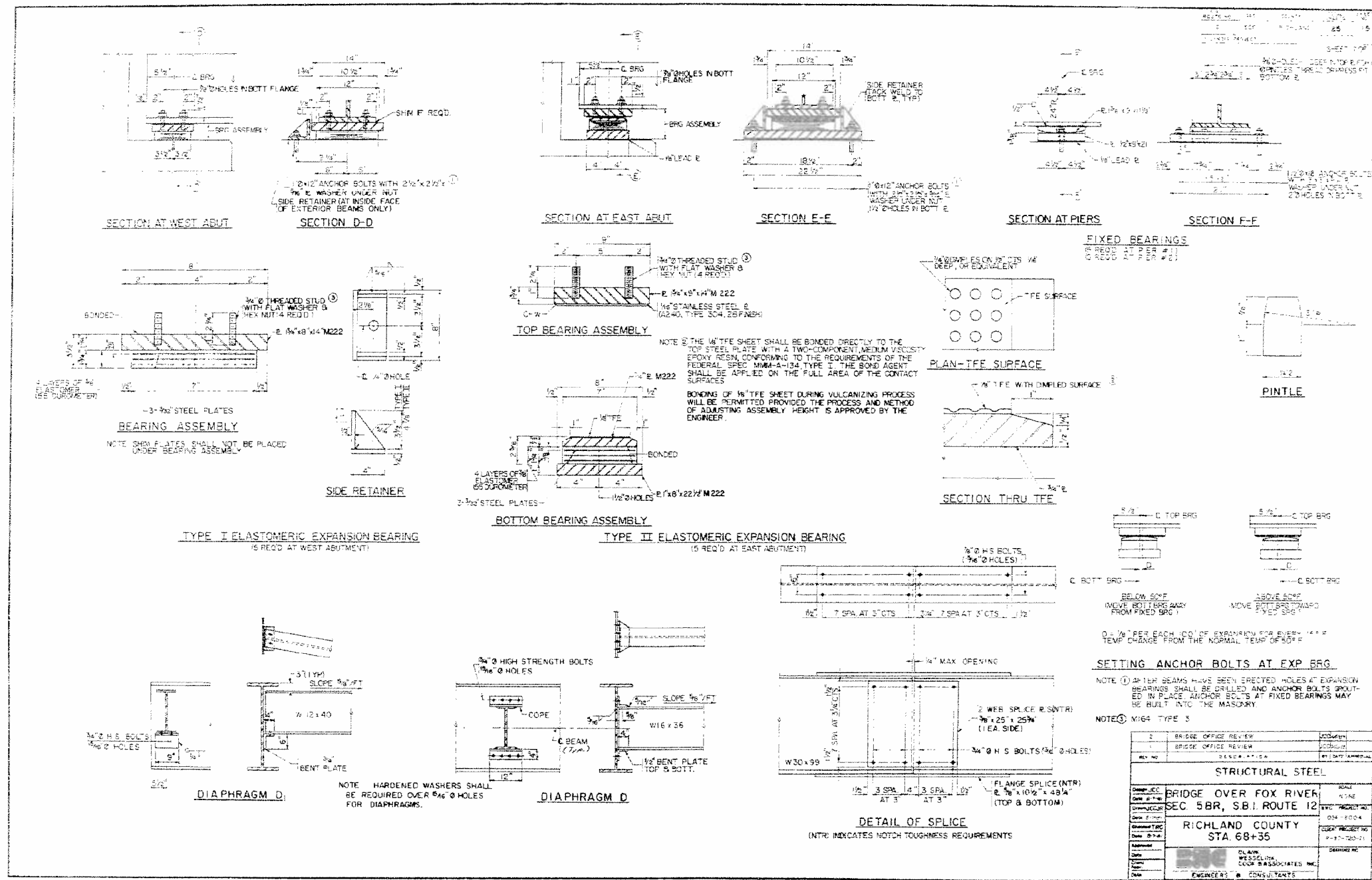
	ABUT.	PIER
R _x	(k) 254	73.6
R _y	(k) 375	50.5
IMP	(k) 10.5	4.1
R _x TOTAL	(k) 71.4	138.2

I_x & S_x ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE STEEL SECTION USED IN COMPUTING I_s TOTAL.
 I_c & S_c ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING I_s TOTAL.
 VR IS THE MAXIMUM V + IMPACT SHEAR RANGE IN SPAN.
 THE LOAD FACTOR (1.3R + 5%V + IMP) IS USED IN COMPUTING MOMENTS AND STRESSES.



NO.	DESCRIPTION	DATE	BY
1	BRIDGE OFFICE REVIEW	10/24/13	WJG/BJG
2	BRIDGE OFFICE REVIEW	10/24/13	WJG/BJG

STRUCTURAL STEEL	
Checked by:	BRIDGE OVER FOX RIVER
Drawn by:	SEC. 5BR, S.B.I. ROUTE 12
Checked by:	RICHLAND COUNTY
Drawn by:	STA. 68+35
Checked by:	BLANK
Drawn by:	MESSELMAN
Checked by:	CONWAY ASSOCIATES, INC.
Drawn by:	ENGINEERS & CONSULTANTS



FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -
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	PLOT DATE = 8/12/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN STRUCTURE 080-0022			
SCALE: N/A	SHEET 7	OF 10 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
• D7 BRIDGE PAINTING 2015-2		••	15	11
CONTRACT NO. 74698				
ILLINOIS FED. AID PROJECT				

• F.A.P. RTE. 327 & F.A.S. RTE. 1720
•• RICHLAND & CLAY

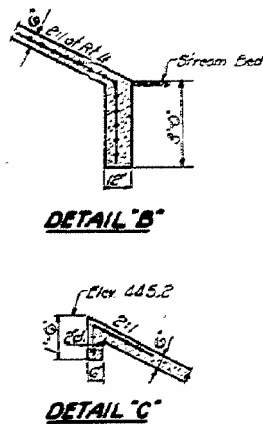
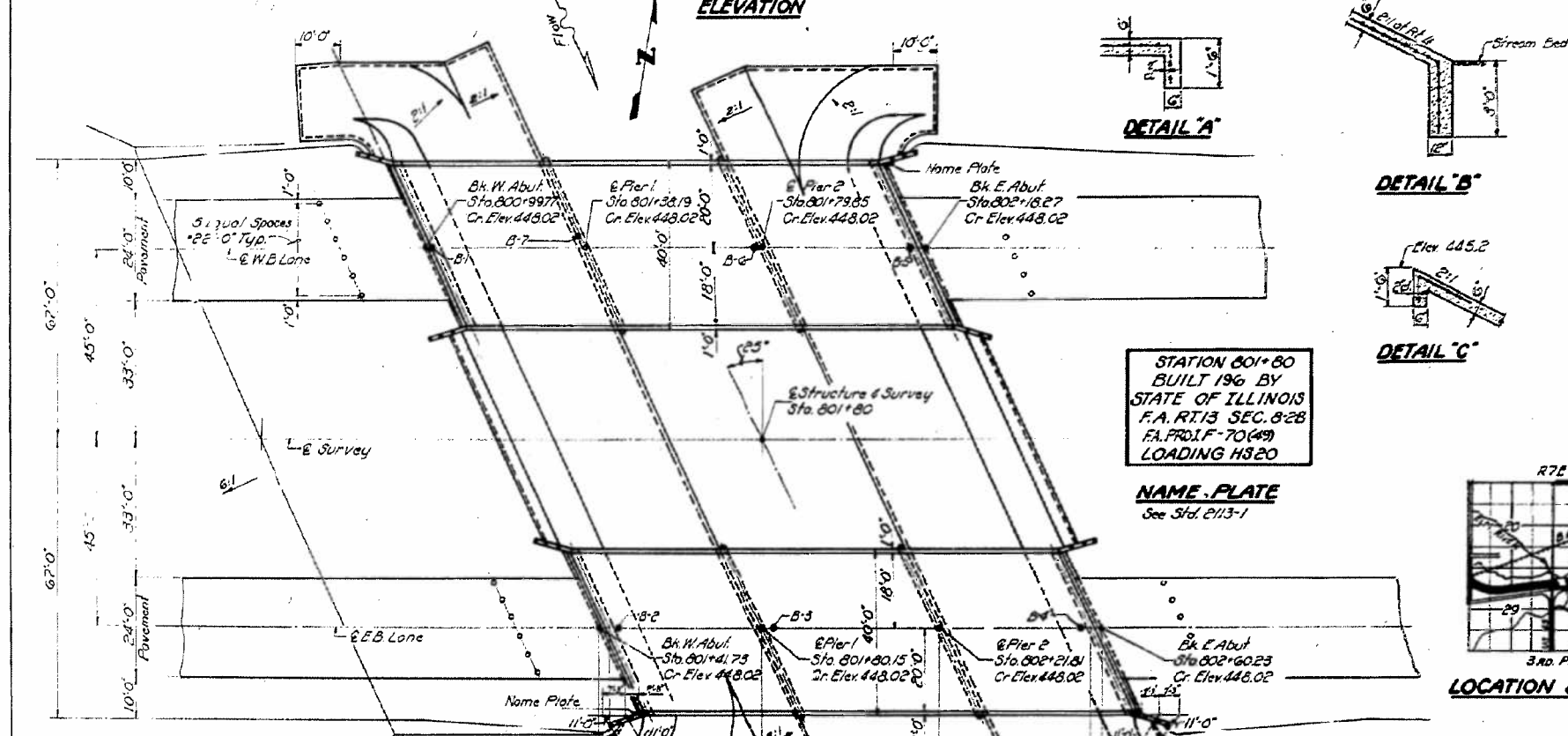
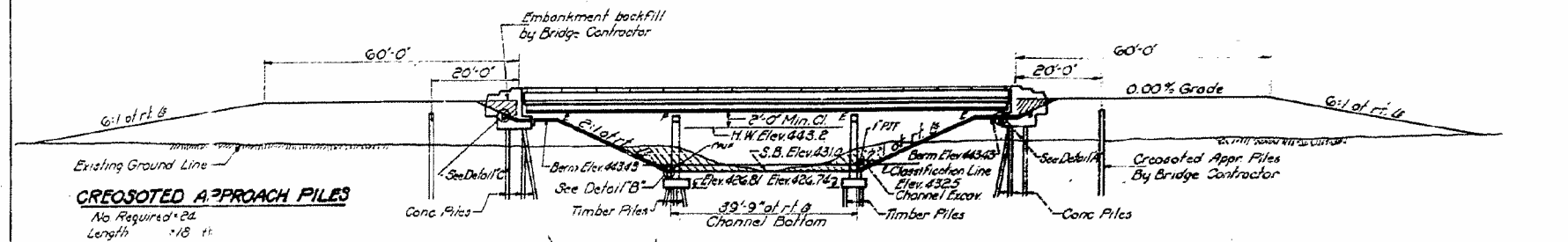
B.M. SAW in roof of 32' x 4 230
 L1 Sta 800+52 Elev 46.87
 No Existing Structure

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

PROJECT NO.	DATE	SCALE	SHEET NO.	TOTAL SHEETS
FA 13 B-28	CLAY	24	5	11 SHEETS

GENERAL NOTES

Coarse aggregate to be used in parapet handrails and wing walls must be absolutely free of chert, flint, limonite, lignite and soft sandstone.
 The concrete floor slab shall be finished in accordance with Article 519 of Standard Specifications.
 Slope wall shall be reinforced with welded wire fabric G-40 mesh, weighing 36# per 100 sq. ft.
 Layout of slope walls may be varied to suit ground conditions in the field as directed by the Engineer.
 All reinforcement shall be lapped 20 diameters unless otherwise noted.
 All structural steel shall conform to ASTM Specifications for Structural Steel designation A-36.
 Rivets 3/8" open holes 1/2" unless otherwise noted.
 Anchor bolt shall be set before riveting diaphragms over supports.
 The exposed surfaces of the expansion guard shall be given two shop coats of red lead paint; the contact surfaces shall be given one coat of red lead paint; Anchor studs shall not be painted.
 Expansion guards are included in the quantity of Structural Steel. Est. Weight = 4,620 lbs.
 Except as otherwise provided all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Article 56.1 to 56.5 inclusive of the Standard Specification.
 The contractor shall drive two concrete test piles in a permanent location: one at W. Abutment W.B.L., one at E. Abutment E.B.L., and two timber test piles one at Pier 1 West Bound Lanes, and one at Pier 2 E.B.L. as directed by the Engineer before casting the remainder of piles.



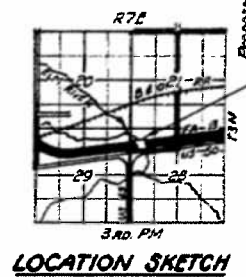
STATION 801+80
 BUILT 1965 BY
 STATE OF ILLINOIS
 F.A. RT.13 SEC. 8-28
 F.A. PROJ. F-70(49)
 LOADING HS20

NAME PLATE
 See Std. E113-1

TOTAL BILL OF MATERIAL

Items	Unit	Super	Sub	Total
* Class B Excavation For Structures	Cu. Yds.		432	432
Channel Excavation	Cu. Yds.		1670	1670
Structural Steel	Lbs.	165,860		165,860
Class A Concrete	Cu. Yds.		356.2	356.2
Class X Concrete	Cu. Yds.	255.0	142.8	423.8
Aluminum Handrail	Lin. Ft.		460	460
Reinforcement Bars	Lbs.	57,570	25,540	83,110
Concrete Piles	Lin. Ft.		1080	1080
Test Pile (Concrete)	Each		2	2
Crested Piles	Each		2	2
Test Piles (Timber)	Each		2	2
Name Plates	Each		2	2
Slope Wall	Sq. Yds.		1,920	1,920
Protective Coat	Sq. Yds.	1,130		1,130
Bridge Seat Sealant	Lump Sum			1.5
Timber Piles	Lin. Ft.		2067	2067
* Class A Excavation For Structures	Cu. Yds.		125	125

* Includes Excavation for Slope Wall.
 ** At Abutments.



HIGHWAY CLASSIFICATION
 Class B-3
 D.V. 790(1985)
 70 MPH

DESIGNED: I. Kusper
 CHECKED: J. Albrecht
 DRAWN: W.E. Dickerson
 EXAMINED: J. Albrecht
 PASSED: H. S. Altman
 APPROVED: [Signature]

DESIGN STRESSES
 F_s - 14,000 psi (Super & Sub)
 F_s - 20,000 psi (Struct.)
 F_s - 20,000 psi (Rein. F.)
 V_c - 75 psi (F₁ & F₂)
 n - 10
 Allowable & Defl. Span/1000
 LOADING HS20-44

PROJ. F-70(49)
GENERAL PLAN & ELEVATION
F.A. RT. 13 SEC. 8-28
OVER ELM RIVER
CLAY COUNTY
STA. 801+80

WATERWAY INFORMATION
 Drainage Area 7738 Acres
 Character Rolling, Hilly, wooded & Cultivated
 Required Opening 720 Sq. Ft.
 Proposed Opening 720 Sq. Ft.

Note: For Design Data see sheet B

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

DATE	REVISION	BY	REASON	NO.
1-2-13	B-2B	CLAY	26	2

SHEET NO. 4
OF 4 SHEETS

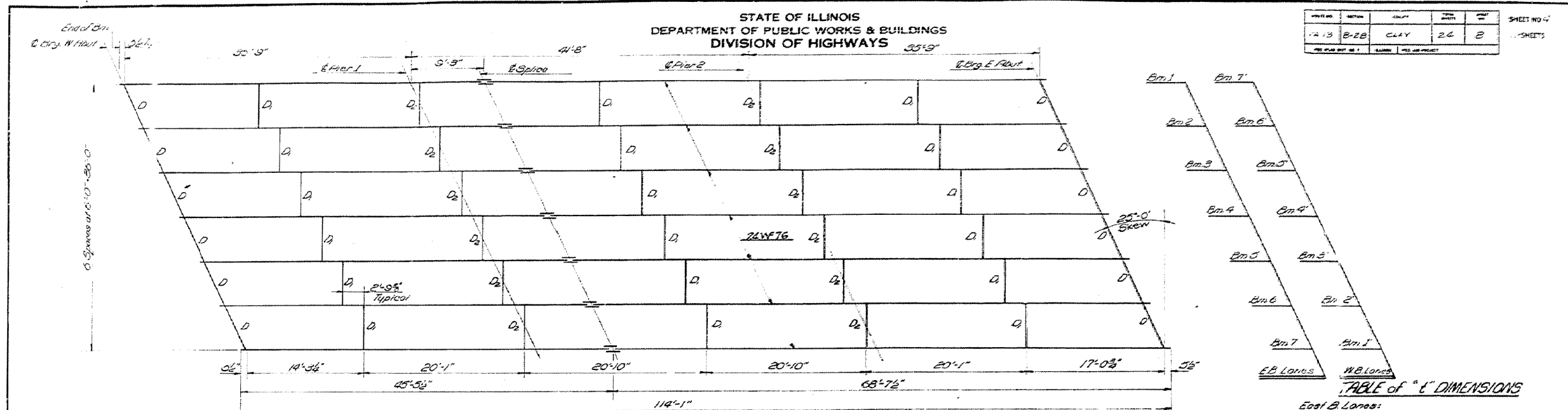


TABLE OF 'E' DIMENSIONS

East B Lanes:

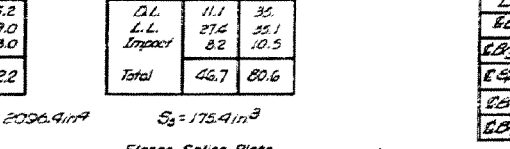
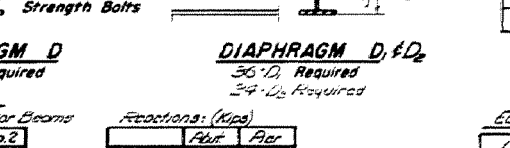
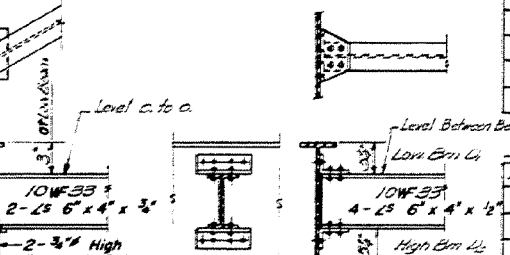
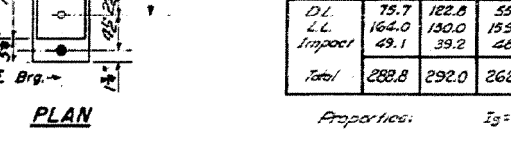
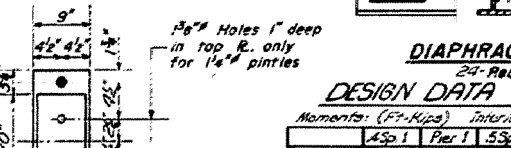
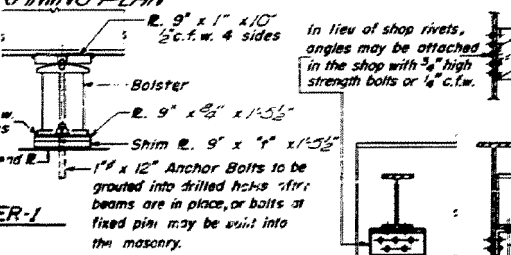
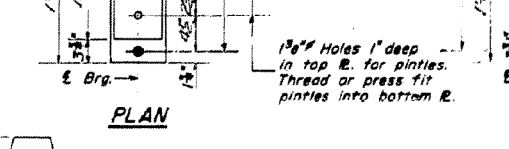
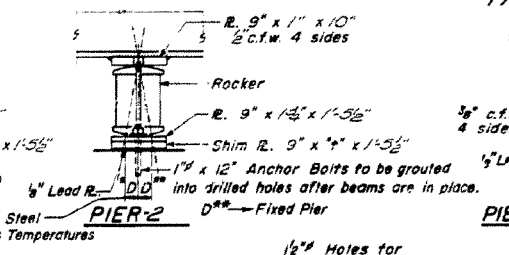
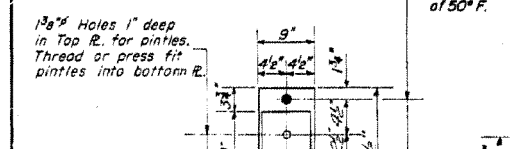
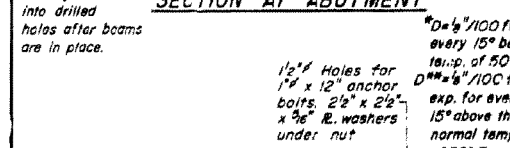
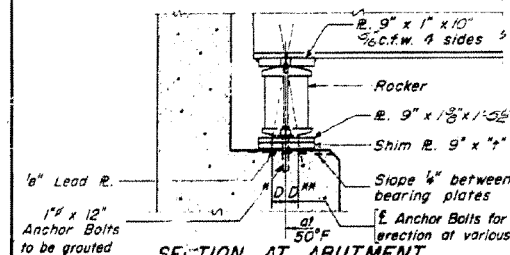
Location	Bm.1	Bm.2	Bm.3	Bm.4	Bm.5	Bm.6	Bm.7
W. Abut	2'	0'	4'	5'	0'	0'	0'
Pier 1	2'	0'	4'	2'	0'	0'	0'
Pier 2	2'	0'	4'	2'	0'	0'	0'
E. Abut	2'	0'	4'	1'	0'	0'	0'

West B Lanes:

Location	Bm.1	Bm.2	Bm.3	Bm.4	Bm.5	Bm.6	Bm.7
W. Abut	2'	0'	4'	2'	0'	0'	0'
Pier 1	2'	0'	4'	2'	0'	0'	0'
Pier 2	2'	0'	4'	2'	0'	0'	0'
E. Abut	2'	0'	4'	2'	0'	0'	0'

ELEVATION TOP OF WF

Location	Bm.1	Bm.2	Bm.3	Bm.4	Bm.5	Bm.6	Bm.7
W. Abut	447.21	447.30	447.40	447.40	447.40	447.20	447.17
Pier 1	447.18	447.21	447.23	447.41	447.21	447.20	447.19
Pier 2	447.17	447.30	447.28	447.40	447.30	447.20	447.12
E. Abut	447.12	447.15	447.10	447.42	447.10	447.21	447.10



DIAPHRAGM D DESIGN DATA

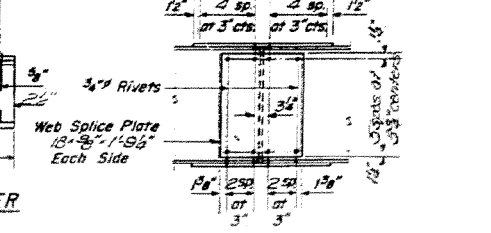
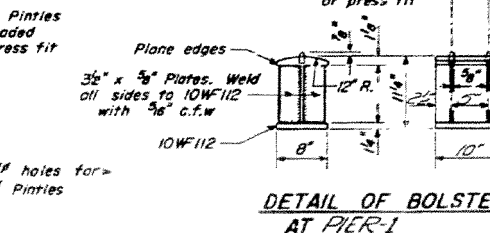
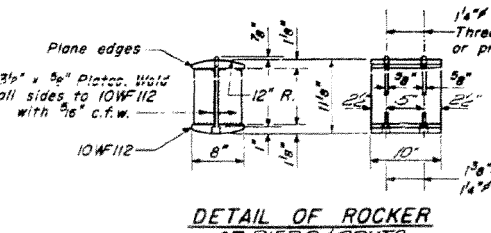
Moments: (Ft-Kips)	Interior Beams	Ends
D.L.	15.7	122.8
L.L.	164.0	130.0
Impact	49.1	39.2
Total	228.8	292.0

Reactions: (Kips)

Abut	Pier
D.L.	11.1
L.L.	27.6
Impact	8.2
Total	46.7

DESIGNED: J. Kasper
CHECKED: R. Barnett
DRAWN: W. A. Sausman Jr.
APPROVED: [Signature]

7-2-62 Rev 11-9-62 Rev. 6-16-63 Rev. 12-10-63

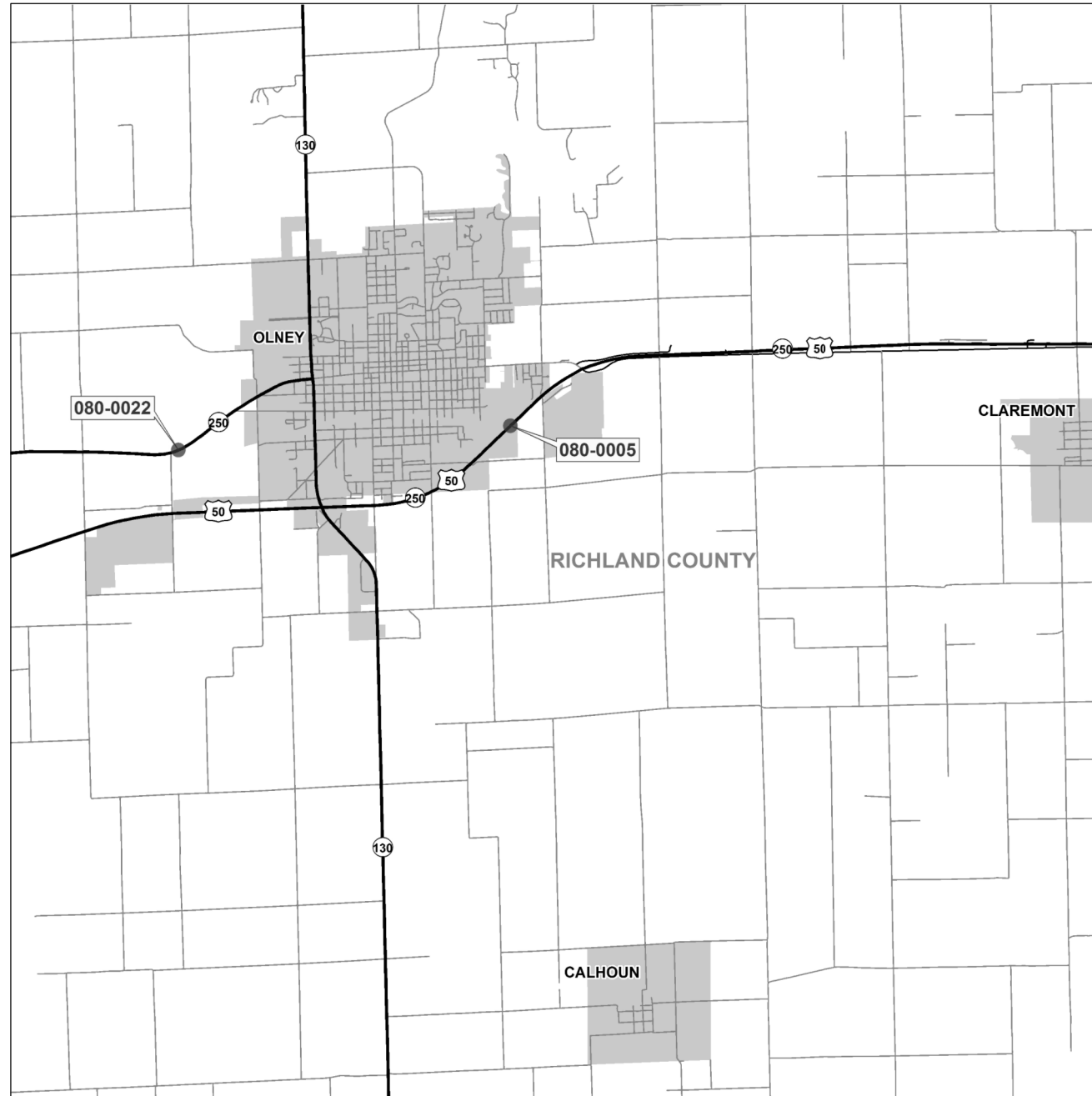


STRUCTURAL STEEL
E.B. & W.B. LANES
PART 13 - SEC. 8-2B
CLAY COUNTY
STA. 801+50

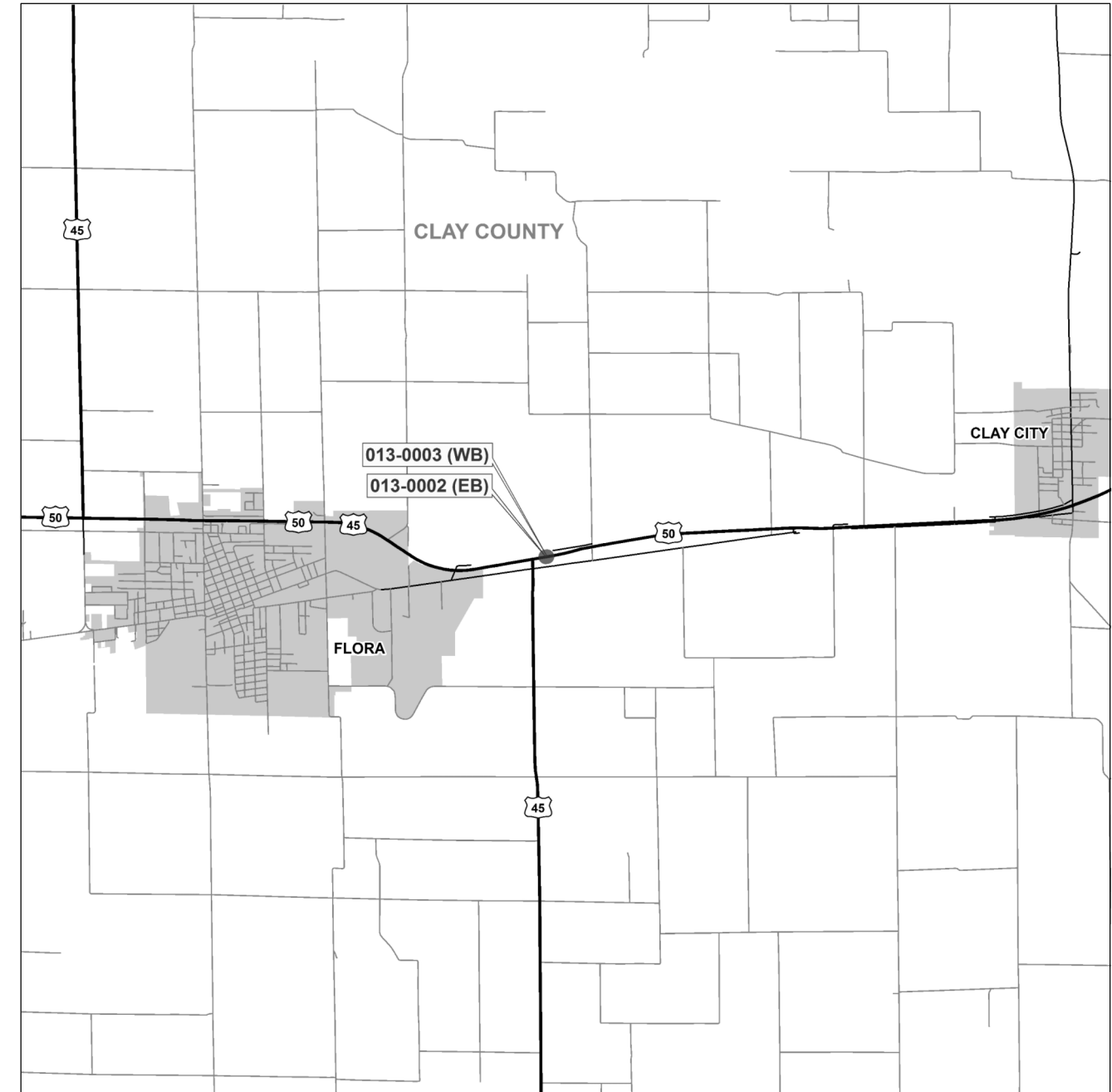
F.A.P. RTE. 327 & F.A.S. RTE. 1720
RICHLAND & CLAY



D7 BRIDGE PAINTING 2015-2
S.N. 080-0005 & S.N. 080-0022
RICHLAND COUNTY



D7 BRIDGE PAINTING 2015-2
S.N. 013-0002 (EB) & S.N. 013-0003 (WB)
CLAY COUNTY



• F.A.P. RTE. 327 & F.A.S. RTE. 1720
 •• RICHLAND & CLAY

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	PLOT DATE = 8/12/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE LOCATION MAPS

SCALE: N/A SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	D7 BRIDGE PAINTING 2015-2	••	15	15
			CONTRACT NO. 74698	
ILLINOIS FED. AID PROJECT				