03-03-2017 LETTING ITEM 038

INDEX OF SHEETS

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COVER SHEET GENERAL NOTES SUMMARY OF QUANTITIES MAINTENANCE OF TRAFFIC PLAN & NOTES MAINTENANCE OF TRAFFIC TYPICAL SECTIONS MAINTENANCE OF TRAFFIC SCHEDULE 10-14 EXISTING RIGHT-OF-WAY PLANS (FOR INFORMATION ONLY) 15-27 STRUCTURE PLANS

HIGHWAY STANDARDS

701428-01 001001-02 701456-04 001006 701501-06 701006-05 701901-06 701400-09 701401-10

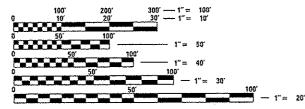
FUNCTIONAL CLASSIFICATIONS

I-55/I-64 EB & WB CD LANES: INTERSTATE NB TUDOR-PIGGOTT RAMPS: INTERSTATE WB 1-55/1-64 TUDOR RAMP: INTERSTATE

TRAFFIC DATA

I-55/I-64 EB CD LANES: 2015 ADT = 27, 100 2017 ADT = 27,600 (EST.) SU = 2.6% MU = 6.8%POSTED SPEED = 50 MPH I-55/I-64 WB CD LANES: 2016 ADT = 15,500 2017 ADT = 15.700 (EST.) SU = 3.1% MII = 7.7% POSTED SPEED = 50 MPH NB TUDOR-PIGGOTT RAMPS: 2015 ADT = 3,000 (EST.) 2017 ADT = 3,100 (EST.) SU = 3.3% MU = 3.0%

POSTED SPEED = 50 MPH WB I-55/I-64 TUDOR RAMP: 2016 ADT = 1,100 2017 ADT = 1,100 (EST.) SU = 3.4% MU = 2.1% POSTED SPEED = 50 MPH



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 TIMOTHY PADGETT, PE (618) 346-3325 PROJECT MANAGER DONALD HAYDEN, PE (618) 346-3181

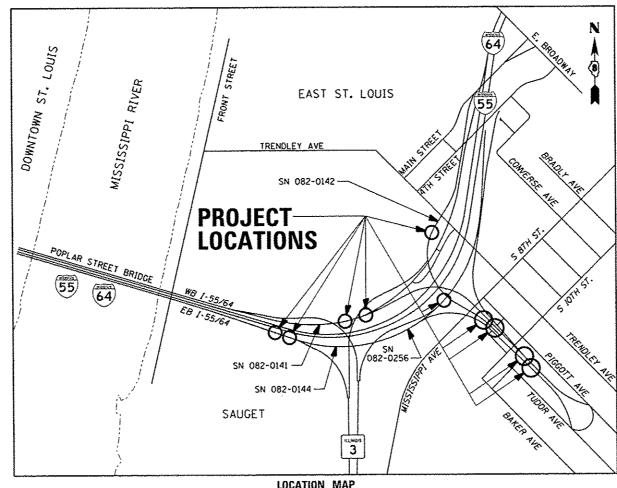
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAI ROUTE 70 (I-55 / I-64) SECTION 82-3HVB-2R-2-B-R PROJECT ACNHPP-0070(029) EMERGENCY REPAIRS POPLAR STREET BRIDGE COMPLEX ST. CLAIR COUNTY

C-98-045-16



NOT TO SCALE

EFK Moen, LLC Civil Engineering Design

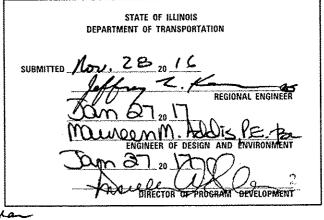
DATE SIGNED:

LICENSE EXPIRES: 11 /30 /2017

THE SEAL SHOWN ABOVE IS VALID FOR THE FOLLOWING SHEETS ON THESE PLANS WHICH WERE PREPARED UNDER MY DIRECTION

SECTION 82-3HVB-2R-2-8-R ST. CLAIR 27 ILLINOIS CONTRACT NO. 76J68





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 76J68

GENERAL NOTES

- 1. ALL REPAIRS DETAILED ON THESE PLANS SHALL BE CONSTRUCTED ACCORDING TO ALL CURRENT APPLICABLE LOOT POLICIES AND STANDARDS IN EFFECT ON THE DATE OF THE INVITATION FOR BIDS.
- 2. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT ARE BEFORE DIGGING. FIELD MARKING OF UTILITIES MAY BE OBTAINED BY CONTACTING J. U. L. I. E. OR FOR NON-MEMBERS, THR UTILITY COMPANY DIRECTLY.
 AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
- AMEREN ILLINOIS ELECTRIC & GAS
 AT&T ILLINOIS COMMUNICATIONS
- CHARTER COMMUNICATIONS CABLE TV
 CITY OF EAST ST, LOUIS LIGHTING
- . ILLINOIS AMERICAN WATER COMPANY WATER
- . LACLEDE PIPELINE COMPANY ~ PIPELINE
- . VERIZON BUSINESS COMMUNICATIONS
- . ZAYO GROUP COMMUNICATIONS

MEMBERS OF J.U.L.I.E. CALL TOLL FREE (800) 892-0123 OR 811 AND ARE INDICATED BY . NON-J. U. L. I. E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

- 3. EXCEPT WHERE DESIGNATED OTHERWISE, THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM OFFICE RECORD INFORMATION FURNISHED BY THE UTILITY OWNERS AND MUST BE CONSIDERED APPROXIMATE.
- 4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 5. ONLY RUBBER TIRES WILL BE ALLOWED ON THE AT-GRADE CROSSINGS.
- 6. FOR SN 082-141, SN 082-0144, AND SN 082-0256, ALL WORK WITHIN 25 FEET OF THE TRACK CENTERLINE WILL REQUIRE A UNION PACIFIC RAILROAD (UPRR) FLAGMAN.

UNION PACIFIC RAILROAD GENERAL NOTES

- 1, WITHIN THESE NOTES, THE UNION PACIFIC RAILROAD SHALL BE REFERRED TO AS THE "RAILROAD".
- 2. A CONTRACTOR'S RIGHT-OF-ENTRY PERMIT IS REQUIRED BEFORE ANY WORK CAN COMMENCE ON RAILROAD PROPERTY. THE COST TO OBTAIN THIS PERMIT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 3. ALL WORK WITHIN 25 FEET OF THE NEAREST TRACK WILL REQUIRE A RAILROAD FLAGMAN. A MINIMUM 72 HOURS NOTICE IS REQUIRED TO SCHEDULE A FLAGMAN FOR WORK. RAILROAD FLAGGING WILL BE PAID FOR ACCORDING TO ARTICLE 109.05 OF THE STANDARD SPECIFICATIONS.
- 4. RAILROAD REVIEW AND APPROVAL OF SHORING AT REPAIR LOCATION H2
- 5. ONLY RUBBER TIRES WILL BE ALLOWED ON THE AT-GRADE CROSSINGS.
- 6. FALSEWORK CLEARANCE SHALL COMPLY WITH THE RAILROAD'S MINIMUM CONSTRUCTION CLEARANCE ENVELOPE.
- 7. THE PRIMARY RAILROAD POINT OF CONTACT FOR THIS PROJECT IS:

JORDON ALBERS
MANAGER INDUSTRY AND PUBLIC PROJECTS 100 NORTH BROADWAY **SUITE 1500** ST. LOUIS, MO 63102 (314) 331-0682 JRALBERSOUP.COM

TERMINAL RAILROAD OF ST. LOUIS GENERAL NOTES

- 1. WITHIN THESE NOTES, THE TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS SHALL BE REFERRED TO AS THE "RAILROAD".
- 2. RAILROAD REVIEW AND APPROVAL OF SHORING AT REPAIR LOCATION DS IS REQUIRED.
- 3. THE PRIMARY RAILROAD POINTS OF CONTACT FOR THIS PROJECT ARE:

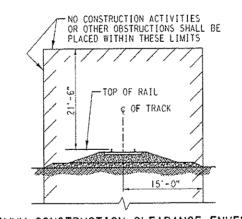
ASIM RAZA CHIEF LEGAL OFFICER, DIRECTOR OF REAL ESTATE & MARKETING 415 SOUTH 18TH SUITE 200 ST. LOUIS, MO 63103 (314) 241-4729 ARAZA@TERMINALRAILROAD.COM

ERIC FIELDS, P.E. CHIEF ENGINEER (618) 451-8428 EFIELDS@TERMINALRAILROAD.COM

COMMITMENTS

COMMITMENTS FOR THIS PROJECT ARE AS FOLLOWS:

1. NO KNOWN COMMITMENTS HAVE BEEN RECORDED AT THIS TIME.



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

(NORMAL TO RAILROAD)

FILE NAME :	USER NAME : sdintalmon	DESIGNED - BJG	REVISED -		GENERAL NOTES	F.A.I RTE.	SECTION	COUNTY SHEETS NO.
SFRELS		DRAWN - BJC	REVISED -	STATE OF ILLINOIS		70	82-3HVB-2R-2-B-R	51. CLAIR 27 2 CONTRACT NO. 76J68
	PLOT SCALE * 180,800 * / 10.	CHECKED - SLD	REVISED -	DEPARTMENT OF TRANSPORTATION	SCALE: N.A. SHEET) OF L SHEETS STA. TO STA.	\neg \vdash	ILLINOIS FED. AIC	PROJECT NO. 10000
Defoult	PLOI DATE = 1/17/2017	DATE - 11/21/16	REVISEO -	<u> </u>				

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					CONSTRUC	110H COUL	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0014 S. N. 082-0141	BRIDGE 0014 S. N. 082-0142	BRIDGE 0014 S. N. 082-0144	BRIDGE 0014 S.N. 082-0256
			endante de la constante de la			THE PROPERTY OF THE PROPERTY O	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	0. 7	0.6	1. 1	0.6
67100100	MOBILIZATION	L SUM	1	0.3	0.3	0.3	0.1
70100205	TRAFFIC CONTROL AND PROTECTION. STANDARD 701401	EACH	4	1		2	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	5	2		2	
			-				•
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1	0.3	0.7		
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	w a	1			
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2	0.8	1. 2		
70107007	PAVEMENT MARKING BLACKOUT TAPE, 7"	FOOT	6313	4673	1320	55	265
70107009	PAVEMENT MARKING BLACKOUT TAPE, 9"	FOOT	11868	10408		1197	263
70107016	PAVEMENT MARKING BLACKOUT TAPE, 16"	FOOT	730	730			
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	13558	11506	770	930	352
78100300	REPLACEMENT REFLECTOR	EACH	59	38		6	15
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	59	38		6	15
X0325748	ACRYLIC COATING	SQ YD	282		188	80	14
SPECIALTY	TTEM						

FILE NAME =	USER NAME = mkirchner	DESIGNED - BUG	REVISED -		CHRISTIANU OF OURSETTING	F.A.I SECTION COUNTY JOTAL SHEET
FILEL		DRAWN ~ 8JG	REVISED -	STATE OF ILLINOIS	SUMMARY OF QUANTITIES	NIL. SHEETS NO.
	PLOT SCALE = 198.8888 1/ 10.	CHECKED - SLD	REVISED -	DEPARTMENT OF TRANSPORTATION		70 82-3HVB-2R-2-8-R ST. CLAIR 27 3
Default.	PLOT DATE * 11/23/2016	DATE - 11/21/16	REVISEO -		SCALE; N.A. SHEET 1 OF 2 SHEETS STA. TO STA.	CONTRACT NO. 76J68
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	CODE			TOTAL	BRIDGE	BRIDGE	BRIDGE	PRIDEE
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	110.	1 ;ivi	ONI	CUANTITI	S. N. 082-0141		S. N. 082-0144	S. N. 082-0256
			Advantation in the contract of		3.14. 002 0141	3.14. 082 0142	3,14, 002 0144	3.14. 002-0236
	X0325749	FIBER WRAP	SQ FT	2540		1690	725	125
	Z0001905	STRUCTURAL STEEL REPAIR	POUND	5050	4190		260	VANA
	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	1961		1310	587	64
				d. Andrews				
	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	0.4		0.4	0.2
	Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	11	TOTAL PARTY AND	4	5	2
	<i>X09000</i> 37	COLUMN TENSIONED STRANDS	EACH	4			4	
ø	Z0076600	TRAINEES	Hour	1500	1500			
•			, , , o ,		1,200			
ø	20076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	1500	1500			
					as various services			
					90 A A A A A A A A A A A A A A A A A A A			
	**************************************				And the second s			
9								
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FILE NAME :

Sept.

DESIGNED - BJG

DRAWN - BJG

CHECKED - SLD

DATE - 11/21/16 USER NAME = mkurchner REVISEO -REVISED -PLOT SCALE * 100.0000 '/ 10.
PLOT DATE * 11/22/2016 REVISED -REVISED -

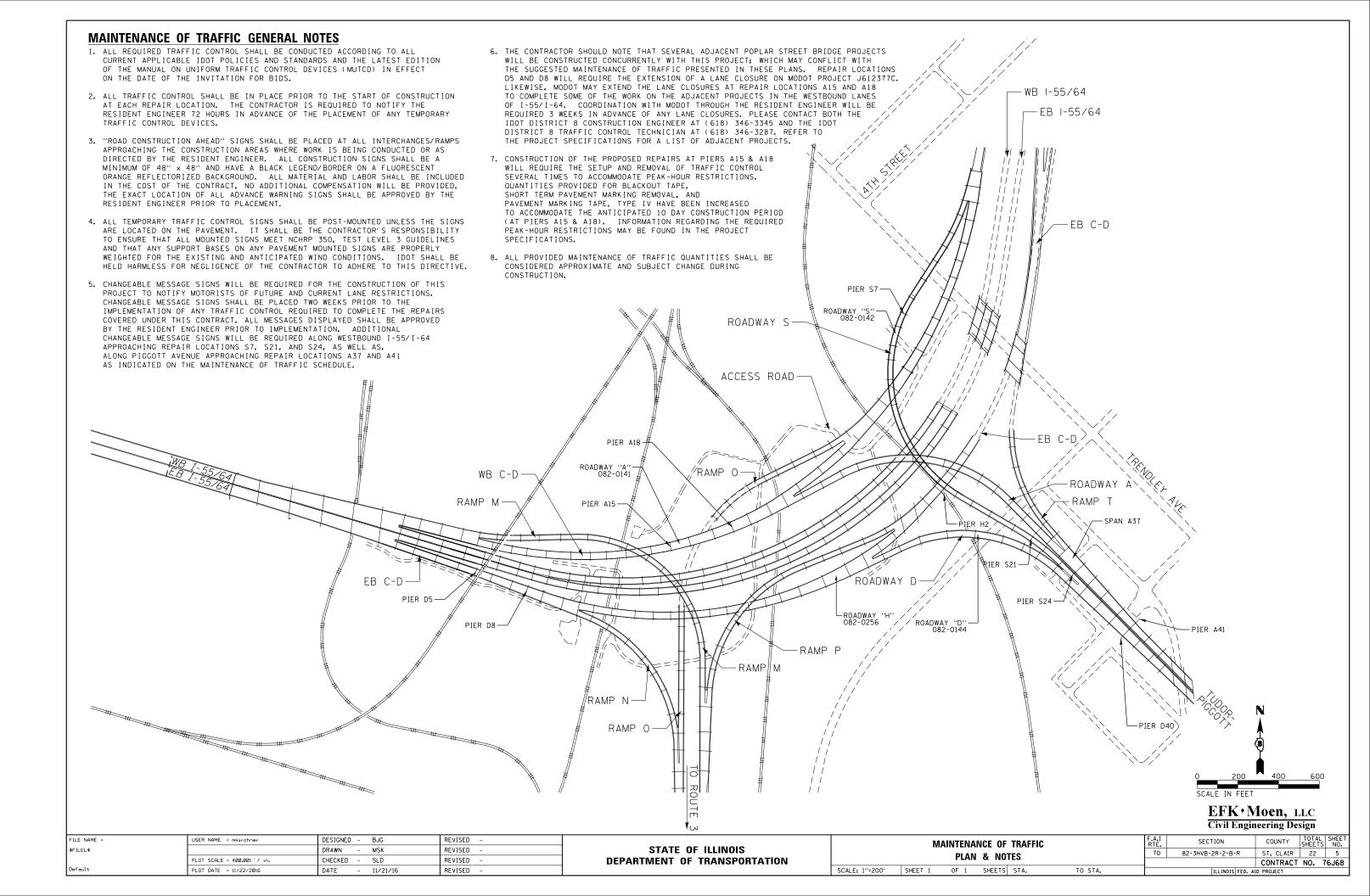
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

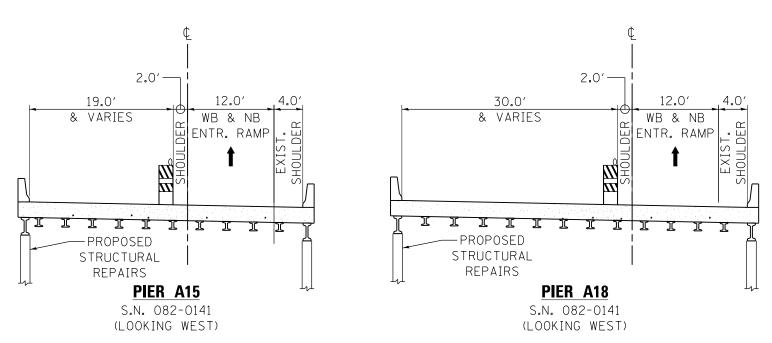
	St	JMMARY	OF QUA	NTITIES		F.A.I RTE.	SECTION
						70	82-3HVB-2R-
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EFK • Moen, LLC Civil Engineering Design

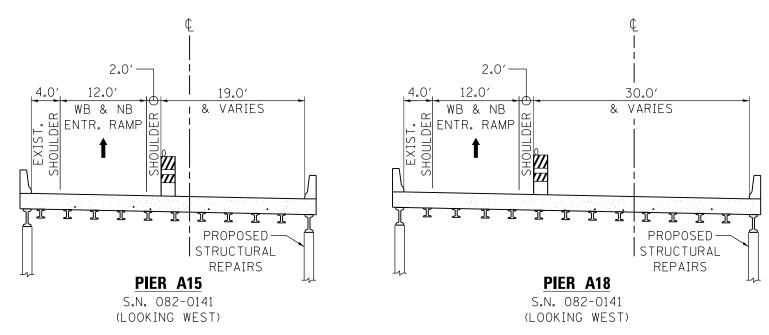
ON COUNTY TOTAL SHEET NO. 18-2-B-R ST. CLAIR 27 4

| CONTRACT NO. 76J68 | CLINOIS | FED. AID PROJECT





LEFT SIDE REPAIRS



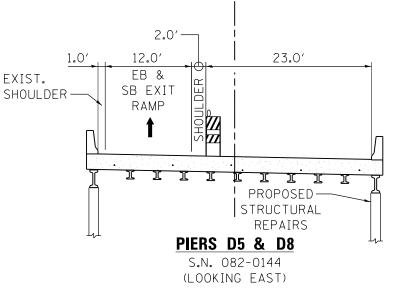
RIGHT SIDE REPAIRS

SUGGESTED MAINTENANCE OF TRAFFIC - PIERS A15 & A18

- 1. CLOSE LEFT LANES AT BOTH REPAIR LOCATIONS (USING HIGHWAY STANDARDS 701400, 701401 & 701411).
- 2. CONSTRUCT REPAIRS ON LEFT PIERS.
- 3. CLOSE RIGHT LANES AT BOTH REPAIR LOCATIONS
- (USING HIGHWAY STANDARD 701400, 701401 & 701411).
- 4. CONSTRUCT REPAIRS ON RIGHT PIERS.
- 5. REMOVE TRAFFIC CONTROL AND RESUME NORMAL TRAFFIC PATTERNS.

NOTE:

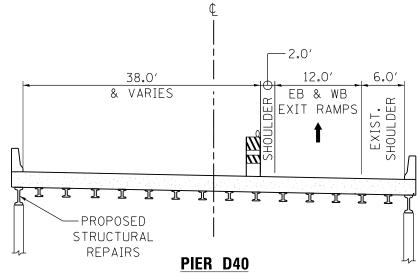
ALL ARROWS SHOWN INDICATE DIRECTION OF TRAFFIC FLOW.



RIGHT SIDE REPAIRS ONLY

SUGGESTED MAINTENANCE OF TRAFFIC - PIERS D5 & D8

- 1. CLOSE RIGHT LANES AT BOTH REPAIR LOCATIONS (USING HIGHWAY STANDARDS 701428, 701400, 701401, & 701411) IN CONJUNCTION WITH MODOT PROJECT NO. J6I2377C.
- 2. CONSTRUCT REPAIRS ON RIGHT PIERS.
- 3. REMOVE TRAFFIC CONTROL AND RESUME NORMAL TRAFFIC PATTERNS.
- 4. CONSTRUCT REPAIRS ON LEFT PIERS UNDER TRAFFIC.



S.N. 082-0144 (LOOKING SOUTH)

LEFT SIDE REPAIRS ONLY

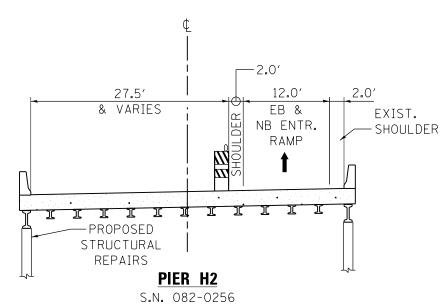
SUGGESTED MAINTENANCE OF TRAFFIC - PIER D40

- 1. CLOSE LEFT LANES AT REPAIR LOCATION
- (USING HIGHWAY STANDARDS 701400, 701401 & 701411).

 CONSTRUCT REPAIRS ON LEFT SPAN.

 REMOVE TRAFFIC CONTROL AND RESUME NORMAL TRAFFIC PATTERNS.

FILE NAME =	USEF	ER NAME = mkirchner	DESIGNED - BJG	REVISED -			MAI	INTFNANC	E OF TRA	FFIC	F.A.I RTF.	SECTION	COUNTY	TOTAL	SHEET NO.
\$FILEL\$			DRAWN - MSK	REVISED -	STATE OF ILLINOIS				SECTIONS		70	82-3HVB-2R-2-B-R	ST. CLAIR		6
	PL01	OT SCALE = 100.0000 ' / in.	CHECKED - SLD	REVISED -	DEPARTMENT OF TRANSPORTATION		_	ITTICAL			_		CONTRACT	NO. 7	6J68
Default	PL01	DT DATE = 11/22/2016	DATE - 11/21/16	REVISED -		SCALE: N.A.	SHEET 1	OF 3 S	HEETS STA.	TO STA.		ILLINOIS FED. A	D PROJECT		

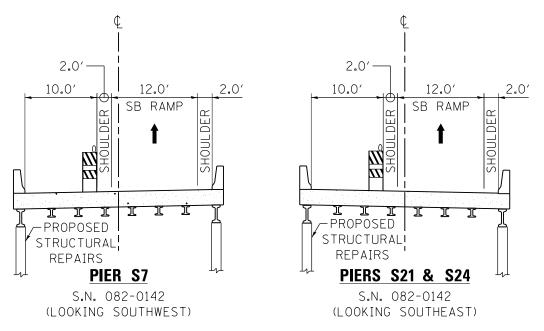


(LOOKING NORTHEAST)

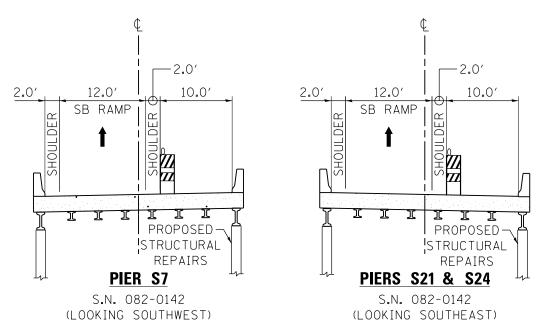
SUGGESTED MAINTENANCE OF TRAFFIC - PIER H2

LEFT SIDE REPAIRS ONLY

- 1. CLOSE LEFT LANES AT REPAIR LOCATION
- (USING HIGHWAY STANDARDS 701428, 701400, 701401, & 701411).
- 2. CONSTRUCT REPAIRS ON LEFT PIER.
- 3. REMOVE TRAFFIC CONTROL AND RESUME NORMAL TRAFFIC PATTERNS.



LEFT SIDE REPAIRS



RIGHT SIDE REPAIRS

SUGGESTED MAINTENANCE OF TRAFFIC - PIERS S7, S21, & S24

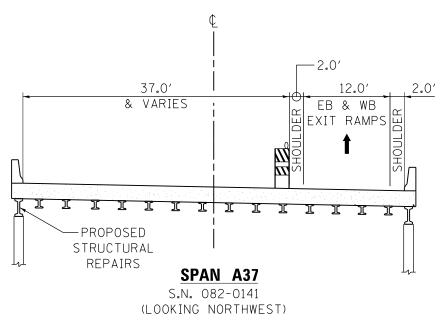
- 1. SHIFT TRAFFIC TO LEFT SIDE OF RAMP AT REPAIR LOCATIONS (USING HIGHWAY STANDARD 701456).
 2. CONSTRUCT REPAIRS ON RIGHT PIERS.
 3. SHIFT TRAFFIC TO RIGHT SIDE OF RAMP AT REPAIR LOCATIONS (USING HIGHWAY STANDARD 701456).

- 4. CONSTRUCT REPAIRS ON LEFT PIERS.
- 5. REMOVE TRAFFIC CONTROL AND RESUME NORMAL TRAFFIC PATTERN.

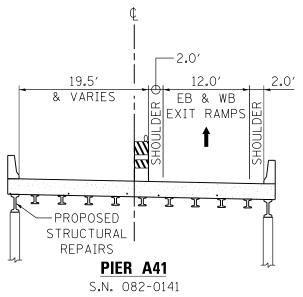
NOTE:

ALL ARROWS SHOWN
INDICATE DIRECTION OF TRAFFIC FLOW.

	MAINTENANCE OF TRAFFIC	F.A.I RTF	SECTION	COUNTY	TOTAL SHEET
SFILELS DRAWN - MSK REVISED - STATE OF ILLINOIS		70	82-3HVB-2R-2-B-R	ST. CLAIR	27 7
PLOT SCALE = 100.0000 1/ In. CHECKED - SLD REVISED - DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			CONTRACT	NO. 76J68
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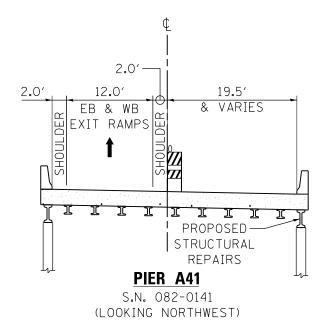


LEFT SIDE REPAIRS ONLY



S.N. 082-0141 (LOOKING NORTHWEST)

LEFT SIDE REPAIRS



RIGHT SIDE REPAIRS

SUGGESTED MAINTENANCE OF TRAFFIC - SPAN A37 & PIER A41

- 1. CLOSE LEFT LANE AND STRIPED MEDIAN AT REPAIR LOCATION A37 & CLOSE LEFT LANE AT REPAIR LOCATION A41 (USING HIGHWAY STANDARDS 701411, 701456, & 701501).
- 2. CONSTRUCT REPAIRS ON LEFT SIDE AT BOTH REPAIR LOCATIONS.
- 3. CLOSE RIGHT LANE AT REPAIR LOCATION A41 (USING HIGHWAY STANDARD 701456).
- 4. CONSTRUCT REPAIRS ON RIGHT SIDE AT REPAIR LOCATION A41.
- 5. REMOVE TRAFFIC CONTROL AND RESUME NORMAL TRAFFIC PATTERNS.

NOTE:

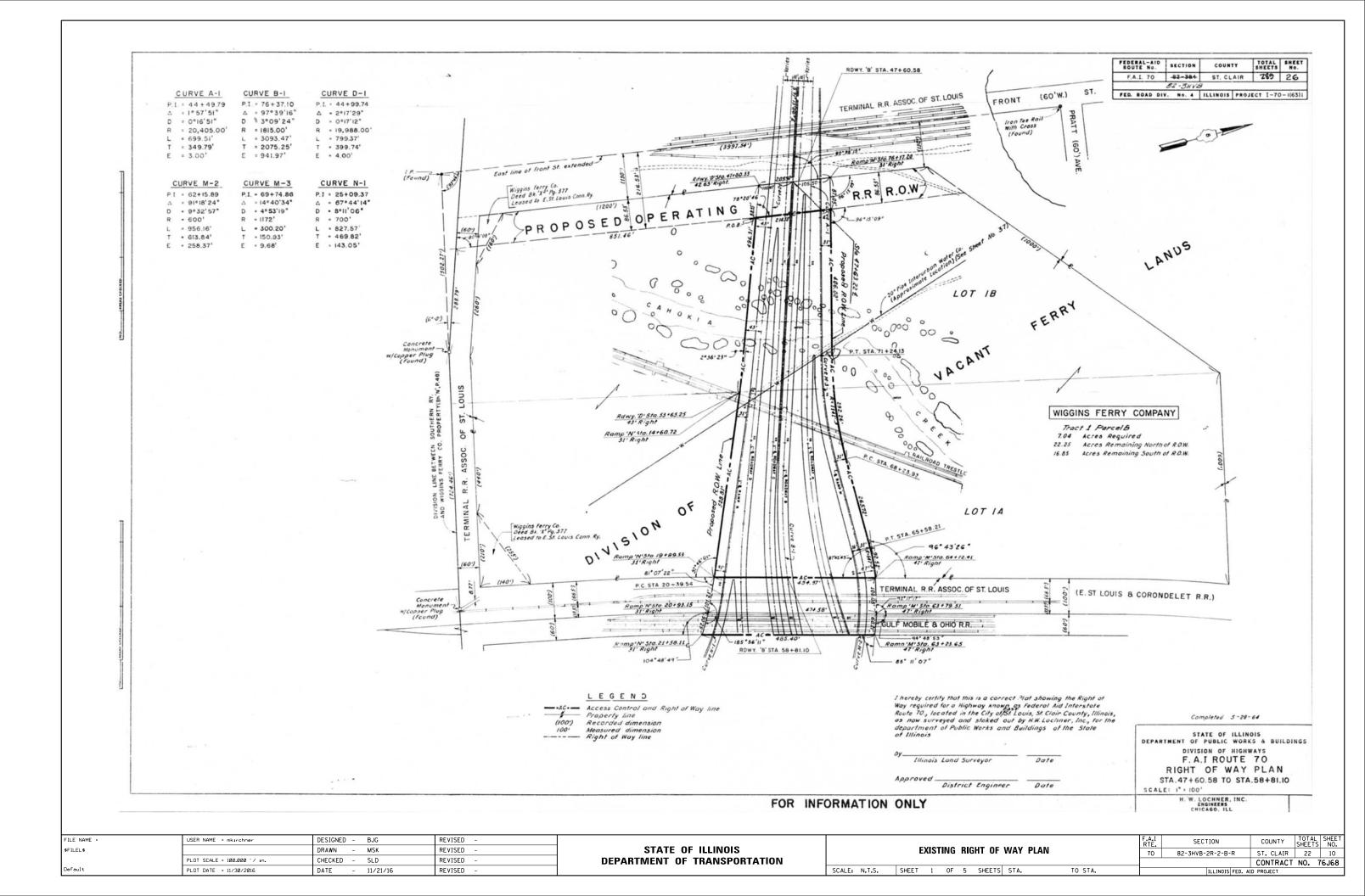
ALL ARROWS SHOWN
INDICATE DIRECTION
OF TRAFFIC FLOW.

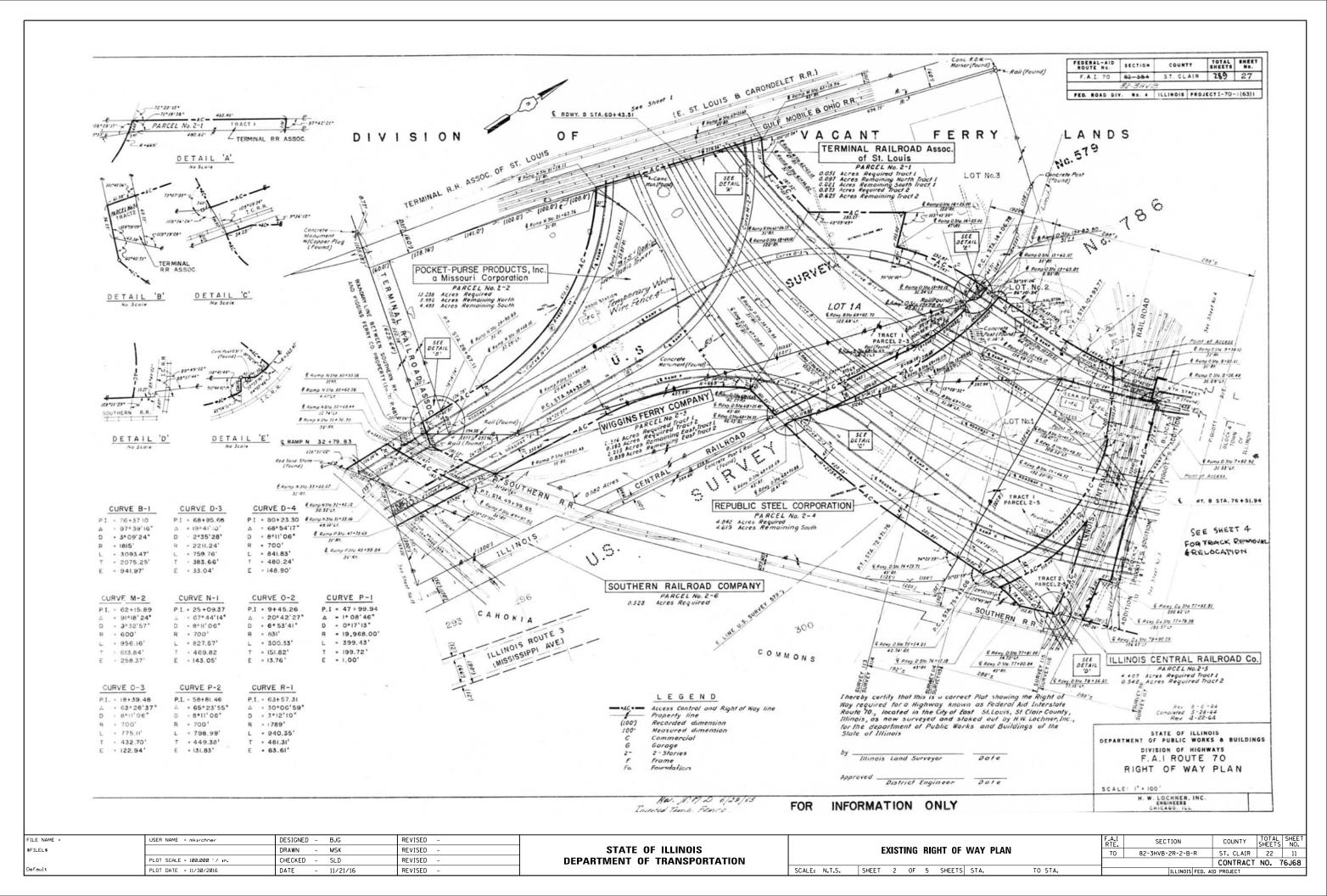
FILE NAME =	USER NAME = mkirchner	DESIGNED - BJG	REVISED -			MAINTENANCE OF TRAFFIC	F.A.I RTE.	SECTION	COUNTY	SHEETS N	NO.
\$FILEL\$		DRAWN - MSK	REVISED -	STATE OF ILLINOIS			70	82-3HVB-2R-2-B-R	ST. CLAIR	27	8
	PLOT SCALE = 100.0000 '/ in.	CHECKED - SLD	REVISED -	DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS				CONTRACT	NO. 76J	J68
Default	PLOT DATE = 11/23/2016	DATE - 11/21/16	REVISED -		SCALE: N.A.	SHEET 3 OF 3 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT		

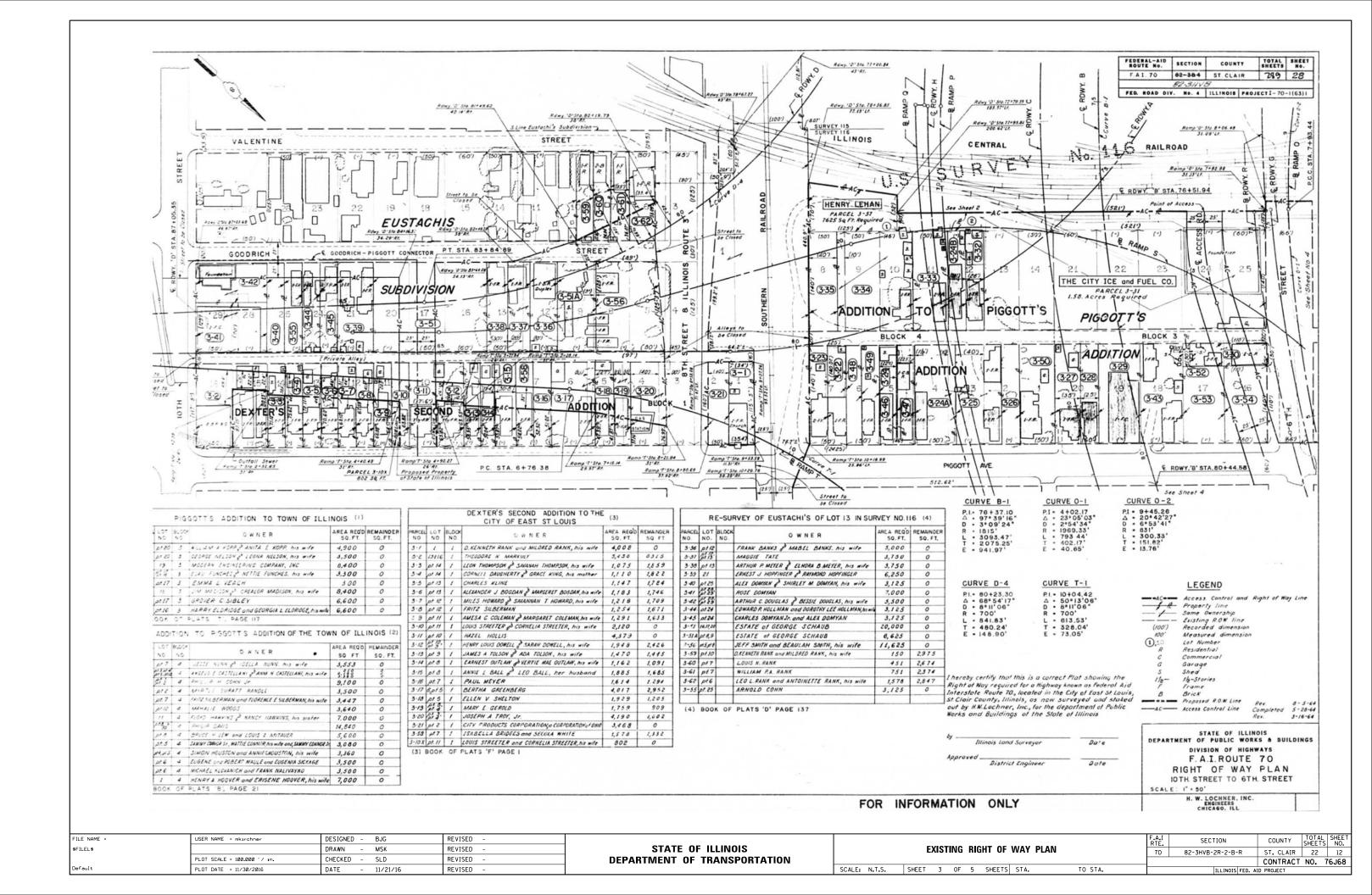
						MAINT	ENANCE OF TRA	FFIC SCHEDU	LE						
REPAIR	ENGINEERS	MOBILIZATION	TRAFFIC	TRAFFIC	TRAFFIC	TRAFFIC	CHANGEABLE	PAVEMENT	PAVEMENT	PAVEMENT	SHORT	PAVEMENT	REPLACEMENT	RAISED	RAILROAD
LOCATION	FIELD		CONTROL	CONTROL	CONTROL	CONTROL	MESSAGE	MARKING	MARKING	MARKING	TERM	MARKING	REFLECTOR	REFLECTIVE	PROTECTIV
	OFFICE		&	&	&		SIGN	BLACKOUT	BLACKOUT	BLACKOUT	PAVEMENT	TAPE		PAVEMENT	LIABILIT
	TYPE		PROTECTION	PROTECTION	PROTECTION	PROTECTION		TAPE	TAPE	TAPE	MARKING	TYPE IV		MARKER	INSURANCE
	Α		STANDARD	STANDARD	STANDARD	STANDARD		7′′	9″	16"	REMOVAL	8″*		REMOVAL	
			701401	701411	701456	701501									
	(CAL MO)	(L SUM)	(EACH)	(EACH)	(L SUM)	(L SUM)	(CAL MO)	(FOOT)	(FOOT)	(FOOT)	(SQ FT)	(F00T)	(EACH)	(EACH)	(L SUM)
							SN 082-0	141							
A15 & A18	0.65	0.14	1	1				2,746**	9,278**	184**	8,807**	15,417**	17	17	0.4
A37 & A41	0.05	0.14		1	0.30	1	0.8	1927	1,130	546	2,699		21	21	
							SN 082-0	142							
S 7	0.20	0.14			0.35		0.6	440			257				
S21 & S24	0.40	0.14			0.35		0.6	880			513				
							SN 082-0	144							
D5 & D8	0.65	0.14	1	1				21	491		380	445	3	3	0.4
D40	0.45	0.14	1	1				34	706		550	789	3	3	
							SN 082-0	256							
H2	0.60	0.14	1	1				265	263		352	448	15	15	0.2
TOTALS	3.0	1.0	4	5	1.0	1	2.0	6,313	11.868	730	13,558	17,099	59	59	1.0

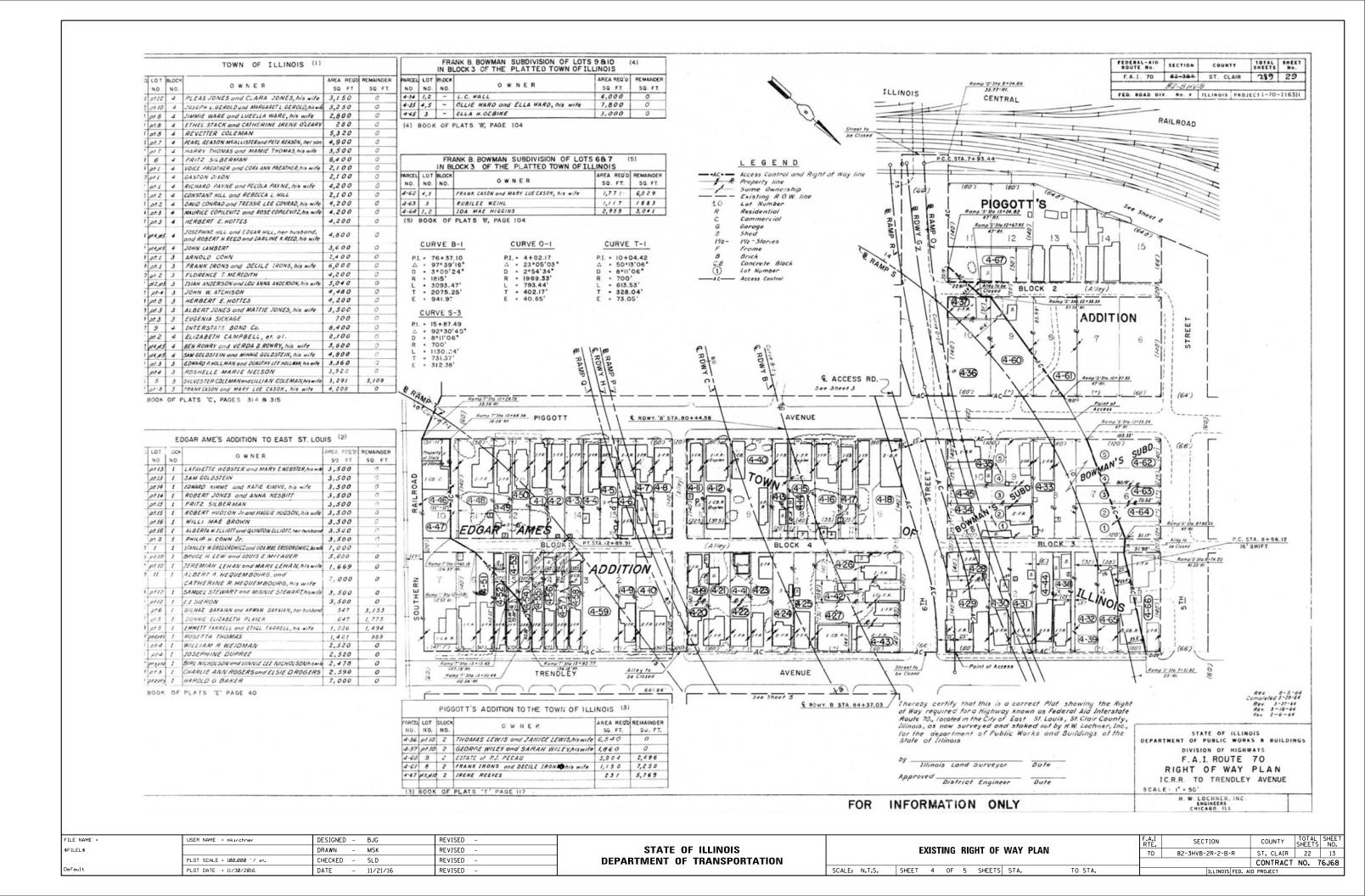
- QUANTITY INCLUDED IN APPROPRIATE TRAFFIC CONTROL & PROTECTION PAY ITEM PER ARTICLE 703.07 OF THE STANDARD SPECIFICATIONS.
 •• QUANTITY INCLUDES 10 APPLICATIONS (FOR DAILY SETUP & REMOVAL OF IDOT HIGHWAY STANDARD 701411 TO ACCOMMODATE PEAK-HOUR RESTRICTIONS).

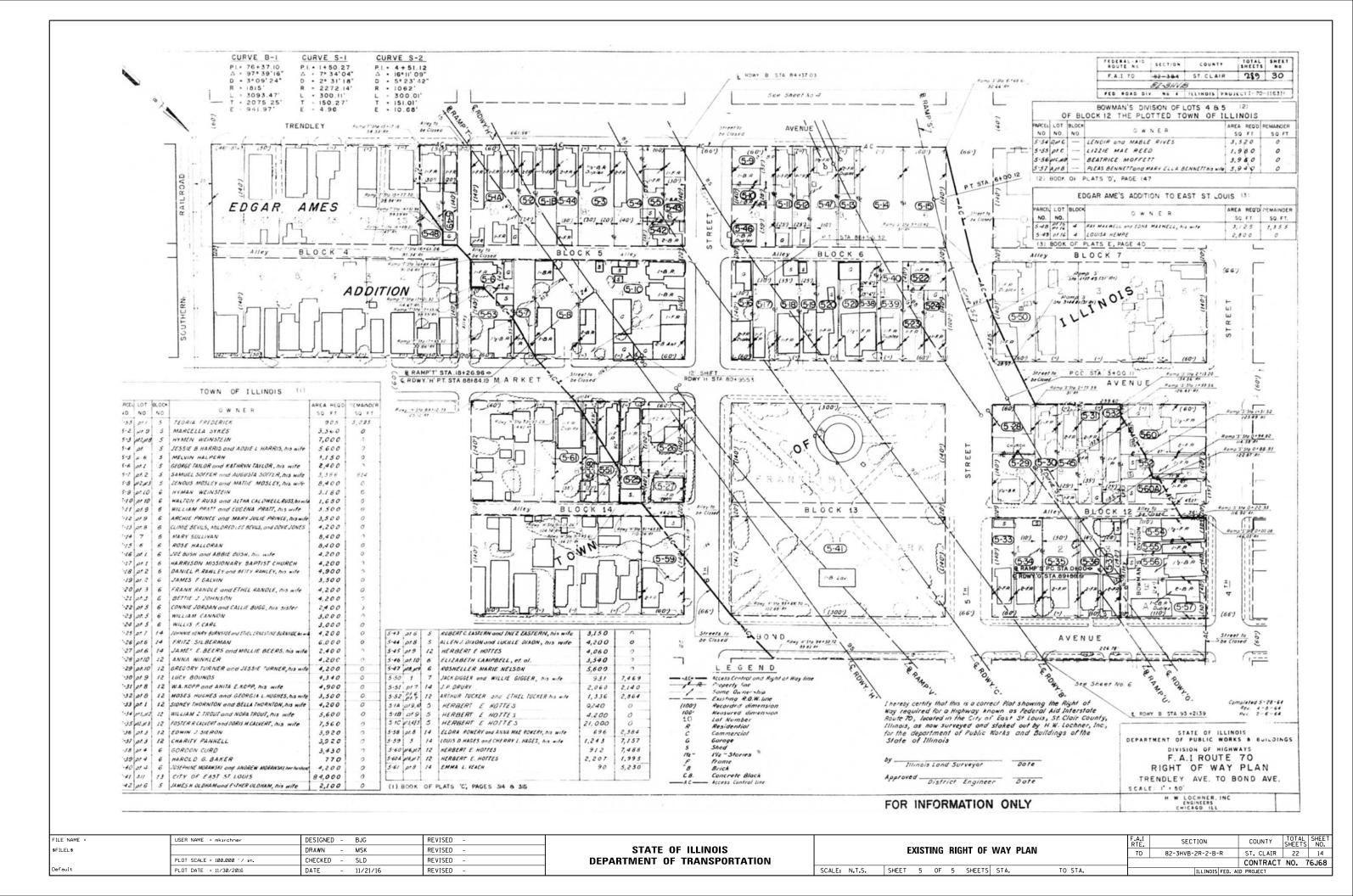
FILE NAME =	USER NAME = mkirchner	DESIGNED - BJG	REVISED -	27.77 27 11.111212		MAINTENANCE OF TRAFFIC		F.A.I RTE.	SECTION	COUNTY	TOTAL SHEET NO.
\$FILEL\$		DRAWN - BJG	REVISED -	STATE OF ILLINOIS	SCHEDULE			70	82-3HVB-2R-2-B-R	ST. CLAIR	27 9
	PLOT SCALE = 100.0000 ' / in.	CHECKED - SLD	REVISED -	DEPARTMENT OF TRANSPORTATION		SCHEDULE				CONTRACT	NO. 76J68
Default	PLOT DATE = 11/23/2016	DATE - 11/21/16	REVISED -		SCALE: N.A.	SHEET 1 OF 1 SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT	

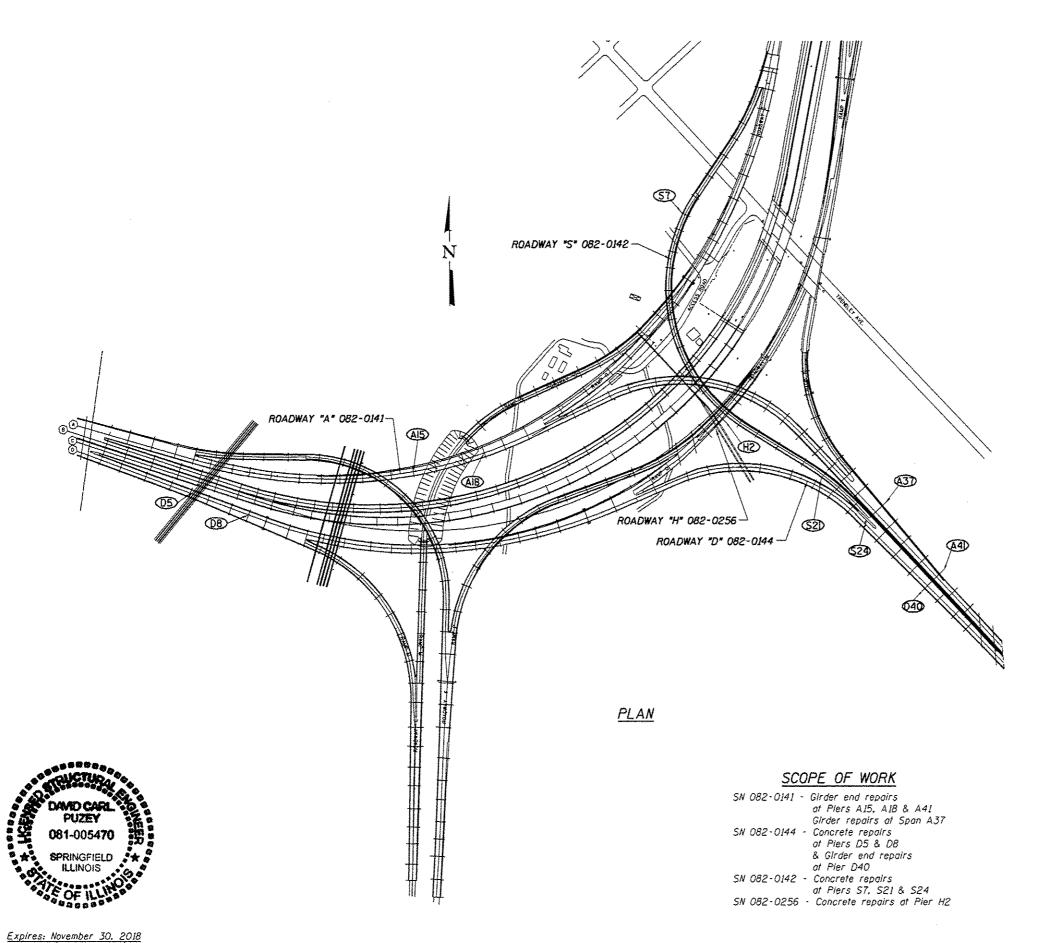












GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the GBSP "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300. Type 1. Cost included with Structural Steel Repair.

Shotcrete is only allowed for the Structural Repair of Concrete on the underside of the cross beams. Column repairs to be completed using Formed Concrete. See Special Provisions.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTIT
Structural Steel Repair	Lbs.	5050
Structural Repair of Concrete Depth≤5"	Sa. Ft.	1961
Temporary Shoring & Cribbing	Each	11
Fiber Wrap	Sq. Ft.	2540
Acrylic Coating	Sq. Yd.	282
Column Tensioned Strands	Each	4

PASSED LICEL OF BRIDGES AND PROCTURE

DATE - JANUARY 30, 2017
REVISED

REVISED

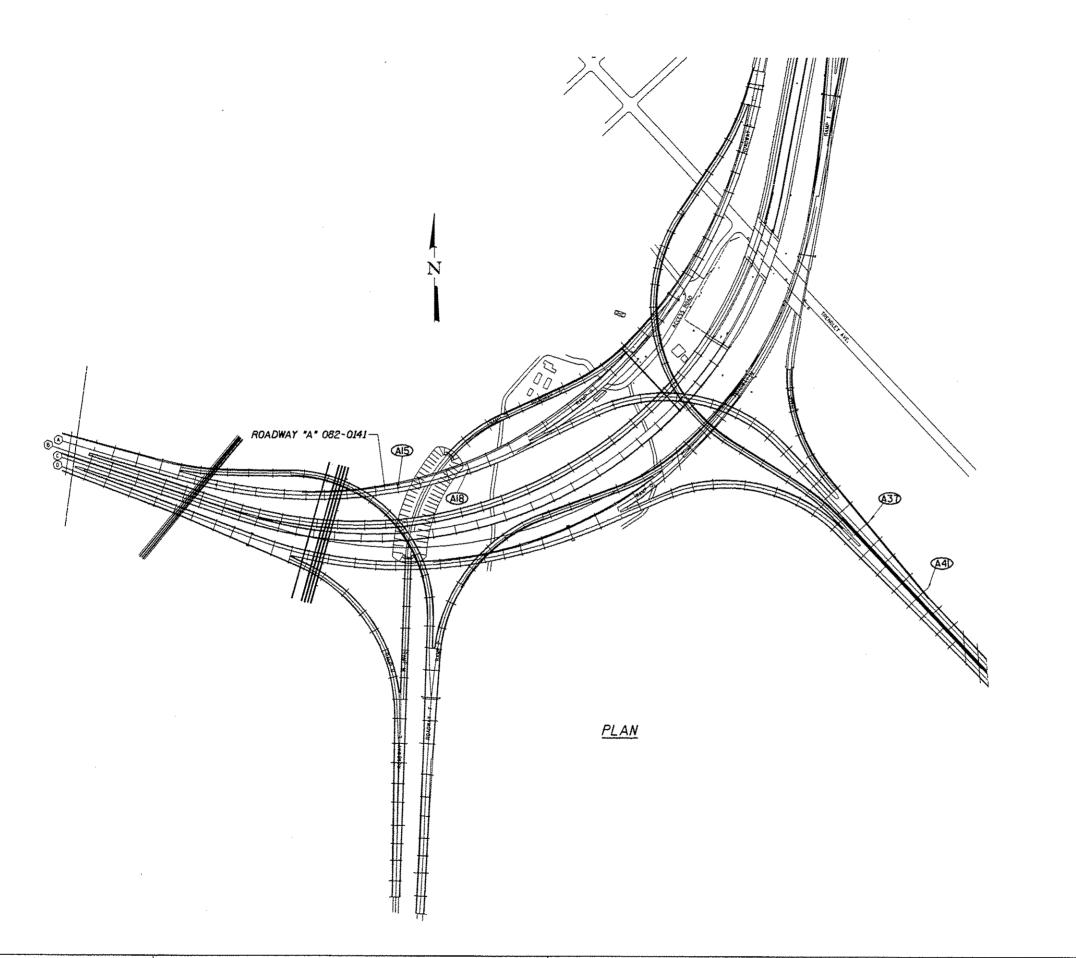
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

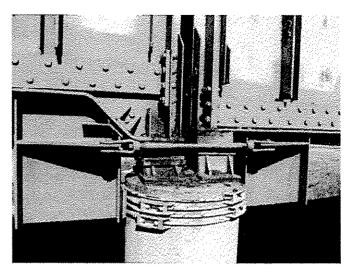
GENERAL PLAN
POPLAR STREET BRIDGE APPROACH REPAIRS
SN 082-0141, 0142, 0144 & 0256
SHEET NO. 1 OF 13 SHEETS

F.A.I. SECTION COUNTY TOTAL SHEETS NO.

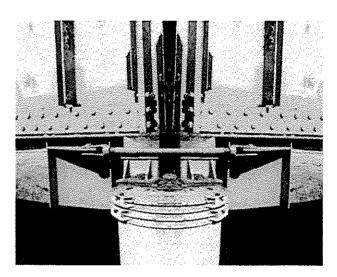
70 82-3HVB-2R-2-B-R ST. CLAIR 27 15

CONTRACT NO. 76J68

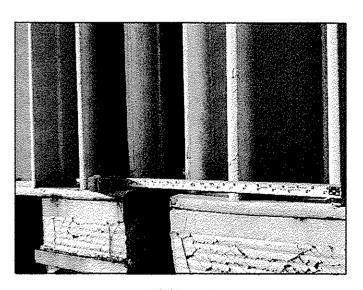




PIER A15

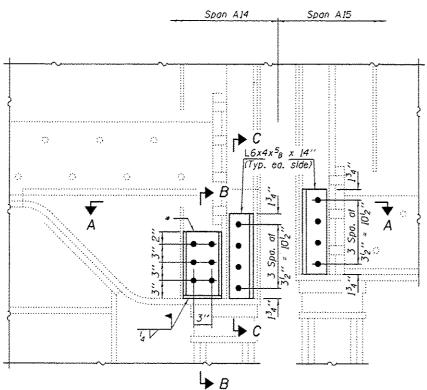


PIER A18



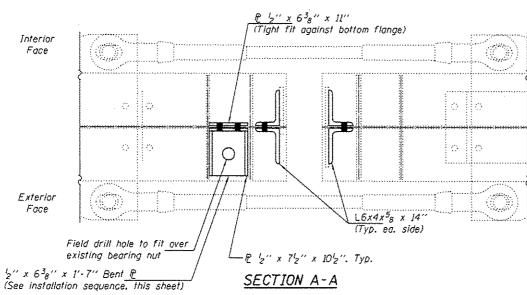
PIER A41

DESIGNED - VHV CHECKED - DAB	DATE - JANUARY 30, 2017 STATE OF ILLINOIS	ROADWAY "A"	F.A.I. SECTION	COUNTY TOTAL SHEET NO.
DRAWN - ballva PASSED A Carl Roser	REVISED DEPARTMENT OF TRANSPORTATION	SN 082-0141	70 82-3HV8-2R-2-8-R	ST. CLAIR 27 16
CHECKED - VHV DAB ENGINEER OF BRIDGES AND STRUCTURES	REVISEO	SHEET NO. 2 OF 13 SHEETS	<u> </u>	ID PROJECT



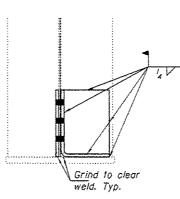
PIER A15 GIRDER END REPAIR DETAILS (Typ. Girders A1 & A2)

* $\frac{1}{2}$ " \times 6^{3} 8" \times 1'-7" Bent & Exterior face & $\frac{1}{2}$ " \times 6^{3} 8" \times 11" Interior face

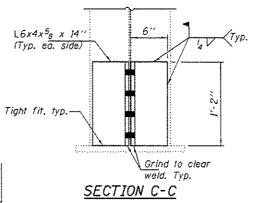


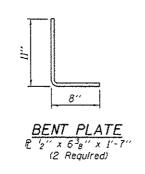
INSTALLATION SEQUENCE

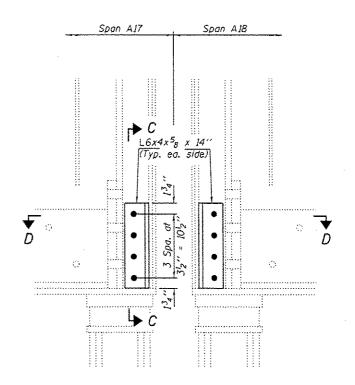
- 1) Install bent plate over bearing nut.
- 2) Bolt bent plate to web and weld outstanding leg to bottom flange.
- 3) Install $\frac{1}{2}$ " x $7\frac{1}{2}$ " x $10\frac{1}{2}$ " plate tight against bent plate and stiffener.
- 4) Field weld ${}^{l}_{2}$ " x $7{}^{l}_{2}$ " x $10{}^{l}_{2}$ " plate to bent plate and stiffener.



SECTION B-B

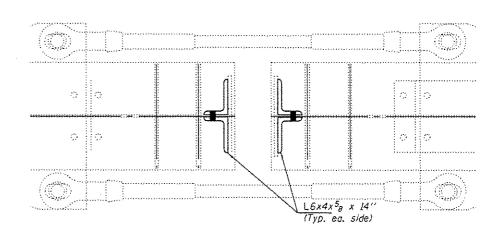






PIER A18 GIRDER END REPAIR DETAILS

(Typ. Girders A1 & A2)



SECTION D-D

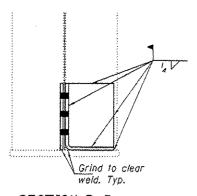
BILL OF MATERIAL

ITÉM	UNIT	QUANTITY
Structural Steel Repair	Pound	480

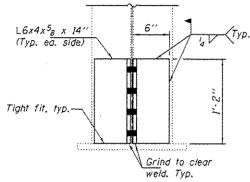
DESIGNED - VHV ROADWAY "A" BEAM REPAIR DETAILS COUNTY TOTAL SHEETS NO. DATE -JANUARY 30, 2017 SECTION CHECKED - DAB DRAWN - Kyle STATE OF ILLINOIS PIER A15 & PIER A18 -2R-2-8-R ST. CLAIR 27 17

CONTRACT NO. 76J68

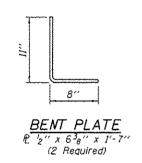
[ILLINOIS] FEO. AID PROJECT 82-3HV8-2R-2-8-R - Kyle M. Steffen /bolivo REVISED PASSED **DEPARTMENT OF TRANSPORTATION** SN 082-0141 SHEET NO. 3 OF 13 SHEETS CHECKED - VHV DAB REVISED



SECTION B-B



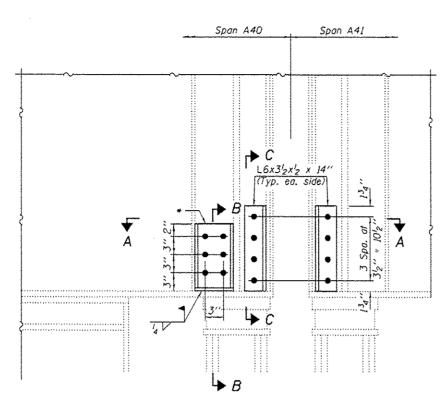
SECTION C-C



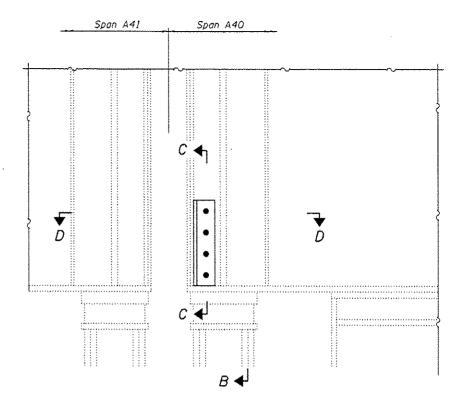
INSTALLATION SEQUENCE

- D Install bent plate over bearing nut.
- 2) Bolt bent plate to web and weld outstanding leg to bottom flange.

 3) Install $\frac{1}{2}$ " x $\frac{7}{2}$ " x $\frac{10}{2}$ " plate tight against
- bent plate and stiffener.
- 4) Field weld 2" x 72" x 102" plate to bent plate and stiffener.

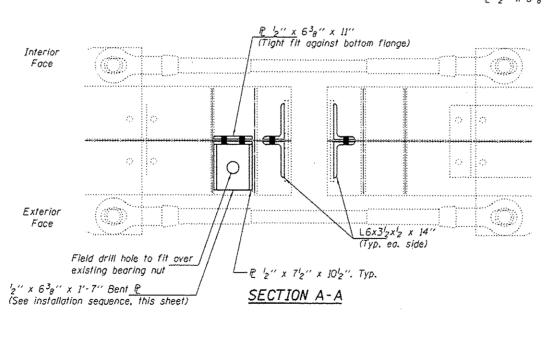


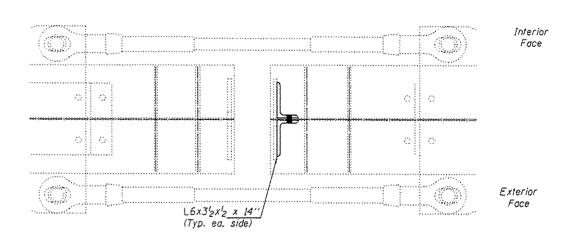
PIER A41 GIRDER END REPAIR DETAILS (Typ. Inside Face Girder A1)



PIER A41 GIRDER END REPAIR DETAILS (Typ. Inside Face Girder A2)

 * $_{2}^{''}$ \times 6 $_{8}^{3}$ '' \times 1' - 7'' Bent E exterior face E $_{2}^{''}$ \times 6 $_{8}^{3}$ '' \times 11'' Interior face



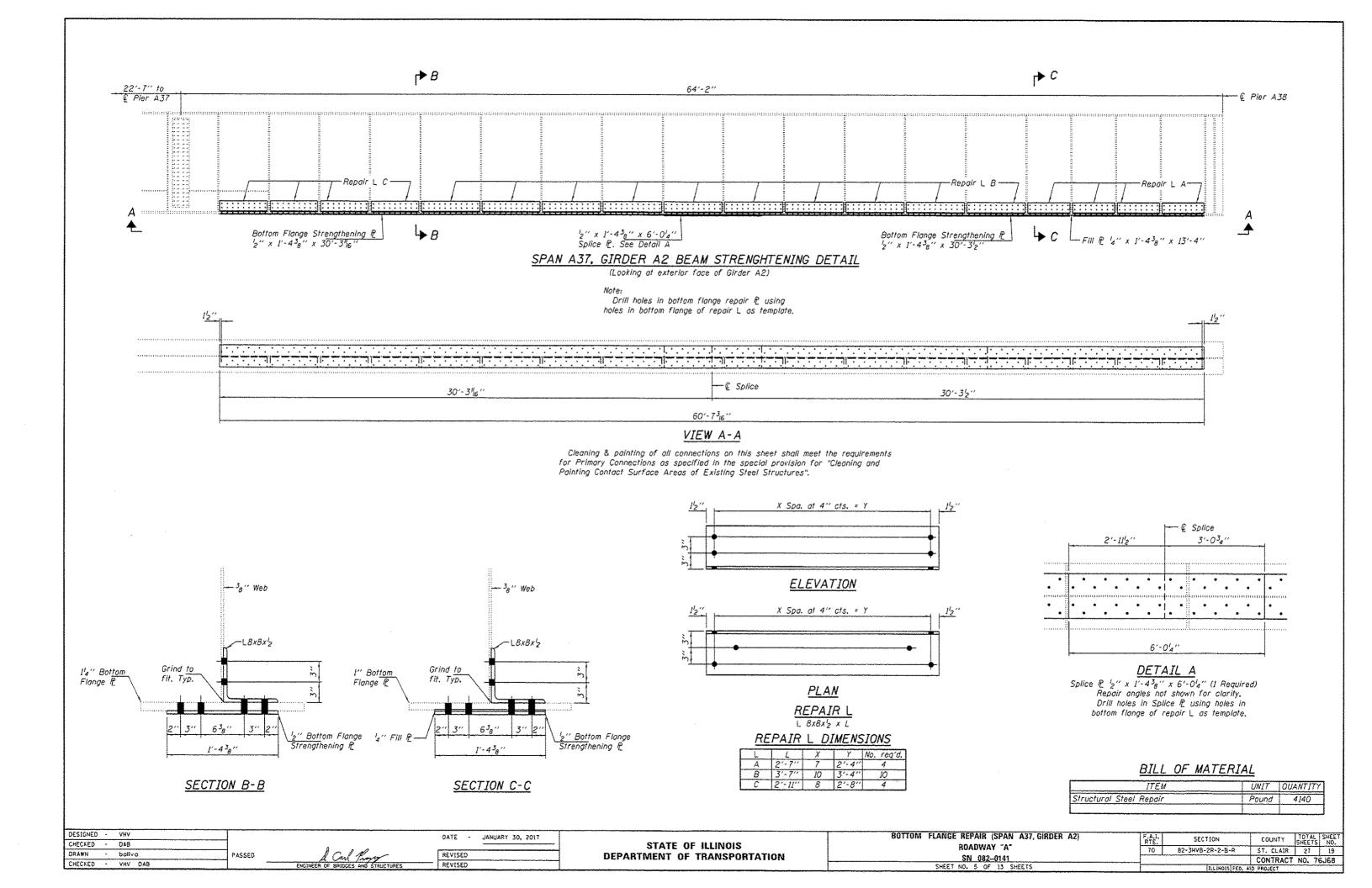


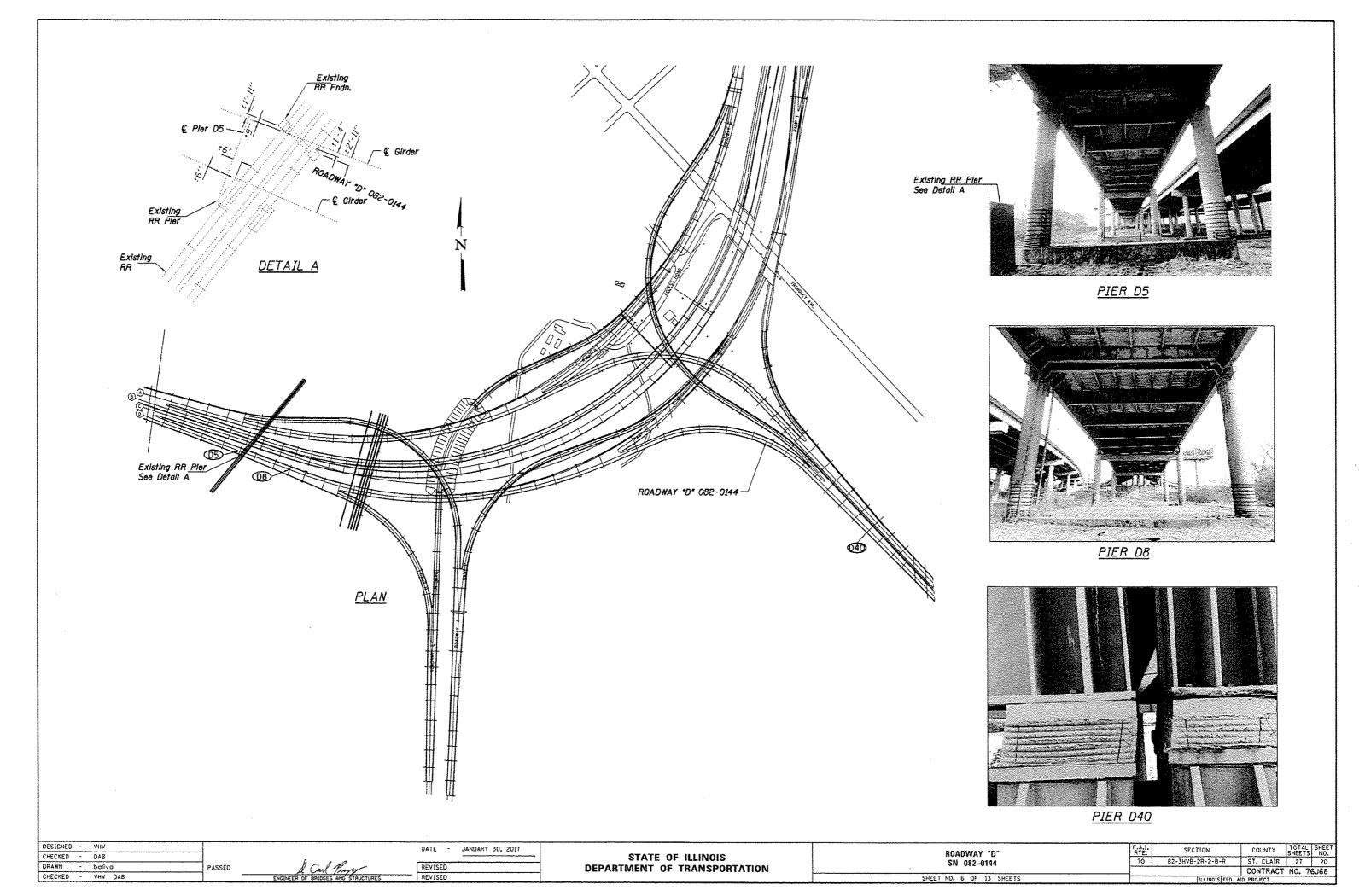
SECTION D-D

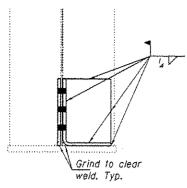
BILL OF MATERIAL

ITEM	UNIT	OUANTITY
Structural Steel Repair	Pound	170

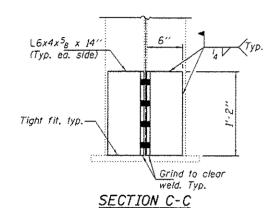
DESIGNED - VHV ROADWAY "A" BEAM REPAIR DETAILS DATE -JANUARY 30, 2017 F.A.I. RTÉ. 70 COUNTY TOTAL SHEET NO. ST. CLAIR 27 18 SECTION CHECKED - DAB STATE OF ILLINOIS PIER A41 82-3HVB-2R-2-8-R ORAWN - Kyle M. Steffen /ballva REVISED PASSED **DEPARTMENT OF TRANSPORTATION** SN 082-0141 CONTRACT NO. 76J68 CHECKED - VHV DAB SHEET NO. 4 OF 13 SHEETS

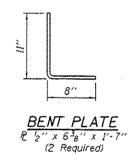






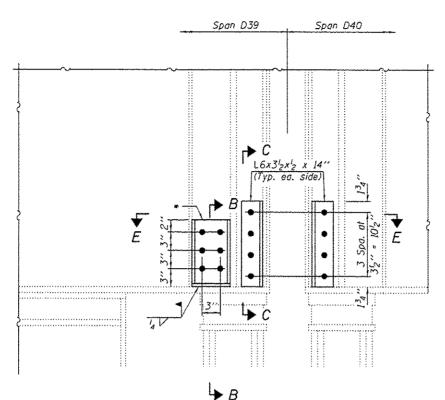
SECTION B-B





INSTALLATION SEQUENCE

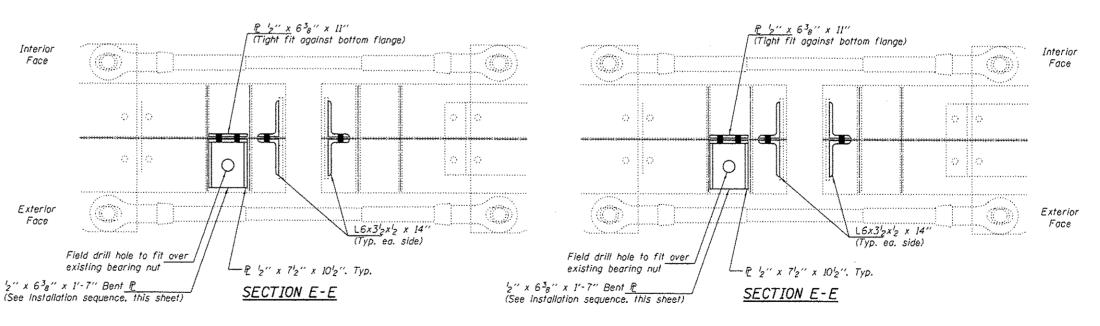
- 1) Install bent plate over bearing nut.
- 2) Bolt bent plate to web and weld outstanding leg to bottom flange.
- 3) Install 2" x 72" x 10½" plate tight against bent plate and stiffener.
- 4) Field weld $_{2}^{l}$ " x $_{2}^{l}$ " x $_{2}^{l}$ " x $_{3}^{l}$ " plate to bent plate and stiffener.



PIER D40 GIRDER END REPAIR DETAILS
(Typ. Inside Face Girder D1)

PIER D40 GIRDER END REPAIR DETAILS
(Typ. Inside Face Girder D2)

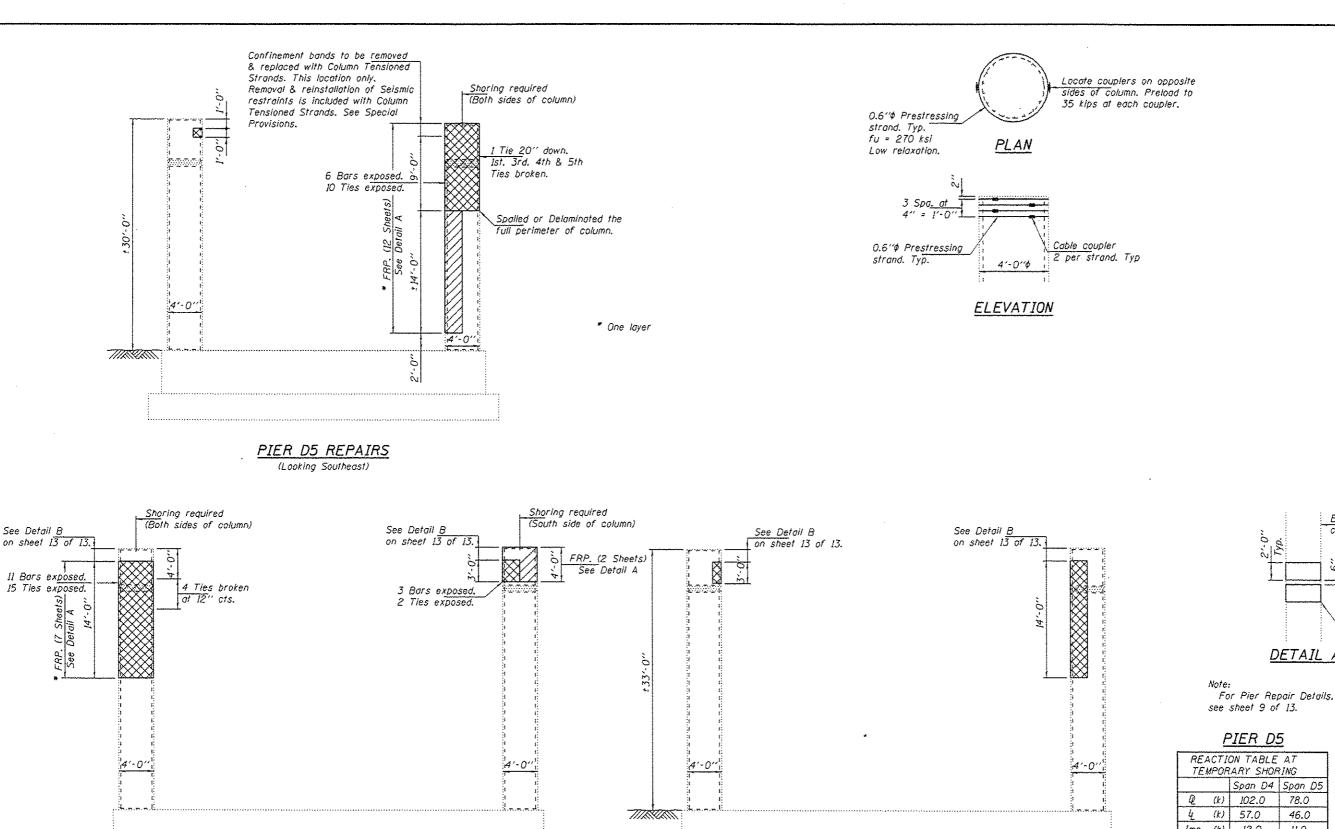
* $^{1}_{2}$ " x 6^{3}_{8} " x 1'-7" Bent £ Exterior face £ $^{1}_{2}$ " x 6^{3}_{8} " x 11" Interior face



BILL OF MATERIAL

ITEM	UNIT	OUANTITY
Structural Steel Repair	Pound	260

DESIGNED - VHV	DATE - JANUARY 30, 2017		ROADWAY "D" BEAM REPAIR DETAILS	F.A.I. SECTION COUNTY TOTAL SHEET
CHECKED - DAB	.0	STATE OF ILLINOIS	PIER D40	70 82-3HVR-2R-2-R-R ST CLAIR 27 21
ORAWN - Kyle M. Steffen /bolivo PASSED & Carl 1	REVISED	DEPARTMENT OF TRANSPORTATION	SN 082-0144	CONTRACT NO. 76J68
CHECKED - VHV DAB ENGINEER OF BRIDGES A	NO STRUCTURES REVISED		SHEET NO. T OF 13 SHEETS	ILLINOIS FED. AID PROJECT



PIER D8

DETAIL A

Existing

column

FRP. See Special Provisions

REACTION TABLE AT TEMPORARY SHORING									
	******	Span D4							
Q	(k)	102.0	78.0						
4_	(k)	57.0	46.0						
Īmp.	(k)	12.0	11.0						
Total	(k)	171.0	135.0						

SHEET NO. 8

REACTION TABLE AT TEMPORARY SHORING						
Span D7 Span D8						
<u>Q</u>	(k)	78.0	78.0			
4_	(k)	46.0	46.0			
Imp.	(k)	11.0	11.0			
Total	(k)	135.0	135.0			

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete Depth≤5"	Sq. Ft,	587
Temporary Shoring & Cribbing	Each	5
iber Wrap	Sq. Ft.	725
Acrylic Coating	Sq. Yd.	80
Column Tensioned Strands	Each	4

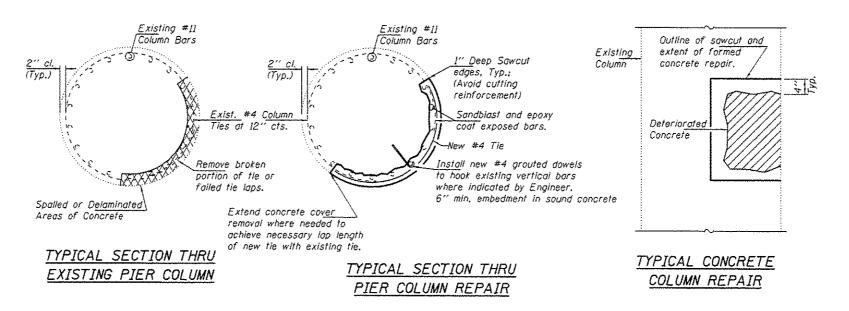
- Delaminated Concrete	PIER D8 REPAIRS
Delaiminated Concrete	(Looking Southeast)
- Spalled Concrete with exposed bars.	

DESIGNED	-	VHV			DATE	-	JANUARY 30, 2017	Γ
CHECKED	-	DAB		Δ .				i
DRAWN	-	Kyle M. Steffen	PASSED	A Carl Proper	REVISE	ED		
CHECKED	•	VHV DAB		ENGINEER OF BRIDGES AND STRUCTURES	REVISE	ED		

PIER D8 REPAIRS (Looking Northwest)

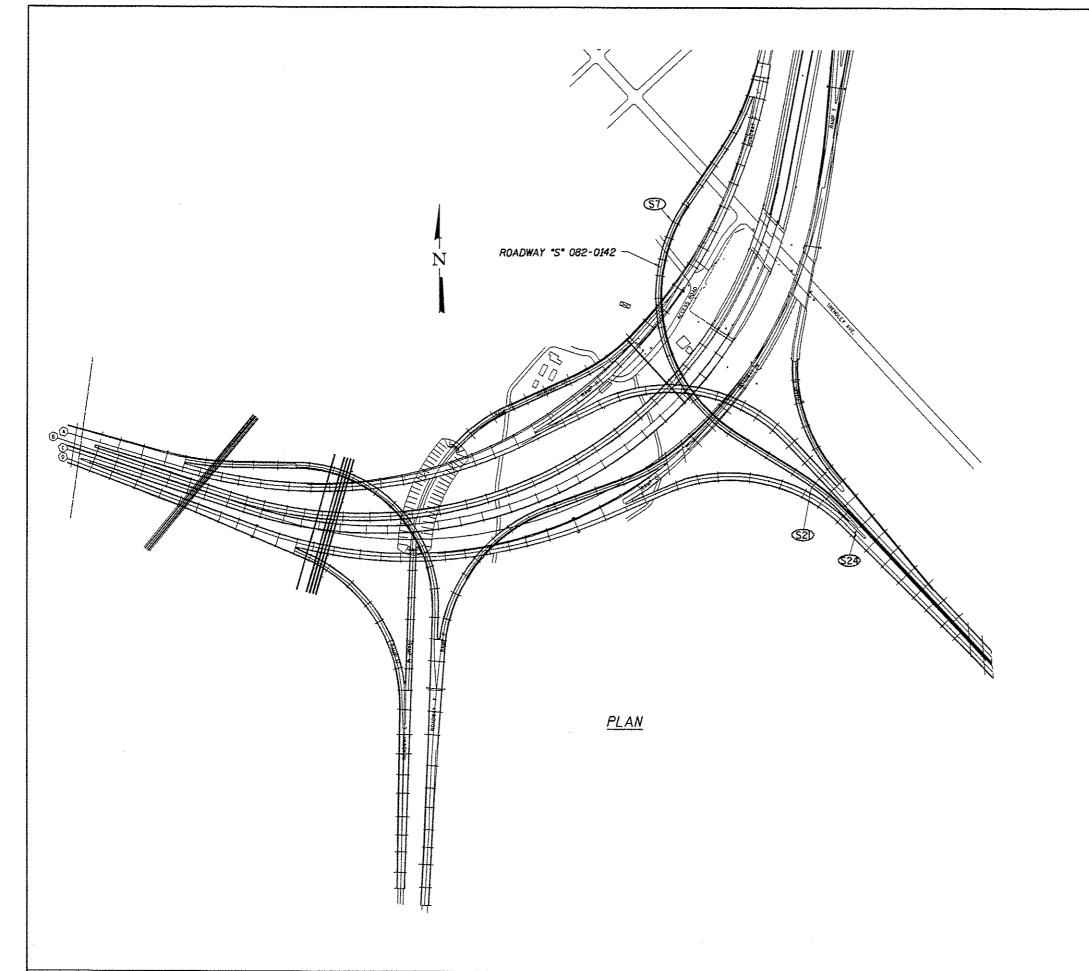
STATE	: 01	LLINOIS
DEPARTMENT	OF	TRANSPORTATION

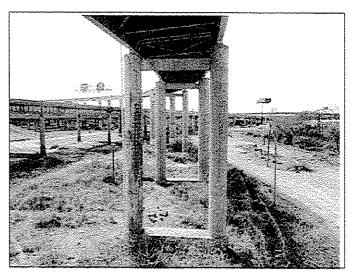
					1
PIER REPAIR LOCATIONS	F.A.I. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
ROADWAY "D"	70	82-3HVB-2R-2-B-R	ST. CLAIR	27	22
SN 082-0144			CONTRACT	NO. 7	5J68
SHEET NO. 8 OF 13 SHFETS		to those sen	In Boniery		



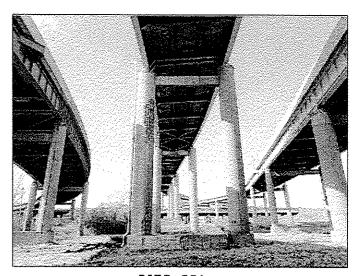
MINIMUM BAR LAP #4 bar = 1'-10"

DESIGNED - VHV CHECKED - DAB	DATE - JANUARY 30, 2017	STATE OF ILLINOIS		F.A.I. SECTION	COUNTY TOTAL SHEET NO.
DRAWN - Kyle M. Steffen PASSED & Carl Player CHECKED - VHV DAB	REVISED REVISED	DEPARTMENT OF TRANSPORTATION	ROADWAY "D" SN 082-0144	70 82-3HVB-2R-2-B-R	ST, CLAIR 27 23 CONTRACT NO. 76J68
2007-201-00-010-23-700-3700-010-23			SHEET NO. 9 OF 13 SHEETS	ILLINOIS FED. A	JD PROJECT

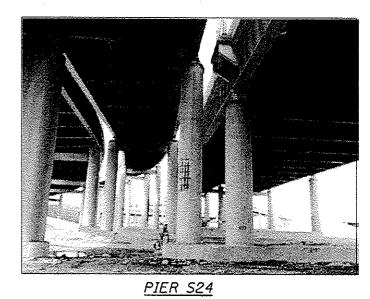




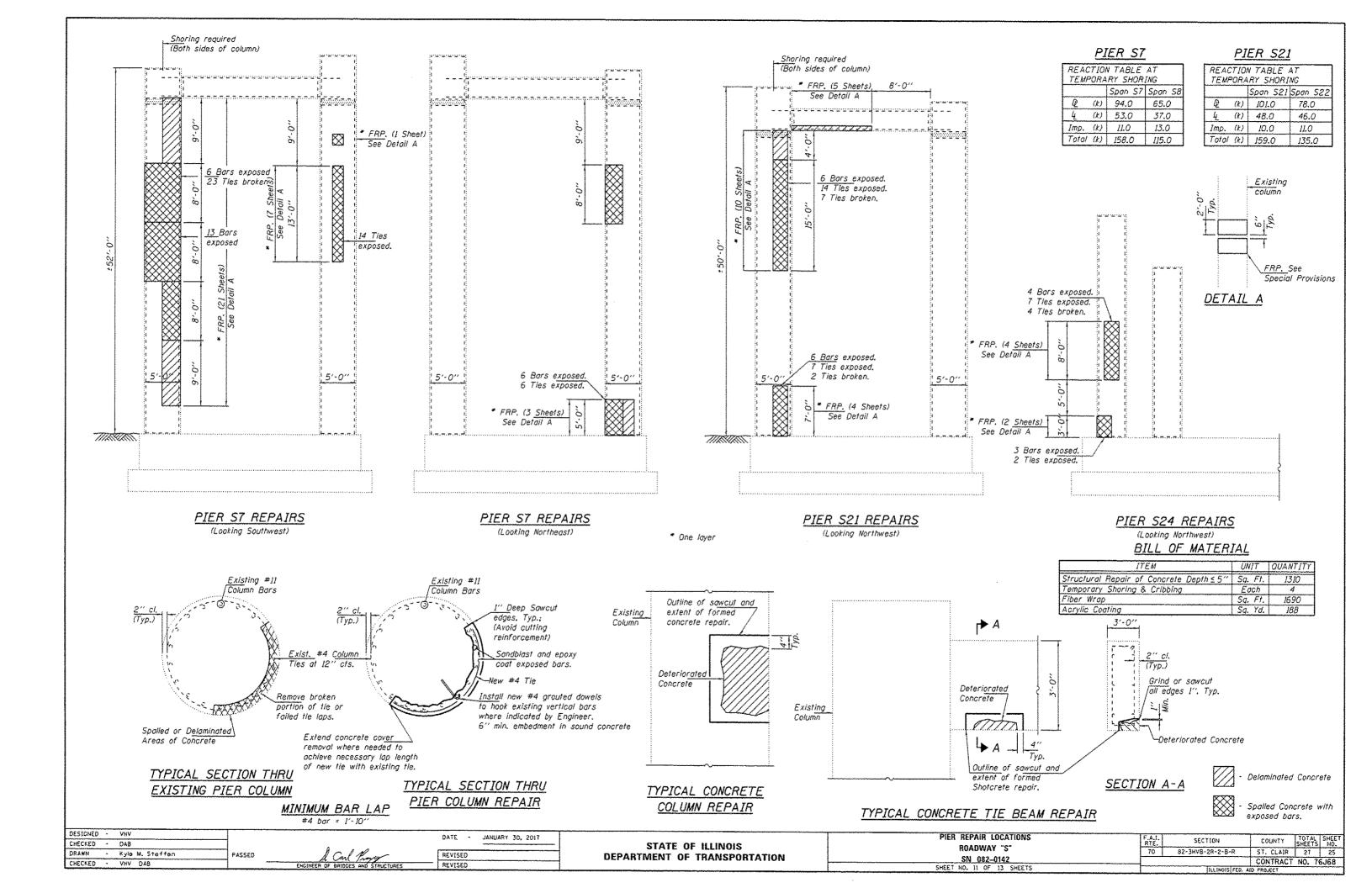
PIER ST

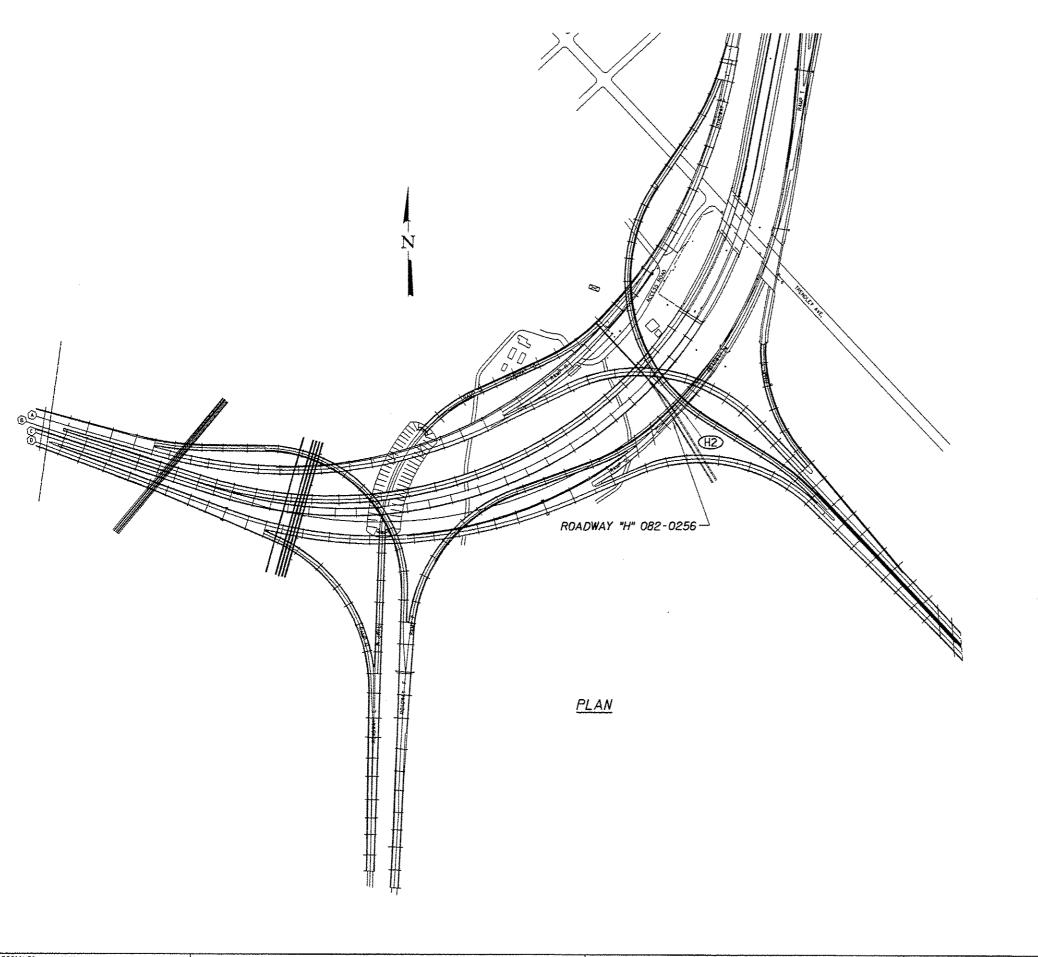


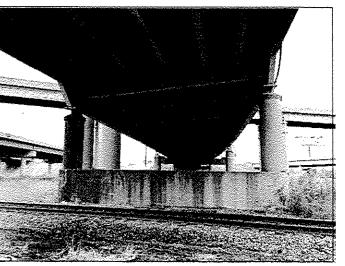
PIER S21



DESIGNED - VHV	DATE - JANUARY 30, 2017	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY "S" SN 082-0142	F.A.J. SECTION	COUNTY TOTAL SHEET
CHECKED - DAB DRAWN - bollvo PASSED	A Carl Power REVISED			70 82-3HVB-2R-2-B-R	ST. CLAIR 27 24
CHECKED - VHV DAB ENGINEER OF	ENGINEER OF BRIDGES AND STRUCTURES REVISED		SHEET NO. 10 OF 13 SHEETS	ILLIHOIS FED	CONTRACT NO. 76J68







PIER H2

DESIGNED - VHV
CHECKED - DAB
CHECKED - DAB
CHECKED - DAB
CHECKED - DAB
CHECKED - VHV DAB

DATE - JANUARY 30, 2017

STATE OF ILLINOIS
SN 082-0256

STATE OF ILLINOIS
SN 082-0256

REVISED

DEPARTMENT OF TRANSPORTATION

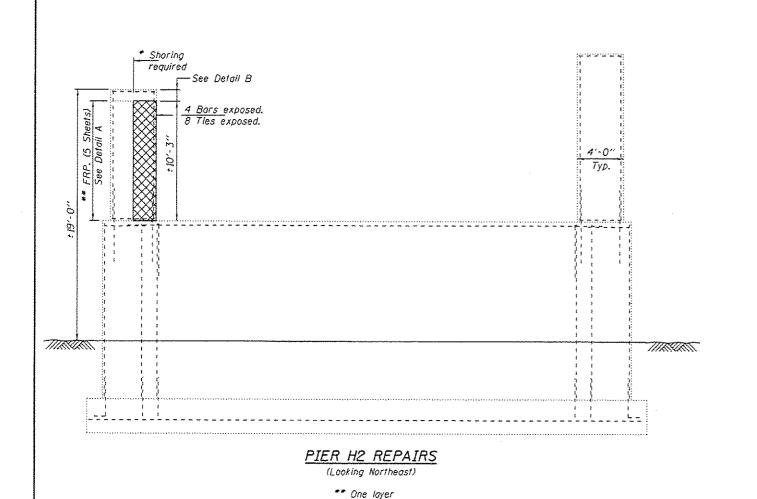
STATE OF ILLINOIS
SN 082-0256

DEPARTMENT OF TRANSPORTATION

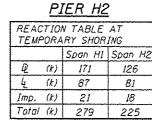
SHEET NO. 12 OF 13 SHEETS

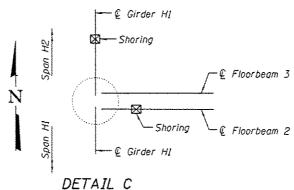
SHEET NO. 12 OF 13 SHEETS

SHEET NO. 12 OF 13 SHEETS



* Shore Girder HI on Span H2 on the North side of column. Shore Floorbeam 2 against crashwall on Span H1. (See Detail C).





Existing column FRP. See Special Provisions DETAIL A

Area to be cleaned, blasted and painted only. See Special Provision "Cleaning and Painting Exposed Rebar". Cost included with Structural Repair of Concrete.

DETAIL B COLUMN REPAIR DETAILS

*** Contractor shall exercise care during concrete removal to avoid encroaching in the area under the confinement bands.

Delaminated Concrete

Spalled Concrete with exposed bars.

MINIMUM BAR LAP #4 bar = 1'-10"

BILL OF MATERIAL ITEM UNIT QUANTITY Structural Repair of Concrete Depth≤5" Sq. Ft. 64 Temporary Shoring & Cribbing Each Sg. Ft.

DESIGNED - VHV DATE - JANUARY 30, 2017 CHECKED - DAB DRAWN - Kyle M. Steffen PASSED REVISED REVISED

(Typ.)

Extend concrete cover

removal where needed to

achieve necessary lap length

of new tie with existing tie.

xist. #4 Column

Ties at 12" cts.

Remove broken

portion of tie or failed tie laps,

Existing #9

Column Bars

TYPICAL SECTION THRU

PIER COLUMN REPAIR

L'' Deep Sawcut

edges. Typ.: (Avoid cutting

reinforcement)

Sandblast and epoxy

Install new #4 grouted dowels

to hook existing vertical bars

where indicated by Engineer. 6" min. embedment in sound concrete

coat exposed bars.

Existina #9

Column Bars

2" cl. (Typ.)

Spalled or Delaminated

TYPICAL SECTION THRU

EXISTING PIER COLUMN

Areas of Concrete

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TYPICAL CONCRETE

COLUMN REPAIR

Outline of sawcut and

extent of formed

concrete repair,

Deteriorated

Concrete

Existing Column

Acrylic Coating Sq. Yd. COUNTY TOTAL SHEET NO.
-R ST. CLAIR 27 27

CONTRACT NO. 76J68
FEO. AID PROJECT PIER REPAIR LOCATIONS F.A.I. RTÉ. 70 SECTION ROADWAY "H" 82-3HV8-2R-2-B-R SN 082-0256 SHEET NO. 13 OF 13 SHEETS

Fiber Wrop