

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

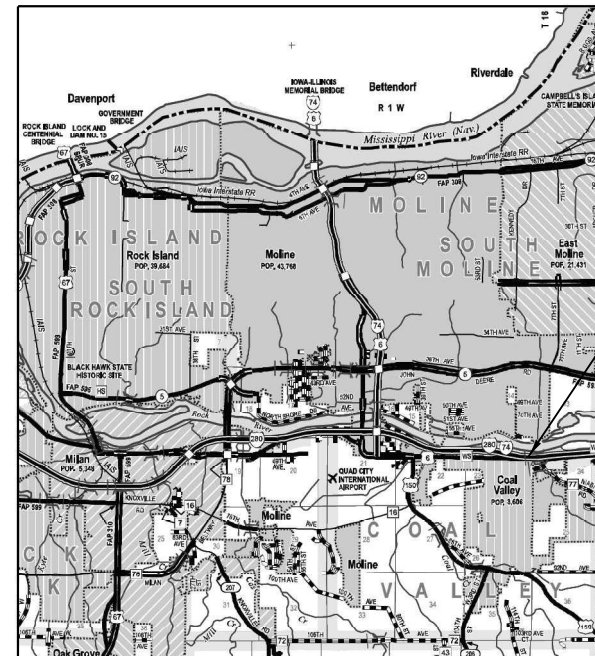
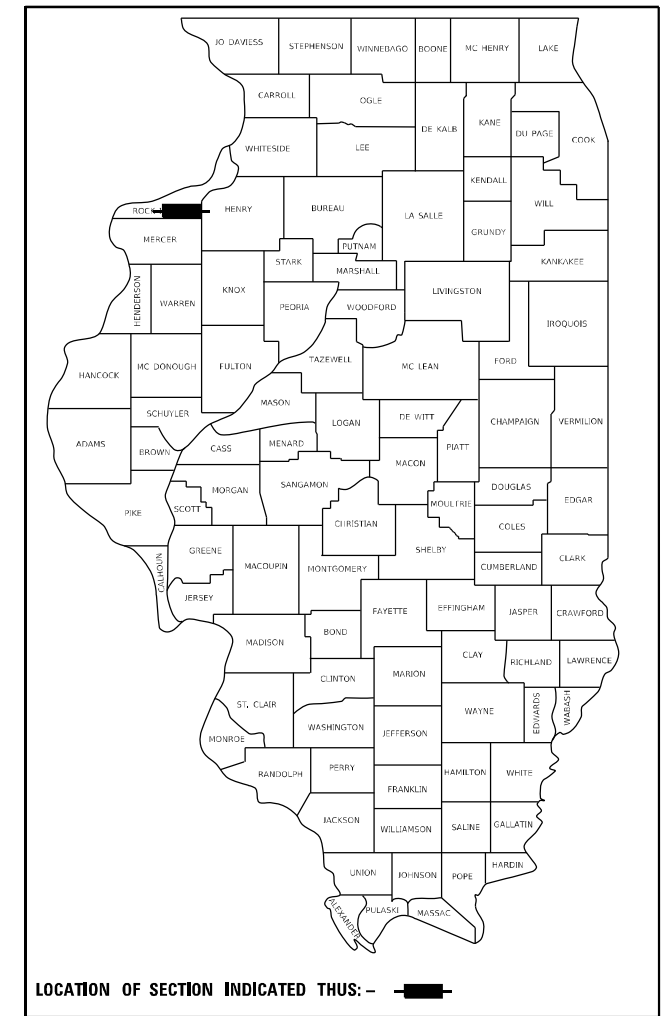
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-3B-1) BDR	ROCK ISLAND	21	1
		ILLINOIS	CONTRACT NO. 64R31	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

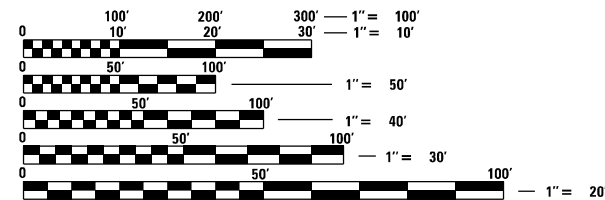
PROPOSED HIGHWAY PLANS

FAI 74 (I-74) & FAI 280 (I-280)
SECTION (81-3B-1)BJR
PROJECT
MAINTENANCE OF TRAFFIC
ROCK ISLAND COUNTY

C-92-004-22



PROJECT LOCATION
SN 081-0007 & 081-0008
OVER SHAFFER CREEK



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

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

PROJECT ENGINEER: HOWARD HAMILTON
PROJECT MANAGER: MAHMOUD ETEMADI

CONTRACT NO. 64R31

GROSS LENGTH = x.xx FT. = x.xxx MILE
NET LENGTH = x.xx FT. = x.xxx MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED October 26, 20 21
Howard Hamilton
REGIONAL ENGINEER

December 10, 20 21
Stephen M. Lewis
ENGINEER OF DESIGN AND ENVIRONMENT

December 10, 20 21
Stephen M. Lewis
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
50102400	CONCRETE REMOVAL	CU YD	45.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	83.3
50300300	PROTECTIVE COAT	SQ YD	153
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	10,990
50800515	BAR SPLICERS	EACH	116
67100100	MOBILIZATION	L SUM	1
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	2
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	2
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	2
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	60
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	4,591
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	13,770
70400100	TEMPORARY CONCRETE BARRIER	FOOT	725
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	725
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
* 78009004	MODIFIED URETHANE PAVEMENT MARKING LINE 4"	FOOT	19,012
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	28
78300202	PAVEMENT MARKING REMOVAL-WATER BLASTING	SQ FT	1,148
X0326649	LINEAR DELINEATOR PANELS, 6 INCH	EACH	80
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	4060
Z0001905	STRUCTURAL STEEL REPAIRS	POUND	2127
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	41

*= SPECIALTY ITEM

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HAMILTON CONSULTING ENGINEERS, INC.
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 Ph: (815) 730-3444 Fax: (815) 730-6703
 LICENSE NO. 184-002005
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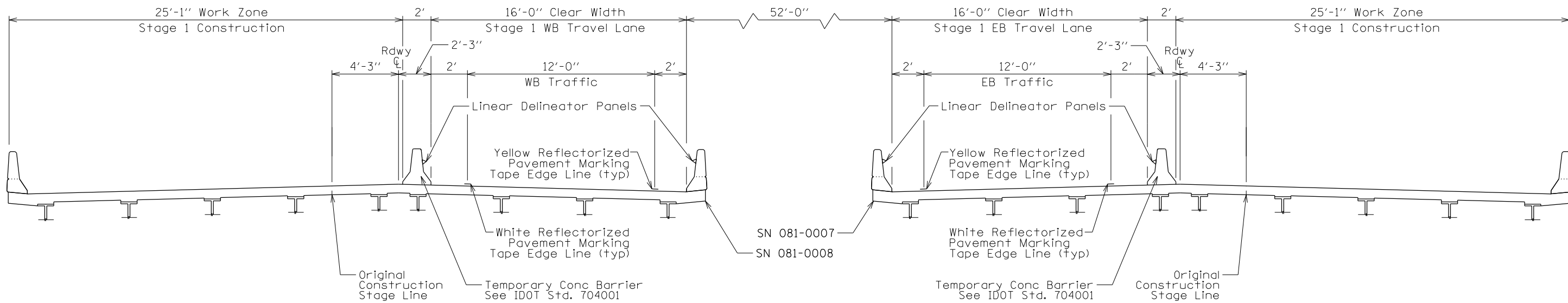
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PLOT DATE = 10/26/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

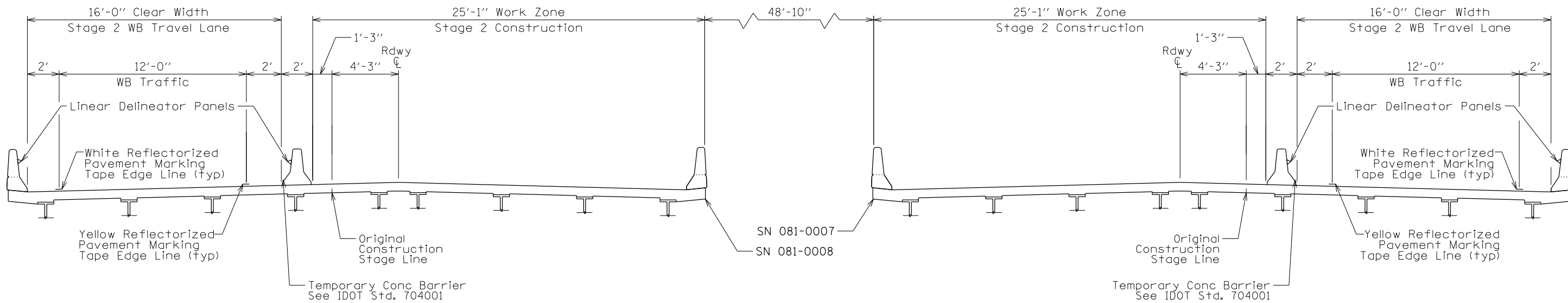
IL 74 & 280 CROSSING SHAFFER CREEK
SCHEDULE OF QUANTITIES

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74/280	(81-3B-1)BJR	ROCK ISLAND	3	3
CONTRACT NO. 64R31				
(ILLINOIS) FED. AID PROJECT				

SCALE: SHEET 3 OF 12 SHEETS STA. TO STA.



STAGE 1
(LOOKING EAST)



STAGE 2
(LOOKING EAST)

MODEL: D:\p\h\...
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 PROJECT: ...
 DATE: 10/26/2021

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 74 & 280 CROSSING SHAFFER CREEK
STAGING TYPICAL SECTION**

SCALE: NTS SHEET 4 OF 12 SHEETS STA. TO STA.

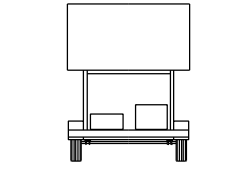
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74/280	(81-3B-1)BJR	ROCK ISLAND	4	4
CONTRACT NO. 64R31				
ILLINOIS FED. AID PROJECT				



W20-1103(0)-48

W16-3a(0)-3612

Place on both sides as per Std. 701400



Portable Changeable Message Sign

75'

2500'



W20-5(0)-48
Place on both sides as per Std. 701400



W21-III5(0)-3618

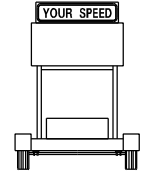


R2-1-3648

R10-1108p-3618

R2-1106p-3618

Place on both sides as per Std. 701400



Trailer mounted speed display sign



W20-5(0)-48
Place on both sides as per Std. 701400

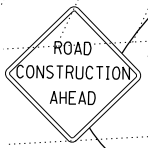


W4-2R(0)-48
Place on both sides as per Std. 701400

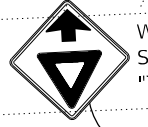
330+00

Matchline sta 334+35 Eastbound Lanes.
MOT setup in accordance with Std. 701400

MATCHLINE STA. 332+00



W20-1103(0)-48.
Sta 319+65 - Cost included with item "Traffic Control & Protection Std. 701411"



W3-2(0)-48
Sta 324+65 - Cost included with item "Traffic Control and Protection, Std 701411"

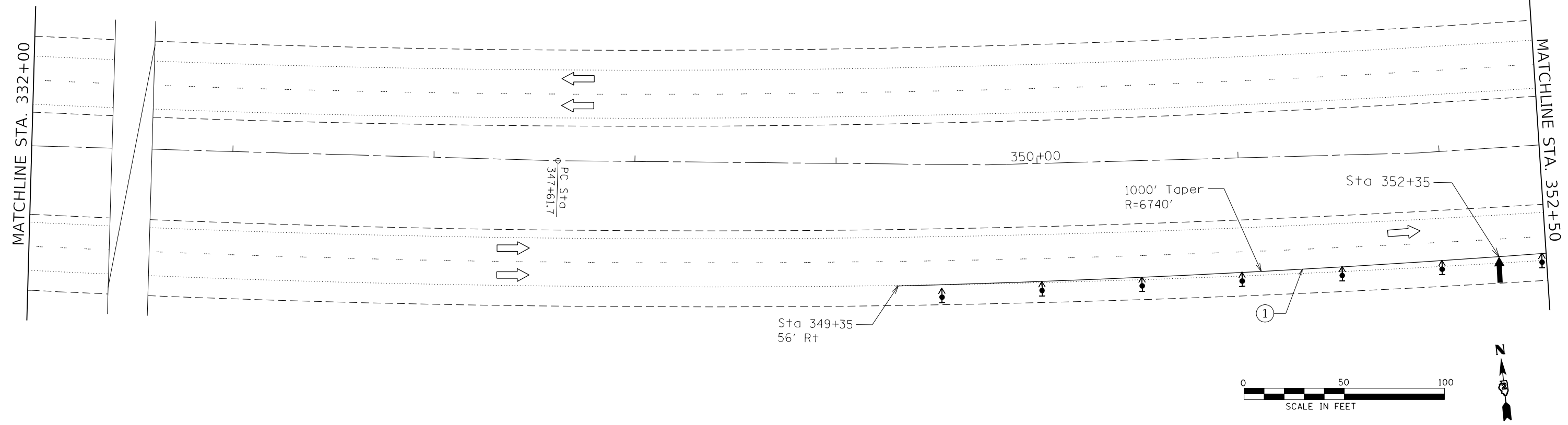


R1-2-48
Sta 329+65. Cost included with item "Traffic Control & Protection Std. 701411"

SYMBOLS	
	Work area
	Direction indicator barricade with steady burn monodirectional light. See IDOT Std 701901.
	Linear delineator panels on 25' centers.
	Monodirectional reflector. See IDOT Std 782006.
	Temporary impact attenuator, non-redirective, test level 3.
	Arrow board located in accordance with IDOT Stds 701400 and 701402
	Trailer mounted sign
	Sign
	Type II or vertical barricade, or drum, with monodir. flashing light. See IDOT Std 701901.
	Temp. concrete barrier. See IDOT Std 704001.

PAVEMENT MARKING CALLOUTS	
	Pavement Marking Tape, Type IV, 4" White
	Pavement Marking Tape, Type IV, 4" Yellow
	Pavement Marking Removal-Grinding

NOTE: All barricades, drums, vertical panels and reflectors shall be offset and spaced in accordance with IDOT Standards 701400, 701402, and 701411.



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HAMILTON CONSULTING ENGINEERS, INC. 3230 Executive Drive, Joliet, Illinois 60431

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PLOT DATE = 10/26/2021

DESIGNED -
DRAWN -
CHECKED -
DATE -

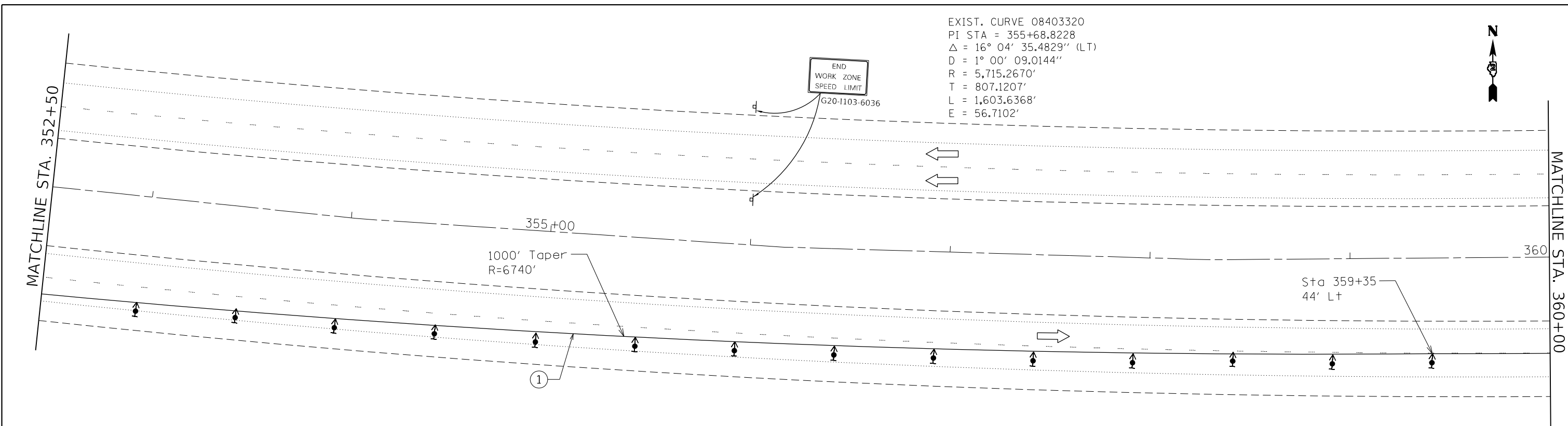
REVISED -
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REVISED -
REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL 74 & 280 CROSSING SHAFFER CREEK TRAFFIC CONTROL STAGE 1 PLAN SHEET

SCALE: 1"=50' SHEET 5 OF 12 SHEETS STA. 324+50 TO STA. 352+50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74/280	(81-3B-1)BJR	ROCK ISLAND	5	5
CONTRACT NO. 64R31				
ILLINOIS FED. AID PROJECT				



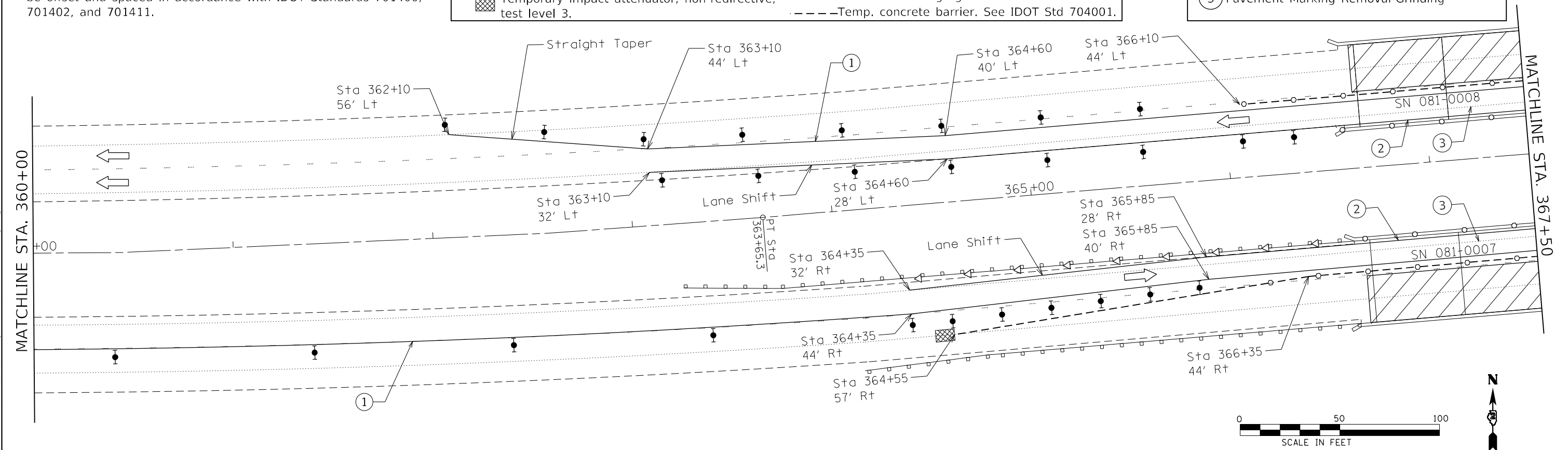
SYMBOLS

Work area	Arrow board located in accordance with IDOT Stds 701400 and 701402
Direction indicator barricade with steady burn monodirectional light. See IDOT Std 701901.	Trailer mounted sign
Linear delineator panels on 25' centers.	Sign
Monodirectional reflector. See IDOT Std 782006.	Type II or vertical barricade, or drum, with monodir. flashing light. See IDOT Std 701901.
Temporary impact attenuator, non-redirective, test level 3.	Temp. concrete barrier. See IDOT Std 704001.

PAVEMENT MARKING CALLOUTS

- ① Pavement Marking Tape, Type IV, 4" White
- ② Pavement Marking Tape, Type IV, 4" Yellow
- ③ Pavement Marking Removal-Grinding

NOTE: All barricades, drums, vertical panels and reflectors shall be offset and spaced in accordance with IDOT Standards 701400, 701402, and 701411.



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 Ph: (815) 730-3444 Fax: (815) 730-6703
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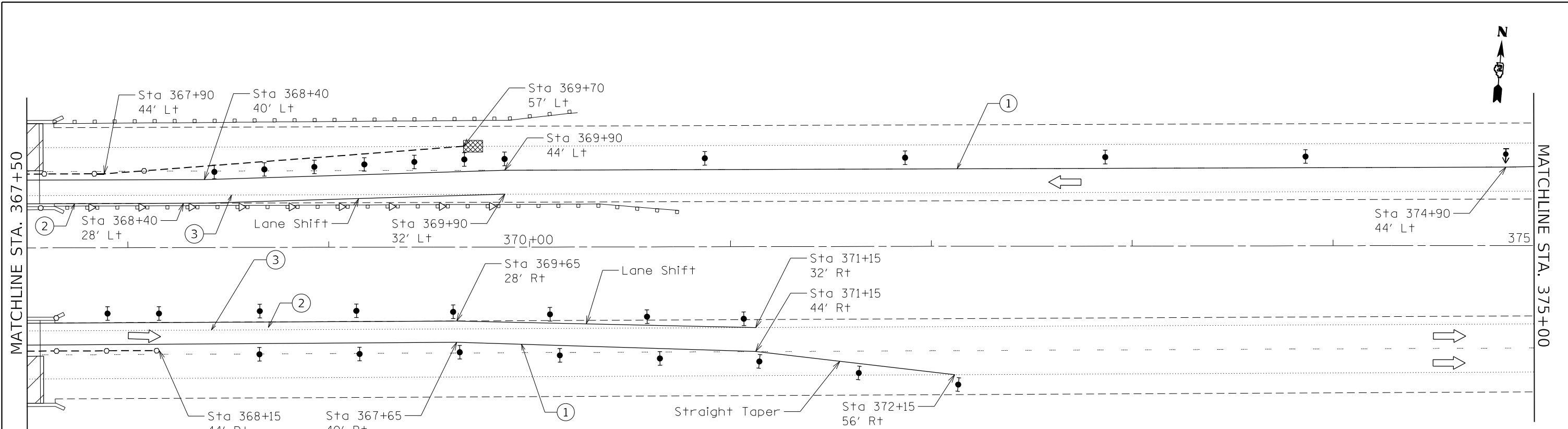
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	PLOT DATE = 10/26/2021	CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 74 & 280 CROSSING SHAFFER CREEK
TRAFFIC CONTROL STAGE 1 PLAN SHEET**

SCALE: 1"=50'
 SHEET 6 OF 12 SHEETS
 STA. 352+50 TO STA. 367+50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74/280	(81-3B-1)BJR	ROCK ISLAND	6	6
CONTRACT NO. 64R31				
ILLINOIS FED. AID PROJECT				



MATCHLINE STA. 367+50

MATCHLINE STA. 375+00

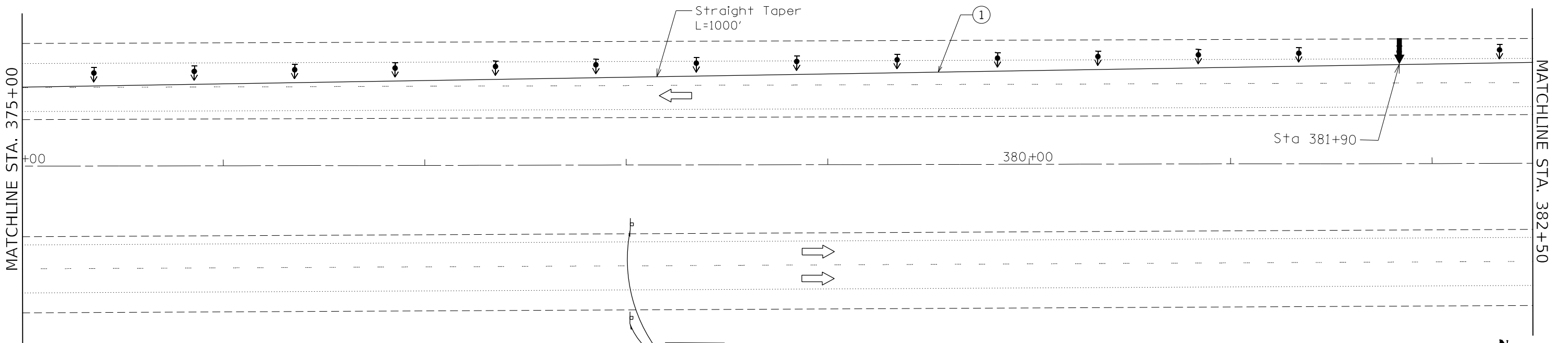
SYMBOLS

	Work area		Arrow board located in accordance with IDOT Stds 701400 and 701402
	Direction indicator barricade with steady burn monodirectional light. See IDOT Std 701901.		Trailer mounted sign
	Linear delineator panels on 25' centers.		Sign
	Monodirectional reflector. See IDOT Std 782006.		Type II or vertical barricade, or drum, with monodir. flashing light. See IDOT Std 701901.
	Temporary impact attenuator, non-redirective, test level 3.		Temp. concrete barrier. See IDOT Std 704001.

PAVEMENT MARKING CALLOUTS

- ① Pavement Marking Tape, Type IV, 4" White
- ② Pavement Marking Tape, Type IV, 4" Yellow
- ③ Pavement Marking Removal-Grinding

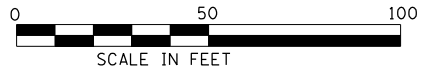
NOTE: All barricades, drums, vertical panels and reflectors shall be offset and spaced in accordance with IDOT Standards 701400, 701402, and 701411.



MATCHLINE STA. 375+00

MATCHLINE STA. 382+50

END
WORK ZONE
SPEED LIMIT
G20-1103-6036



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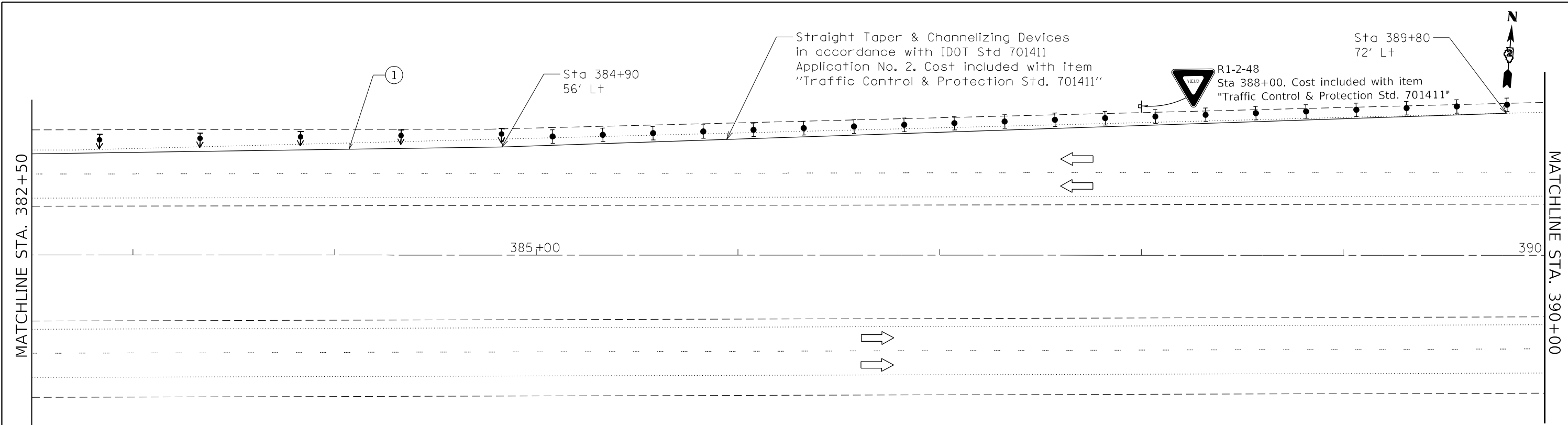
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 LICENSE NO. 184-002095
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USER NAME = dws	DESIGNED -	REVISED -
PLOT SCALE = 50,0000 * / in.	DRAWN -	REVISED -
PLOT DATE = 10/26/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 74 & 280 CROSSING SHAFFER CREEK
TRAFFIC CONTROL STAGE 1 PLAN SHEET**
 SCALE: 1"=50' SHEET 7 OF 12 SHEETS STA. 367+50 TO STA. 382+50

F.A.I. RTE. 74/280	SECTION (81-3B-1)BJR	COUNTY ROCK ISLAND	TOTAL SHEETS 7	SHEET NO. 7
				CONTRACT NO. 64R31
ILLINOIS FED. AID PROJECT				



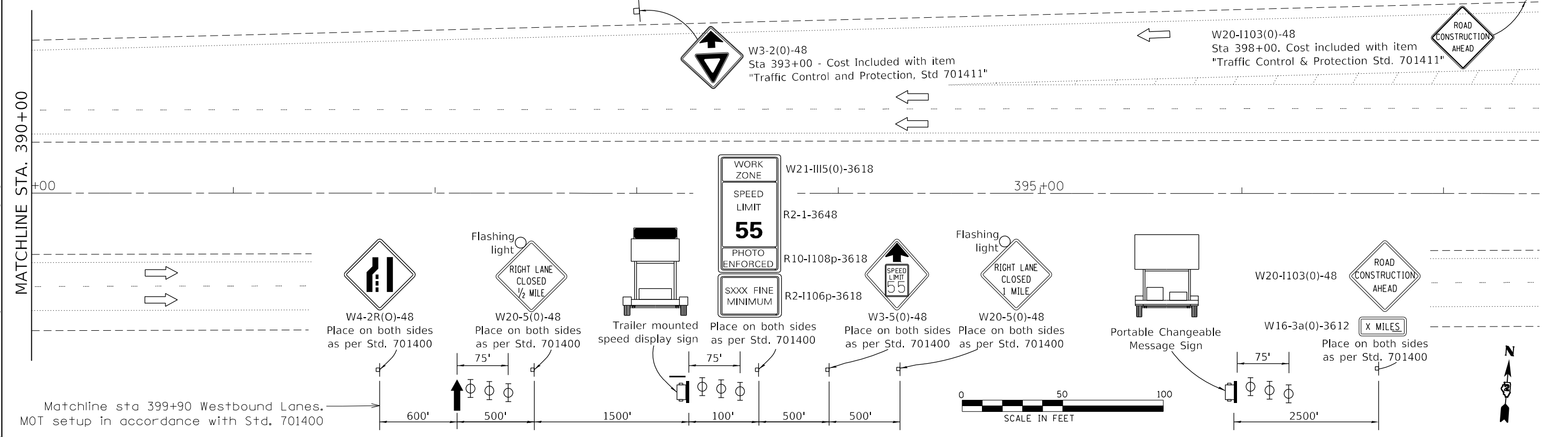
SYMBOLS

Work area	Arrow board located in accordance with IDOT Stds 701400 and 701402
Direction indicator barricade with steady burn monodirectional light. See IDOT Std 701901.	Trailer mounted sign
Linear delineator panels on 25' centers.	Sign
Monodirectional reflector. See IDOT Std 782006.	Type II or vertical barricade, or drum, with monodir. flashing light. See IDOT Std 701901.
Temporary impact attenuator, non-redirective, test level 3.	Temp. concrete barrier. See IDOT Std 704001.

PAVEMENT MARKING CALLOUTS

- ① Pavement Marking Tape, Type IV, 4" White
- ② Pavement Marking Tape, Type IV, 4" Yellow
- ③ Pavement Marking Removal-Grinding

NOTE: All barricades, drums, vertical panels and reflectors shall be offset and spaced in accordance with IDOT Standards 701400, 701402, and 701411.



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USER NAME = dws	DESIGNED -	REVISED -
PLOT SCALE = 50,0000 * / in.	DRAWN -	REVISED -
PLOT DATE = 10/26/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 74 & 280 CROSSING SHAFFER CREEK
TRAFFIC CONTROL STAGE 1 PLAN SHEET**

SCALE: 1"=50' SHEET 8 OF 12 SHEETS STA. 382+50 TO STA. 397+50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74/280	(81-3B-1)BJR	ROCK ISLAND	8	8
CONTRACT NO. 64R31			ILLINOIS FED. AID PROJECT	

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall 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. Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

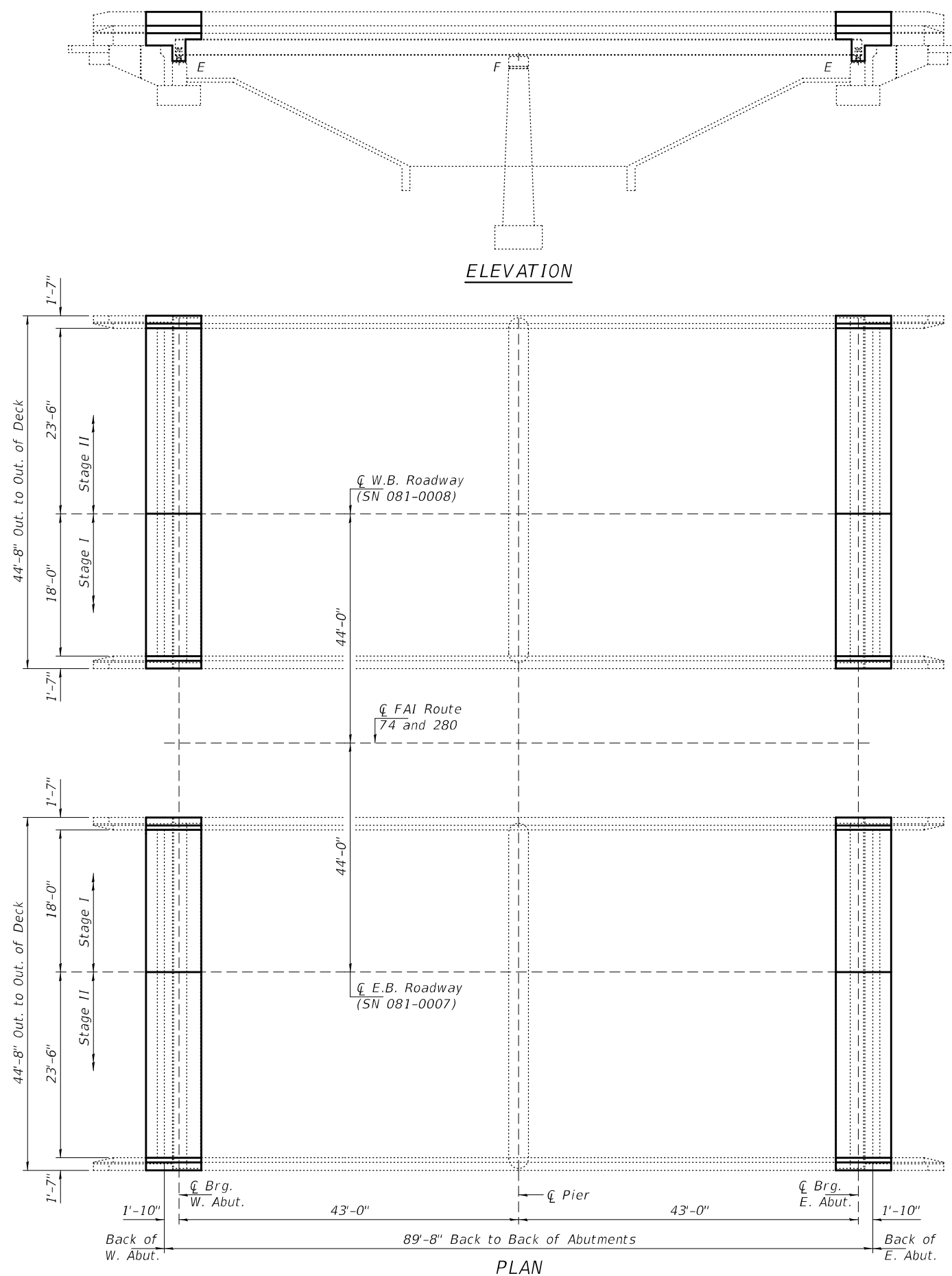
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

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

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

Cleaning and Painting of the existing structural steel shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures". After removal of deck ends and end diaphragms, but prior to encasement of the steel beams, bearings and other structural steel within 5 ft. (measured along the beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning (SSPC-SP10)

The designated areas cleaned per Near White Blast Cleaning shall be painted according to the requirements of paint system 1-OZ/E/U. The color of the final finish coat for all steel surfaces shall be Interstate Green, Munsell No. 7.5G 4/8. SSPC QP1 and SSPC QP2 Certification is required for this Contract.



TOTAL BILL OF MATERIAL

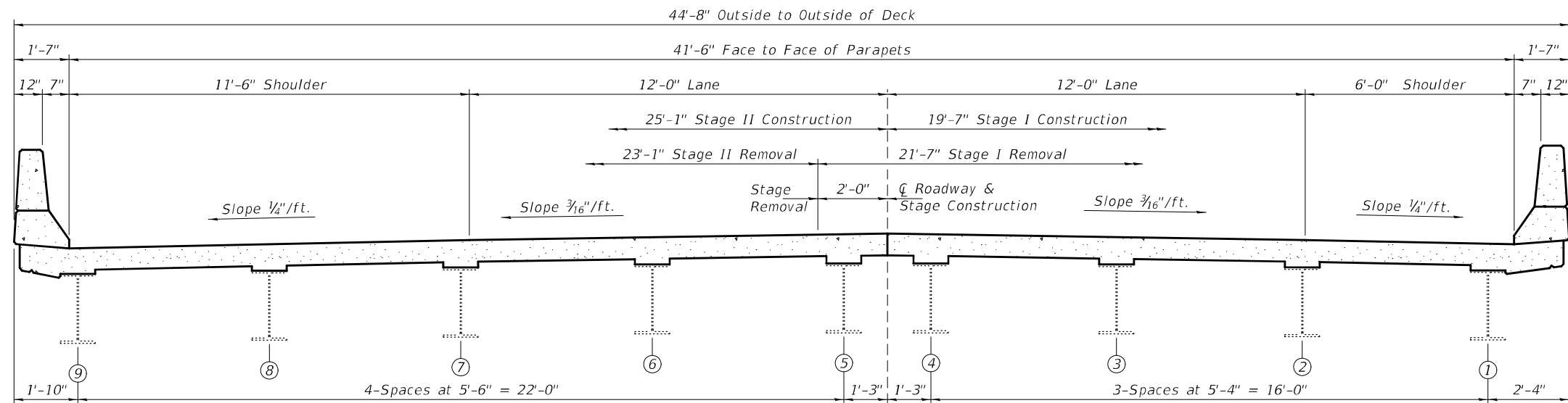
ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	45.6
Concrete Superstructure	Cu. Yd.	83.3
Structural Steel Removal	Pound	4060
Structural Steel Repair	Pound	2127
Reinforcement Bars, Epoxy Coated	Pound	10990
Bar Splicers	Each	116
* Deck Slab Repair (Partial)	Sq. Yd.	41
Protective Coat	Sq. Yd.	153

* Estimated quantity, location and size of patches to be determined in the field by the Engineer.



Expires: November 30, 2022

DESIGNED - Victor H. Veliz	EXAMINED - <i>Tracy A. Beck</i> ENGINEER OF STRUCTURAL SERVICES	DATE - DECEMBER 10, 2021	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION FA.I. ROUTE 74 & 280 OVER SHAEFFER CREEK SN 081-0007 (E.B.) & -0008 (W.B.)	F.A.I. RTE. 74	SECTION (81-3B-1) BJR	COUNTY ROCK ISLAND	TOTAL SHEETS 21	SHEET NO. 13	
CHECKED - Adrian T. Halloway	PASSED - <i>David Carl Puzey</i> ENGINEER OF BRIDGES AND STRUCTURES	REVISED -			CONTRACT NO. 64R31					
DRAWN - STEFFEN		REVISED -			SHEET NO. 1 OF 9 SHEETS					
CHECKED - VHV ATH					ILLINOIS FED. AID PROJECT					



CROSS SECTION - BRIDGE DECK STAGING

Looking West SN 081-0007 (E.B.) Lanes
Looking East SN 081-0008 (W.B.) Lanes

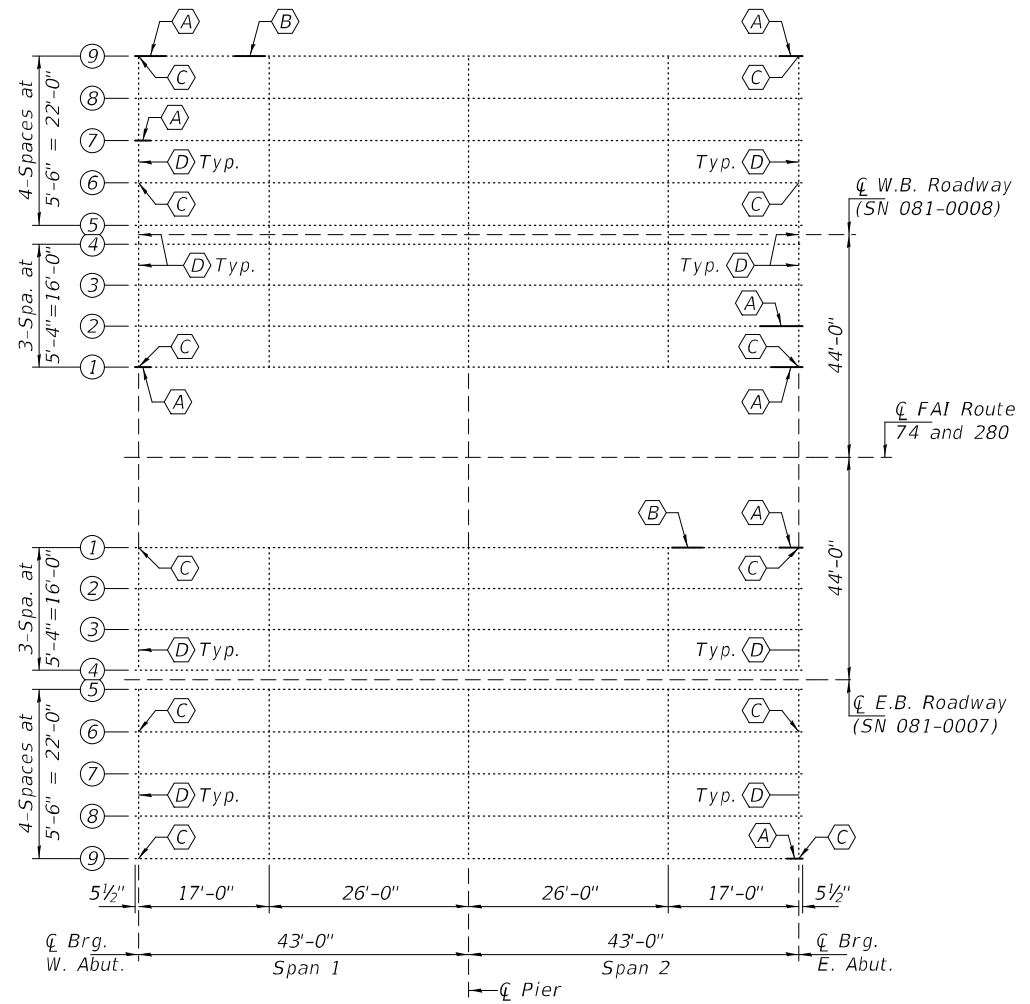
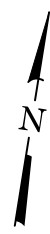
DESIGNED - VHV	EXAMINED	DATE - DECEMBER 10, 2021
CHECKED - ATH	<i>Timothy A. Andujar</i> ENGINEER OF STRUCTURAL SERVICES	
DRAWN - STEFFEN	PASSED	REVISED -
CHECKED - VHV ATH	<i>Carl Ruyter</i> ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGING DETAILS
SN 081-0007 (E.B.) & -0008 (W.B.)**

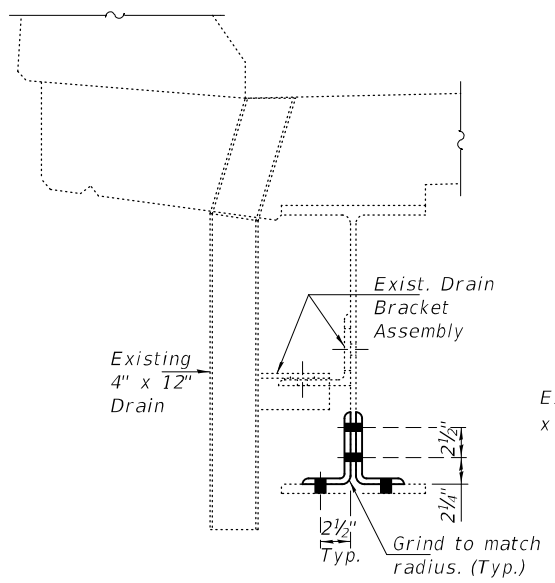
SHEET NO. 2 OF 9 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-3B-1) BJR	ROCK ISLAND	21	14
CONTRACT NO. 64R31				
ILLINOIS FED. AID PROJECT				

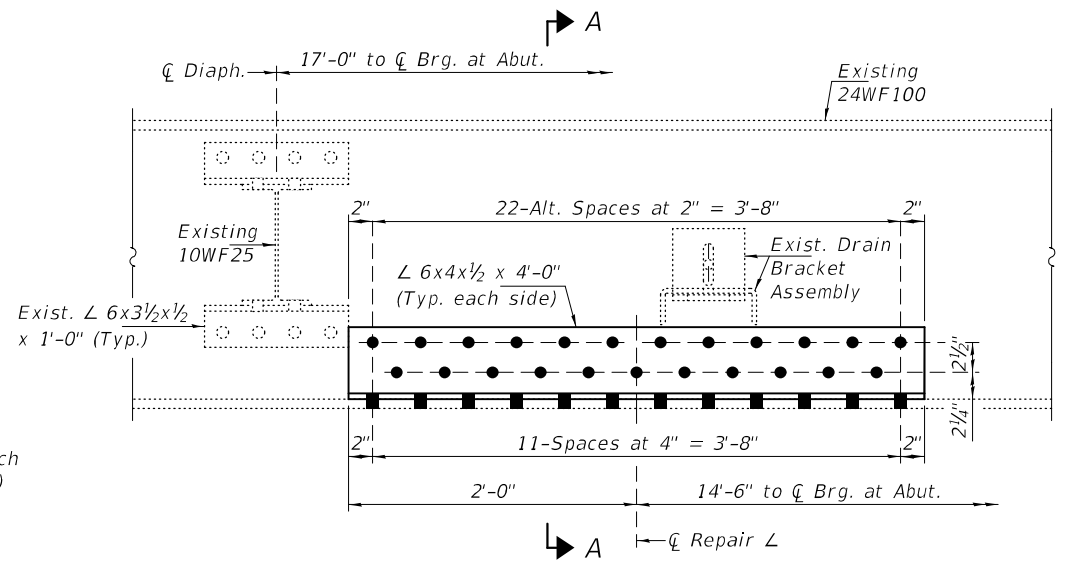


FRAMING PLAN

- (A) - Beam End Repair
- (B) - Beam Repair at Drain
- (C) - Remove Bearing Side Retainer
- (D) - Remove End Diaphragms (Existing Clip L's to remain.) (30-Locations)

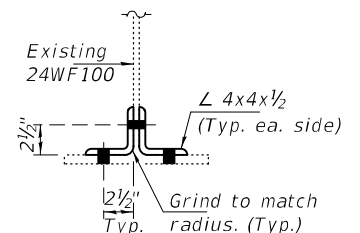


SECTION A-A

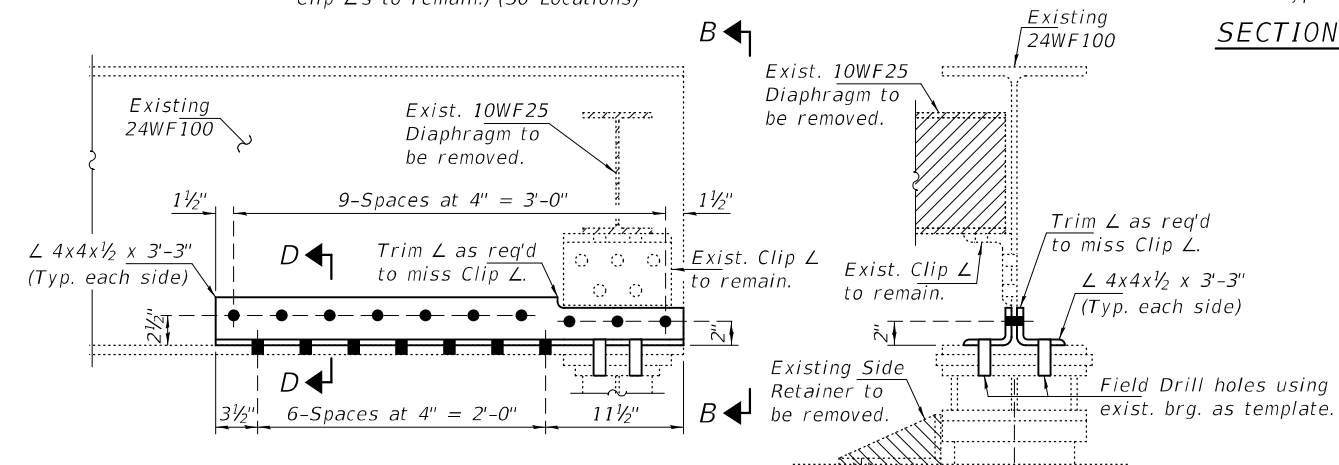


BEAM REPAIR AT DRAIN

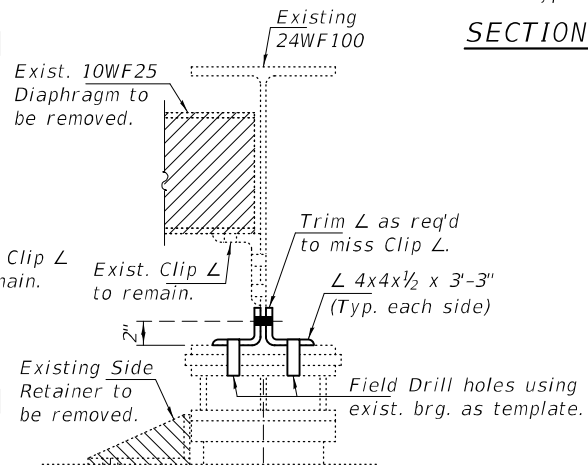
SN 081-0007 Beam 1, Span 2 (Looking South)
SN 081-0008 Beam 9, Span 1 (Looking South)



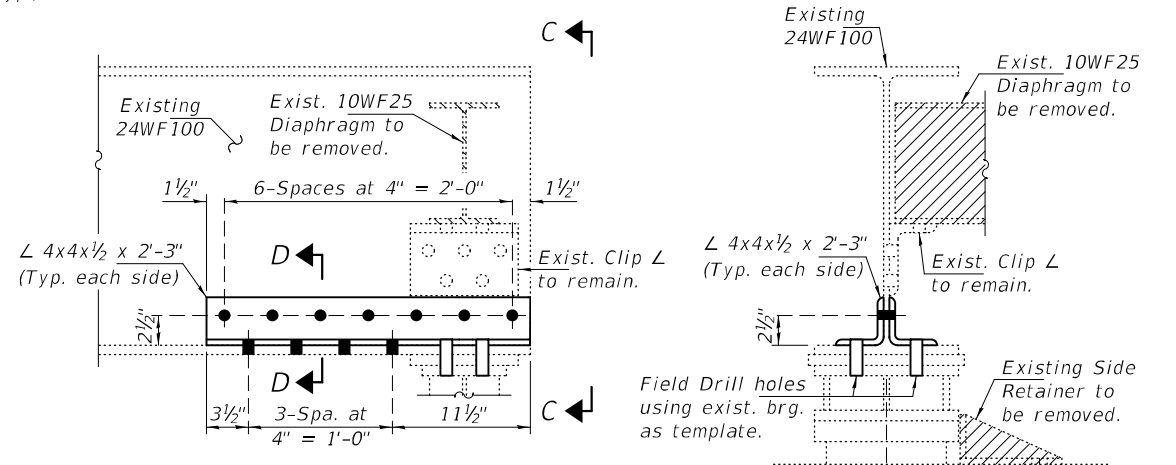
SECTION D-D



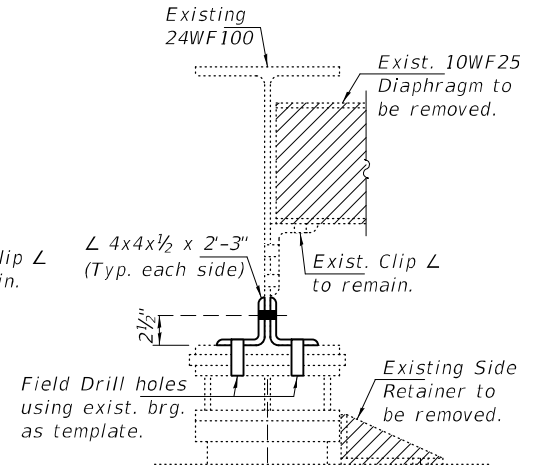
BEAM END REPAIR "A" AT BEAM 1, E. ABUT., SN 081-0007
(Looking North)



VIEW B-B



BEAM END REPAIR "A" AT BEAM 9, E. ABUT., SN 081-0007
(Looking North)



VIEW C-C

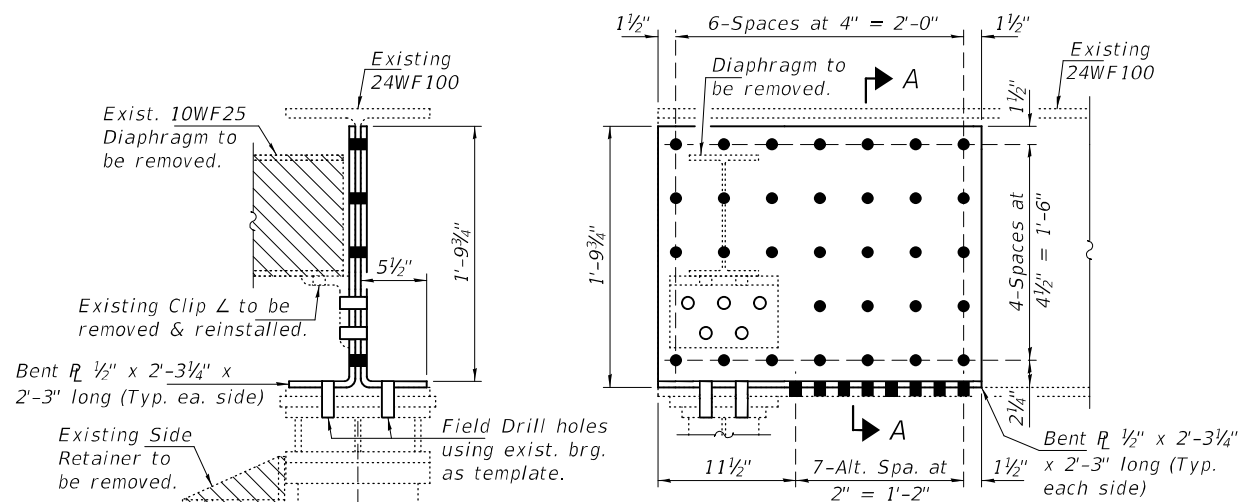
DESIGNED - VHV	EXAMINED - <i>Timothy A. ...</i>	DATE - DECEMBER 10, 2021
CHECKED - ATH	PASSED - <i>Carl ...</i>	REVISED -
DRAWN - STEFFEN		REVISED -
CHECKED - VHV ATH		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

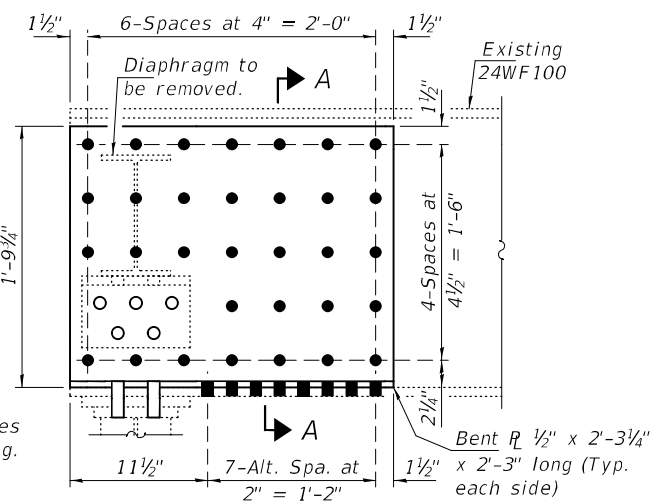
FRAMING PLAN & BEAM REPAIR DETAILS
SN 081-0007 (E.B.) & -0008 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-3B-1) BJR	ROCK ISLAND	21	15
CONTRACT NO. 64R31				
ILLINOIS FED. AID PROJECT				

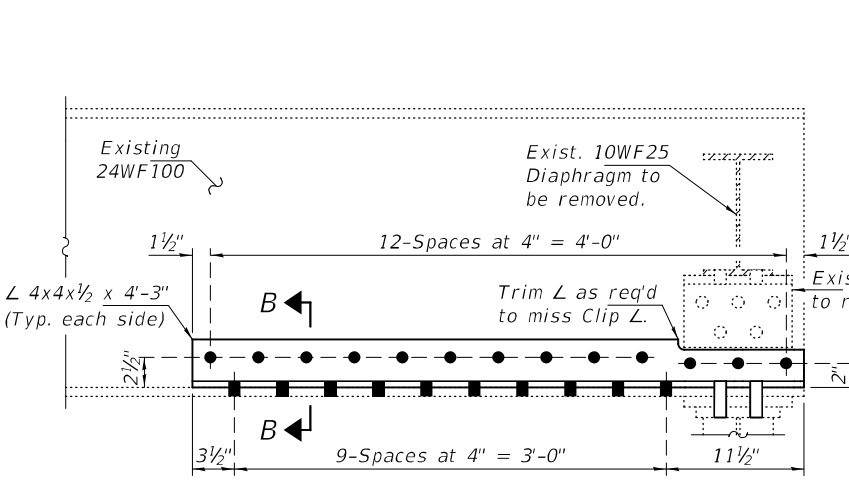
SHEET NO. 3 OF 9 SHEETS



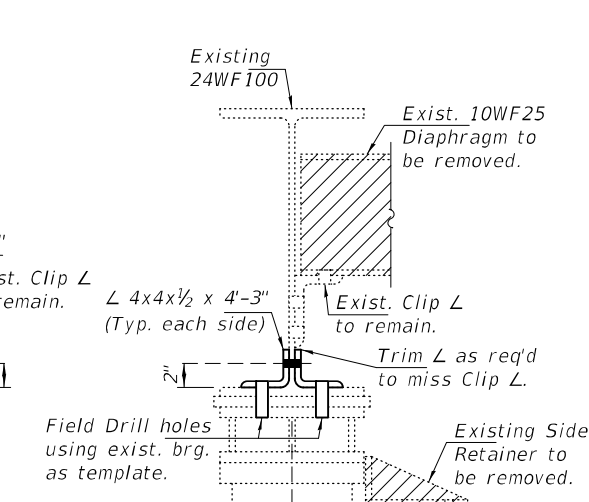
SECTION AT BEARING



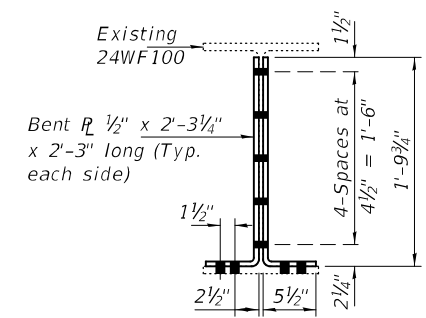
ELEVATION (Looking North)



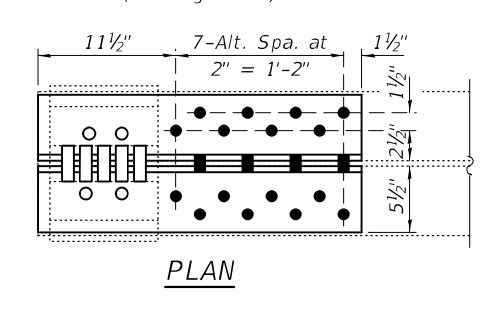
ELEVATION (Looking North)



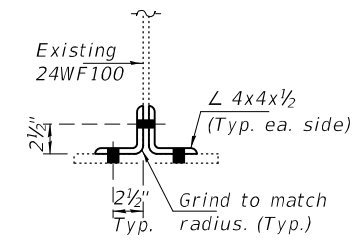
SECTION AT BEARING



SECTION A-A



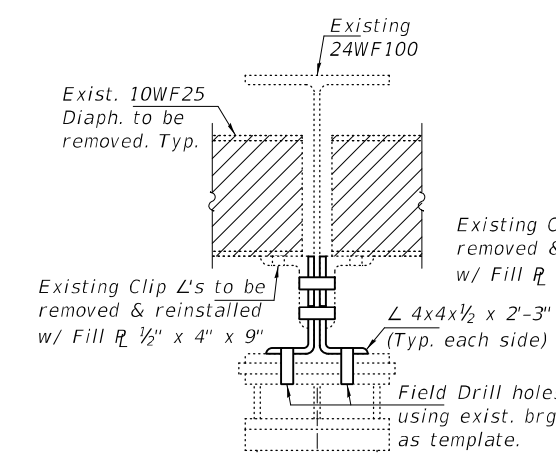
PLAN



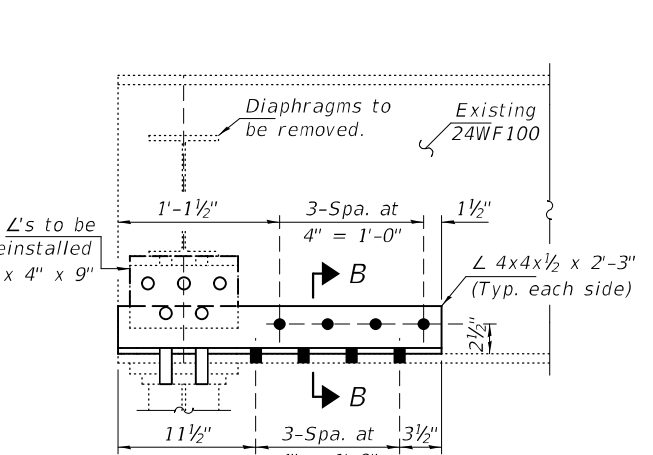
SECTION B-B

BEAM END REPAIR "A" AT BEAM 1, E. ABUT., SN 081-0008

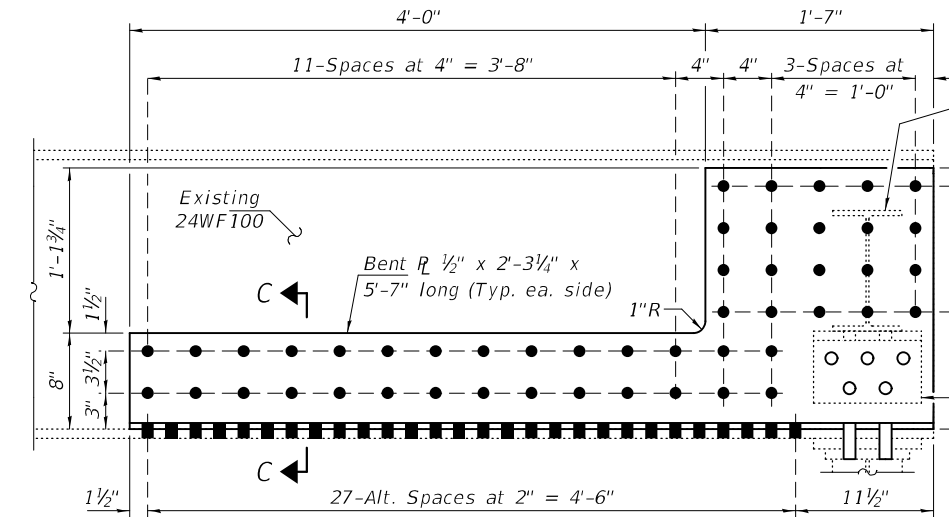
BEAM END REPAIR "A" AT BEAM 1, W. ABUT., SN 081-0008



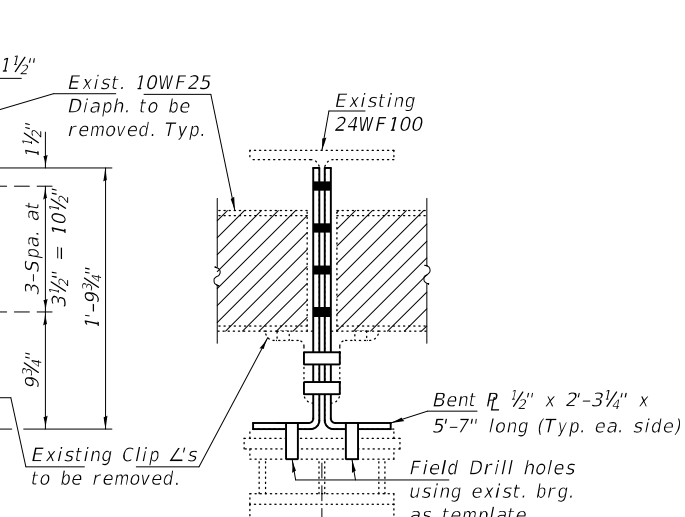
SECTION AT BEARING



ELEVATION (Looking North)

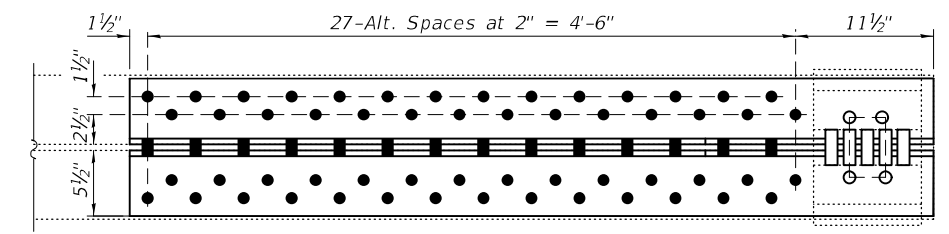


ELEVATION (Looking North)

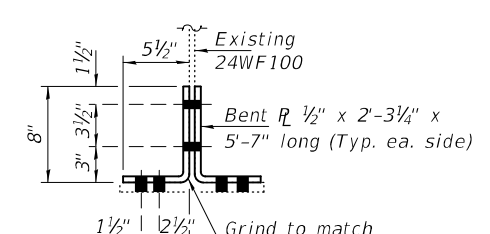


SECTION AT BEARING

BEAM END REPAIR "A" AT BEAM 7, W. ABUT., SN 081-0008



PLAN



SECTION C-C

BEAM END REPAIR "A" AT BEAM 2, E. ABUT., SN 081-0008

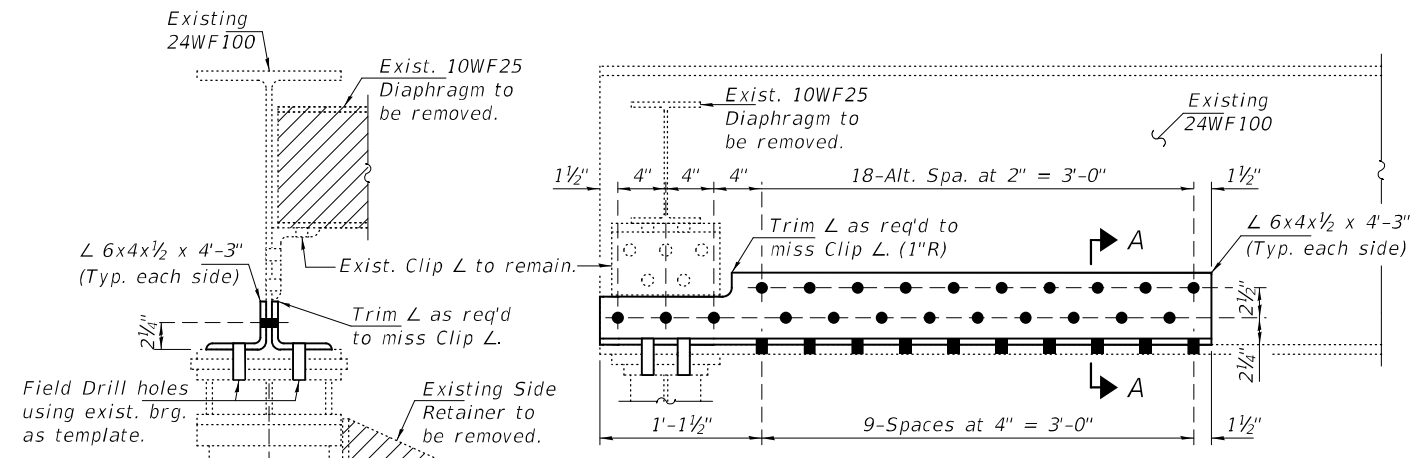
DESIGNED - VHV	EXAMINED - <i>Timothy A. Daulton</i>	DATE - DECEMBER 10, 2021
CHECKED - ATH	ENGINEER OF STRUCTURAL SERVICES	
DRAWN - STEFFEN	PASSED - <i>Carl Ruyter</i>	REVISED -
CHECKED - VHV ATH	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

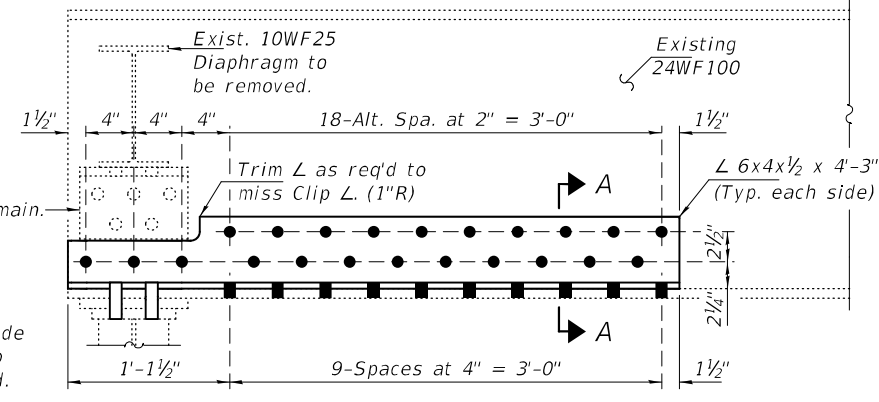
BEAM REPAIR DETAILS
SN 081-0008 (W.B.)

SHEET NO. 4 OF 9 SHEETS

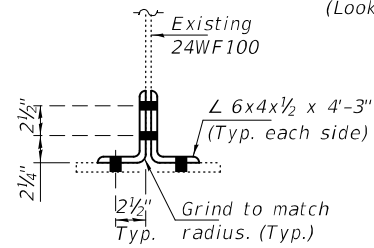
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-3B-1) BJR	ROCK ISLAND	21	16
CONTRACT NO. 64R31				
ILLINOIS FED. AID PROJECT				



SECTION AT BEARING

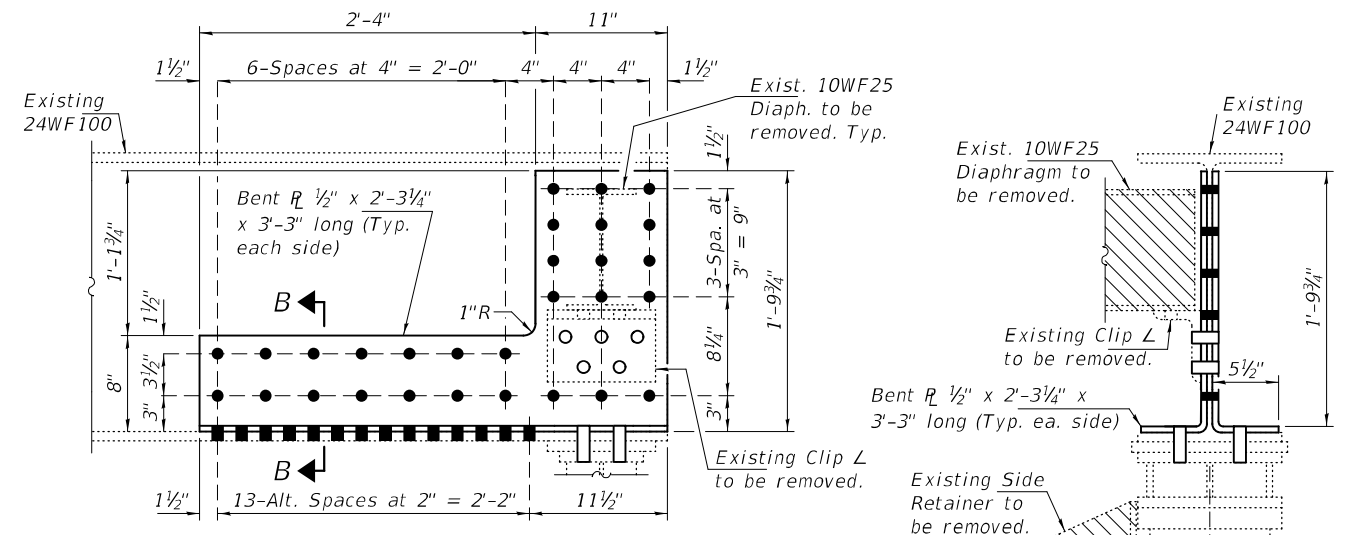


ELEVATION
(Looking North)

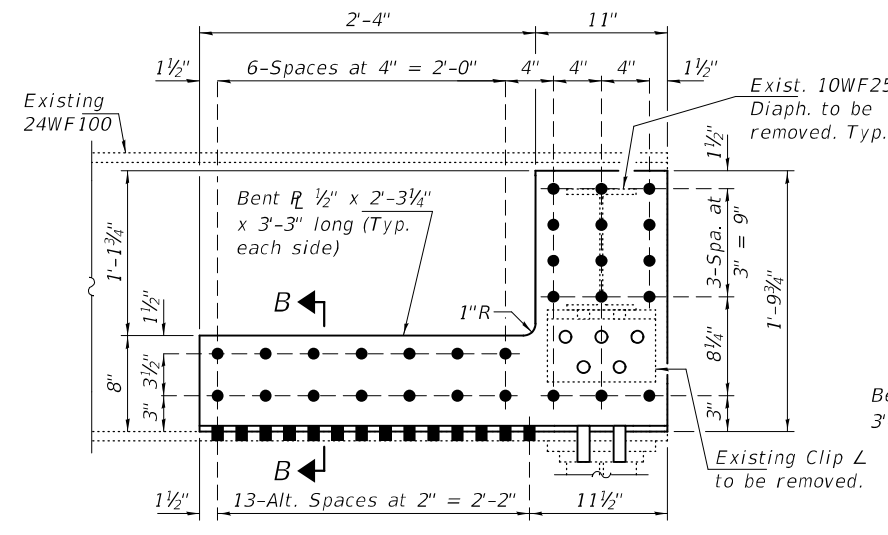


SECTION A-A

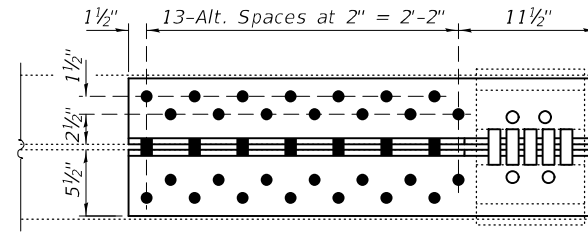
BEAM END REPAIR "A" AT BEAM 9, W. ABUT., SN 081-0008



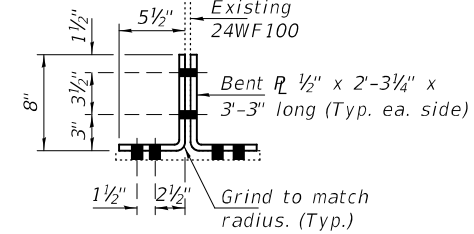
SECTION AT BEARING



ELEVATION
(Looking North)



PLAN



SECTION B-B

BEAM END REPAIR "A" AT BEAM 9, E. ABUT., SN 081-0008

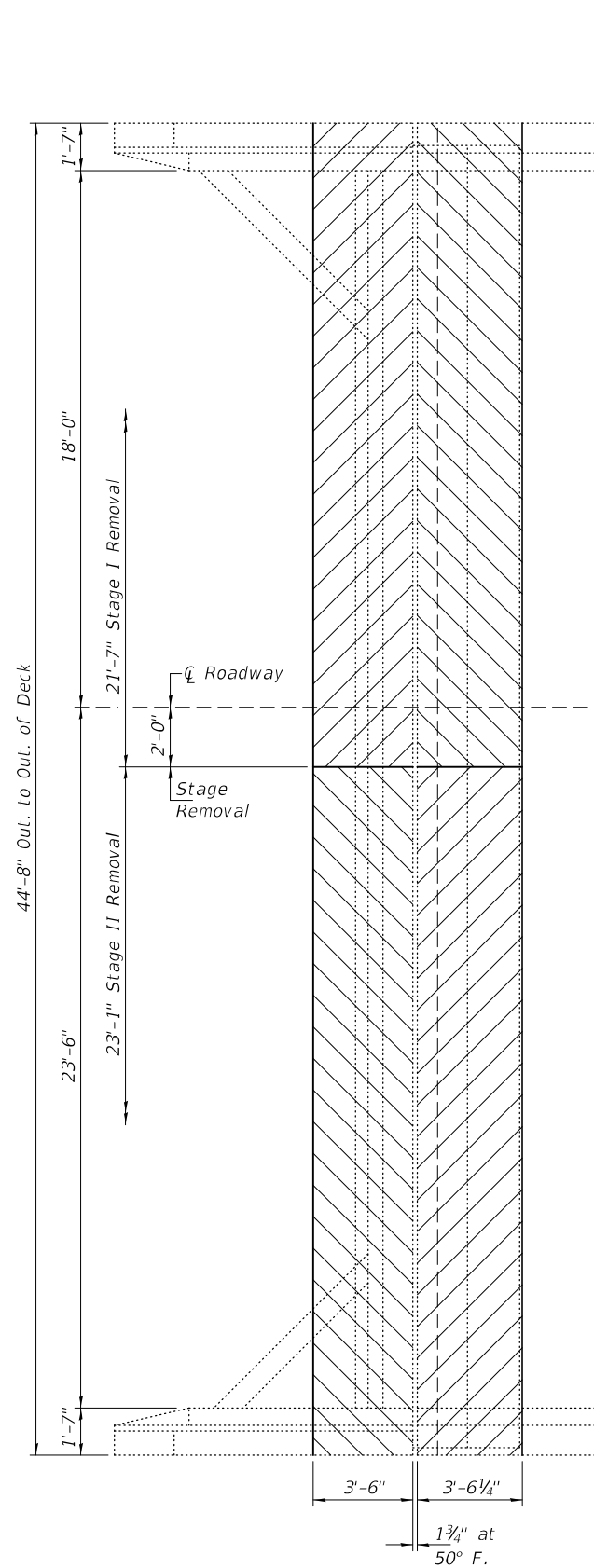
DESIGNED - VHV	EXAMINED - <i>Timothy A. Daulton</i> ENGINEER OF STRUCTURAL SERVICES	DATE - DECEMBER 10, 2021
CHECKED - ATH	PASSED - <i>Carl Ruyter</i> ENGINEER OF BRIDGES AND STRUCTURES	REVISED -
DRAWN - STEFFEN		REVISED -
CHECKED - VHV ATH		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM REPAIR DETAILS
SN 081-0008 (W.B.)

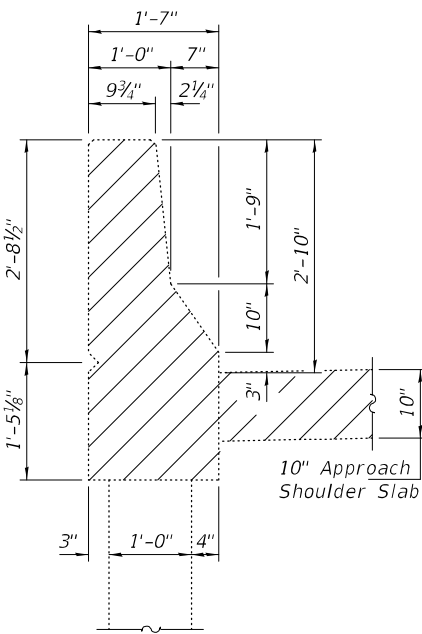
SHEET NO. 5 OF 9 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-3B-1) BJR	ROCK ISLAND	21	17
CONTRACT NO. 64R31				
ILLINOIS FED. AID PROJECT				



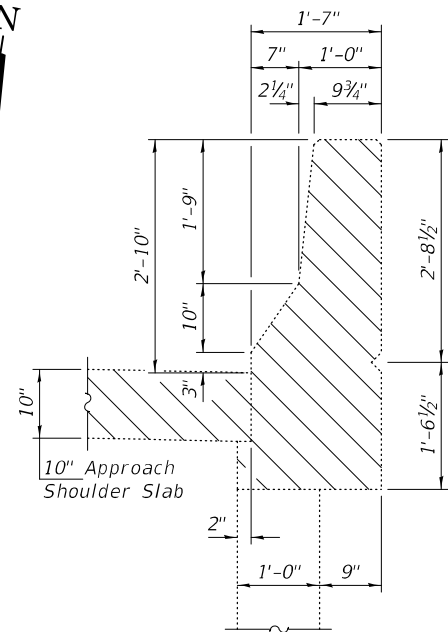
CONCRETE REMOVAL PLAN

E.B. Roadway, West Abutment shown;
other Abutments symmetrical
about \bar{C} Pier or \bar{C} FAI 74.



SECTION THRU WINGWALL

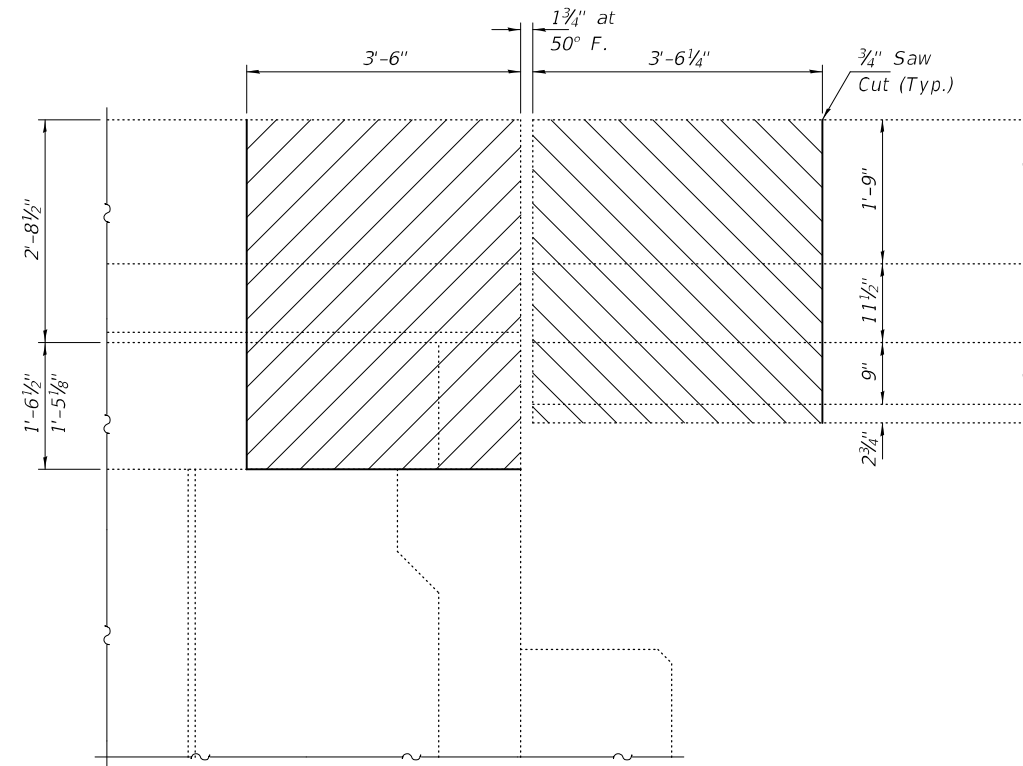
South Wingwall (East Bound)
North Wingwall (West Bound)



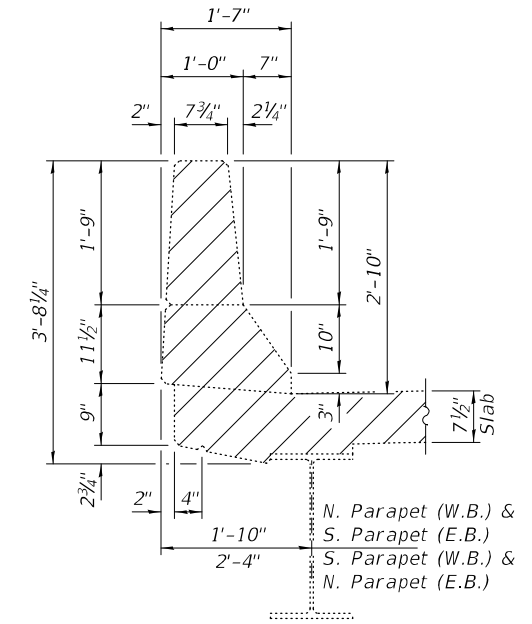
SECTION THRU WINGWALL

South Wingwall (West Bound)
North Wingwall (East Bound)

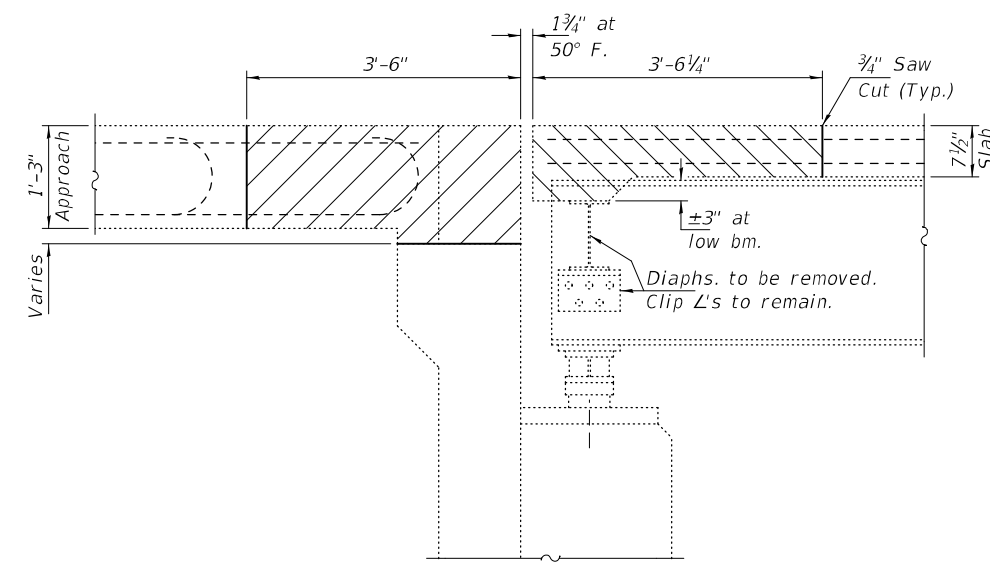
Note:
Hatched areas indicate
Concrete Removal.



WINGWALL & PARAPET ELEVATION



SECTION THRU BRIDGE PARAPET



SECTION A-A

DESIGNED - VHV	EXAMINED - Timothy A. [Signature]
CHECKED - ATH	ENGINEER OF STRUCTURAL SERVICES
DRAWN - STEFFEN	PASSED - [Signature]
CHECKED - VHV ATH	ENGINEER OF BRIDGES AND STRUCTURES

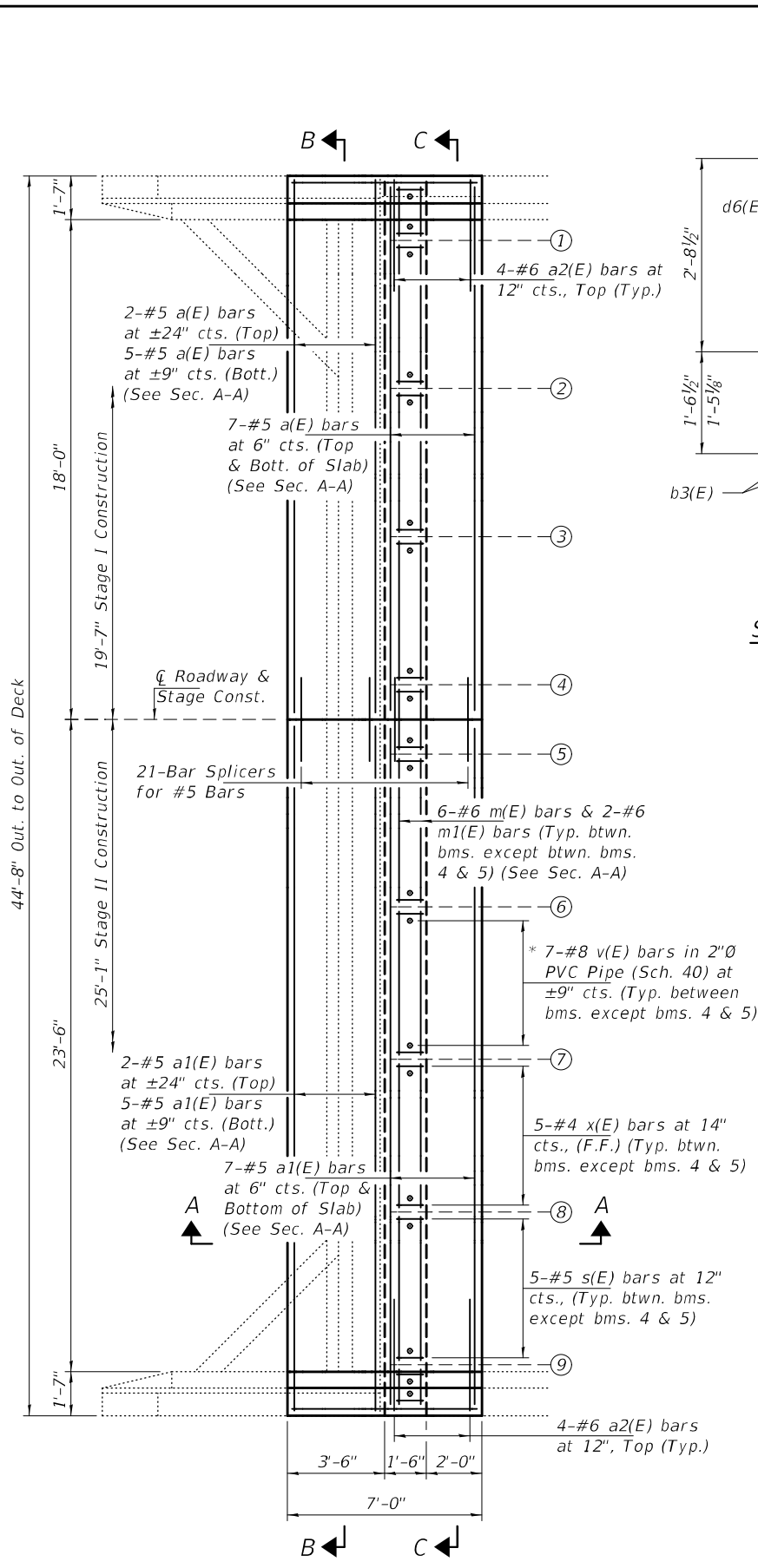
DATE - DECEMBER 10, 2021
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT REMOVAL DETAILS
SN 081-0007 (E.B.) & -0008 (W.B.)

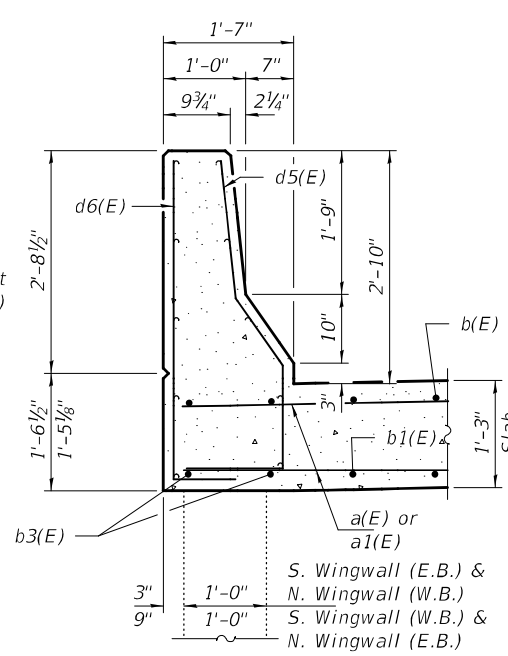
SHEET NO. 6 OF 9 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-3B-1) BJR	ROCK ISLAND	21	18
CONTRACT NO. 64R31				
ILLINOIS FED. AID PROJECT				

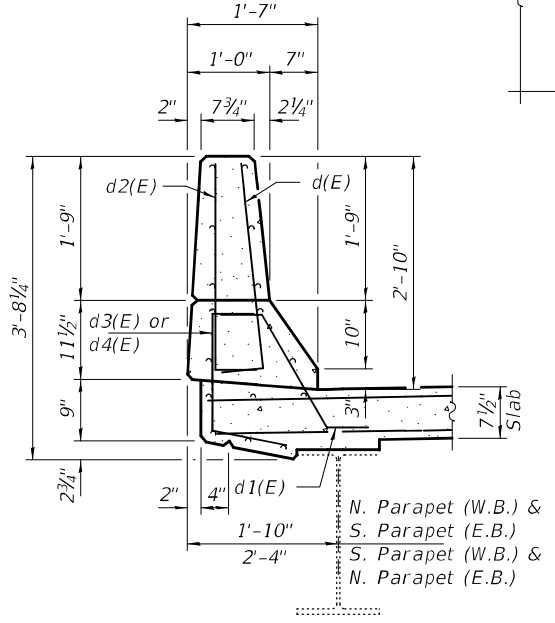


CONCRETE REPLACEMENT PLAN

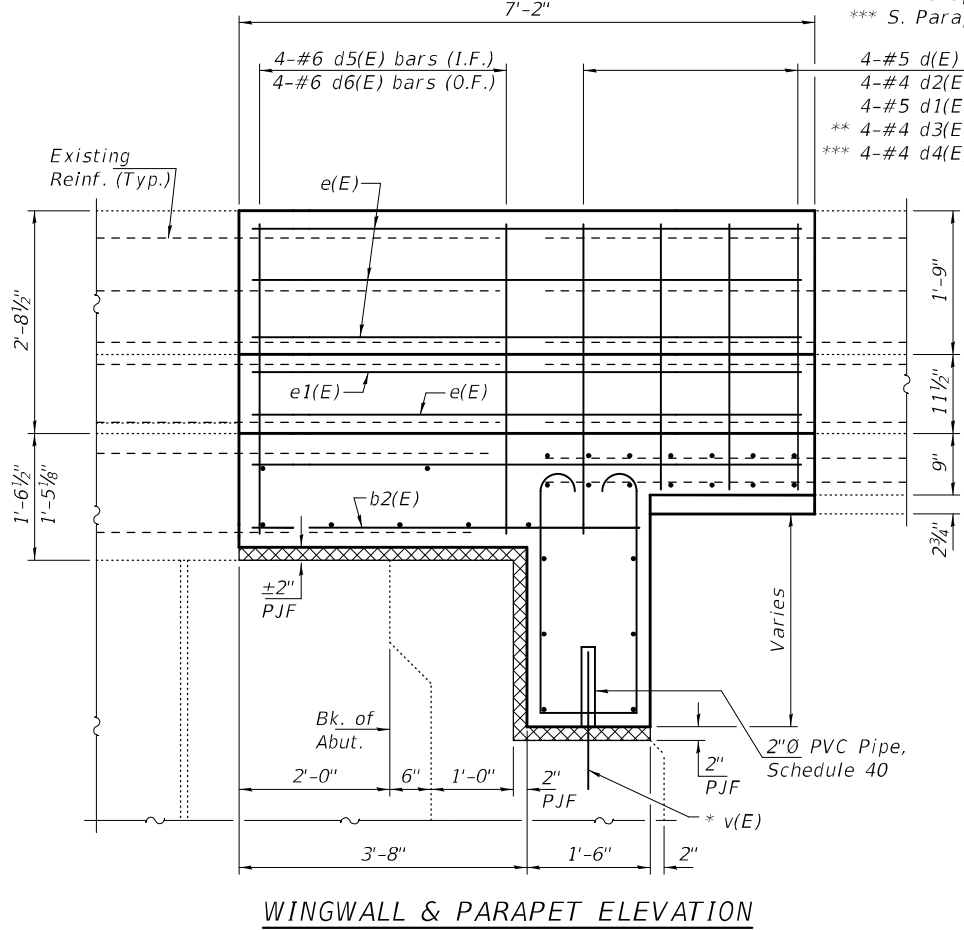
E.B. Roadway, West Abutment shown; other Abutments symmetrical about \bar{C} Pier or \bar{C} FAI 74.



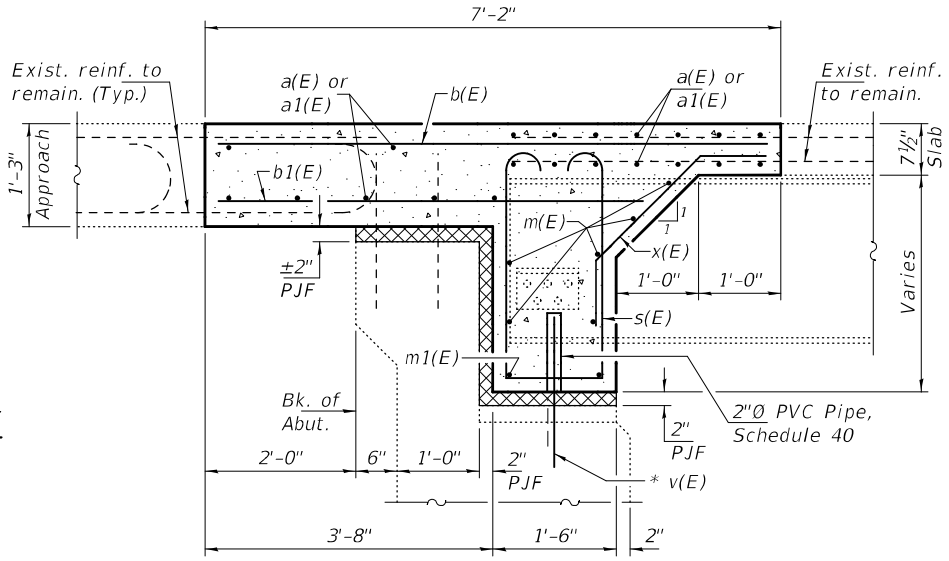
SECTION THRU WINGWALL



SECTION THRU BRIDGE PARAPET



WINGWALL & PARAPET ELEVATION

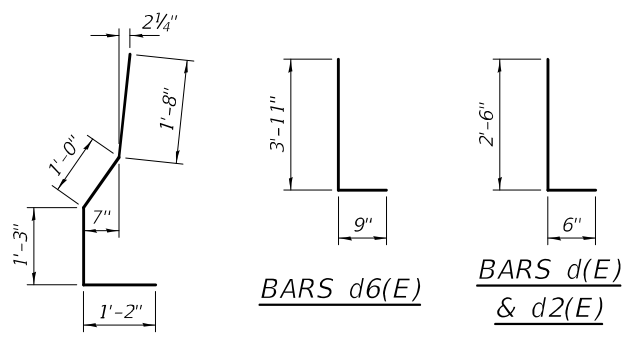
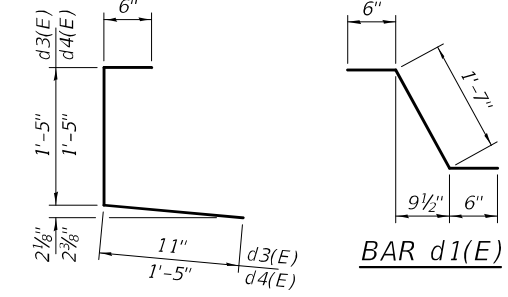
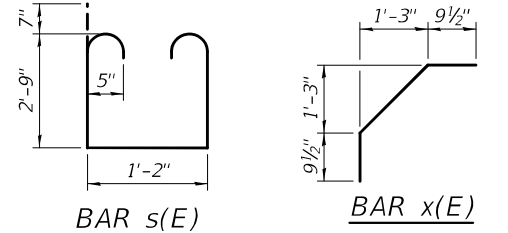


SECTION A-A

* v(E) bars to be epoxy grouted into 9" min. holes according to Article 584 of the Std. Specs.

Notes:
Cost of 2"Ø PVC Pipe, Schedule 40 included with Concrete Superstructures.
For Sections B-B & C-C, see sheet 8 of 9.

** N. Parapet (WB)
*** S. Parapet (SB)



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	84	#5	19'-4"	—
a1(E)	84	#5	24'-9"	—
a2(E)	32	#6	4'-0"	—
b(E)	45	#5	6'-8"	—
b1(E)	41	#7	5'-4"	—
b2(E)	16	#4	4'-10"	—
d(E)	56	#5	3'-0"	L
d1(E)	56	#5	2'-7"	L
d2(E)	56	#4	3'-0"	L
d3(E)	56	#4	2'-10"	L
d4(E)	56	#4	3'-4"	L
d5(E)	32	#4	5'-1"	L
d6(E)	32	#4	4'-8"	L
e(E)	64	#4	6'-10"	—
e1(E)	16	#8	6'-10"	—
m(E)	168	#6	5'-0"	—
m1(E)	56	#6	4'-0"	—
m2(E)	48	#6	1'-6"	—
m3(E)	16	#6	1'-0"	—
s(E)	220	#5	7'-10"	U
v(E)	220	#8	1'-8"	—
x(E)	164	#4	3'-4"	L
Concrete Removal				Cu. Yd. 45.6
Concrete Superstructure				Cu. Yd. 83.3
Bar Splicers				Each 116
Reinforcement Bars, Epoxy Coated				Pound 10990

DESIGNED - VHV
CHECKED - ATH
DRAWN - STEFFEN
CHECKED - VHV ATH

EXAMINED
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

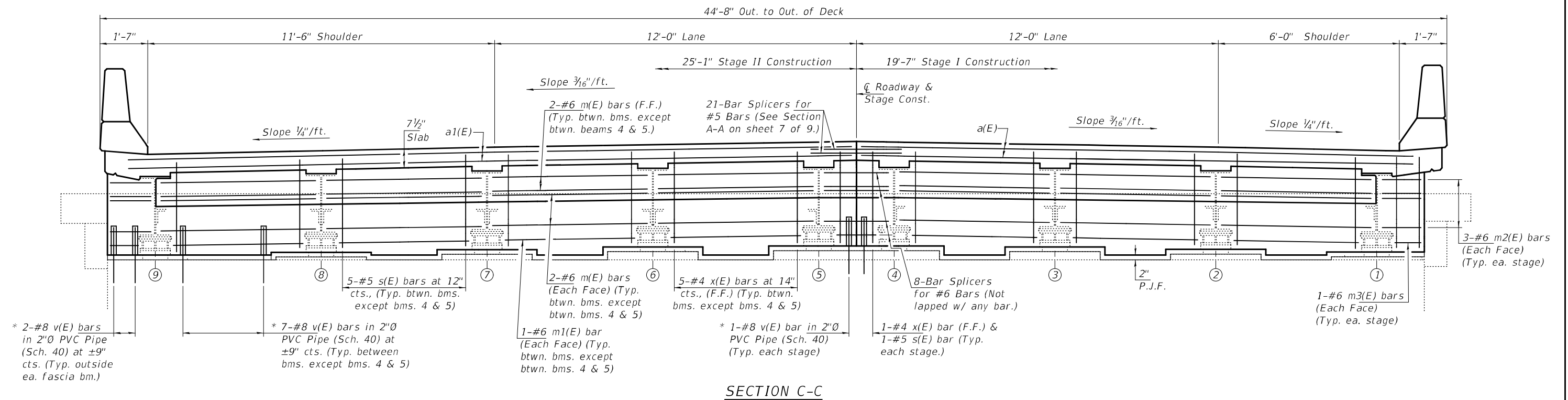
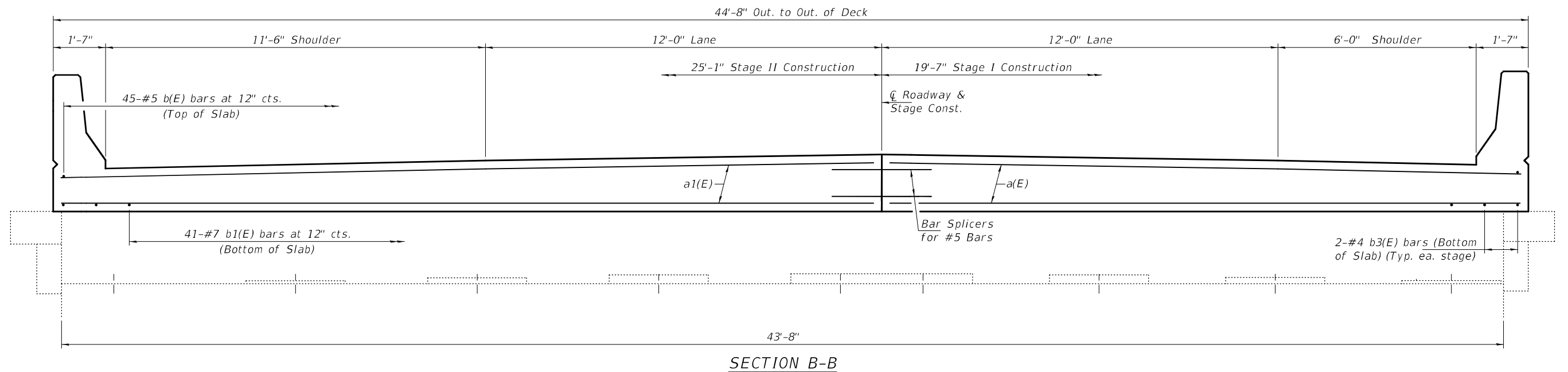
DATE - DECEMBER 10, 2021
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT REPLACEMENT DETAILS
SN 081-0007 (E.B.) & -0008 (W.B.)

SHEET NO. 7 OF 9 SHEETS

FA.I. RTE. 74
SECTION (81-3B-1) BJR
COUNTY ROCK ISLAND
TOTAL SHEETS 21
SHEET NO. 19
CONTRACT NO. 64R31
ILLINOIS FED. AID PROJECT



* v(E) bars to be epoxy grouted into 9" min. holes according to Article 584 of the Std. Specs.

Notes:
Cost of 2'0" PVC Pipe, Schedule 40 included with Concrete Superstructures.

DESIGNED - VHV
CHECKED - ATH
DRAWN - STEFFEN
CHECKED - VHV ATH

EXAMINED
PASSED

 ENGINEER OF STRUCTURAL SERVICES

 ENGINEER OF BRIDGES AND STRUCTURES

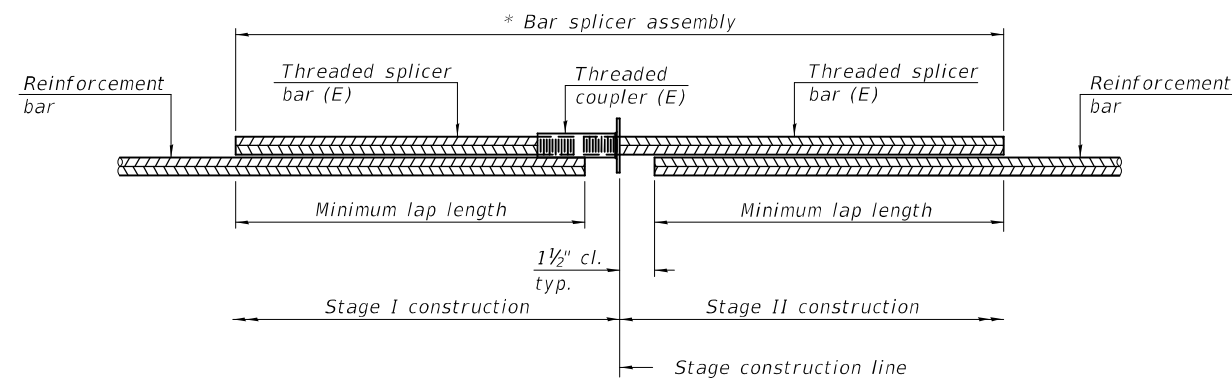
DATE - DECEMBER 10, 2021
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**JOINT REPLACEMENT DETAILS
SN 081-0007 (E.B.) & -0008 (W.B.)**

SHEET NO. 8 OF 9 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-3B-1) BJR	ROCK ISLAND	21	20
CONTRACT NO. 64R31				
ILLINOIS FED. AID PROJECT				

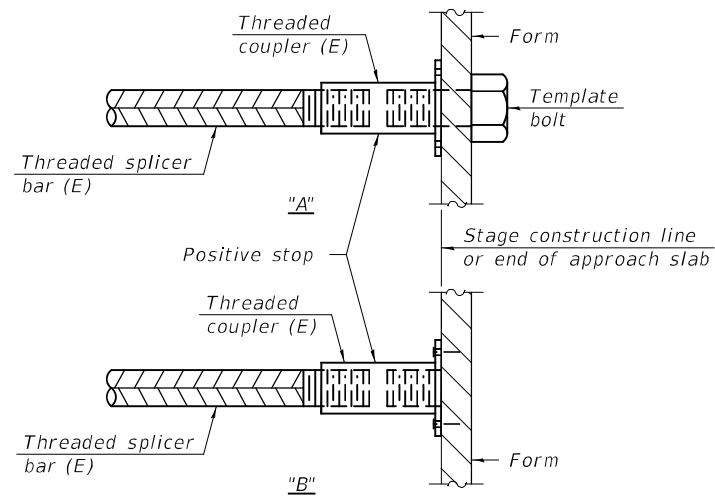


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Abutment	#5	84	3'-6"
Abutment	#6	32	4'-0"

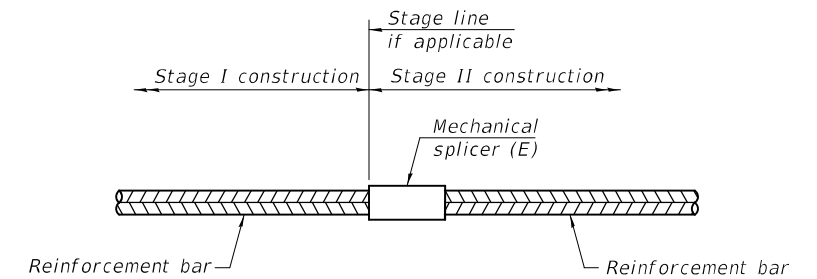


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-1-2020

DESIGNED - VHV	EXAMINED	DATE - DECEMBER 10, 2021
CHECKED - ATH	<i>Timothy A. Anderson</i> ENGINEER OF STRUCTURAL SERVICES	
DRAWN - STEFFEN	PASSED	REVISED -
CHECKED - VHV ATH	<i>Carl Rieger</i> ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 SN 081-0007 (E.B.) & -0008 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-3B-1) BJR	ROCK ISLAND	21	21
CONTRACT NO. 64R31				
ILLINOIS FED. AID PROJECT				

SHEET NO. 9 OF 9 SHEETS