

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

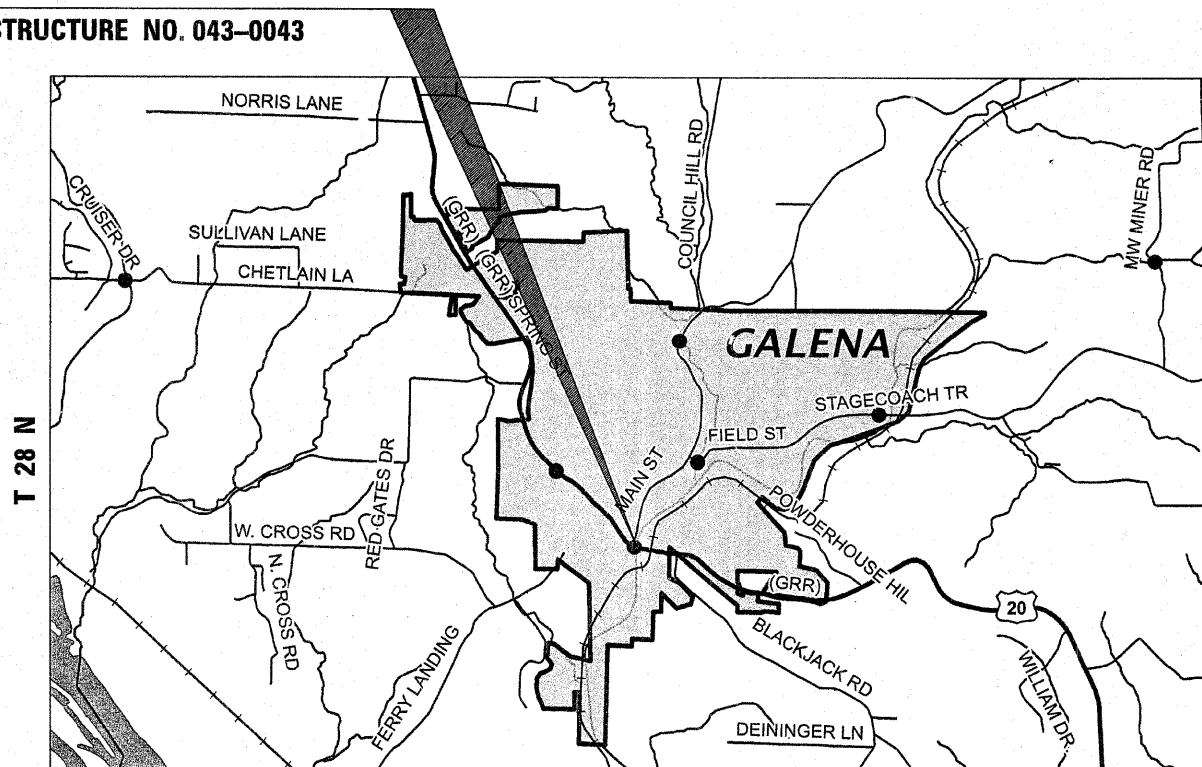
**PROPOSED  
HIGHWAY PLANS**

FAP ROUTE 301 (US 20)  
SECTION (102VBR)M-1

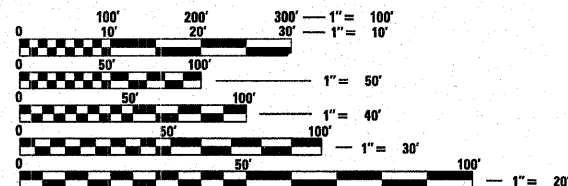
BRIDGE REPAIRS  
JODAVIESS COUNTY

PROJECT LOCATION  
STRUCTURE NO. 043-0043

C-92-062-11



FOR INDEX OF SHEETS, SEE SHEET NO. 2



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

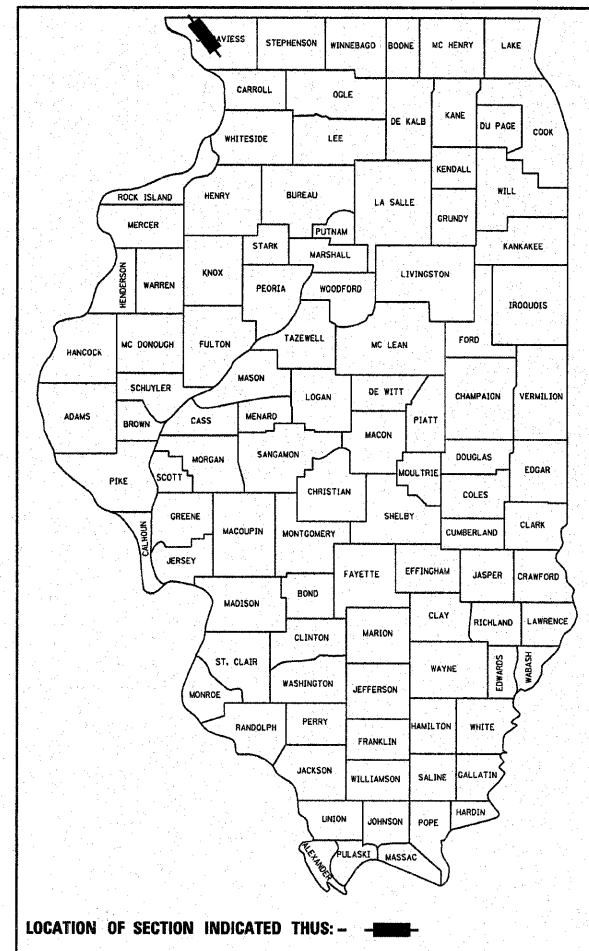
J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

BRIDGE MAINTENANCE ENGINEER: MAHMOUD ETEMADI 815/284-5393  
PLAN TECHNICIAN: DAN LINK 815/284-5416  
TOWNSHIP(S): WEST GALENA, EAST GALENA  
CONTRACT NO. 64G82

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	(102VBR)M-1	JODAVIESS	14	1
ILLINOIS			CONTRACT NO. 64G82	

#14 + 8 = 22

D-92-062-11



LOCATION OF SECTION INDICATED THIS: -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED February 1 20 11  
Eric S. Thorsildson  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 25 20 11  
Scott E. Stitt, P.E. |a|  
acting ENGINEER OF DESIGN AND ENVIRONMENT

March 25 20 11  
Christine M. Reed |a|  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

# INDEX OF SHEETS

1. Cover Sheet
2. Index of Sheets, General Notes, Standards
3. Summary of Quantities
- 4.-5. Traffic Standards
- 6.-7. Approach Slab Repairs
- 8.-9. Bridge Deck Slab Repairs
- 10.-13. Traffic Control Plans
14. Traffic Staging
- 15.-22. Bridge Repairs

# STANDARDS

# GENERAL NOTES

The final top four inches of soil in any right-of-way area disturbed by the Contractor must be capable of supporting vegetation. The soil must be from the A horizon (zero to 2' deep) of soil profiles of local soils.

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

The Contractor shall seed all disturbed areas within the project limits. Seeding Class 4 or 2A shall be used, except in front of properties where the grass will be mowed, then use Seeding, Class 1. Class 2A shall be used on front slopes and ditch bottoms. Class 4 shall be used behind Type A gutter, on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches. This work will be included in the contract unit price per Cubic Yard for CONCRETE REMOVAL.

Fertilizer shall be applied to all disturbed areas and incorporated into the seedbed prior to seeding or placement of sod at the rate specified in Sections 250 and 252 of the Standard Specifications. This work shall be included in the cost of CONCRETE REMOVAL.

Mulch Method II shall be applied over all seeded areas. This shall be included in the cost of the CONCRETE REMOVAL.

At bridge expansion joints, if temporary expansion joint bulkheads are attached to adjacent deck slabs or abutments for support, the Contractor shall cut the attachments as soon as the concrete has set to prevent joint damage due to horizontal contraction or expansion.

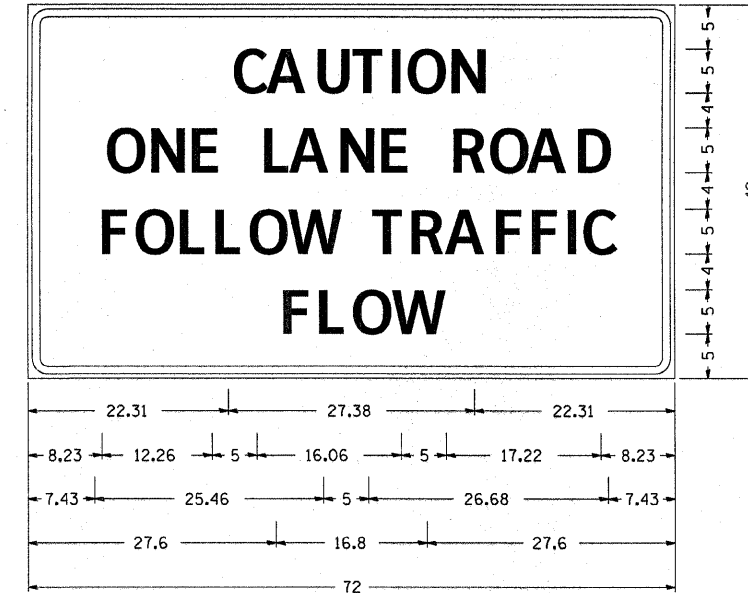
The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123.

One Changeable Message Board shall be placed at the tops of the hills approaching the bridge in each direction a minimum of two weeks prior to the start of construction notifying motorists of impending lane closures. Once construction begins the message boards should warn motorists of traffic signals ahead.

FILE NAME =	USER NAME = linkdj	DESIGNED -	REVIS	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, STANDARDS, GENERAL NOTES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Q:\BRV\CADD plans\Jo Daviess County\043043\PLAN\eng.dgn	DRAWN -	REVIS	301			(102VBRM-1)	JODAVIESS	----	2	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVIS	CONTRACT NO. 64G82							
PLOT DATE = Mon Jan 31 07:54:20 2011	DATE -	REVIS	ILLINOIS FED. AID PROJECT							
				SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____						



# ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS



Type AA Fluorescent Orange Sheetting ;  
 2.25" Radius, 0.88" Border, 0.50" Indent, Black on Orange;  
 [CAUTION] D; [ONE LANE ROAD] D;  
 [FOLLOW TRAFFIC] D; [FLOW] D

Table Of Widths And Spaces

22.31	C	3.36	0.62	A	4.18	0.94	U	3.36	0.94	T	3.04	0.94	I	0.78	1.17	O	3.52	1.17	N	3.36	22.31
8.23	O	3.51	1.17	N	3.36	1.18	E	3.04													
5.00	L	3.05	0.31	A	4.18	0.94	N	3.36	1.17	E	3.05										
5.00	R	3.36	0.93	O	3.52	0.94	A	4.18	0.93	D	3.36	8.23									
7.43	F	3.04	0.94	O	3.52	1.17	L	3.04	0.94	L	3.05	0.94	O	3.51	0.94	W	4.37				
5.00	T	3.05	0.94	R	3.36	0.94	A	4.18	0.93	F	3.05	0.94	F	3.04	0.94	I	0.78	1.18	C	3.35	7.43
27.60	F	3.05	0.94	L	3.04	0.94	O	3.52	0.93	W	4.38	27.60									

### GENERAL NOTES

THIS SIGN SHALL BE INSTALLED AT ENTRANCES LOCATED BETWEEN THE TEMPORARY SIGNALS AS DIRECTED BY THE ENGINEER.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

THE COST TO FURNISH, INSTALL AND REMOVE THIS SIGN AT THE REQUIRED LOCATIONS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

# STOP LINE SIGN FOR TEMPORARY SIGNALS



SIZE: 600(24) x 600(24)  
 100(4) CAPITAL LETTERS - BLACK  
 13 (1/2) BORDER - BLACK  
 WHITE REFLECTIVE - TYPE AP  
 HIGH INTENSITY PRISMATIC SHEETING

### GENERAL NOTE:

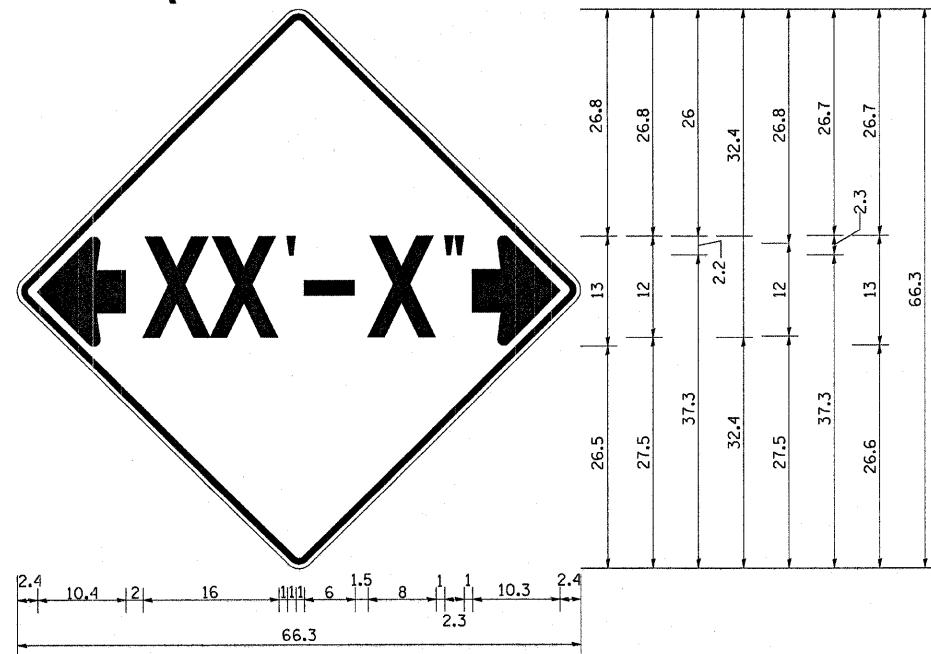
THIS SIGN SHALL BE INSTALLED AT THE STOP LINE AS DIRECTED BY ENGINEER.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

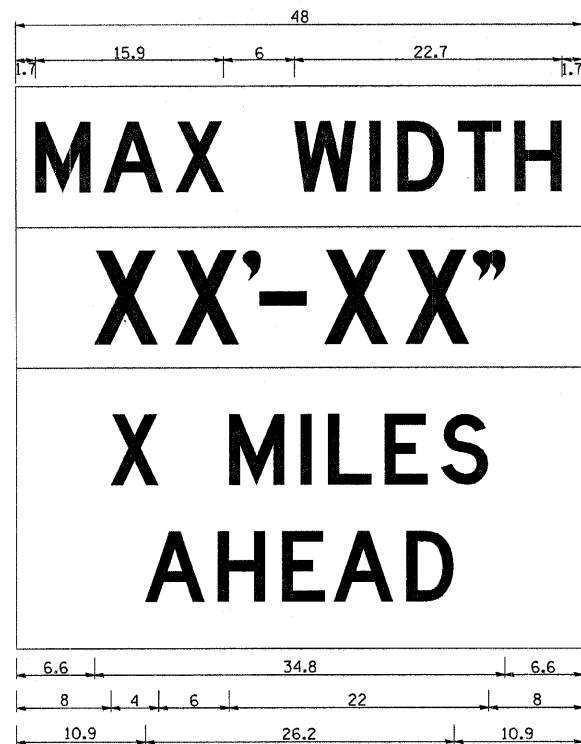
REVISED - 1-22-07

REVISED - 1Q-28-05	REGION 2 / DISTRICT 2 STANDARD		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - ---			304	(102 VBR) M-1	JOHNSON	22	4
REVISED - ---			CONTRACT NO. 64682				
REVISED - ---	SCALE: 50:0000 1/2 IN SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

# INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



**NOTES**  
 W12-2 - Horizontal Clearance Sign  
 48.0" across sides, 1.9" Radius,  
 0.8" Border, 0.5" Indent, Black on  
 Orange; Standard Arrow Custom  
 10.4" X 8.1" 180° Black 11 Inch  
 D Series Lettering; Standard Arrow  
 Custom 10.4" X 8.1" 0°



W12-I103 (Width is 8D);  
 No border, Black on White;  
 [MAX WIDTH] D;

No border, Black on Orange;  
 [XX'-XX'"] D;

No border, Black on White;  
 [X MILES] D; [AHEAD] D;

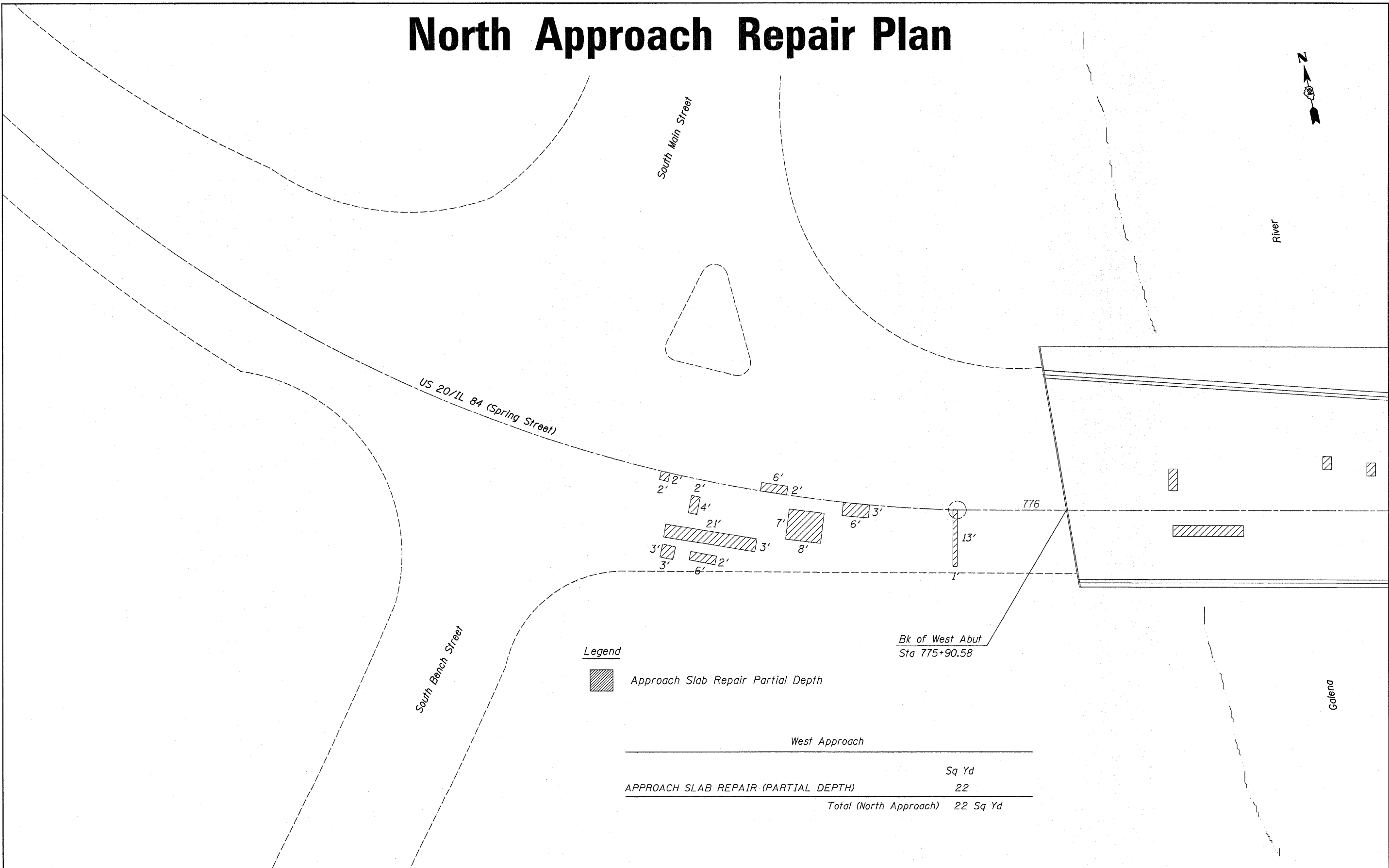
All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.


ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 5-15-09

REVISED - ---	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED - ---		301	(102 VBR) M-1	JODAVES	22	5	
REVISED - ---		CONTRACT NO. 64902					
REVISED - ---		SCALE: 50,000' = 1" IN SHEET NO. ___ OF ___ SHEETS	STA. _____ TO STA. _____	FED. ROAD DIST. NO. ___ [ILLINOIS] FED. AID PROJECT			

# North Approach Repair Plan



**Legend**  
 Approach Slab Repair Partial Depth

West Approach	
	Sq Yd
APPROACH SLAB REPAIR (PARTIAL DEPTH)	22
<b>Total (North Approach)</b>	<b>22 Sq Yd</b>

FILE NAME =	USER NAME = linkj	DESIGNED -	REVISED -
D:\BRV\CADD plans\Jo Daviess County\043043\PLANeng.dgn		DRAWN -	REVISED -
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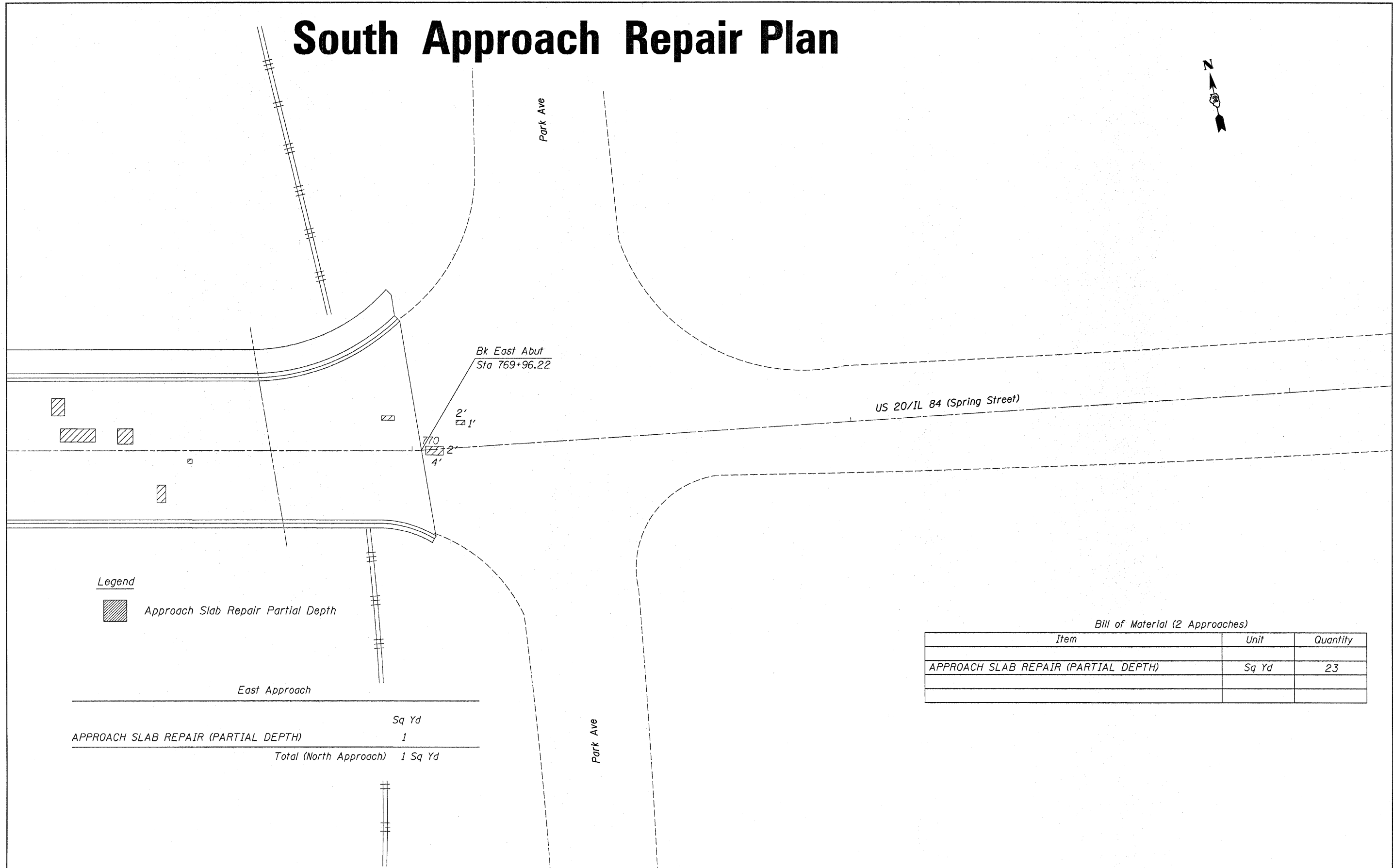
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**North Approach Repair Plan  
Structure No. 043-0043**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	(102VBRM-1)	Jo Daviess	22	6
			CONTRACT NO. 64082	
ILLINOIS FED. AID PROJECT				

# South Approach Repair Plan



**Legend**

Approach Slab Repair Partial Depth

*Bill of Material (2 Approaches)*

Item	Unit	Quantity
APPROACH SLAB REPAIR (PARTIAL DEPTH)	Sq Yd	23

Item	Sq Yd
APPROACH SLAB REPAIR (PARTIAL DEPTH)	1
<b>Total (North Approach)</b>	<b>1 Sq Yd</b>

FILE NAME = G:\BRV\CADD plans\Jo Daviess County\0430043\PLANeng.dgn	USER NAME = linkdj	DESIGNED - ---	REVISED - ---
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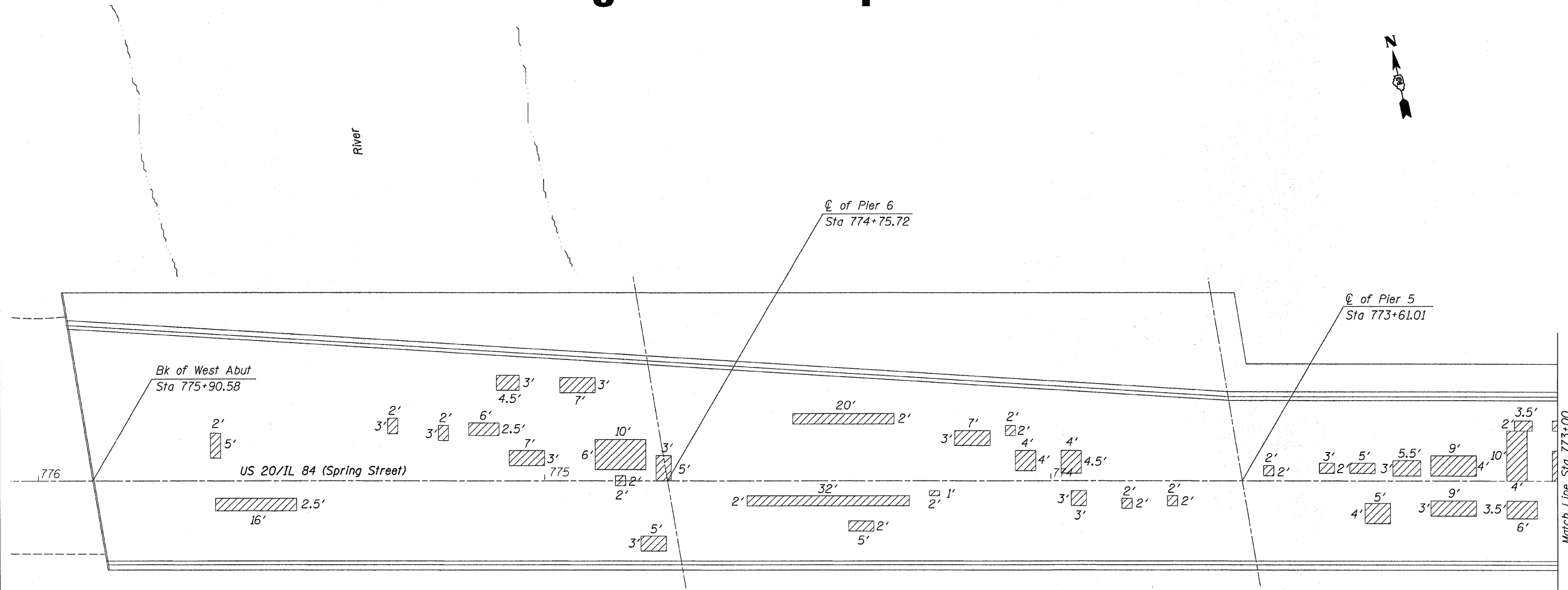
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**South Approach Repair Plan  
Structure No. 043-0043**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE. 301	SECTION 102VBRM-1	COUNTY JoDaviess	TOTAL SHEETS 22	SHEET NO. 7
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64682	

# Bridge Deck Repair Plan



**Legend**

Deck Slab Repair Partial Depth

Note: Patches shown are potential areas of deck slab repair. Actual areas to be determined in the field.

Date of Survey: 12/2/2010

FILE NAME =	USER NAME = InkDJ	DESIGNED -	REVISED -
D:\BR\CADD plans\Jo Daviess County\0430043\PLANeng.dgn		DRAWN -	REVISED -
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PLOT DATE = Mon Jan 31 07:53:21 2011		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

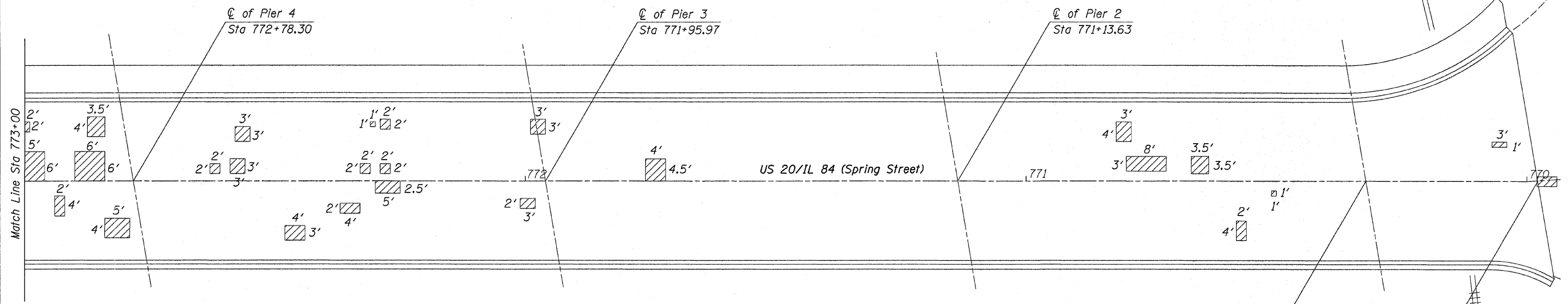
**Bridge Deck Repair Plan  
Structure No. 043-0043**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_\_ OF \_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	1102VBRM-1	Jo Daviess	22	8
			CONTRACT NO. 64G82	
ILLINOIS FED. AID PROJECT				



# Bridge Deck Repair Plan



Date of Survey: 12/2/2010

**Legend**

Deck Slab Repair Partial Depth

Note: Patches shown are potential areas of deck slab repair.  
Actual areas to be determined in the field.

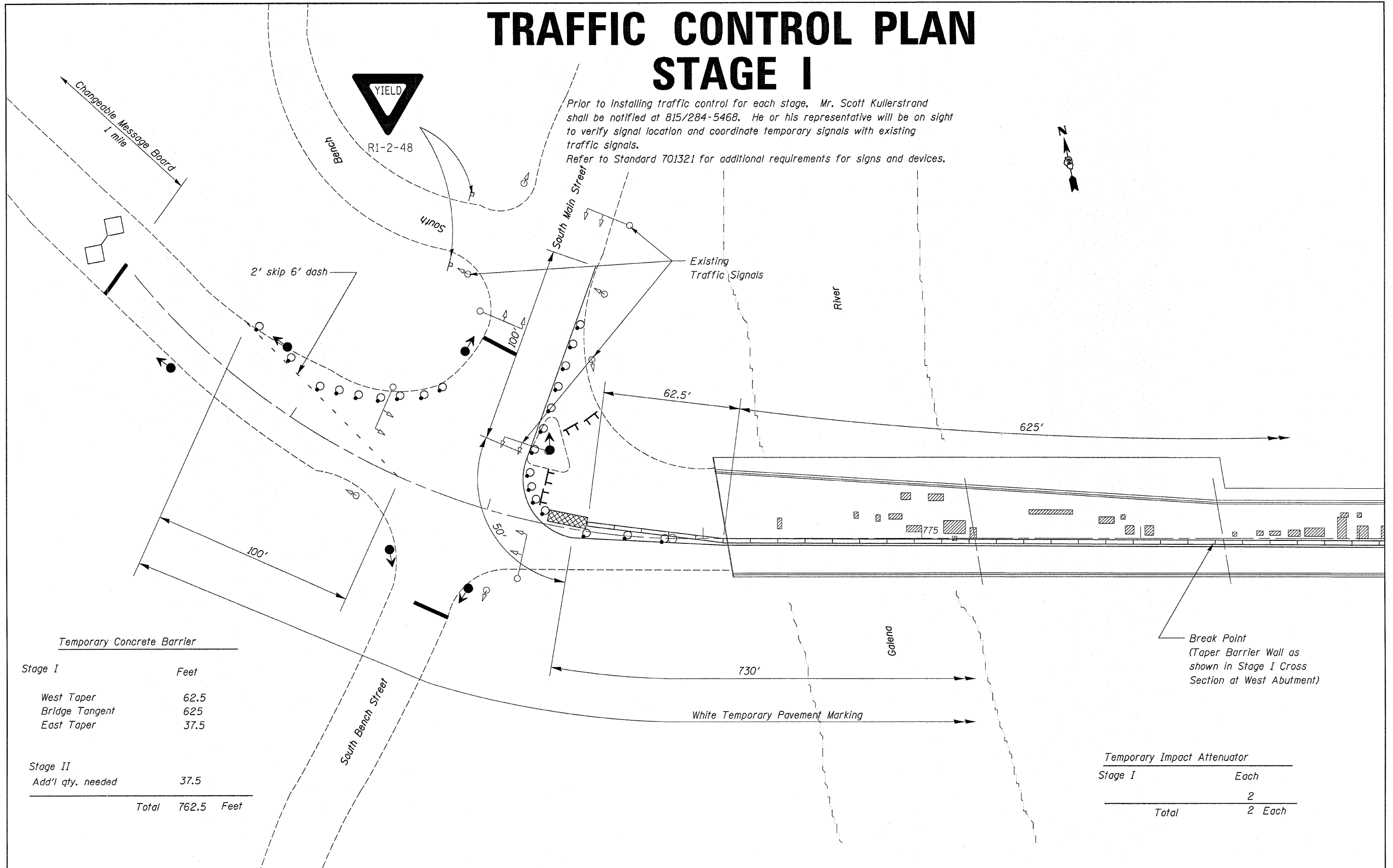
**Bill of Material**

Item	Unit	Quantity
DECK SLAB REPAIR (PARTIAL)	Sq Yd	98

FILE NAME =	USER NAME = jnkj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>Bridge Deck Repair Plan Structure No. 043-0043</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
G:\BRYCADD plans\Jo Daviess County\043043\PLANeng.dgn		DRAWN -	REVISED -			301	(102VBRM-1)	JoDaviess	22	9	
PLOT SCALE = 10,0000' / IN.		CHECKED -	REVISED -			SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____		CONTRACT NO. 64C82			
PLOT DATE = Mon Jan 31 07:53:15 2011		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

# TRAFFIC CONTROL PLAN STAGE I

Prior to installing traffic control for each stage, Mr. Scott Kullerstrand shall be notified at 815/284-5468. He or his representative will be on sight to verify signal location and coordinate temporary signals with existing traffic signals.  
Refer to Standard 701321 for additional requirements for signs and devices.



Temporary Concrete Barrier	
Stage I	Feet
West Taper	62.5
Bridge Tangent	625
East Taper	37.5
<hr/>	
Stage II	
Add'l qty. needed	37.5
<hr/>	
Total	762.5 Feet

Temporary Impact Attenuator	
Stage I	Each
	2
<hr/>	
Total	2 Each

FILE NAME =	USER NAME = jinkdj	DESIGNED -	REVISD -
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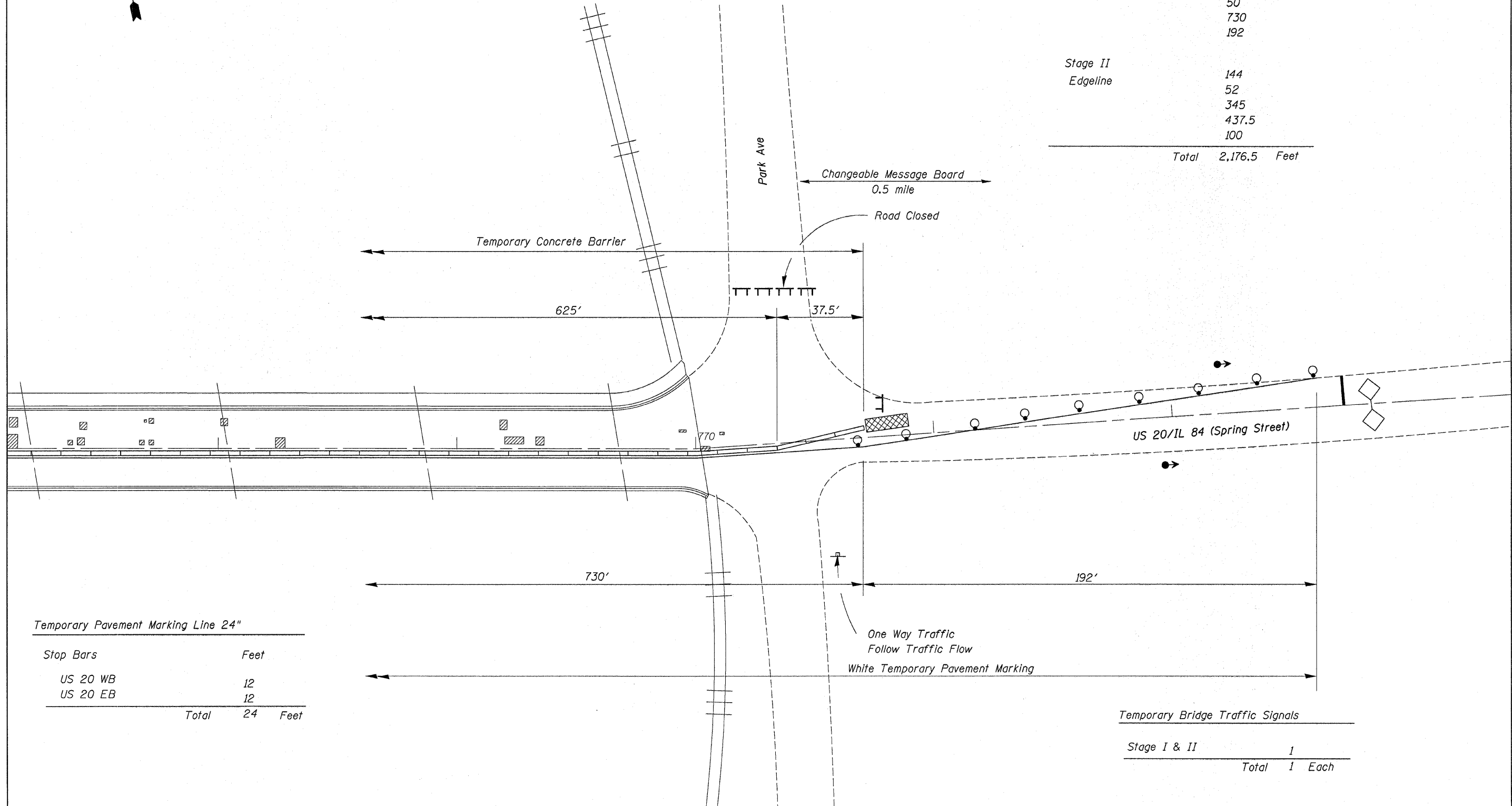
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>Traffic Control Plan Stage I</b>	
<b>Structure No. 043-0043</b>	
SCALE: _____	SHEET NO. ____ OF ____ SHEETS
STA. _____ TO STA. _____	

F.A.P. RTE. 301	SECTION (102VBRM-1)	COUNTY Jo Daviess	TOTAL SHEETS 22	SHEET NO. 10
CONTRACT NO. 64G82			ILLINOIS FED. AID PROJECT	

# TRAFFIC CONTROL PLAN STAGE I

Refer to Standard 701321 for additional requirements for signs and devices.



Temporary Pavement Marking Line 4"

Stage I	Feet
Edgeline	26
	100
	50
	730
	192
Stage II	
Edgeline	144
	52
	345
	437.5
	100
<b>Total</b>	<b>2,176.5 Feet</b>

Temporary Pavement Marking Line 24"

Stop Bars	Feet
US 20 WB	12
US 20 EB	12
<b>Total</b>	<b>24 Feet</b>

Temporary Bridge Traffic Signals

Stage I & II	1
<b>Total</b>	<b>1 Each</b>

FILE NAME =	USER NAME = linkdj	DESIGNED -	REVISED -
G:\BRV\CADD plans\Jo Daviess County\0438043\PLANeng.dgn		DRAWN -	REVISED -
	PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = Mon Jan 31 07:52:41 2011	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

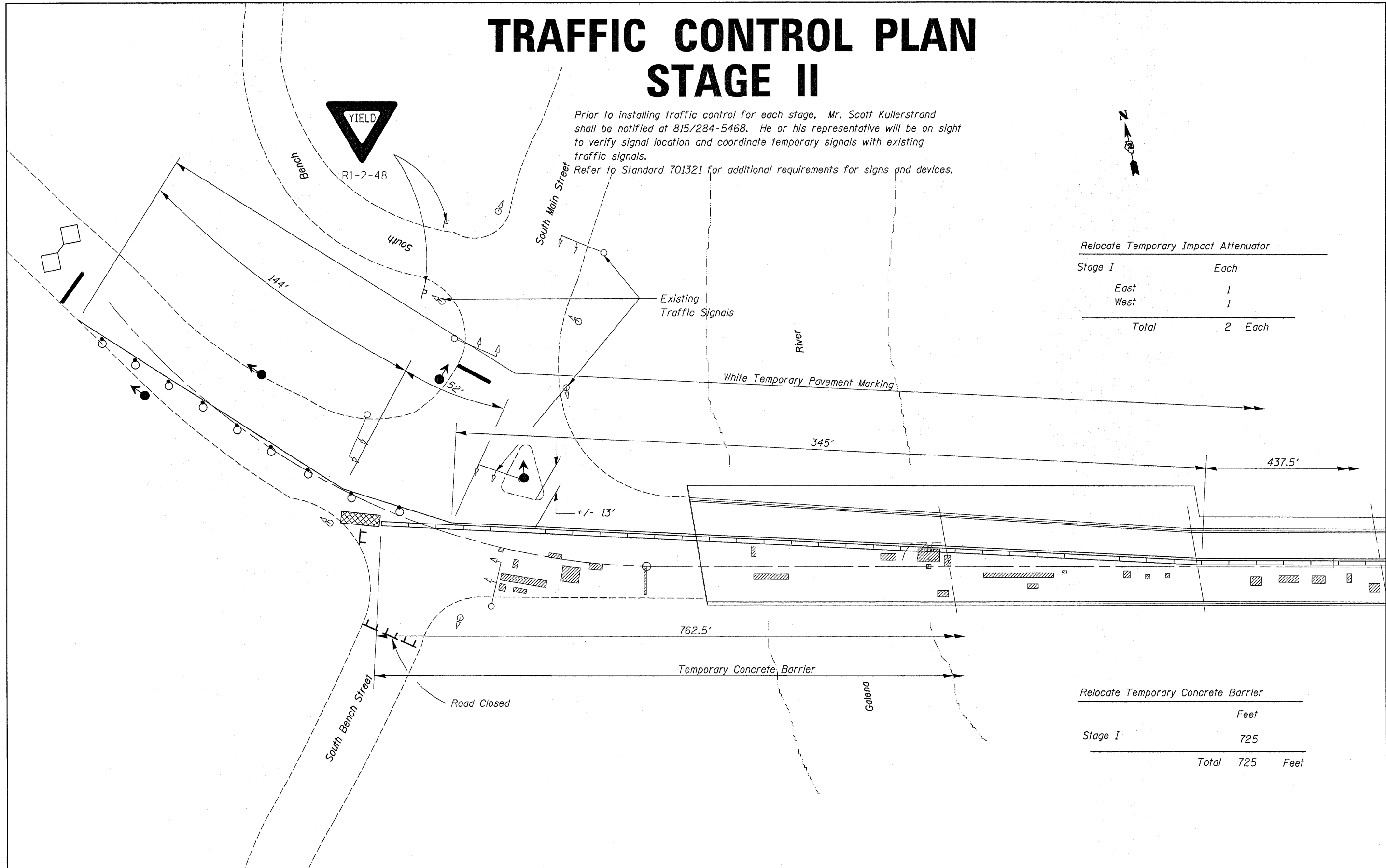
**Traffic Control Plan  
Stage I**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_\_ OF \_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	(102VBRM-1)	Jo Daviess	22	41
			CONTRACT NO. 64G82	
ILLINOIS FED. AID PROJECT				

# TRAFFIC CONTROL PLAN STAGE II

Prior to installing traffic control for each stage, Mr. Scott Kullerstrand shall be notified at 815/284-5468. He or his representative will be on sight to verify signal location and coordinate temporary signals with existing traffic signals.  
Refer to Standard 701321 for additional requirements for signs and devices.



Relocate Temporary Impact Attenuator	
Stage I	Each
East	1
West	1
<b>Total</b>	<b>2 Each</b>

Relocate Temporary Concrete Barrier	
Feet	
Stage I	725
<b>Total</b>	<b>725 Feet</b>

FILE NAME =	USER NAME = linkdj	DESIGNED -	REVISD -
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PLOT SCALE = 20.0000' / IN.		CHECKED -	REVISD -
PLOT DATE = Mon Jan 31 07:52:36 2011		DATE -	REVISD -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**Stage II Traffic Control  
Structure No. 043-0043**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_\_ OF \_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

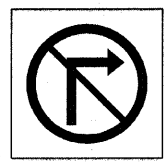
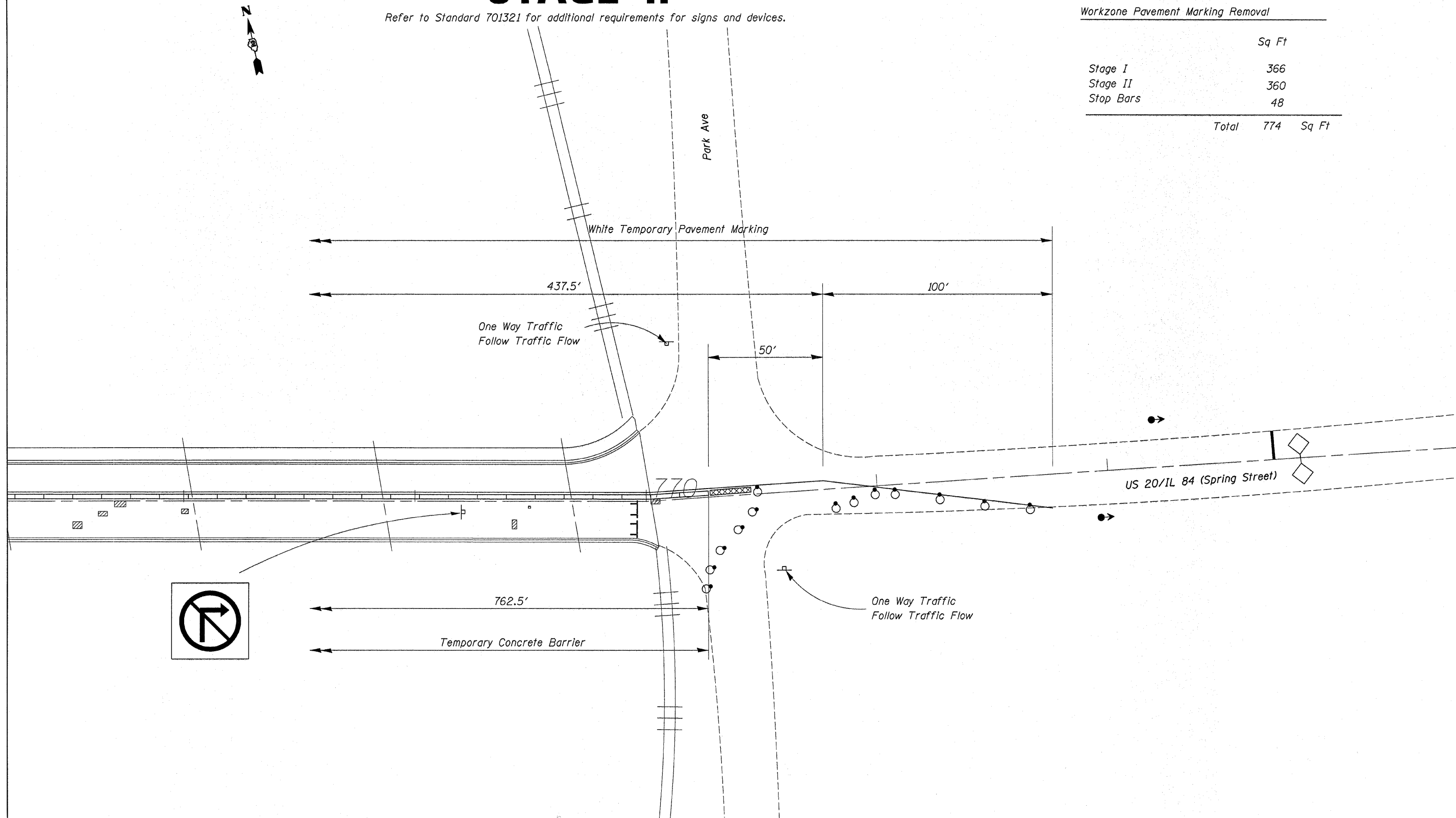
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	(102VBRM-1)	Jo Daviess	22	12
			CONTRACT NO. 64G82	
ILLINOIS FED. AID PROJECT				

# TRAFFIC CONTROL PLAN STAGE II

Refer to Standard 701321 for additional requirements for signs and devices.

### Workzone Pavement Marking Removal

	Sq Ft
Stage I	366
Stage II	360
Stop Bars	48
<b>Total</b>	<b>774</b>



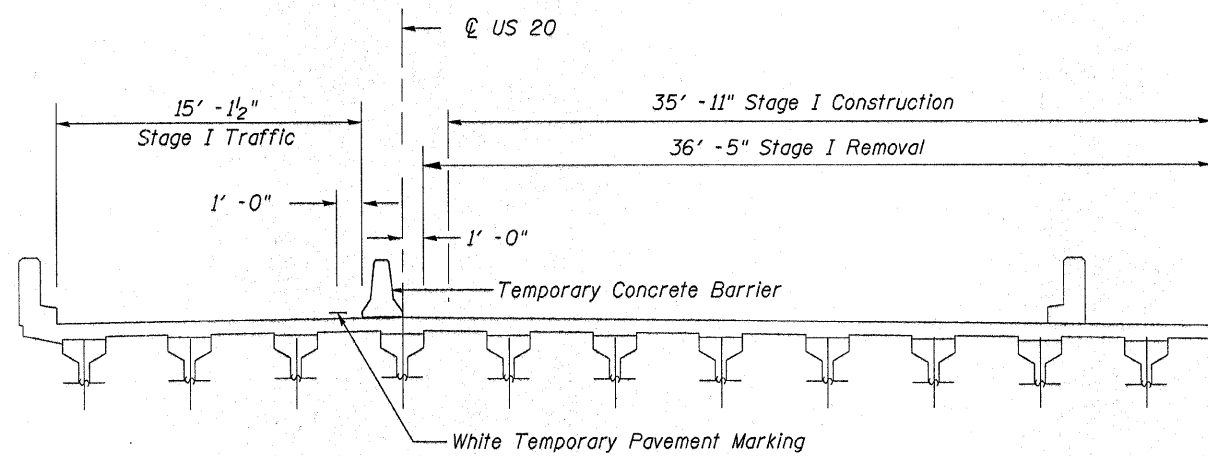
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	PLLOT DATE = Mon Jan 31 07:52:31 2011	DATE -	REVIS

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

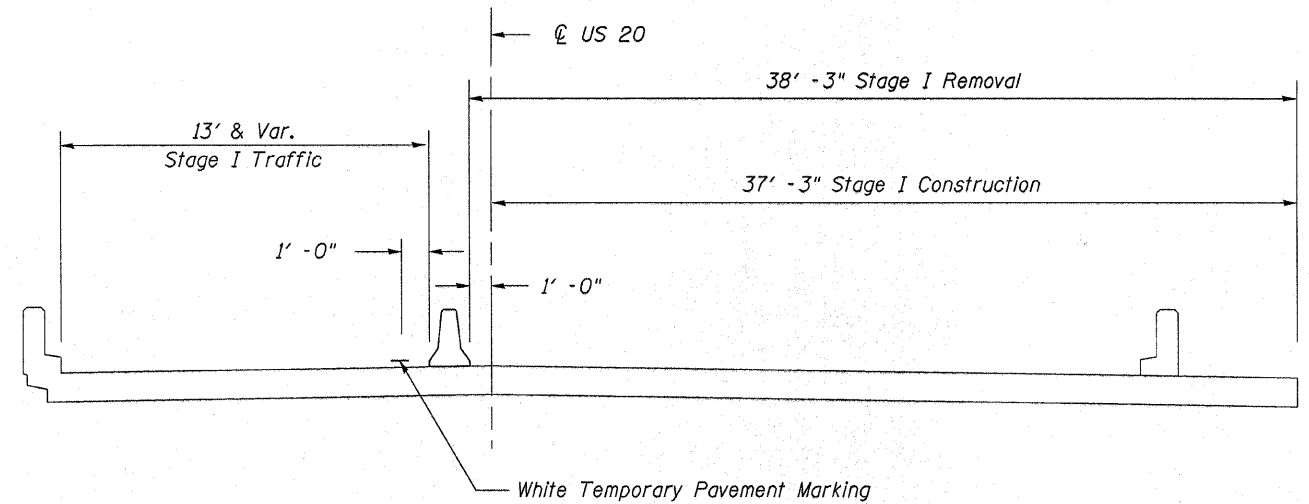
**Stage II Traffic Control  
Structure 043-0043**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_\_ OF \_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

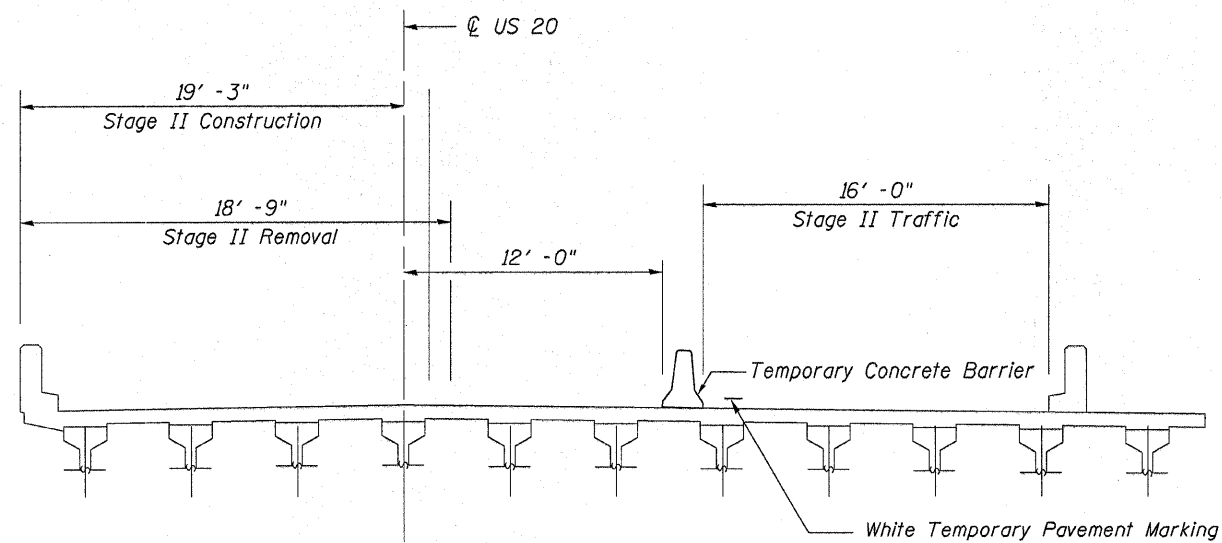
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	(102VBRM-1)	Jo Daviess	12	13
			CONTRACT NO. 64G82	
ILLINOIS FED. AID PROJECT				



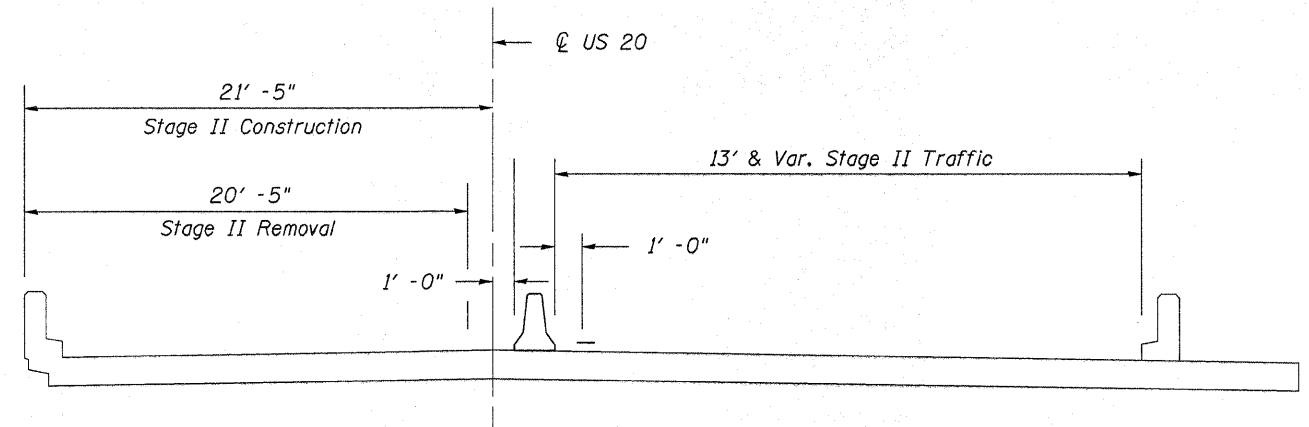
Stage I Cross Section  
Looking West at West Abutment



Stage I Cross Section  
Looking West at East Abutment



Stage II Cross Section  
Looking West at West Abutment



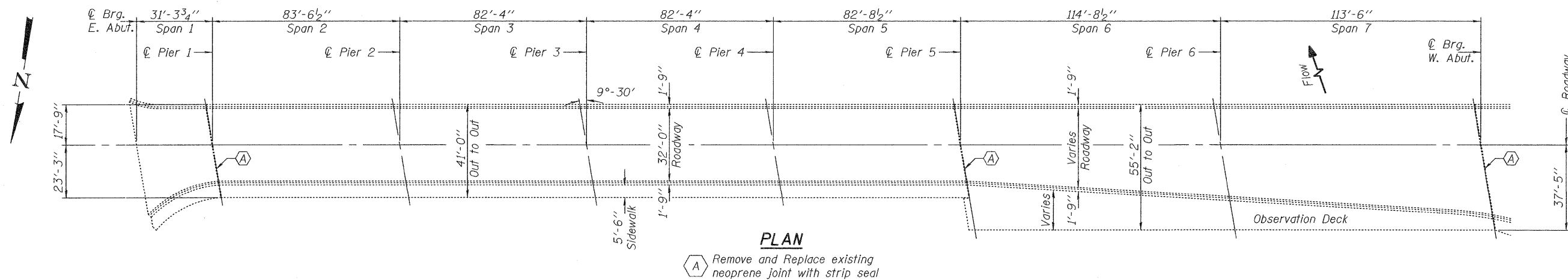
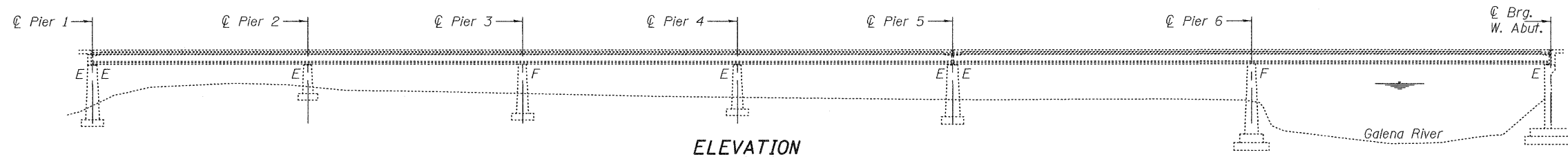
Stage II Cross Section  
Looking West at East Abutment

FILE NAME =	USER NAME = linkdj	DESIGNED -	REVISD -
G:\BRV\CADD plans\Jo Daviess County\0430043\PLANeng.dgn		DRAWN -	REVISD -
PLOT SCALE = 28.0000' / IN.		CHECKED -	REVISD -
PLOT DATE = Mon Jan 31 07:52:24 2011		DATE -	REVISD -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>Staging Cross Sections</b>	
<b>Structure No. 043-0043</b>	
SCALE: _____	SHEET NO. _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	(102VBRM-1)	Jo Daviess	22	14
CONTRACT NO. 64G82			ILLINOIS FED. AID PROJECT	



**GENERAL NOTES**

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.  
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 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.  
 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.  
 Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	5.6
Concrete Superstructure	Cu. Yd.	5.9
Reinforcement Bars, Epoxy Coated	Pound	680
Preformed Joint Strip Seal	Foot	120
Deck Slab Repair (Partial)	Sq. Yd.	98
Bar Splicers	Each	6
Protective Coat	Sq. Yd.	26.6



Expires: November 30, 2012

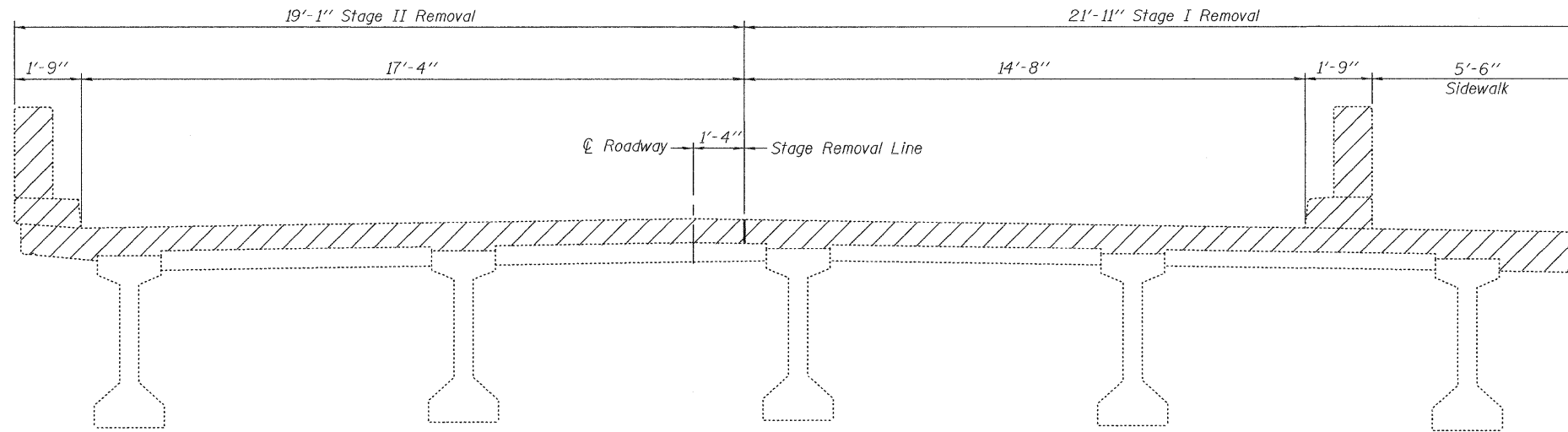
DESIGNED - <i>Adrian T. Holloway</i>	EXAMINED - <i>Jan F. [Signature]</i>	DATE - MARCH 21, 2011
CHECKED - <i>Victor H. Voliz</i>	PASSED - <i>[Signature]</i>	
DRAWN - <b>Drew Christopher</b>		
CHECKED - <i>AJH</i>		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN AND ELEVATION  
SN 043-0043**

SHEET NO. 1 OF 8 SHEETS

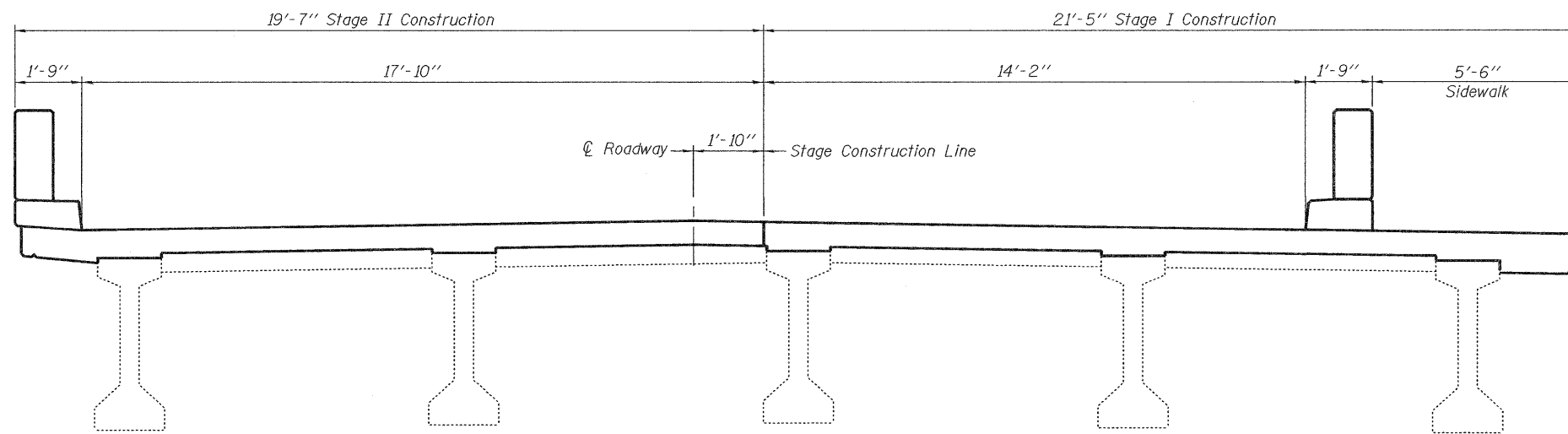
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	102VBR-M	JODAVIESS	22	15
CONTRACT NO. 64B82				
[ILLINOIS] FED. AID PROJECT				



**STAGE REMOVAL CROSS SECTION**

(At Pier 1 Looking West)

Note:  
 Hatched areas indicate removal.  
 The contractor shall use extreme care  
 during concrete removal so as not to damage  
 the PPC-I beams.



**STAGE CONSTRUCTION CROSS SECTION**

(At Pier 1 Looking West)

DESIGNED - ATH  
 CHECKED - VHV  
 DRAWN - **Drew Christopher**  
 CHECKED - ATH VHV

EXAMINED  
 PASSED  
 ACTING ENGINEER OF STRUCTURAL SERVICES  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

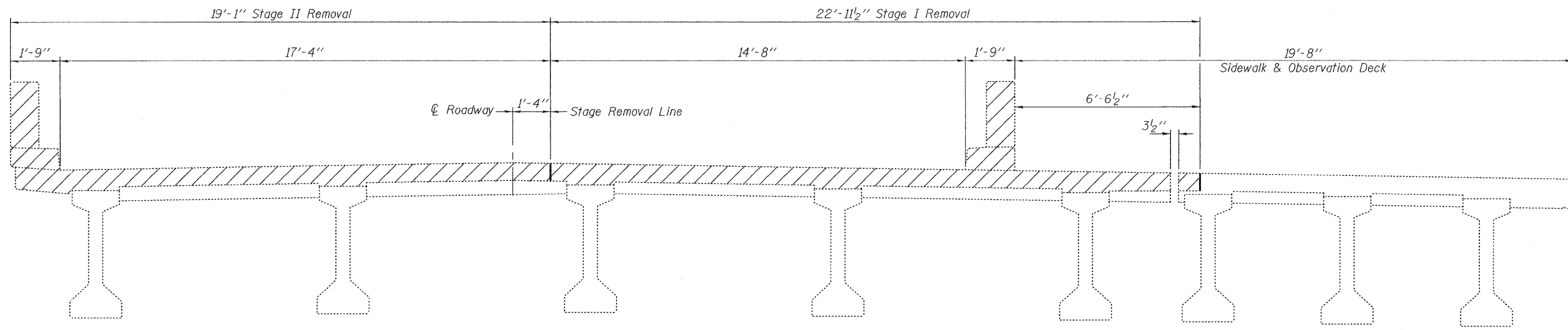
DATE - MARCH 21, 2011

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**STAGING DETAILS**  
**SN 043-0043**  
 SHEET NO. 2 OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	102VBR-M	JODAVIESS	22	16
CONTRACT NO. 64582			ILLINOIS FED. AID PROJECT	

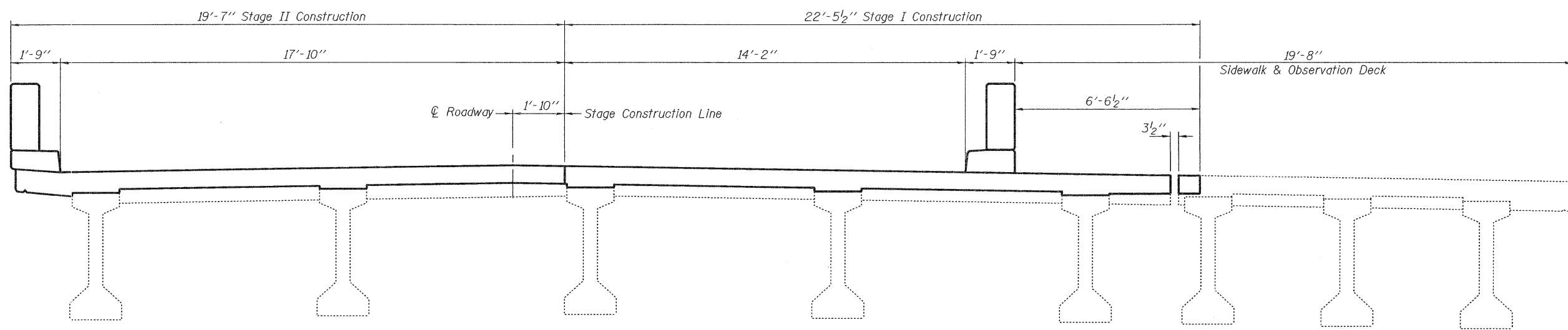




**STAGE REMOVAL CROSS SECTION**

(At Pier 5 Looking West from Span 5)

Note:  
 Hatched areas indicate removal.  
 The contractor shall use extreme care during concrete removal so as not to damage the PPC-I beams and any concrete to remain below the removal line.



**STAGE CONSTRUCTION CROSS SECTION**

(At Pier 5 Looking West from Span 5)

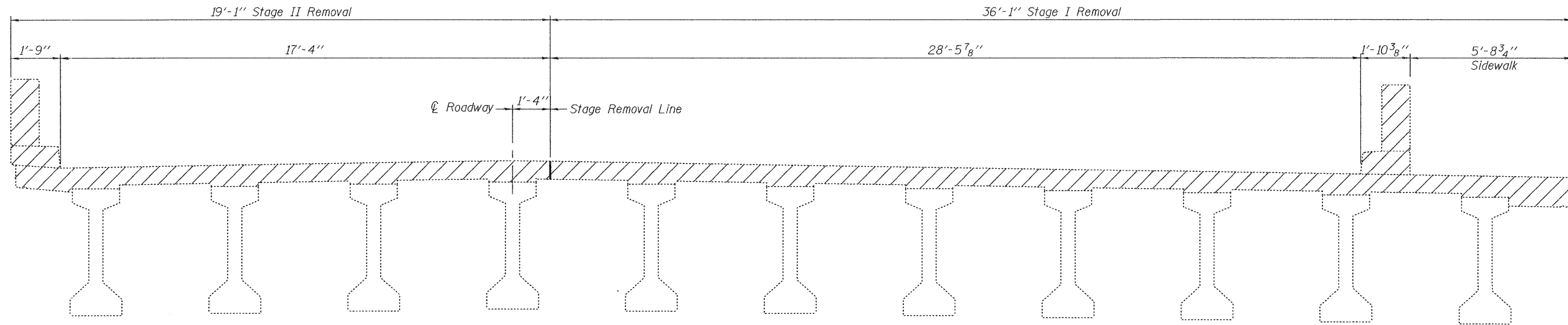
DESIGNED - ATH  
 CHECKED - VHV  
 DRAWN - **Drew Christopher**  
 CHECKED - ATH VHV

EXAMINED *Joanne F. J...*  
 ACTING ENGINEER OF STRUCTURAL SERVICES  
 PASSED *Carl...*  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES  
 DATE - MARCH 21, 2011

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**STAGING DETAILS**  
**SN 043-0043**  
 SHEET NO. 3 OF 8 SHEETS

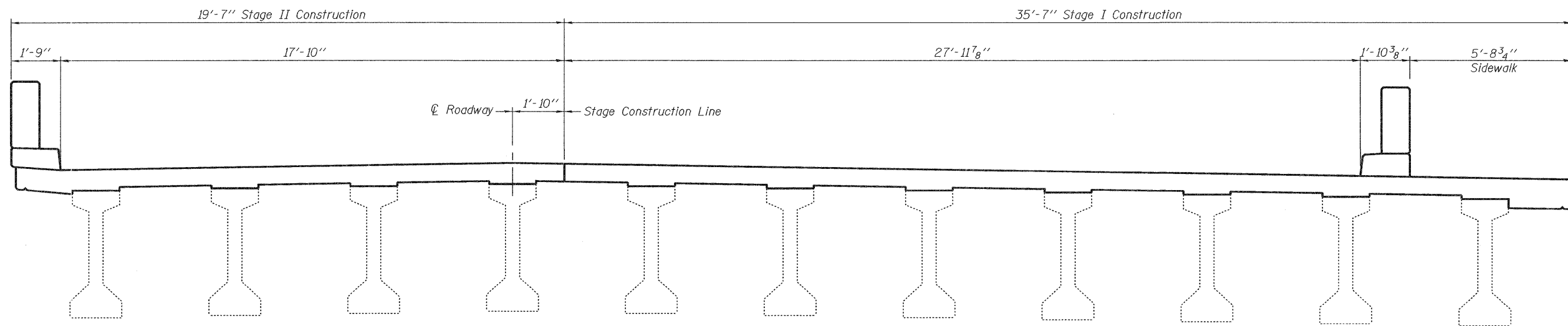
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	102VBR-M	JODAVIESS	12	17
CONTRACT NO. 64682			ILLINOIS FED. AID PROJECT	



**STAGE REMOVAL CROSS SECTION**

(At West Abutment Looking West)

Note:  
 Hatched areas indicate removal.  
 The contractor shall use extreme care during concrete removal so as not to damage the PPC-I beams.



**STAGE CONSTRUCTION CROSS SECTION**

(At West Abutment Looking West)

DESIGNED - ATH  
 CHECKED - VHV  
 DRAWN - Drew Christopher  
 CHECKED - ATH VHV

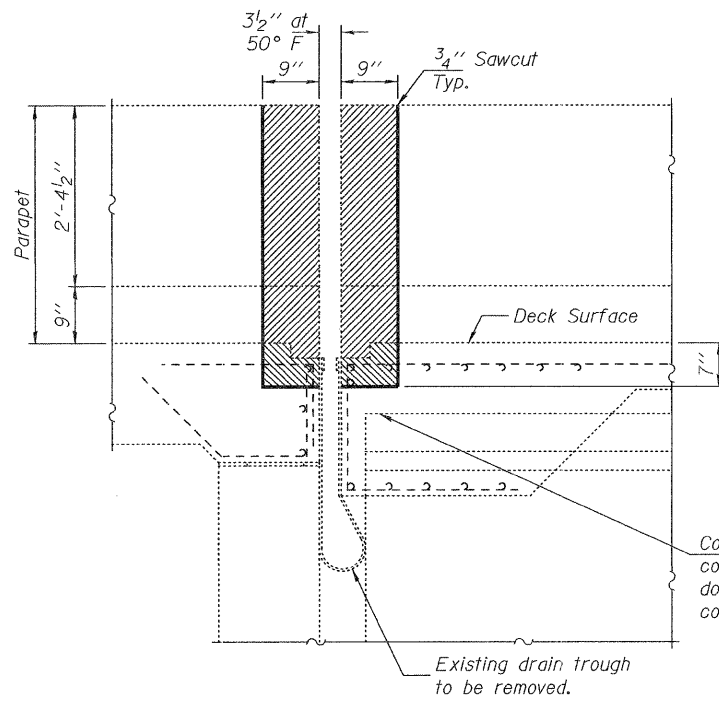
EXAMINED  
 PASSED  
 ACTING ENGINEER OF STRUCTURAL SERVICES  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - MARCH 21, 2011

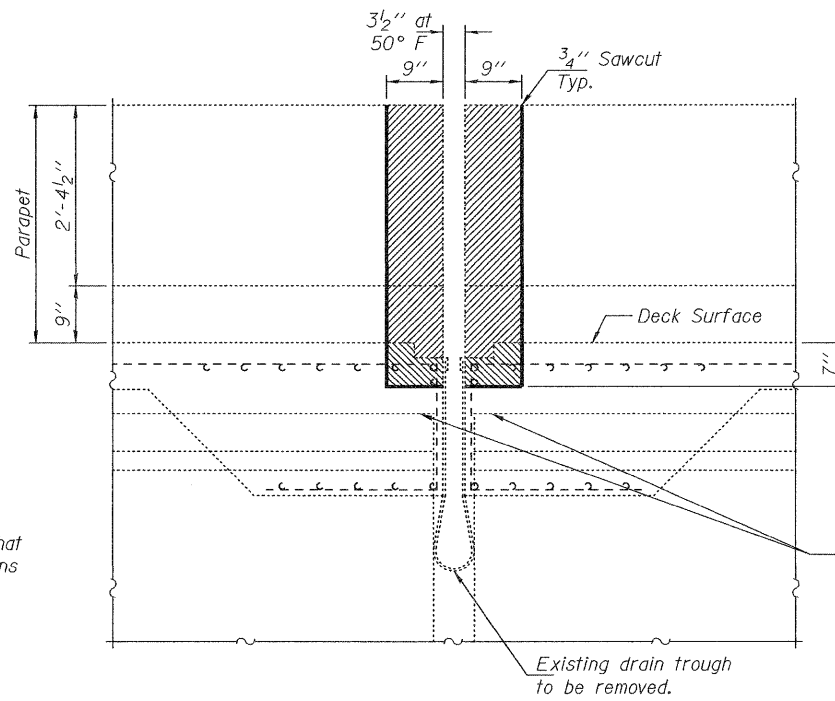
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STAGING DETAILS  
 SN 043-0043  
 SHEET NO. 4 OF 8 SHEETS

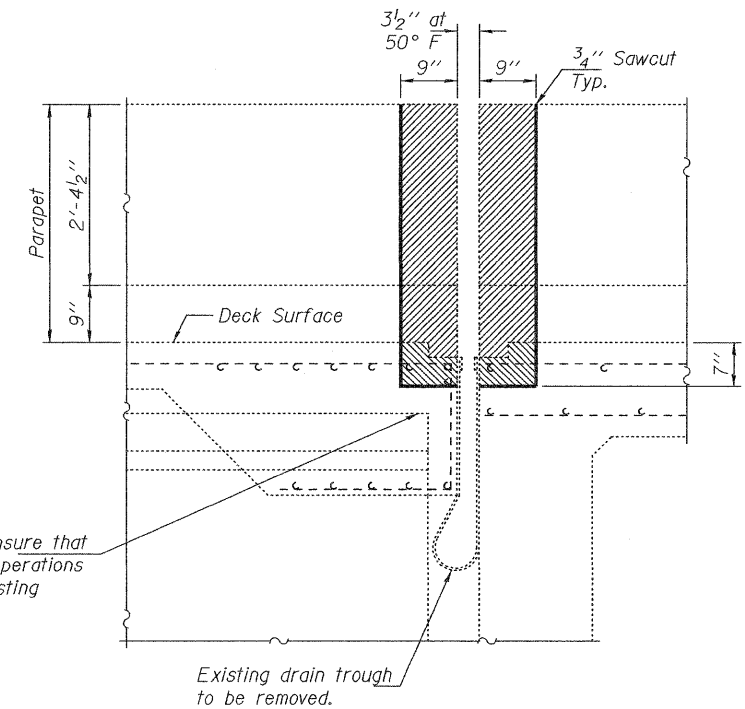
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	102VBR-M	JODAVIESS	22	18
CONTRACT NO. 64582			ILLINOIS FED. AID PROJECT	



**REMOVAL SECTION AT PIER 1**  
(Looking South)



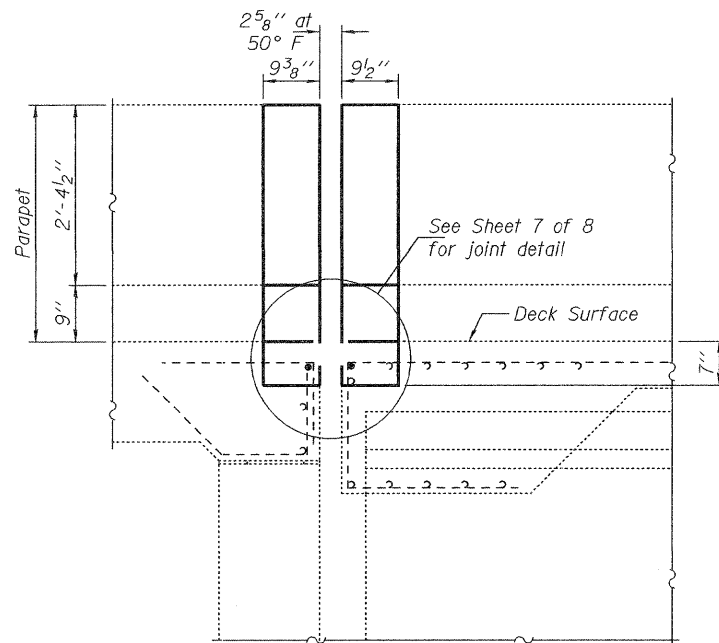
**REMOVAL SECTION AT PIER 5**  
(Looking South)



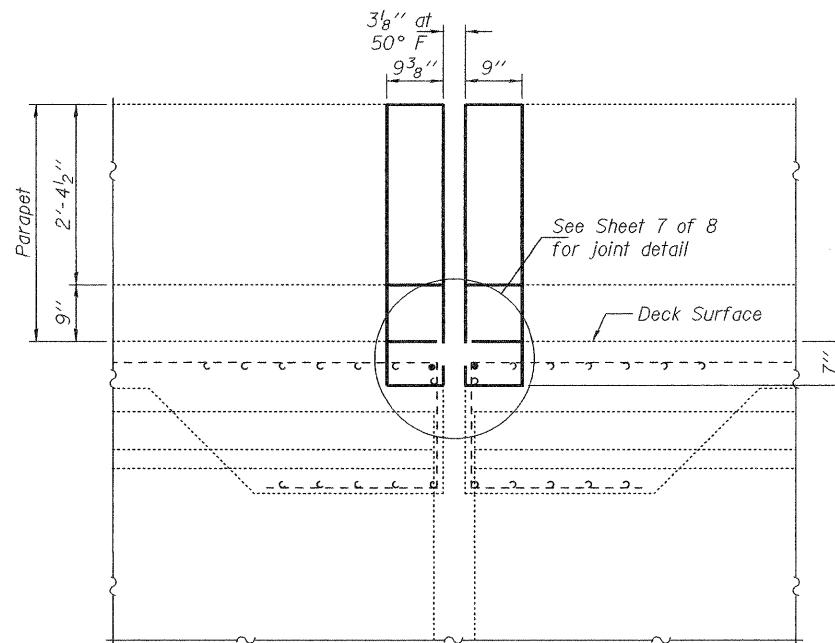
**REMOVAL SECTION AT WEST ABUTMENT**  
(Looking South)

Hatched areas indicate removal.

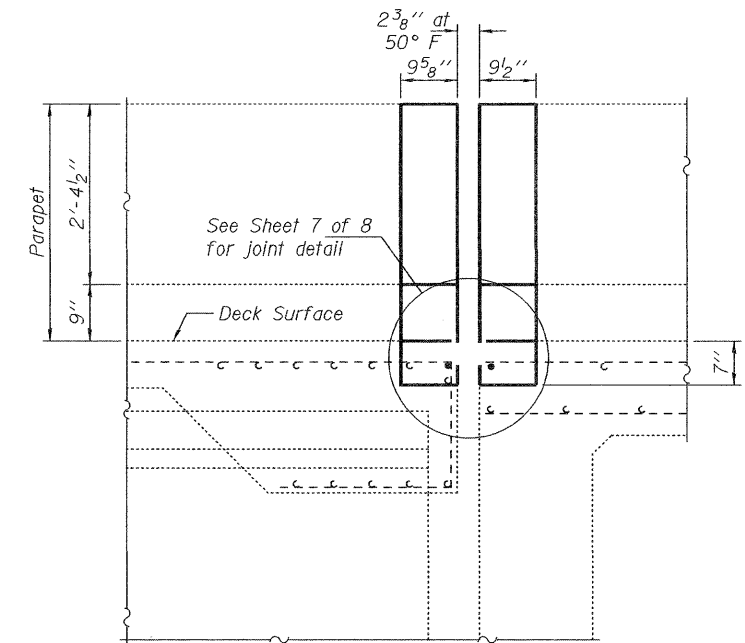
Removal of existing neoprene joints and drain trough is included with Concrete Removal.



**SECTION AT PIER 1**  
(Looking South)



**SECTION AT PIER 5**  
(Looking South)



**SECTION AT WEST ABUTMENT**  
(Looking South)

DESIGNED - ATH  
CHECKED - VHV  
DRAWN - **Drew Christopher**  
CHECKED - ATH VHV

EXAMINED  
PASSED  
ACTING ENGINEER OF STRUCTURAL SERVICES  
ACTING ENGINEER OF BRIDGES AND STRUCTURES

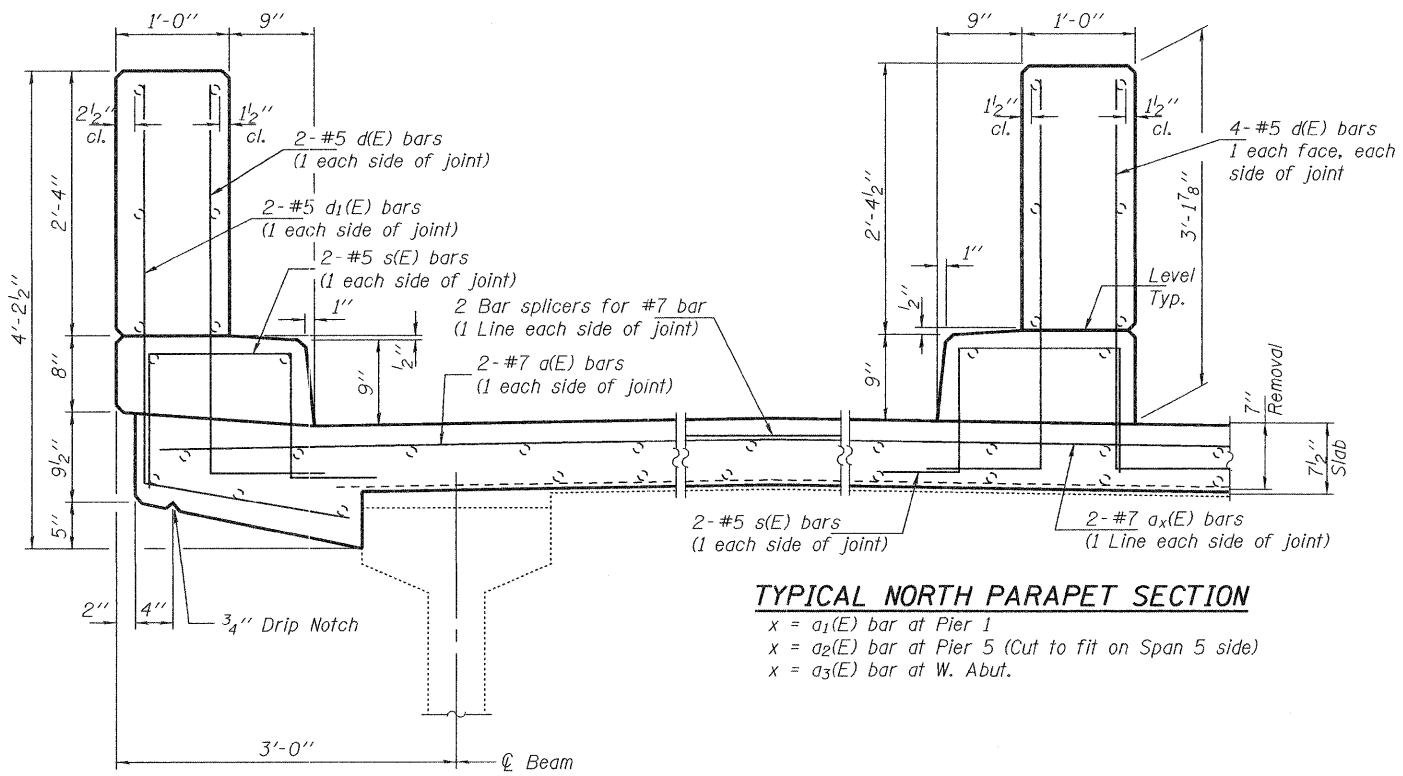
DATE - MARCH 21, 2011

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**REPAIR DETAILS**  
**SN 043-0043**

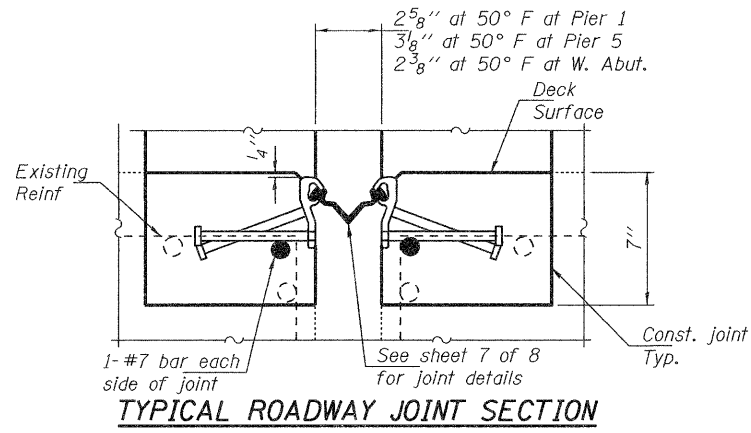
SHEET NO. 5 OF 8 SHEETS

F.A.P. RTE. 301	SECTION 102VBR-M	COUNTY JODAVIESS	TOTAL SHEETS 22	SHEET NO. 19
CONTRACT NO. 64582			ILLINOIS FED. AID PROJECT	

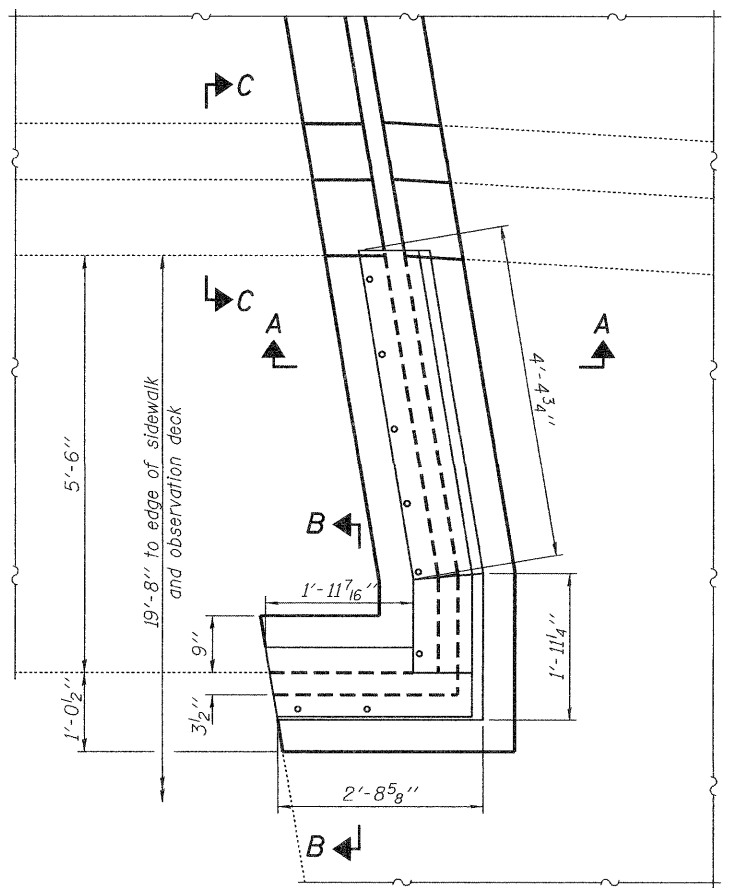


**TYPICAL NORTH PARAPET SECTION**  
 x = a<sub>1</sub>(E) bar at Pier 1  
 x = a<sub>2</sub>(E) bar at Pier 5 (Cut to fit on Span 5 side)  
 x = a<sub>3</sub>(E) bar at W. Abut.

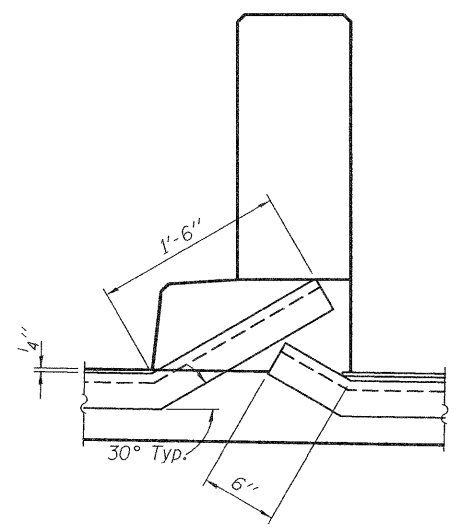
**TYPICAL SOUTH PARAPET SECTION**



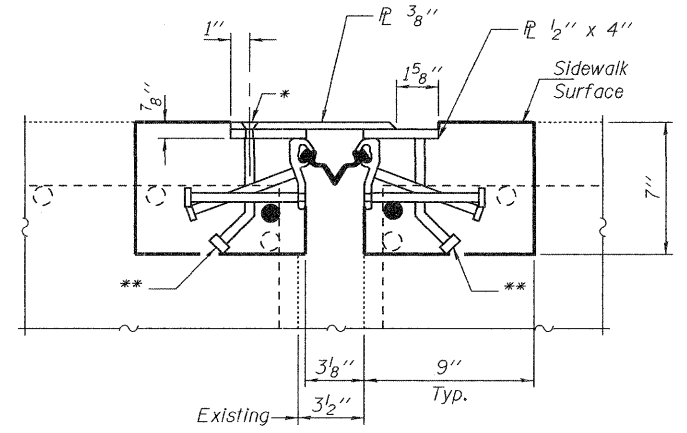
**TYPICAL ROADWAY JOINT SECTION**



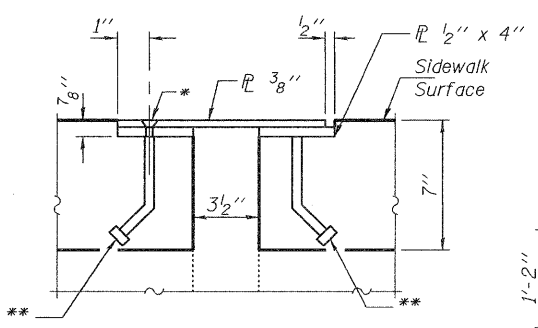
**PARTIAL PLAN AT SIDEWALK AT PIER 5**



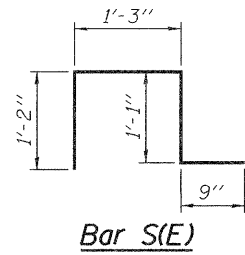
**SECTION C-C**



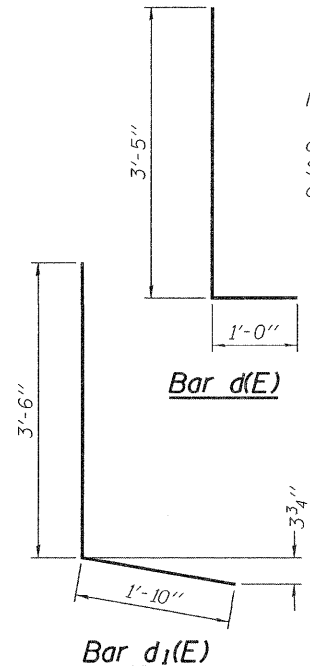
**SECTION A-A**  
(See Note)



**SECTION B-B**  
(See Note)



**Bar S(E)**



**Bar d<sub>1</sub>(E)**

Note:  
 All steel plates and components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Cost of furnishing, galvanizing and installation is included with Preformed Joint Strip Seal

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	6	#7	19'-3"	—
a <sub>1</sub> (E)	2	#7	21'-3"	—
a <sub>2</sub> (E)	2	#7	22'-4"	—
a <sub>3</sub> (E)	2	#7	35'-7"	—
d(E)	18	#5	4'-5"	└
d <sub>1</sub> (E)	6	#5	5'-4"	└
s(E)	12	#5	4'-3"	└
Concrete Removal			Cu. Yd.	5.6
Concrete Superstructure			Cu. Yd.	5.9
Reinforcement Bars, Epoxy Coated			Lbs.	680

DESIGNED - ATH  
 CHECKED - VHV  
 DRAWN - Drew Christopher  
 CHECKED - ATH VHV

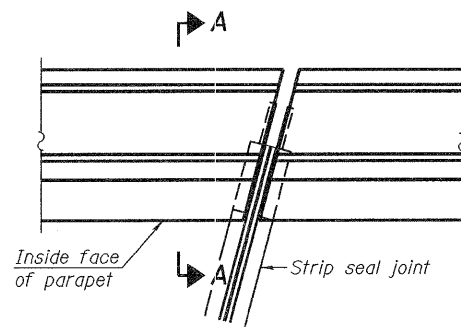
EXAMINED - *Joanne F. J...*  
 ACTING ENGINEER OF STRUCTURAL SERVICES  
 PASSED - *Carl...*  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES  
 DATE - MARCH 21, 2011

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

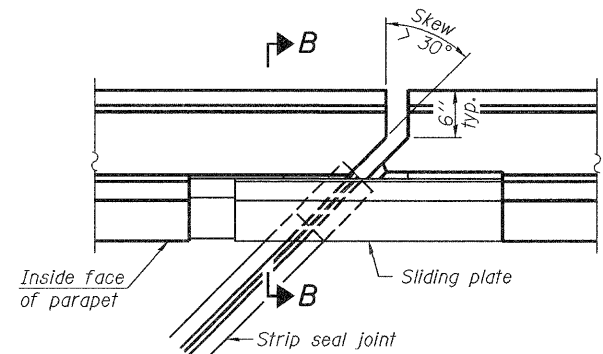
REPAIR DETAILS  
 SN 043-0043

SHEET NO. 6 OF 8 SHEETS

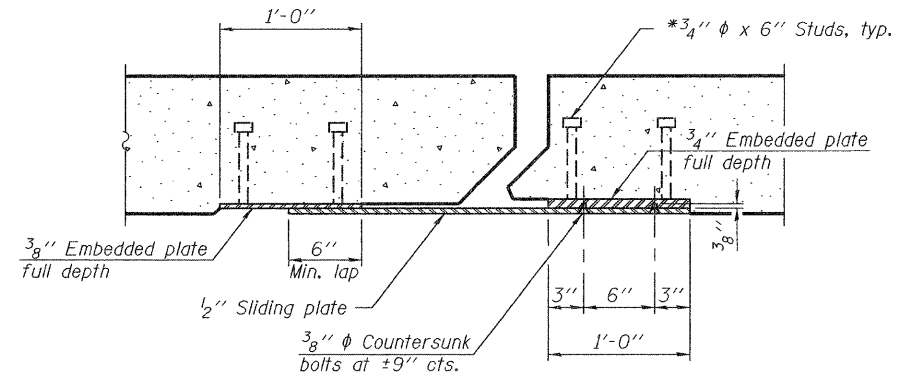
F.A.P. RTE. 301 SECTION 102VBR-M COUNTY JODAVIESS TOTAL SHEETS 22 SHEET NO. 20 CONTRACT NO. 64562 ILLINOIS FED. AID PROJECT



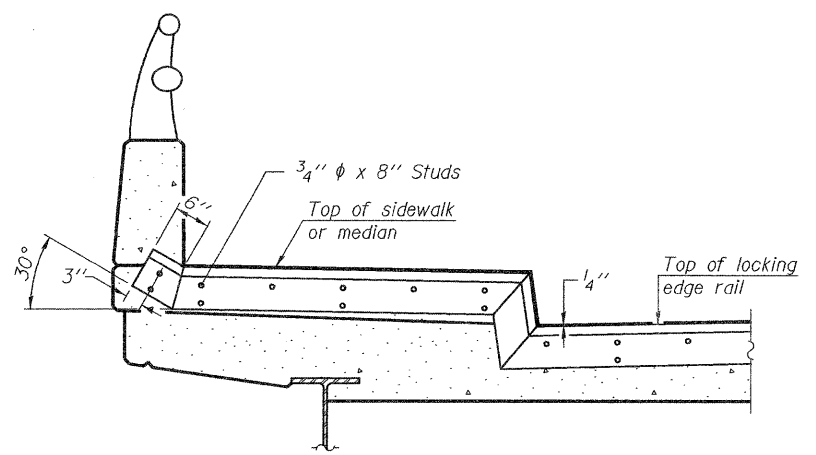
**PLAN**  
(For skews  $\leq 30^\circ$ )



**PLAN**  
(For skews  $> 30^\circ$ )  
Showing point block

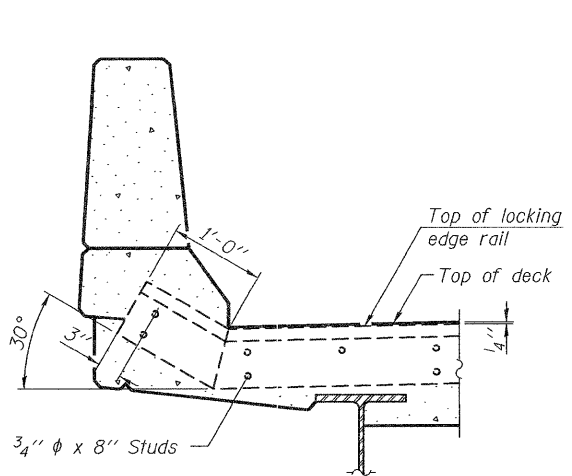


**SECTION C-C**

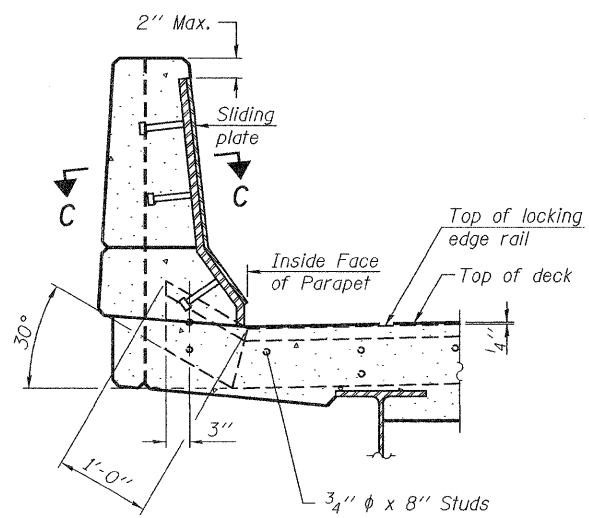


**TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN**

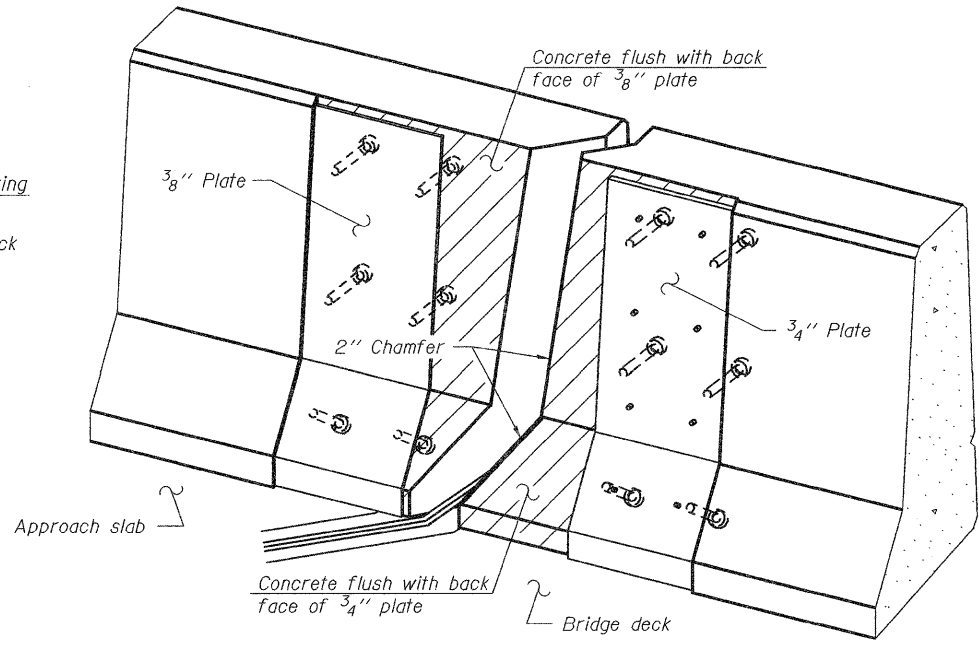
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



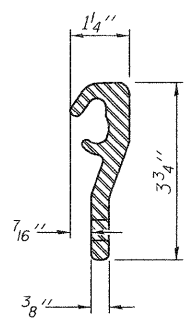
**SECTION A-A**



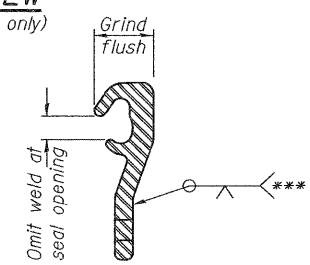
**SECTION B-B**



**TRIMETRIC VIEW**  
(Showing back plates only)



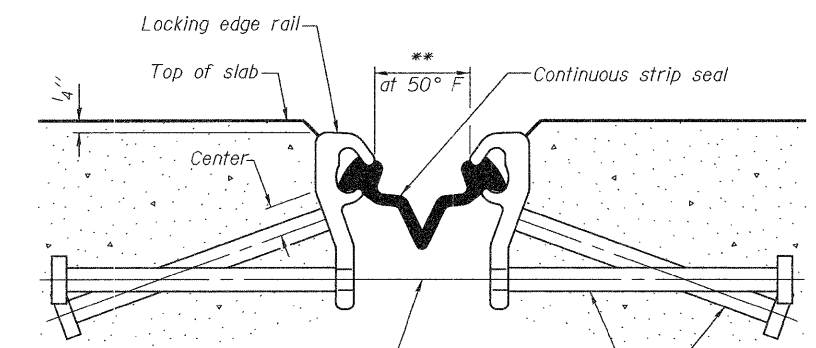
**LOCKING EDGE RAIL**



**LOCKING EDGE RAIL SPLICE**

**Notes:**  
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.  
The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.  
The inside of the Locking Edge Rail groove shall be free of weld residue. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.  
The manufacturer's recommended installation methods shall be followed.

\*\*\* Back gouge not required if complete joint penetration is verified by mock-up.



**SECTION THRU STRIP SEAL JOINT**

7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

Place 1/2"  $\phi$  x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" alt. cts.

\*\* Pier 1 - 13/4"  
Pier 5 - 2 1/4"  
West Abut. - 1 1/2"

**Notes:**  
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.  
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.  
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.  
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.  
Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.  
Parapet plates and anchorage studs for skews  $> 30^\circ$  included in the cost of Preformed Joint Strip Seal.

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	120

DESIGNED - ATH  
CHECKED - VHV  
DRAWN - Drew Christopher  
CHECKED - ATH VHV

EXAMINED  
PASSED  
ACTING ENGINEER OF STRUCTURAL SERVICES  
ACTING ENGINEER OF BRIDGES AND STRUCTURES

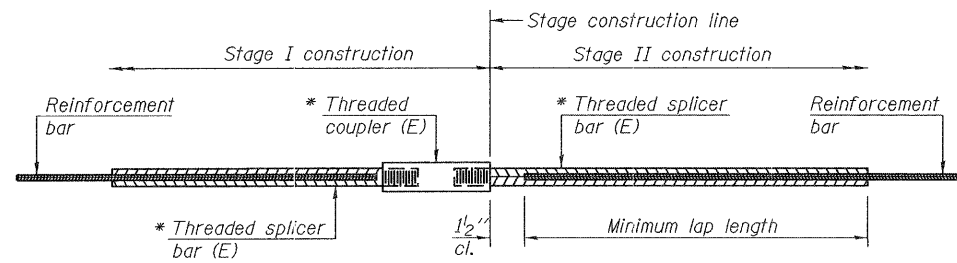
DATE - MARCH 21, 2011

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL  
SN 043-0043

SHEET NO. 7 OF 8 SHEETS

F.A.P. RTE. 301  
SECTION 102VBR-M  
COUNTY JODAVIESS  
TOTAL SHEETS 22  
SHEET NO. 21  
CONTRACT NO. 64682  
ILLINOIS FED. AID PROJECT



**STANDARD BAR SPLICER ASSEMBLY**

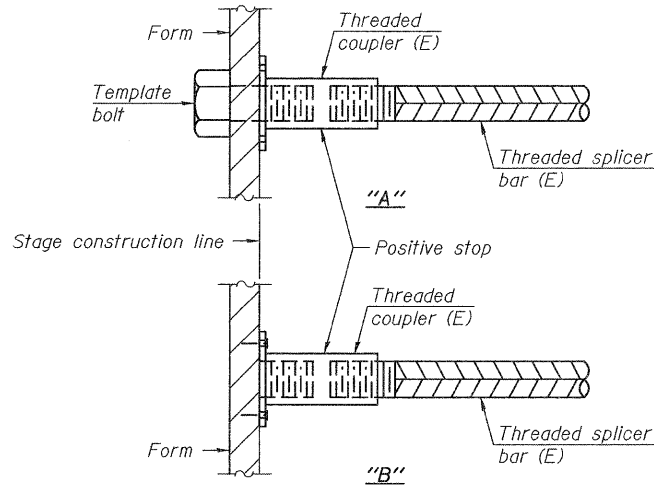
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

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

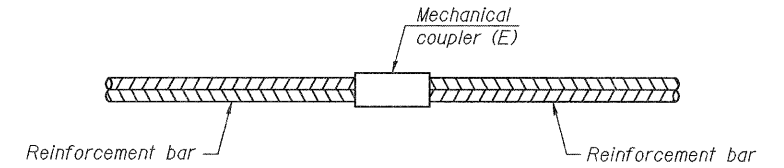
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#7	6	3



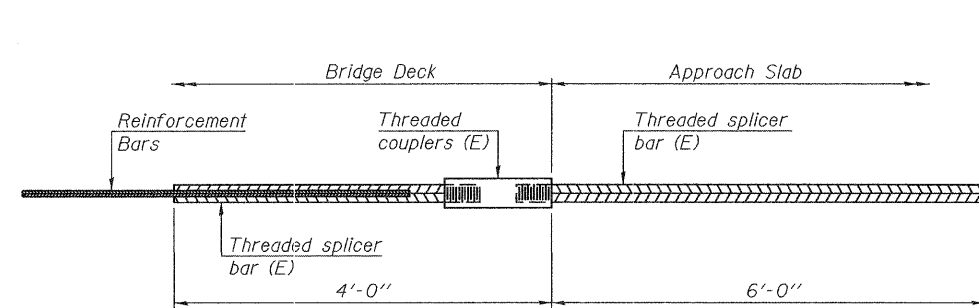
**INSTALLATION AND SETTING METHODS**

"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.



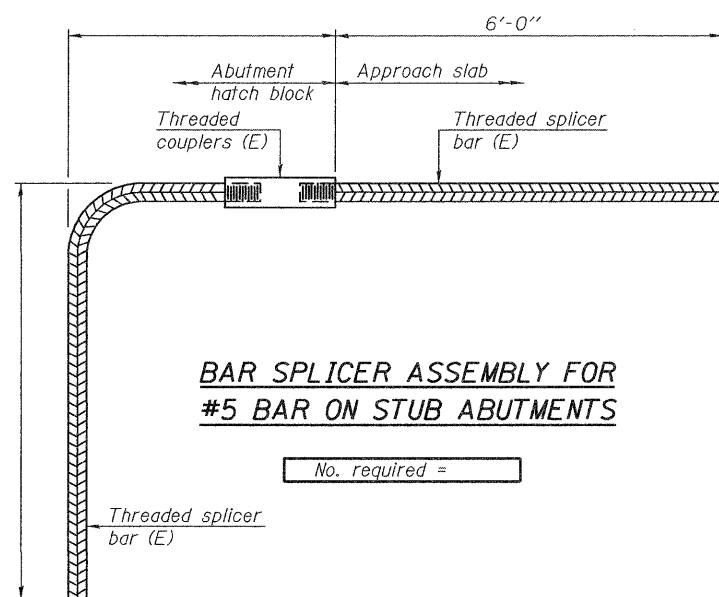
**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

No. required =



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. 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 special provision for Mechanical Splicers.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

7-1-10

DESIGNED - ATH  
 CHECKED - VHV  
 DRAWN - Drew Christopher  
 CHECKED - ATH VHV

EXAMINED  
 PASSED  
 ACTING ENGINEER OF STRUCTURAL SERVICES  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - MARCH 21, 2011

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 SN 043-0043

SHEET NO. 8 OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	102VBR-M	JODAVIESS	22	22
CONTRACT NO. 64582			ILLINOIS FED. AID PROJECT	