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2. Summary of Quantities
3. General Notes & Standards
4. Traffic Control Plan Stage I
5. Traffic Control Plan Stage I
6. Traffic Control Plan Stage II
7. Traffic Control Plan Stage II
8. Plan & Elevation Structure No. 081-0038
9. Details Structure No. 081-0038
10. Preformed Joint Strip Seal Details SN 081-0038
11. Bar Splicer Assembly and Mechanical Assembly Details SN 081-0038

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

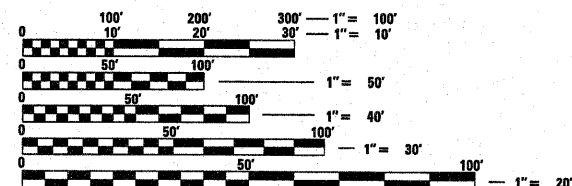
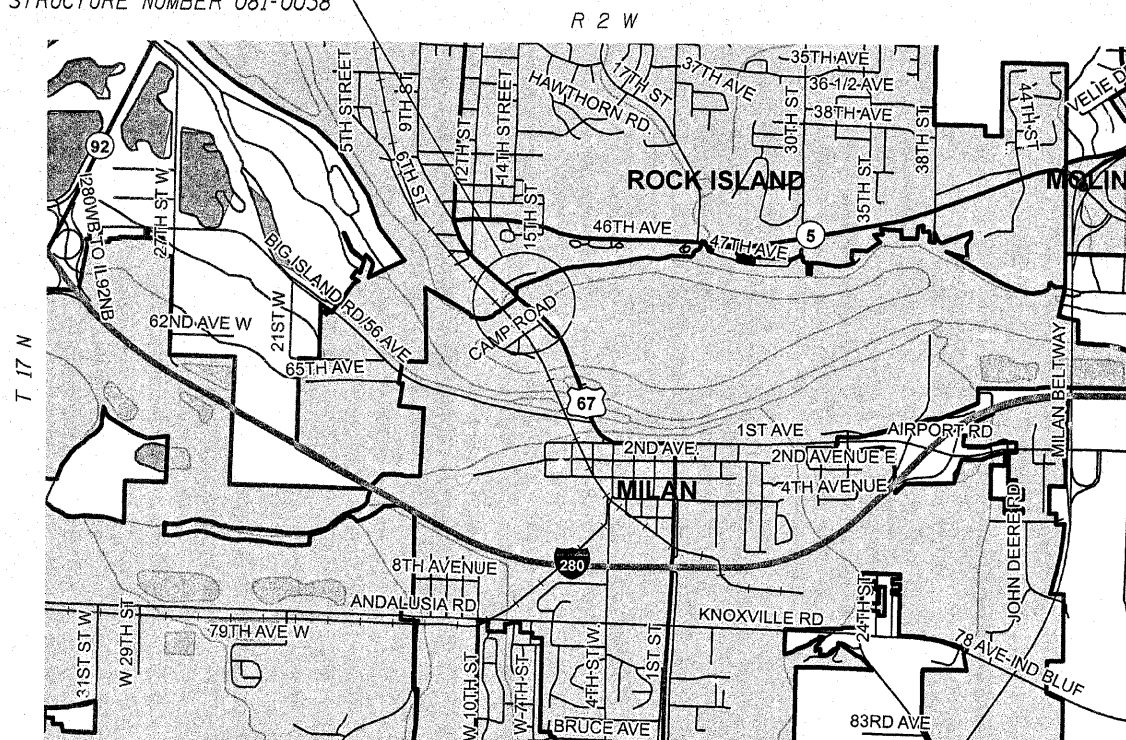
## PROPOSED HIGHWAY PLANS

FAP ROUTE 599 (US 67)  
SECTION 17(D)BR-M

BRIDGE REPAIRS  
ROCK ISLAND COUNTY

C-92-058-10

PROJECT LOCATION  
STRUCTURE NUMBER 081-0038



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.

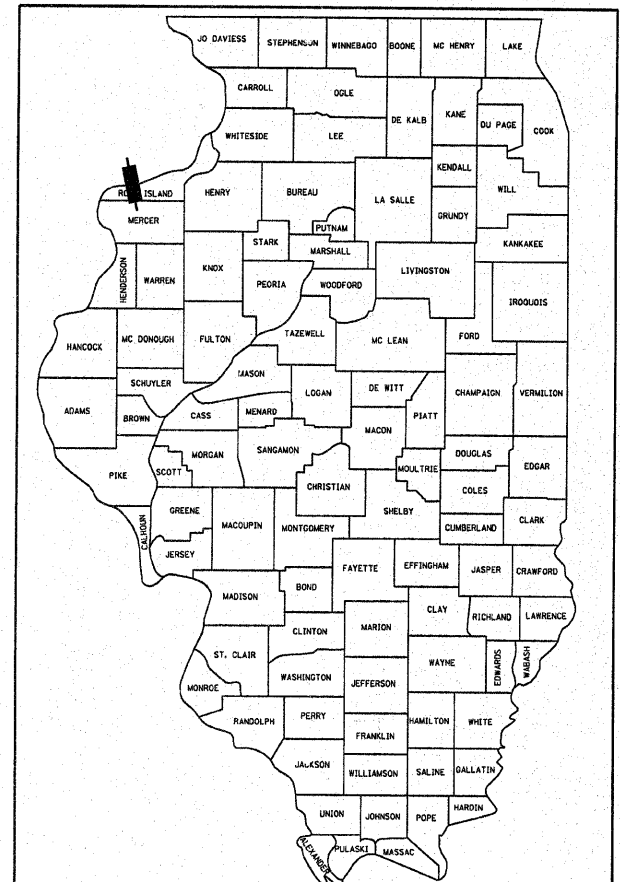
J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER: Mahmoud Etemadi 815/284-5393

GROSS LENGTH = 705.5 FT. = 0.134 MILE  
NET LENGTH = 705.5 FT. = 0.134 MILE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
599	17(D)BR-M	ROCK ISLAND	11	1
ILLINOIS CONTRACT NO. 64F94				

D-92-034-10



LOCATION OF SECTION INDICATED THUS: — ■ —

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED December 4, 2009  
George F. Rymer  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
January 09, 2010  
Scott E. Stitt P.E.  
ACTING ENGINEER OF DESIGN AND ENVIRONMENT  
January 09, 2010  
Christine M. Reed  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

CONTRACT NO. 64F94

SUMMARY OF QUANTITIES

paycode	description	units	quantity
50102400	CONCRETE REMOVAL	CU YD	55.3
50300255	CONCRETE SUPERSTRUCTURE	CU YD	55.3
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4880
50800515	BAR SPLICERS	EACH	62
52000110	PREFORMED JOINT STRIP SEAL	FOOT	404
52000365	NEOPRENE EXPANSION JOINT 6 1/2"	FOOT	69
67100100	MOBILIZATION	L SUM	1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	12510
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4170
70400100	TEMPORARY CONCRETE BARRIER	FOOT	912.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	912.5
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	3240
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1150
Z0024476	FLEXIBLE DELINEATOR MAINTENANCE	EACH	100
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2

\* SPECIALTY ITEM

# 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.*

*No permits from the agencies governing the Rock River have been obtained for this work. If any concrete or debris is dropped in the river it will require that the contractor obtain the permits. No debris can be dropped in the river without obtaining the permit and abiding by the requirements.*

*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.*

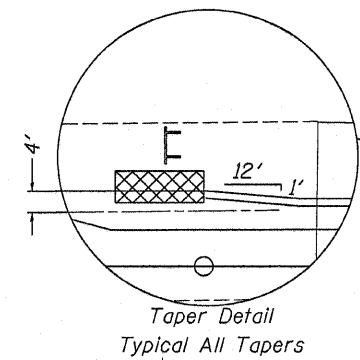
*The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123.*

# STANDARDS

- 701101-02 Off-Road Operations, Multilane, 4.5 m (15') to 600 mm (24" ) From Pavement Edge
- 701426-03 Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds > 45 MPH
- 701606-06 Urban Lane Closure, Multilane, 2W with Mountable Median
- 701801-04 Lane Closure, Multilane 1W or 2W Crosswalk or Sidewalk Closure
- 701901-01 Traffic Control Devices
- 704001-06 Temporary Concrete Barrier
- 720001-01 Sign Panel Mounting Details
- 720006-02 Sign Panel Erection Details
- 720001-01 Sign Panel Mounting Details
- 728001-01 Telescoping Steel Sign Support
- 729001-01 Applications of Types A and B Metal Posts (For Signs & Markers)

FILE NAME =	USER NAME = linkdj	DESIGNED - ---	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	General Notes Standards	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT SCALE = 50.0000' / IN.	CHECKED - ---	REVISED - ---			CONTRACT NO. 64F94				
	PLOT DATE = Fri Dec 04 13:07:32 2009	DATE - ---	REVISED - ---			ILLINOIS FED. AID PROJECT				
SCALE: _____ SHEET NO. __ OF __ SHEETS STA. _____ TO STA. _____										

Refer to Standard 701606-06 for additional details, signing & devices.



Stage I	6120	
Stage II	6390	
<hr/>		
Total	12510	Feet

FILE NAME =	USER NAME = linkdj	DESIGNED - ---	REVISED - ---	<p align="center"><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p>	<p align="center"><b>Traffic Control Plan</b> <b>Stage I</b></p>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = Fri Dec 04 13:07:26 2009		DATE - ---	REVISED - ---		ILLINOIS FED. AID PROJECT								
SCALE: -----	SHEET NO. --	OF --- SHEETS	STA. -----	TO STA. -----									

River

End of Work Zone

25' 50'

Structure 081-0038

270'

270'

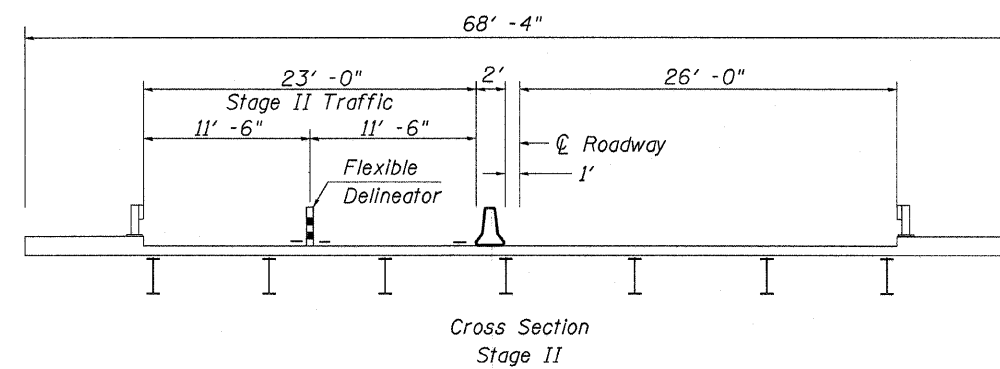
US 67

North Ave

540

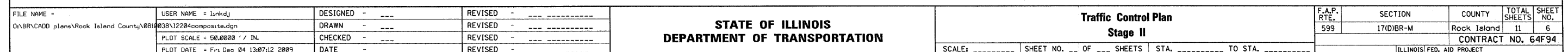
Quarry Entrance

Rock



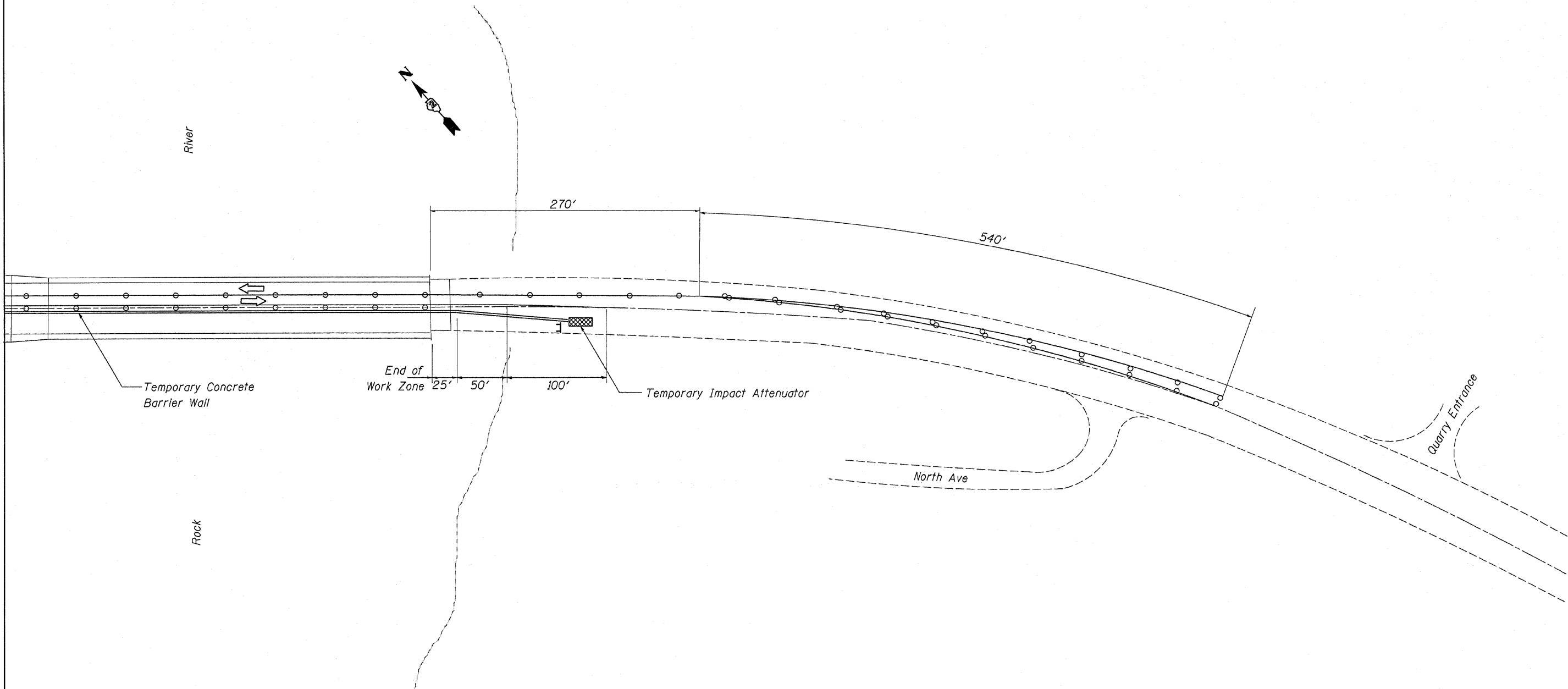
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G:\BR\CADD plans\Rock Island County\0810038\12204composite.dgn		DRAWN - ___	REVISED - ___		SCALE: _____ SHEET NO. __ OF __ SHEETS STA. _____ TO STA. _____	CONTRACT NO. 64F94		
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PLOT DATE = Tue Dec 08 08:28:33 2009		DATE - ___	REVISED - ___					

Refer to Standard 701606-06 for additional details, signing & devices.



# Traffic Control Plan Stage II

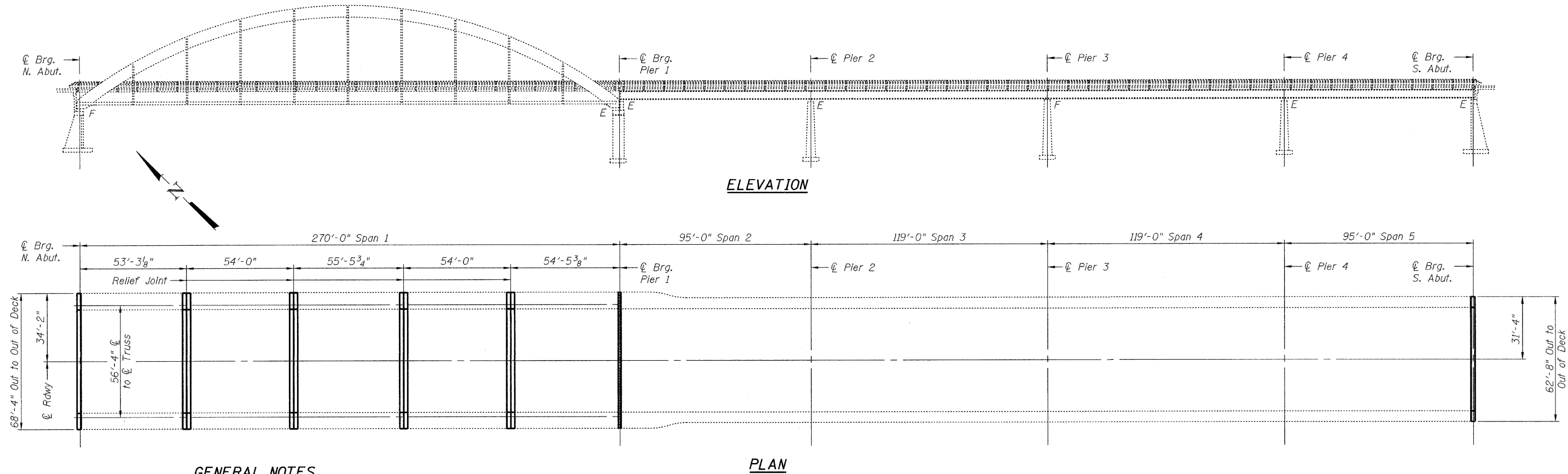
Refer to Standard 701606-06 for additional details, signing & devices.



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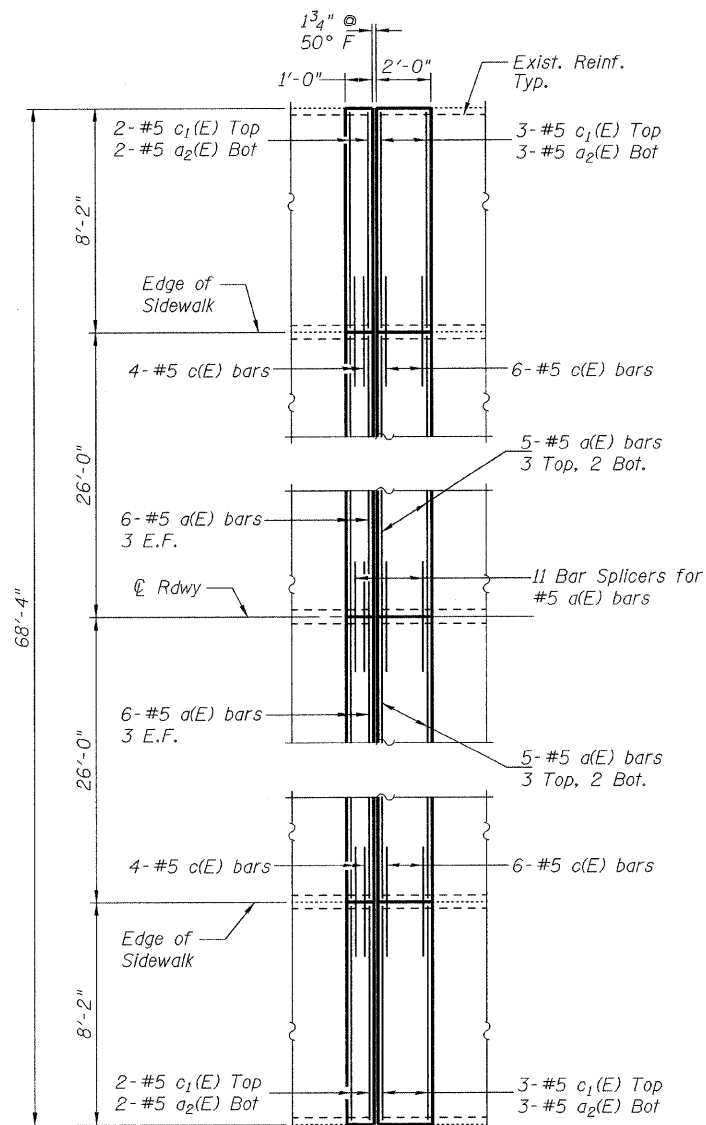


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

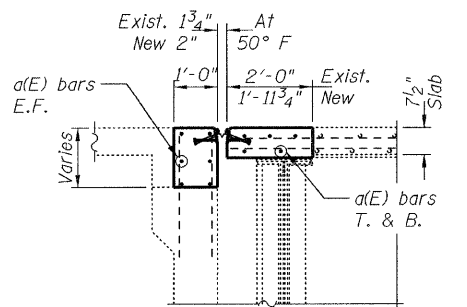




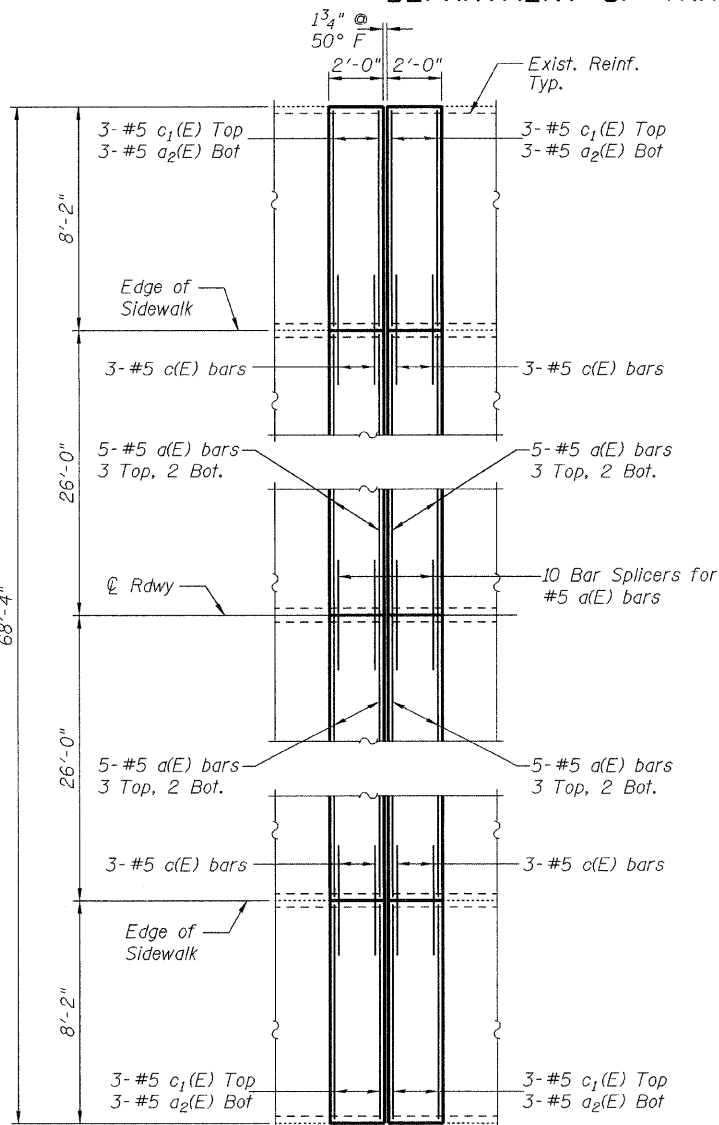
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



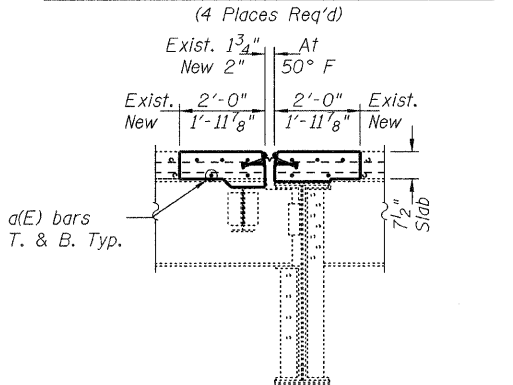
NORTH ABUTMENT PLAN



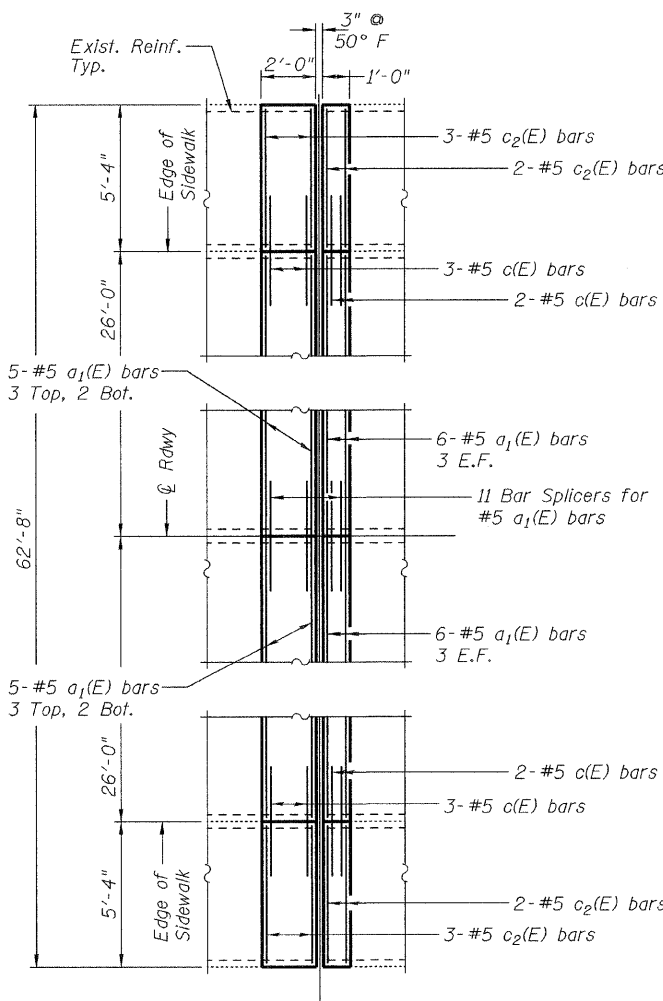
NORTH ABUTMENT SECTION



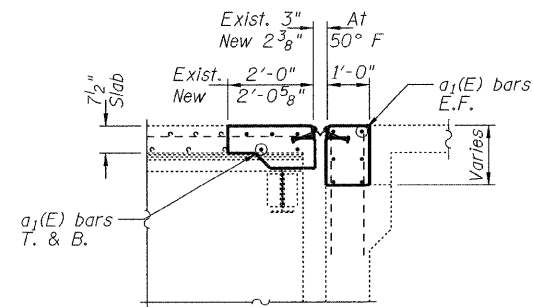
TRUSS SPAN RELIEF JOINT PLAN



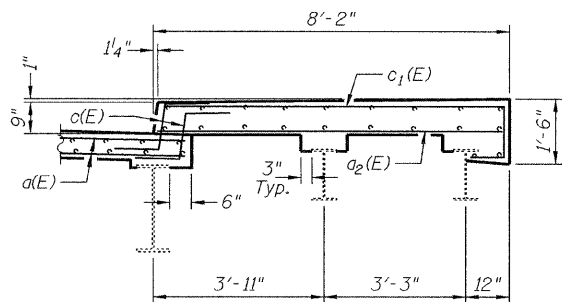
TRUSS SPAN RELIEF JOINT SECTION



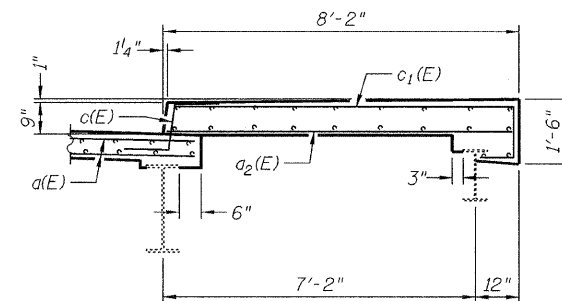
SOUTH ABUTMENT PLAN



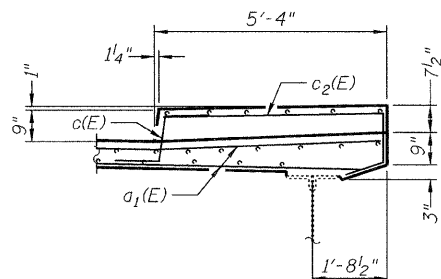
SOUTH ABUTMENT SECTION



NORTH ABUTMENT SECTION  
AT SIDEWALK



TRUSS RELIEF JOINT  
SECTION AT SIDEWALK



SOUTH ABUTMENT SECTION  
AT SIDEWALK

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	102	#5	26'-8"	
a <sub>1</sub> (E)	22	#5	31'-0"	
a <sub>2</sub> (E)	58	#5	7'-10"	
c(E)	78	#5	2'-5"	
c <sub>1</sub> (E)	58	#5	9'-8"	
c <sub>2</sub> (E)	10	#5	7'-4"	
Concrete Removal			Cu. Yd.	55.3
Concrete Superstructure			Cu. Yd.	55.3
Reinforcement Bars, Epoxy Coated			Lbs.	4,880

DETAILS

SN 081-0038

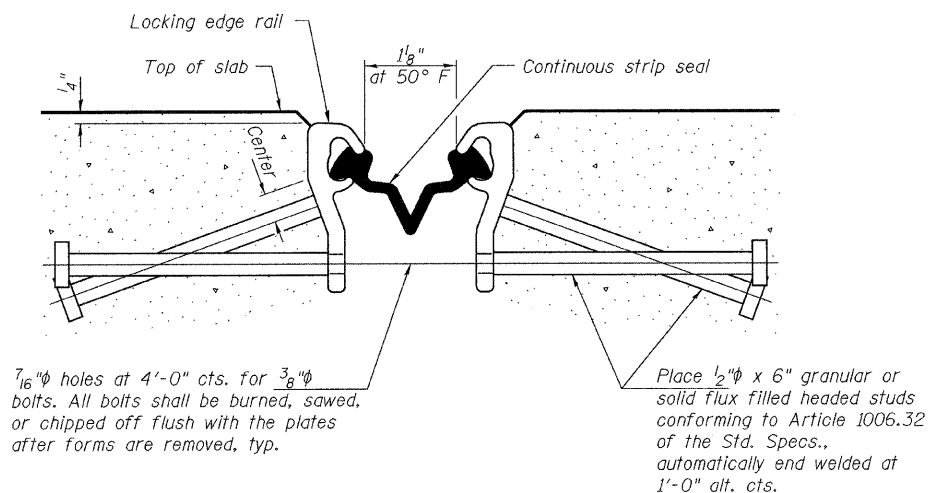
DESIGNED	A.T.H.
CHECKED	I.J.L.
DRAWN	Drew Christopher
CHECKED	A.T.H. I.J.L.

EXAMINED	January 8, 2009
PASSED	Ralph E. Anderson

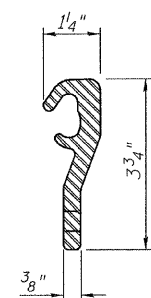
SHEET NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2	599	17(D)BR-M	Rock Island	11	9
4 SHEETS			CONTRACT NO.	64F94	
			FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

\* Omit weld at seal opening.

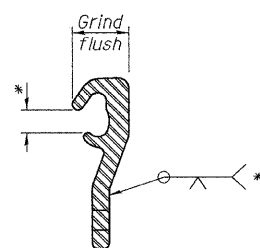
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



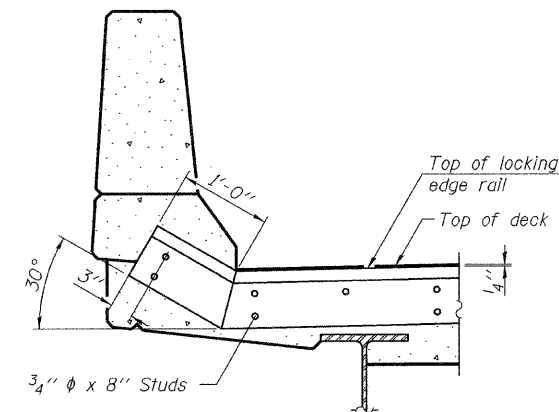
SECTION THRU STRIP SEAL JOINT  
FOR OVERLAY OVER DECK BEAMS



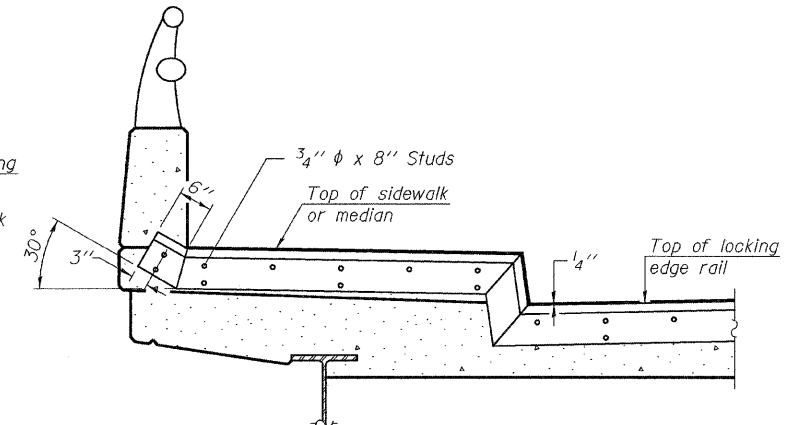
LOCKING EDGE RAIL



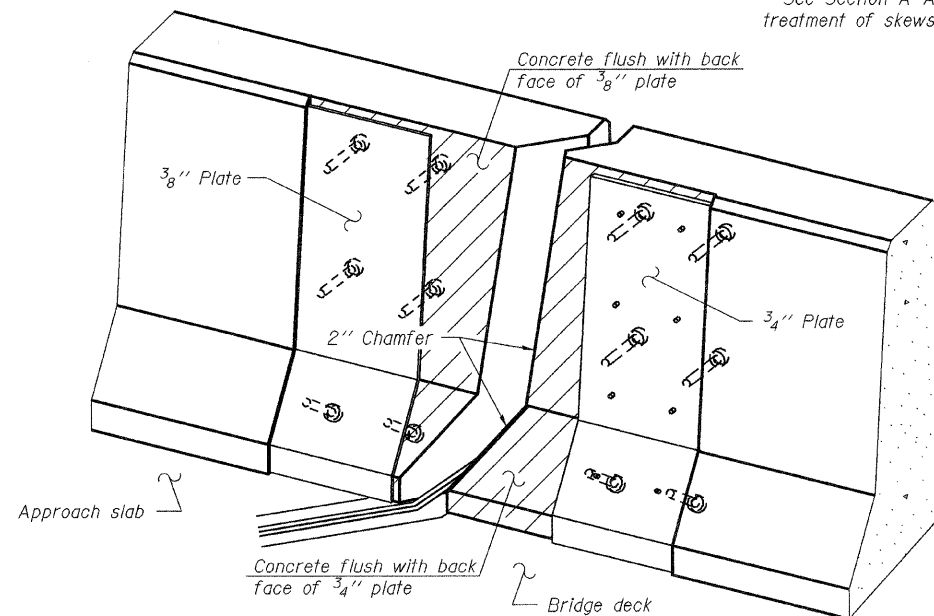
LOCKING EDGE RAIL SPLICE



AT PARAPET  
See Section A-A for end treatment of skews > 30°.



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.

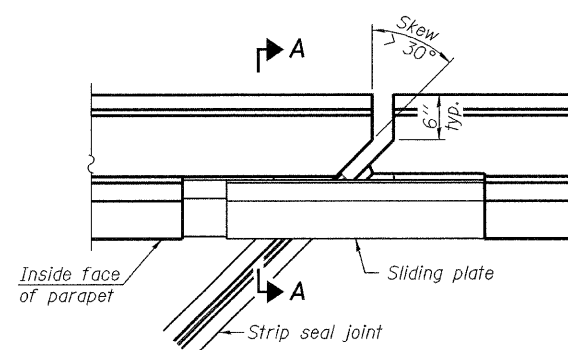


TYPICAL END TREATMENTS

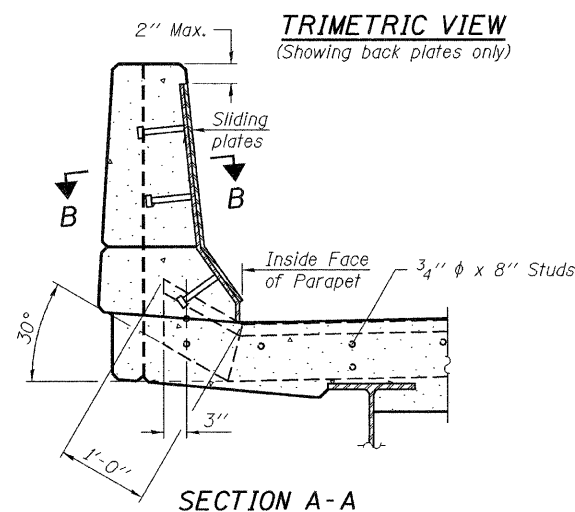
Notes:

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.



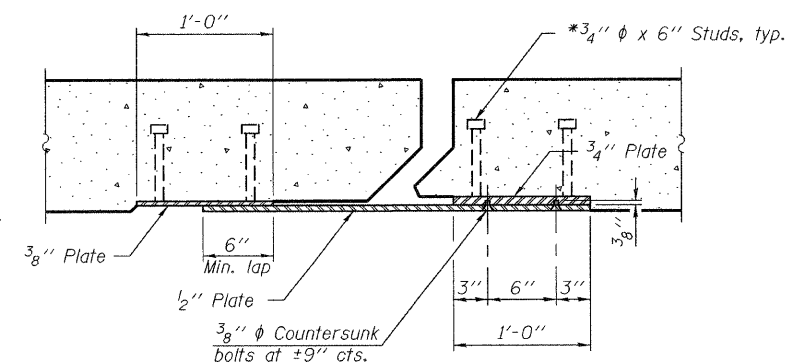
PLAN



TRIMETRIC VIEW  
(Showing back plates only)

SECTION A-A

POINT BLOCK DETAILS  
(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	404

PREFORMED JOINT STRIP  
SEAL DETAILS  
SN 081-0038

DESIGNED	A.T.H.
CHECKED	I.J.L.
DRAWN	Drew Christopher
CHECKED	A.T.H. I.J.L.

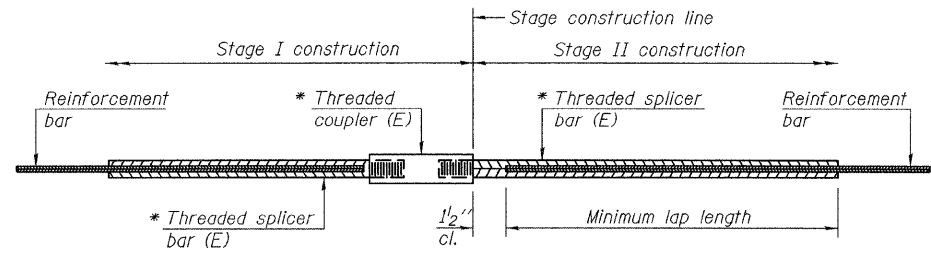
January 8, 2009	
EXAMINED	<i>Carl P. [Signature]</i>
	ENGINEER OF STRUCTURAL SERVICES
PASSED	<i>Ralph E. Anderson</i>
	ENGINEER OF BRIDGES AND STRUCTURES

EJ-SSJ

11-1-09

SHEET NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3	599	17(D)BR-M	Rock Island	11	10
4 SHEETS			CONTRACT NO.	64F94	
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**STANDARD BAR SPLICER ASSEMBLY**

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

Table 1: Black bar, 0.8 Class C

Table 2: Black bar, Top bar lap, 0.8 Class C

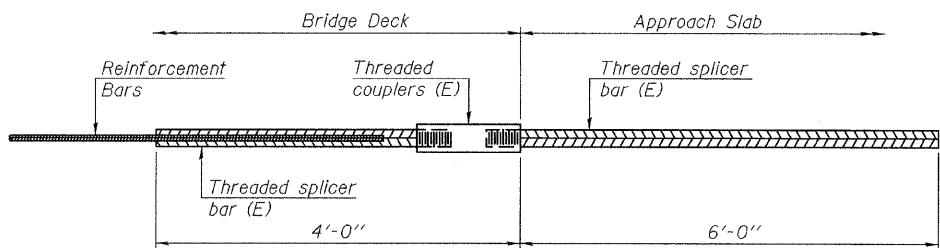
Table 3: Epoxy bar, 0.8 Class C

Table 4: Epoxy bar, Top bar lap, 0.8 Class C

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

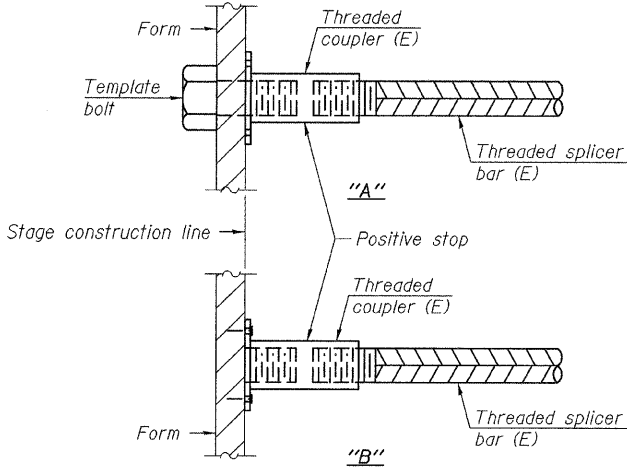
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



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

No. required =

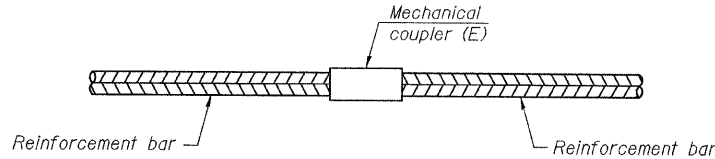


**INSTALLATION AND SETTING METHODS**

"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
Deck	#5	50
Abutment	#5	12

**NOTES**

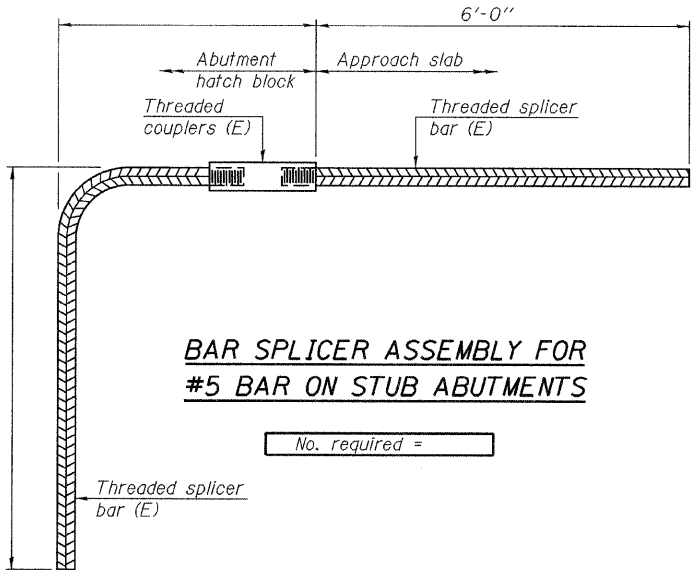
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

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.



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

No. required =

**BAR SPLICER ASSEMBLY AND  
MECHANICAL SPLICER DETAILS**  
**SN 081-0038**

DESIGNED	A.T.H.
CHECKED	I.J.L.
DRAWN	Drew Christopher
CHECKED	A.T.H. I.J.L.

EXAMINED	January 8, 2009
PASSED	Ralph E. Anderson

BSD-1 11-1-09

SHEET NO. 4	F.A. RTE. 599	SECTION 17(D)BR-M	COUNTY Rock Island	TOTAL SHEETS 11	SHEET NO. 11
4 SHEETS	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 64F94	