



## INDEX OF SHEETS

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4	SUMMARY OF QUANTITIES
5	EXISTING ROADWAY TYPICAL SECTION
6	EXISTING STRUCTURE TYPICAL SECTION
7-8	STAGING PLANS
9-10	WIDTH RESTRICTION SIGNING
11-17	S.N. 057-0073 REPAIR PLANS

## LIST OF STANDARDS

<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
442201-03	CLASS C AND D PATCHES
631031-07	TRAFFIC BARRIER TERMINAL, TYPE 6
701006-03	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701101-02	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS $\geq$ 45 MPH
701422-02	LANE CLOSURE, MULTILANE, FOR SPEEDS $\geq$ 45 MPH TO 55 MPH
701423-03	LANE CLOSURE, MULTILANE, WITH BARRIER, FOR SPEEDS $>$ 45 MPH TO 55 MPH
701901-01	TRAFFIC CONTROL DEVICES
704001-05	TEMPORARY CONCRETE BARRIER

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED -
c:\pwork\PWIDOT\SHERERJM\00143296\05	0007-sht-gennote.dgn	DRAWN - JMS	REVISED -
	PLOT SCALE = 100.0000' / IN.	CHECKED - JMS	REVISED -
	PLOT DATE = 8/14/2009	DATE - 070109	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS / HIGHWAY STANDARDS**

SCALE: NO SCALE SHEET NO. 1 OF 1 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2466	(57-18)BJR	MCLEAN	17	2
CONTRACT NO. 70807				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

# GENERAL NOTES

G.N.-100  
 ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND  
 SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT.  
 WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION  
 ONLY.

**GN 406H Mixture Requirements**

Location	
Mixture Use	Class D Patch (Flex Pvmt Conn.)
AC/PG	PG 64-22
RAP % (Max)	15
Design Air Voids	4.0% @ Ndes=50
Mix Comp(Gradation)	IL 9.5
Friction Aggregate	Mix C

G.N.-631  
 IF THE CONTRACTOR ELECTS TO USE THE ALTERNATE MOUNTING  
 METHOD OF THRU DRILLING THE MOUNTING HOLES FOR THE TRAFFIC  
 BARRIER TERMINALS, TYPE 6, THE HOLES SHALL BE DRILLED USING  
 A CORE DRILL. A HAMMER DRILL WILL NOT BE ALLOWED.

G.N.-609

PRIOR TO ROUTING TRAFFIC ONTO THE SHOULDERS AS SHOWN IN THE  
 STAGING PLANS, THE CONTRACTOR SHALL SECURE THE GRATINGS ON  
 SHOULDER INLETS AS DIRECTED BY THE ENGINEER. THIS WORK WILL  
 BE PAID FOR ACCORDING TO ARTICLE 109.04.

COMMITMENTS

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE  
 WRITTEN APPROVAL OF ALL PARTIES TO WHICH THE  
 COMMITMENT WAS MADE.

THERE ARE NO COMMITMENTS FOR THIS PROJECT.

DESIGN NOTE:  
 ALL PLAN DIMENSIONS ARE SUBJECT TO CHANGE IN THE FIELD.  
 THE ENGINEER SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

CLASS D PATCHES							44201777
STATION	DIRECTION	LANE	LENGTH (FT)	WIDTH (FT)	DEPTH (IN)	PATCH AREA TYPE II SQ YD	
234+43.84	NB	DL	5	12	11	6.7	
234+43.84	NB	PL	5	12	11	6.7	
234+43.84	SB	DL	5	12	11	6.7	
234+43.84	SB	PL	5	24	11	13.3	
239+19.16	NB	DL	5	12	11	6.7	
239+19.16	NB	PL	5	24	11	13.3	
239+19.16	SB	DL	5	12	11	6.7	
239+19.16	SB	PL	5	12	11	6.7	
<b>TOTAL =</b>						<b>66.7</b>	
<b>USE =</b>						<b>67.0</b>	

**63200310 GUARDRAIL REMOVAL**

STATION	TO	STATION	FOOT
NB 234+53.91		NB 235+13.91	60.0
<b>TOTAL =</b>			<b>60.0</b>

**63100085 TRAFFIC BARRIER TERMINAL TYPE 6**

STATION	TO	STATION	EACH
NB 234+53.91		NB 235+13.91	1.0
<b>TOTAL =</b>			<b>1.0</b>

PROTECTIVE COAT TO BE APPLIED TO SURFACE OF CLASS D PATCHES,  
 NEW CONCRETE MEDIAN SURFACE, AND NEW CONCRETE SURFACE AT  
 THE ABUTMENT JOINTS.

LOCATION OF WORK:

MCLEAN COUNTY  
 STRUCTURE  
 IMPROVEMENT  
 SN 057-0073  
 FAS 2466 (US 150)  
 STA. 236+82.50  
 100% STATE  
 SFTY-2A

CONSTRUCTION TYPE CODE:

CODE NO	ITEM	UNIT	QUANTITY
44201777	CLASS D PATCHES, TYPE II, 11 INCH	SQ YD	67.0
50102400	CONCRETE REMOVAL	CU YD	51.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	51.8
50300300	PROTECTIVE COAT	SQ YD	306.0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	7,430.0
50800515	BAR SPLICERS	EACH	48.0
52000110	PREFORMED JOINT STRIP SEAL	FOOT	220.0
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1.0
63200310	GUARDRAIL REMOVAL	FOOT	60.0
67100100	MOBILIZATION	L SUM	1.0
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1.0
70100325	TRAFFIC CONTROL AND PROTECTION, STANDARD 701423	EACH	2.0
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,175.0
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1,025.0
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	28.0
* X7200201	WIDTH RESTRICTION SIGNING	L SUM	1.0
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2.0
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2.0

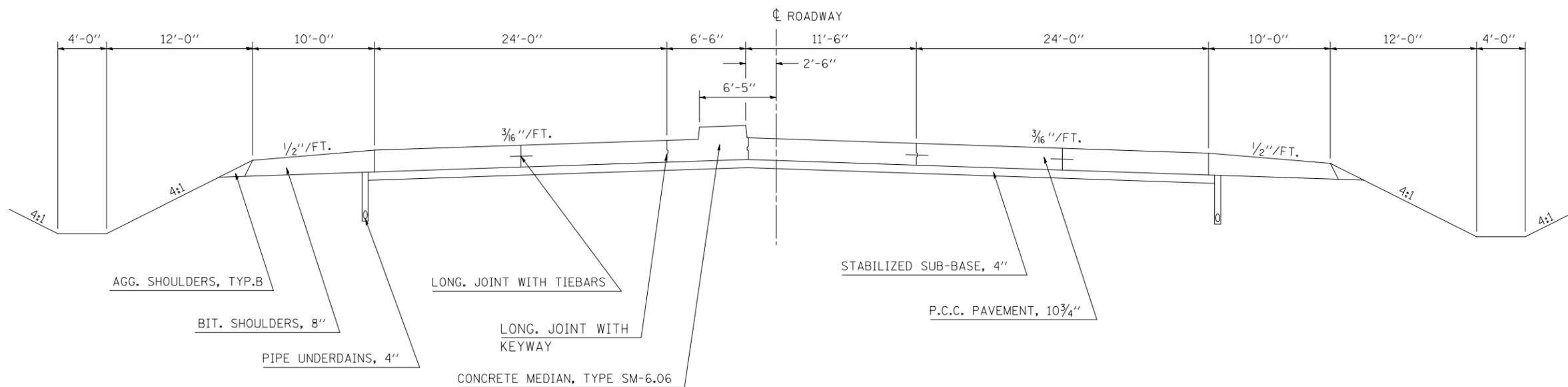
\* SPECIALTY ITEM

FILE NAME =	USER NAME = sherer.jm	DESIGNED - JMS	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\p\work\p\dot\sherer.jm\d0143296\0574907-shr-500.dgn	DRAWN - JMS	REVISED -	2466					(57-18)BJR	MCLEAN	17	4	
PLOT SCALE = 100.0000 / / IN.	CHECKED -	REVISED -	SCALE: NO SCALE SHEET NO. 1 OF 1 SHEETS					CONTRACT NO. 70807				
PLOT DATE = 8/14/2009	DATE - 073109	REVISED -	ILLINOIS FED. AID PROJECT									

# EXISTING TYPICAL SECTION

STATION TO STATION  
206+20.70 239+93.93

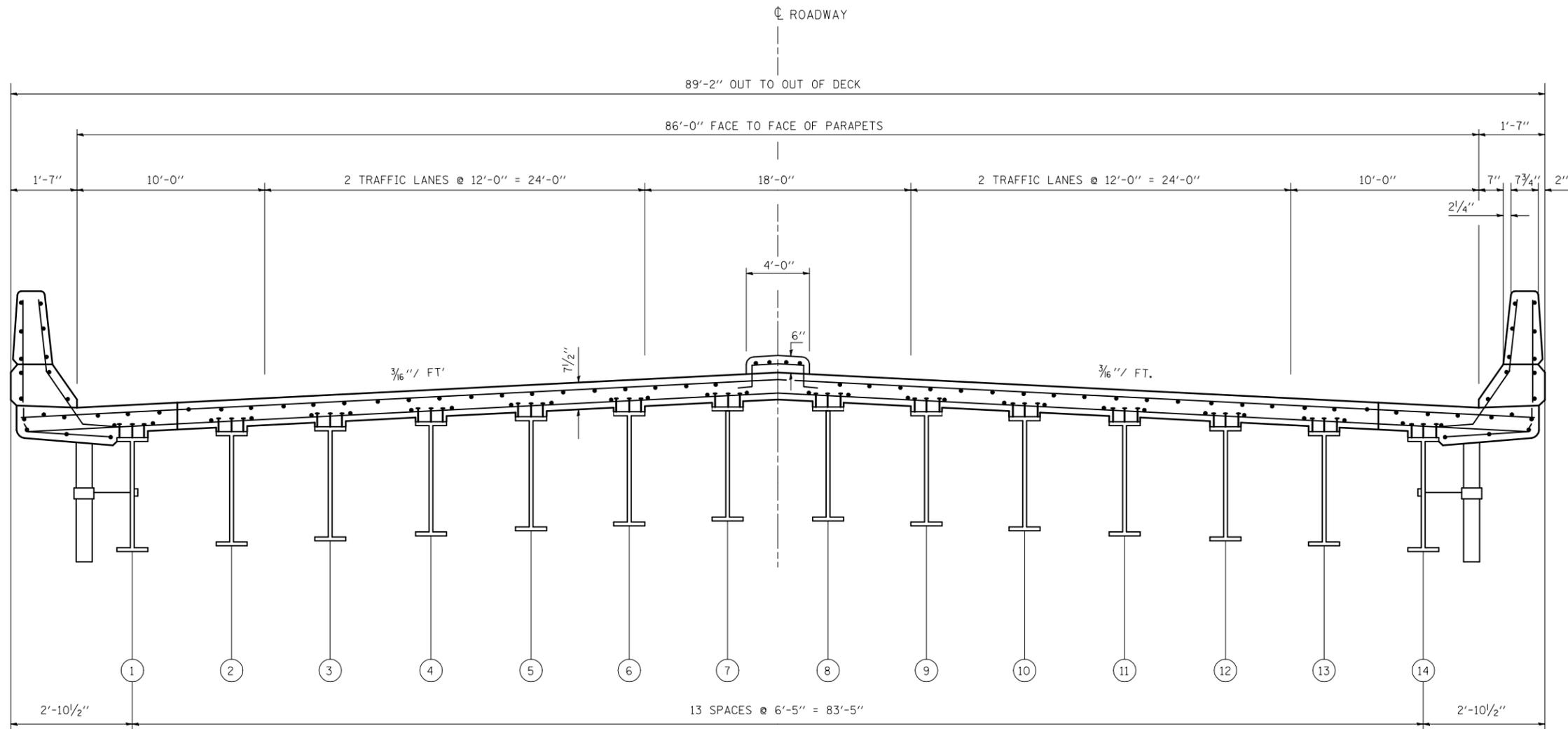
S. N. 057-0073: SBL/NBL STA. 234+45.84 TO 239+19.16



NOT TO SCALE

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING &amp; PROPOSED TYPICAL SECTIONS</b>			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\dot\shererjm\d0143296\0570807-sht-typical.dgn	DRAWN - JMS	REVISED - ---	2466					(57-18)BJR	MCLEAN	17	5	
PLOT SCALE = 100.0000' / IN.	CHECKED - ---	REVISED - ---	CONTRACT NO. 70807									
PLOT DATE = 8/14/2009	DATE - 063009	REVISED - ---	SCALE: NO SCALE		SHEET NO. OF SHEETS	STA. _____ TO STA. _____	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

# EXISTING TYPICAL SECTION



**LOOKING NORTH**

NOT TO SCALE

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---
ct:\pw\work\p\dot\shererjm\d0143296\0570807-sht-typical.dgn		DRAWN - JMS	REVISED - ---
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	PLOT DATE = 8/14/2009	DATE - 063009	REVISED - ---

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING & PROPOSED TYPICAL SECTIONS**

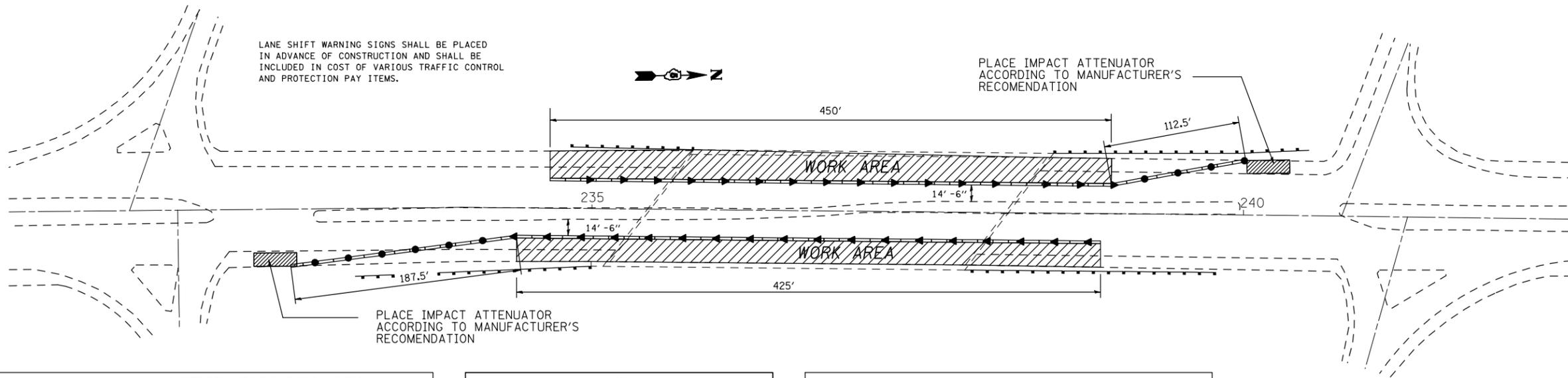
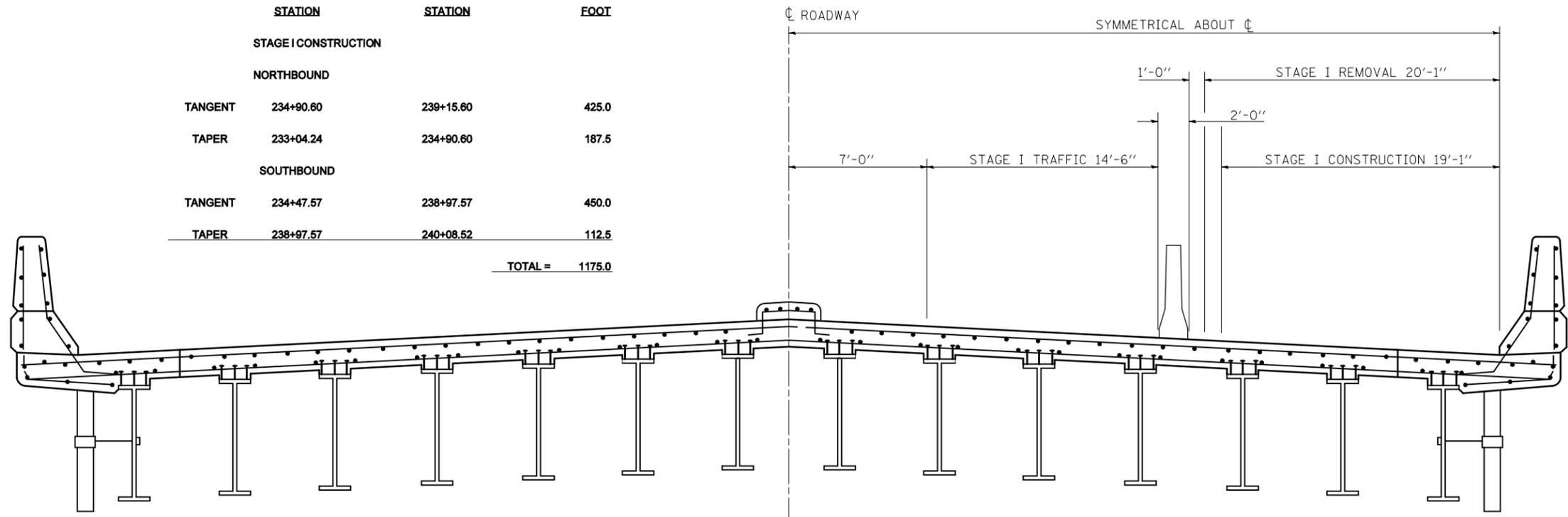
SCALE: NO SCALE SHEET NO. OF SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2466	(57-18)BJR	MCLEAN	17	6
CONTRACT NO. 70807				
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT				

# STAGE I CONSTRUCTION

70400100 TEMPRARY CONCRETE BARRIER

	STATION	STATION	FOOT
<b>STAGE I CONSTRUCTION</b>			
<b>NORTHBOUND</b>			
TANGENT	234+90.60	239+15.60	425.0
TAPER	233+04.24	234+90.60	187.5
<b>SOUTHBOUND</b>			
TANGENT	234+47.57	238+97.57	450.0
TAPER	238+97.57	240+08.52	112.5
<b>TOTAL =</b>			<b>1175.0</b>



LANE SHIFT WARNING SIGNS SHALL BE PLACED IN ADVANCE OF CONSTRUCTION AND SHALL BE INCLUDED IN COST OF VARIOUS TRAFFIC CONTROL AND PROTECTION PAY ITEMS.

PLACE IMPACT ATTENUATOR ACCORDING TO MANUFACTURER'S RECOMENDATION

PLACE IMPACT ATTENUATOR ACCORDING TO MANUFACTURER'S RECOMENDATION

**PLAN NOTES:**

ALL STAGING DETAILS SET UP IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION 701422.

PRIOR TO BARRIER PLACEMENT TRAFFIC CONTROL SHALL BE SET UP IN ACCORDANCE WITH STANDARD 701423.

TRAFFIC CONTROL DETAILS NOT SHOWN ARE TO CONFORM WITH STANDARD 701422 AND 701423.

MESSAGE BOARD SHALL BE PLACED TWO WEEKS PRIOR TO CONSTRUCTION AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS.

RESIDENT ENGINEER AND TRAFFIC CONTROL SUPERVISOR SHALL PROVIDE APPROPRIATE MESSAGE FOR CMS.

ABSORB 350 IMPACT ATTENUATOR WILL NOT BE ALLOWED

RAISED REFLECTIVE PAVEMENT MARKERS AFFECTED BY THE PROPOSED CONSTRUCTION SHALL BE REPLACED. THIS COST SHALL BE INCIDENTAL TO THE VARIOUS TRAFFIC CONTROL PAY ITEMS.

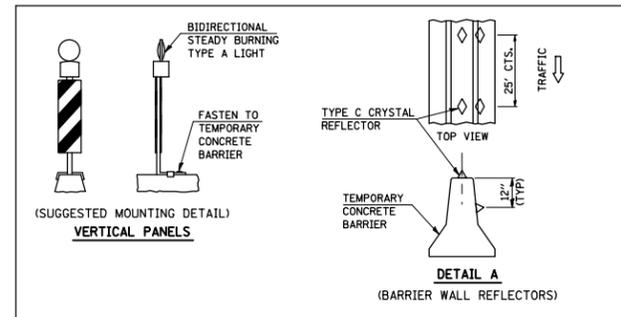
REFLECTORS AND VERTICAL PANELS FOR BARRIER WALL, BRIDGE RAIL AND GUARDRAIL SHALL BE INCLUDED IN THE COST FOR THE APPLICABLE TRAFFIC CONTROL PAY ITEMS.

ATTACH VERTICAL PANELS TO THE LEFT GUARDRAIL AT 25 FOOT CENTERS DURING STAGE II. THIS COST WILL BE INCIDENTAL TO STANDARD 701423.

REFLECTORIZED TEMPORARY MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND ALONG-SIDE THE WORK AREA. THE EDGE LINE SHALL BE YELLOW FOR LEFT LANE CLOSURES. COST FOR THE PLACEMENT AND REMOVAL SHALL BE INCLUDED IN COST FOR APPLICABLE TRAFFIC CONTROL PAY ITEM.

**SYMBOLS**

- ◀ AMBER MONODIRECTIONAL REFLECTOR 25' CTS
- ◁ CRYSTAL MONODIRECTIONAL REFLECTOR 25' CTS
- TEMPORARY CONCRETE BARRIER
- VERTICAL PANELS WITH STEADY BURNING LIGHTS ALONG TAPER 25' CTS
- ⊠ IMPACT ATTENUATOR



ANY ADJUSTMENTS, VARIATIONS OR CHANGES IN THE TRAFFIC CONTROL SHALL BE CONSIDERED AS INCIDENTAL TO 701422 AND 701423 AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

NOT TO SCALE

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED -
et:\pw\work\PWIDOT\SHERERJM\d0143296\050807-shit-staging.dgn		DRAWN - JMS	REVISED -
	PLOT SCALE = 100.0000' / IN.	CHECKED - JMS	REVISED -
	PLOT DATE = 8/17/2009	DATE - 070109	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL STAGING DETAILS**

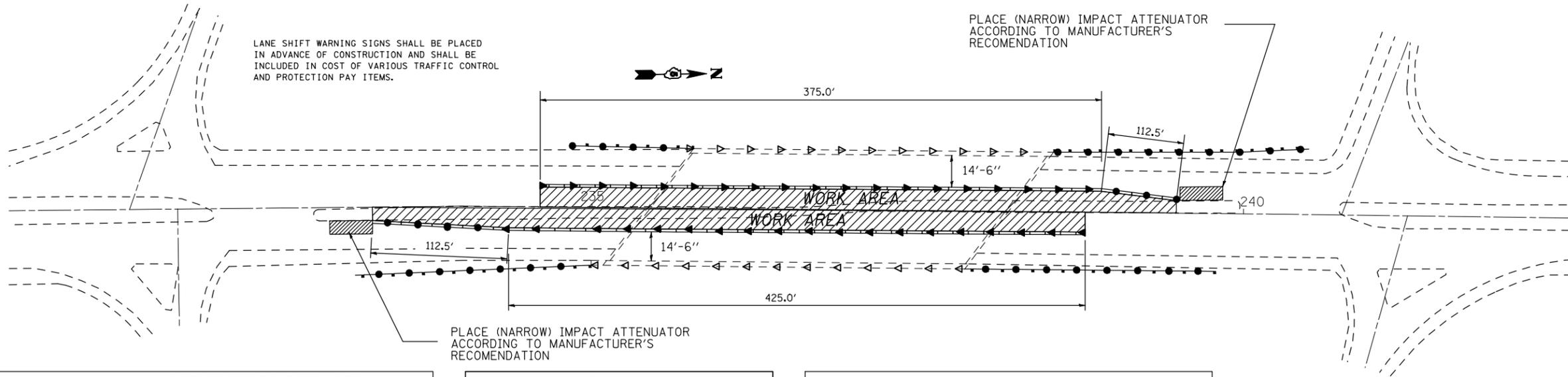
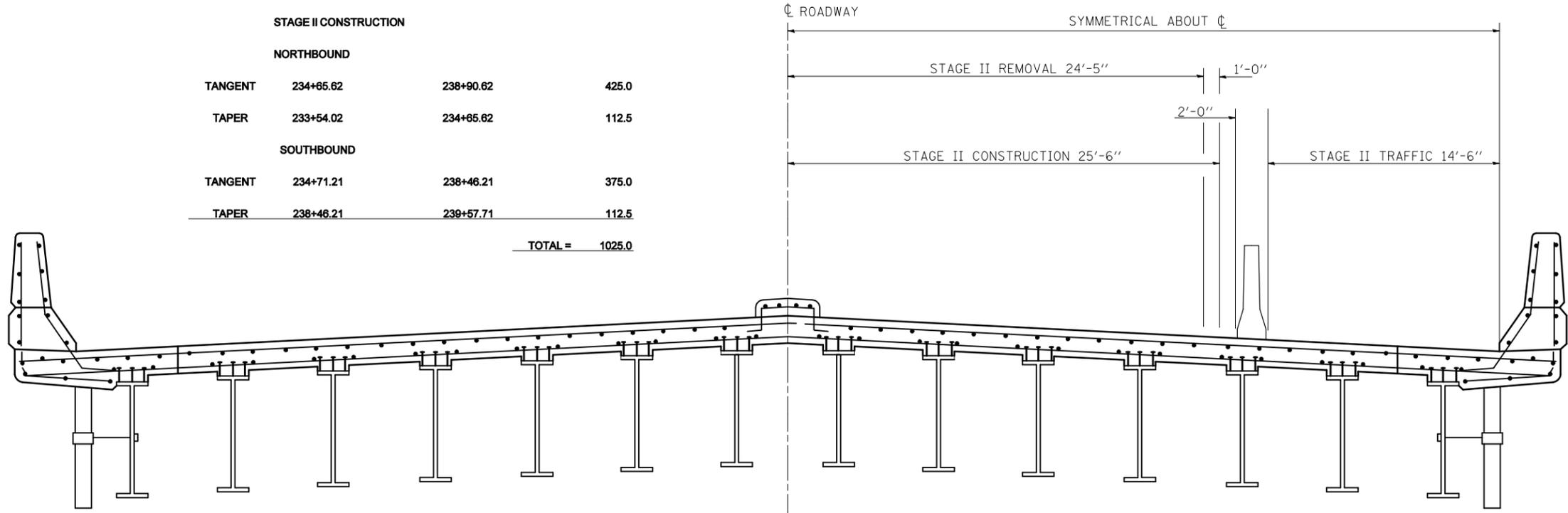
SCALE: NO SCALE SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2466	(57-18)BJR	MCLEAN	17	7
CONTRACT NO. 70807				
ILLINOIS FED. AID PROJECT				

**STAGE II CONSTRUCTION**

70400200 RELOCATE TEMPORARY CONCRETE BARRIER

STAGE II CONSTRUCTION			
NORTHBOUND			
TANGENT	234+65.62	238+90.62	425.0
TAPER	233+54.02	234+65.62	112.5
SOUTHBOUND			
TANGENT	234+71.21	238+46.21	375.0
TAPER	238+46.21	239+57.71	112.5
TOTAL =			1025.0



LANE SHIFT WARNING SIGNS SHALL BE PLACED IN ADVANCE OF CONSTRUCTION AND SHALL BE INCLUDED IN COST OF VARIOUS TRAFFIC CONTROL AND PROTECTION PAY ITEMS.

PLACE (NARROW) IMPACT ATTENUATOR ACCORDING TO MANUFACTURER'S RECOMMENDATION

PLACE (NARROW) IMPACT ATTENUATOR ACCORDING TO MANUFACTURER'S RECOMMENDATION

**PLAN NOTES:**

ALL STAGING DETAILS SET UP IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION 701422.

PRIOR TO BARRIER PLACEMENT TRAFFIC CONTROL SHALL BE SET UP IN ACCORDANCE WITH STANDARD 701423.

TRAFFIC CONTROL DETAILS NOT SHOWN ARE TO CONFORM WITH STANDARD 701422 AND 701423.

MESSAGE BOARD SHALL BE PLACED TWO WEEKS PRIOR TO CONSTRUCTION AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS.

RESIDENT ENGINEER AND TRAFFIC CONTROL SUPERVISOR SHALL PROVIDE APPROPRIATE MESSAGE FOR CMS.

ABSORB 350 IMPACT ATTENUATOR WILL NOT BE ALLOWED

RAISED REFLECTIVE PAVEMENT MARKERS AFFECTED BY THE PROPOSED CONSTRUCTION SHALL BE REPLACED. THIS COST SHALL BE INCIDENTAL TO THE VARIOUS TRAFFIC CONTROL PAY ITEMS.

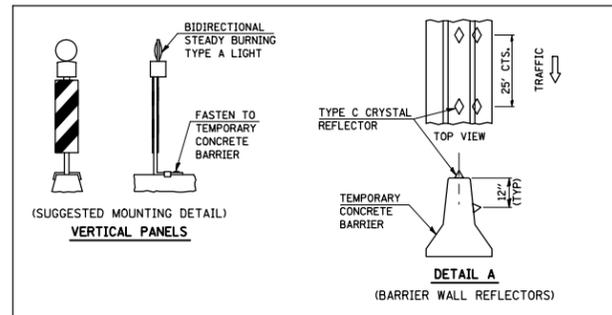
REFLECTORS AND VERTICAL PANELS FOR BARRIER WALL, BRIDGE RAIL AND GUARDRAIL SHALL BE INCLUDED IN THE COST FOR THE APPLICABLE TRAFFIC CONTROL PAY ITEMS.

ATTACH VERTICAL PANELS TO THE LEFT GUARDRAIL AT 25 FOOT CENTERS DURING STAGE II. THIS COST WILL BE INCIDENTAL TO STANDARD 701423.

REFLECTORIZED TEMPORARY MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND ALONG-SIDE THE WORK AREA. THE EDGE LINE SHALL BE YELLOW FOR LEFT LANE CLOSURES. COST FOR THE PLACEMENT AND REMOVAL SHALL BE INCLUDED IN COST FOR APPLICABLE TRAFFIC CONTROL PAY ITEM.

**SYMBOLS**

- ◀ AMBER MONODIRECTIONAL REFLECTOR 25' CTS
- ◁ CRYSTAL MONODIRECTIONAL REFLECTOR 25' CTS
- TEMPORARY CONCRETE BARRIER
- VERTICAL PANELS WITH STEADY BURNING LIGHTS ALONG TAPER 25' CTS
- ⊗ IMPACT ATTENUATOR



ANY ADJUSTMENTS, VARIATIONS OR CHANGES IN THE TRAFFIC CONTROL SHALL BE CONSIDERED AS INCIDENTAL TO 701422 AND 701423 AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

NOT TO SCALE

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED -
et:\pw\work\PIWIDOT\SHERERJM\d0143296\0510807-shit-staging.dgn		DRAWN - JMS	REVISED -
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	PLOT DATE = 8/18/2009	DATE - 070109	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

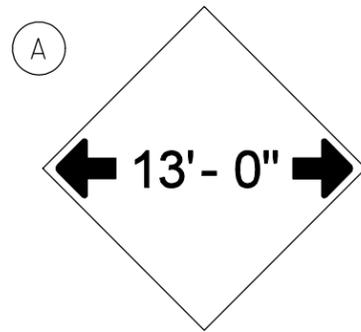
**TRAFFIC CONTROL STAGING DETAILS**

SCALE: NO SCALE SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2466	(57-18)BJR	MCLEAN	17	8
CONTRACT NO. 70807				
ILLINOIS FED. AID PROJECT				



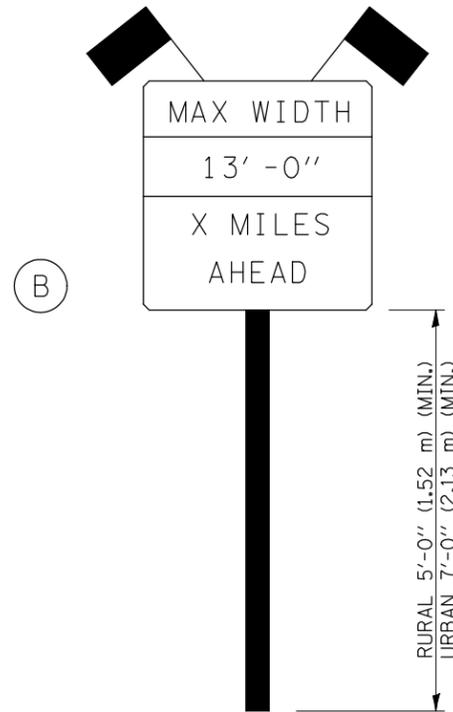
DESIGNER NOTE: PROVIDE MAP WITH SIGN LOCATIONS (A, B, ETC.) AND COORDINATE WITH TRAFFIC OPERATIONS ENGINEER.  
 INCLUDE DISTRICT SPECIAL PROVISION "WIDTH RESTRICTION SIGNING"



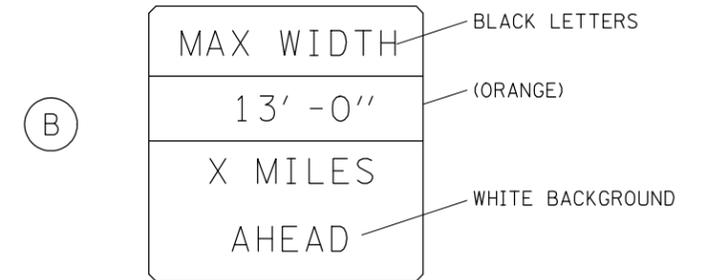
W12-2(0)-48"x48"(1200x1200)

SIGN (A) 2 SIGNS - W12-2(0)-48"x48"(1200x1200) ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

SIGN (B) 2 SIGNS - (SIGN PANEL, TYPE II) AS SHOWN ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.



SIGN PANEL, TYPE II



W12-I103(0)-48"x48"(1200x1200)  
"D" LETTERS/NUMBERS

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
2. ALL (B) SIGNS SHALL HAVE FLAGS INSTALLED UNLESS OTHERWISE DIRECTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR WIDTH RESTRICTION SIGNING.
5. ALL SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE DIRECTED.
6. ALL SIGNS SHOWN ORANGE (0) SHALL BE FLUORESCENT ORANGE.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = shererjm	DESIGNED -	REVISED - 11/06
ct:\pw\work\p\dot\shererjm\d0143296\0570807-sht-widthdetail.dgn		DRAWN -	REVISED - 05/08
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED - 10/08 - KJT
	PLOT DATE = 8/14/2009	DATE -	REVISED - 7/09 - KJT

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WIDTH RESTRICTION SIGNING**

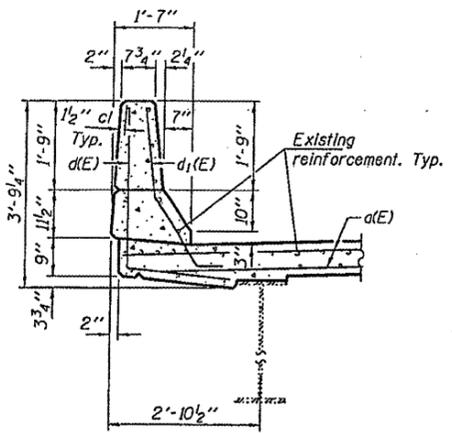
SHEET NO. 2 OF 2 SHEETS

**DISTRICT 5 DETAIL NO. X7200201**

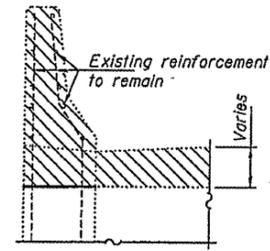
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2466	(57-18)BJR	MCLEAN	17	10
FED. ROAD DIST. NO.			CONTRACT NO. 70807	
ILLINOIS FED. AID PROJECT				



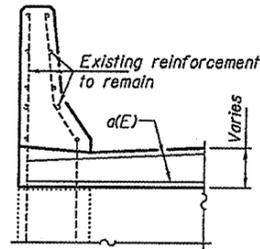
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



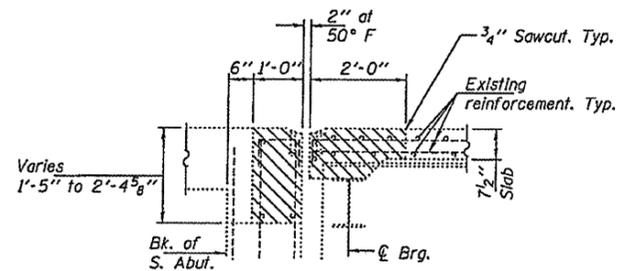
TYPICAL SECTION THRU PARAPET



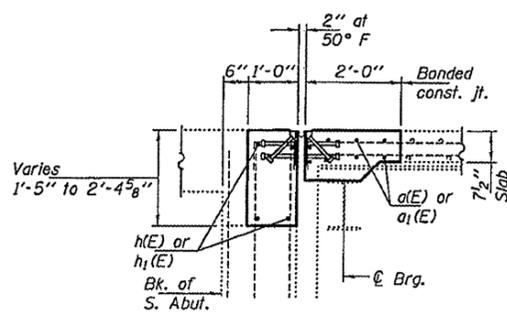
SECTION C-C



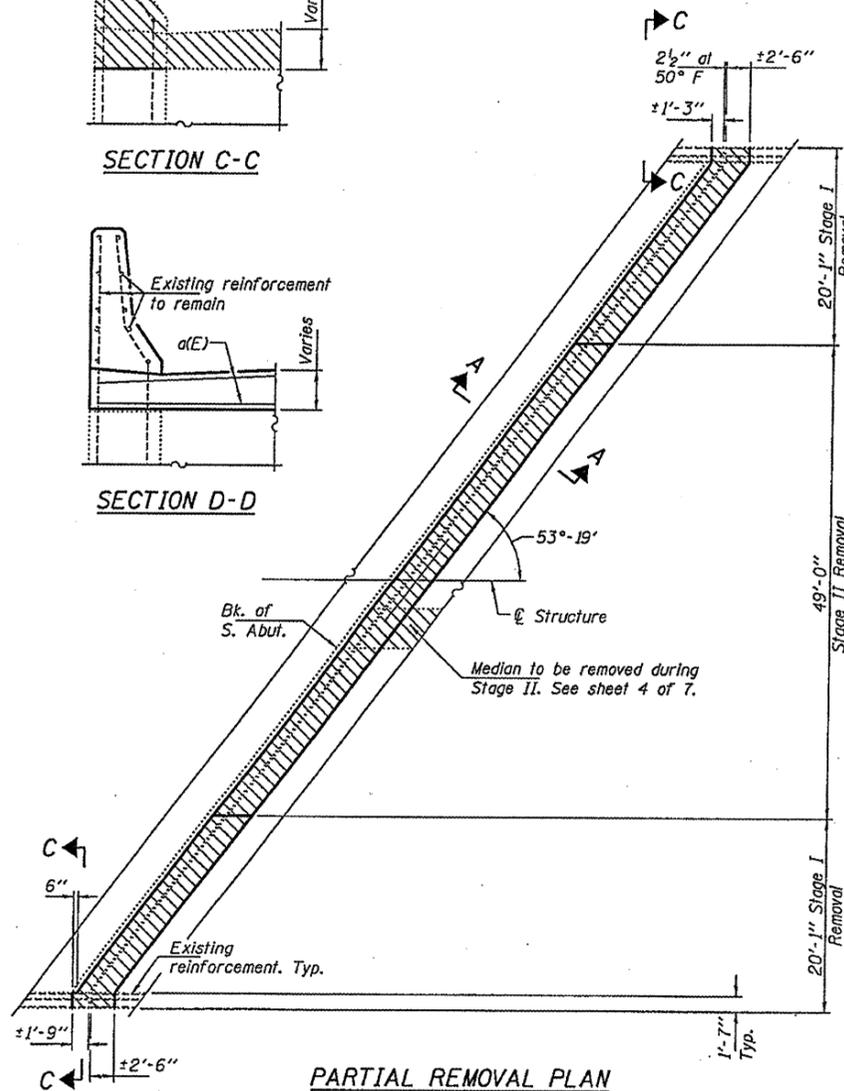
SECTION D-D



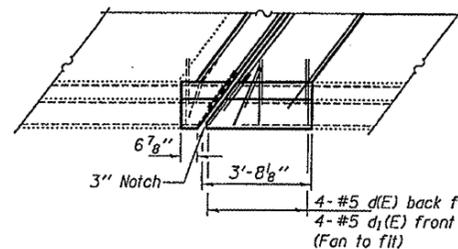
SECTION A-A



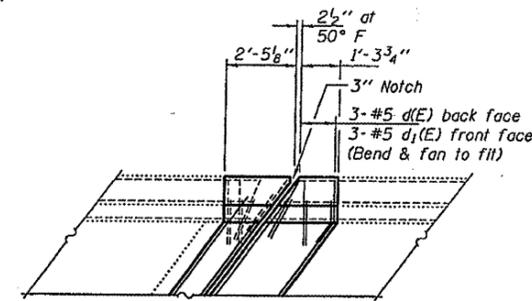
SECTION B-B



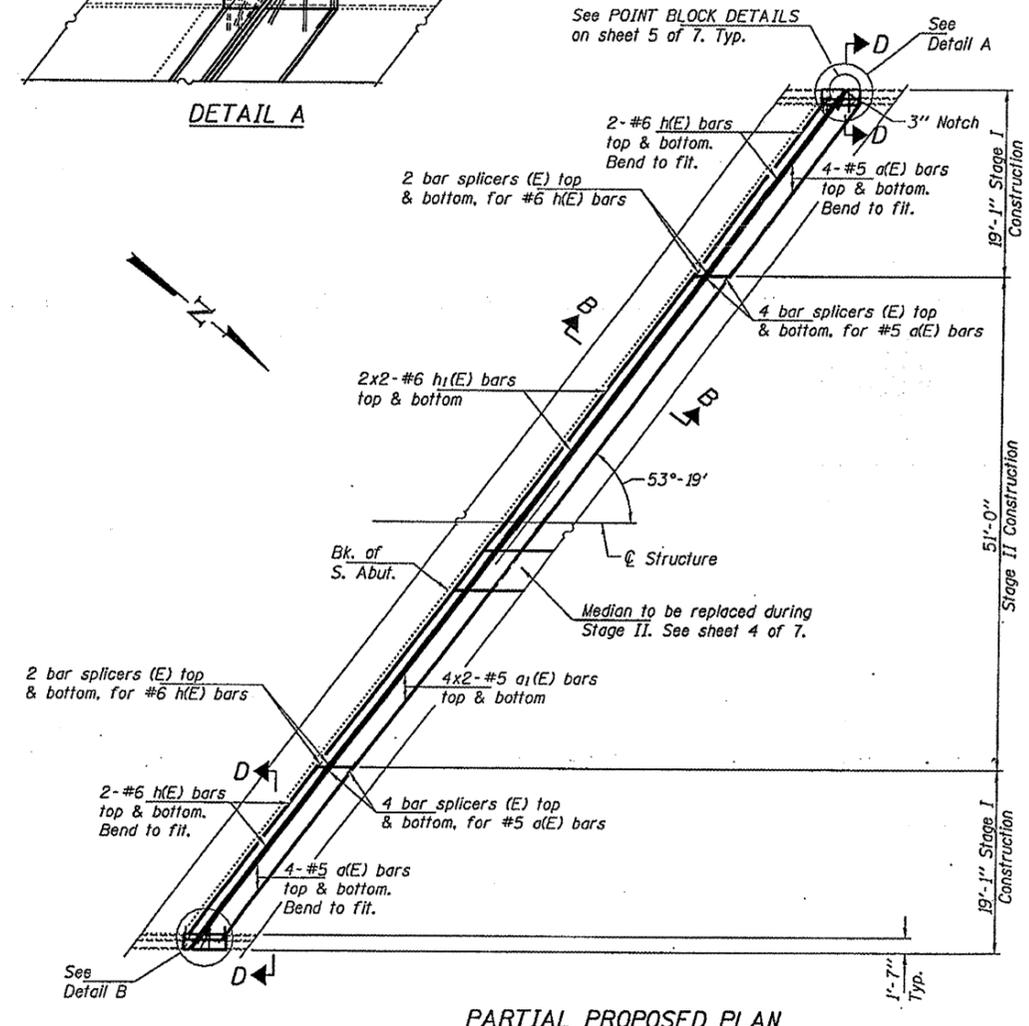
PARTIAL REMOVAL PLAN



DETAIL B



DETAIL A



PARTIAL PROPOSED PLAN

MINIMUM BAR LAPS

#5 bar = 2'-2"  
#6 bar = 2'-7"

Note:  
Hatched areas indicate concrete removal.  
See sheet 1 of 7 for staging.  
Bars indicated thus 4 x 2-#5 etc. indicates 4 lines of bars with 2 lengths per line.  
For bar details & Bill of Material, see sheet 4 of 7.  
Dimensions 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 sheet 5 of 7.

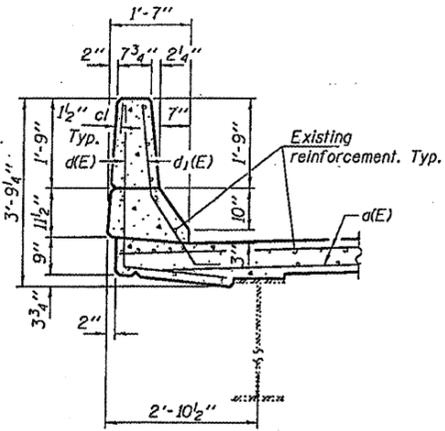
SOUTH ABUTMENT DETAILS  
US RTE 150 OVER I-74  
SN 057-0073

DESIGNED	GGE
CHECKED	AJB
DRAWN	boliva
CHECKED	GGE AJB

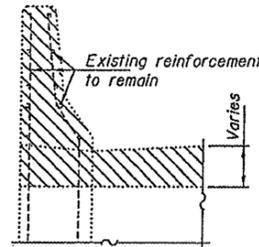
SEPTEMBER 16, 2009  
EXAMINED *Carl Perry*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 2 7 SHEETS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2466	(57-18)BJR	Mc LEAN	17	12
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 70807					

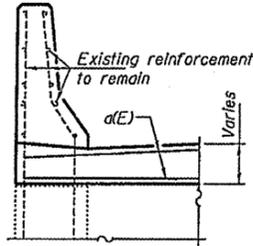
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



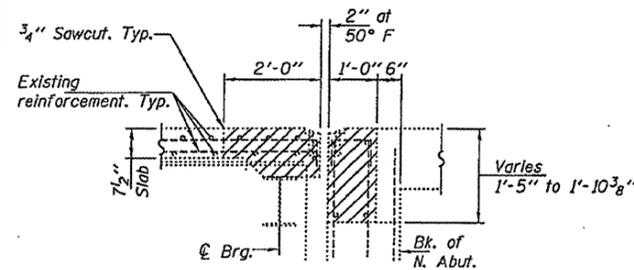
TYPICAL SECTION THRU PARAPET



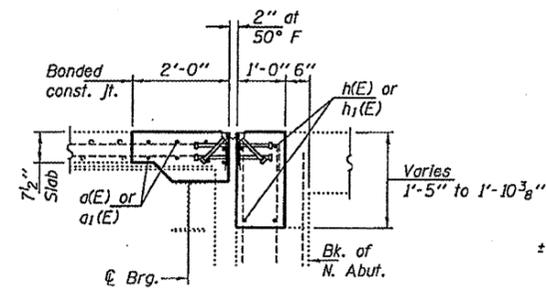
SECTION C-C



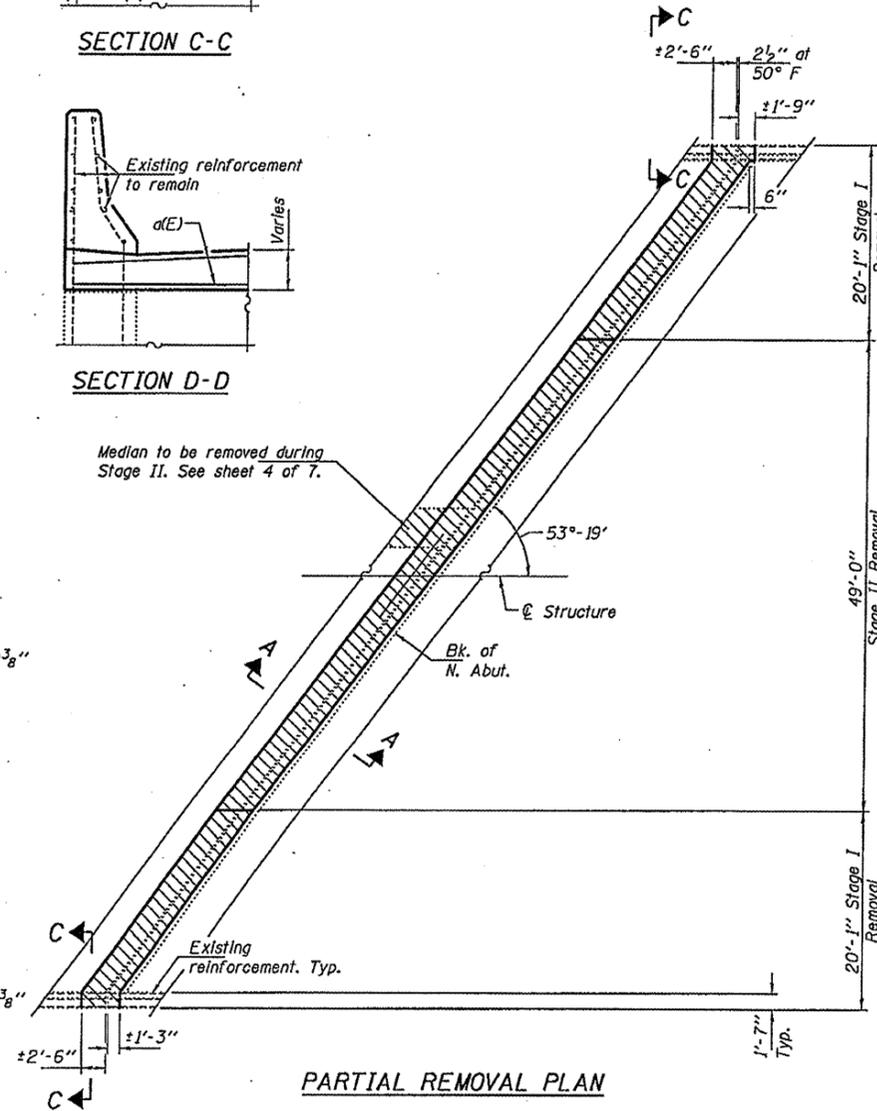
SECTION D-D



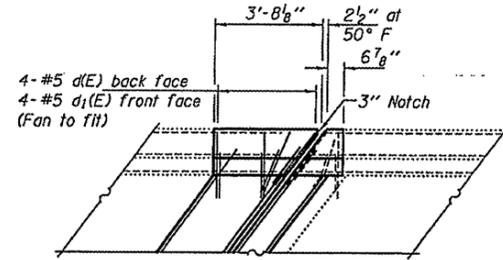
SECTION A-A



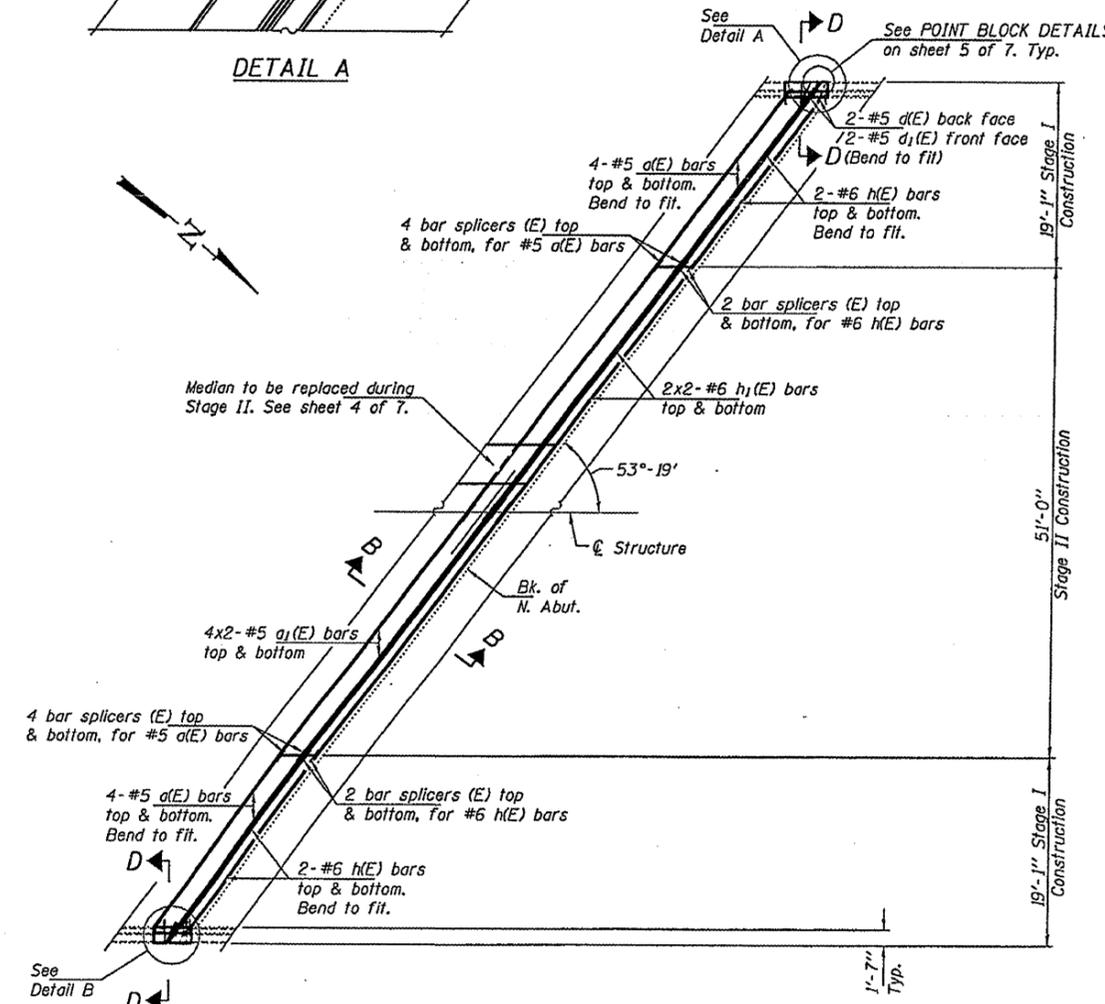
SECTION B-B



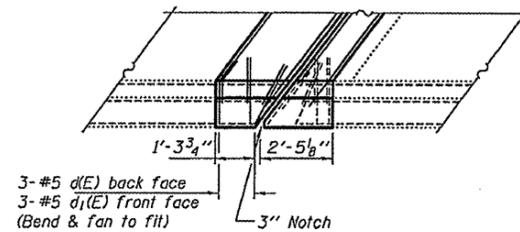
PARTIAL REMOVAL PLAN



DETAIL A



PARTIAL PROPOSED PLAN



DETAIL B

MINIMUM BAR LAPS

#5 bar = 2'-2"  
#6 bar = 2'-7"

Note:  
Hatched areas indicate concrete removal.  
See sheet 1 of 7 for staging.  
Bars indicated thus 4 x 2-#5 etc. indicates 4 lines of bars with 2 lengths per line.  
For bar details & Bill of Material, see sheet 4 of 7.

NORTH ABUTMENT DETAILS

US RTE 150 OVER I-74

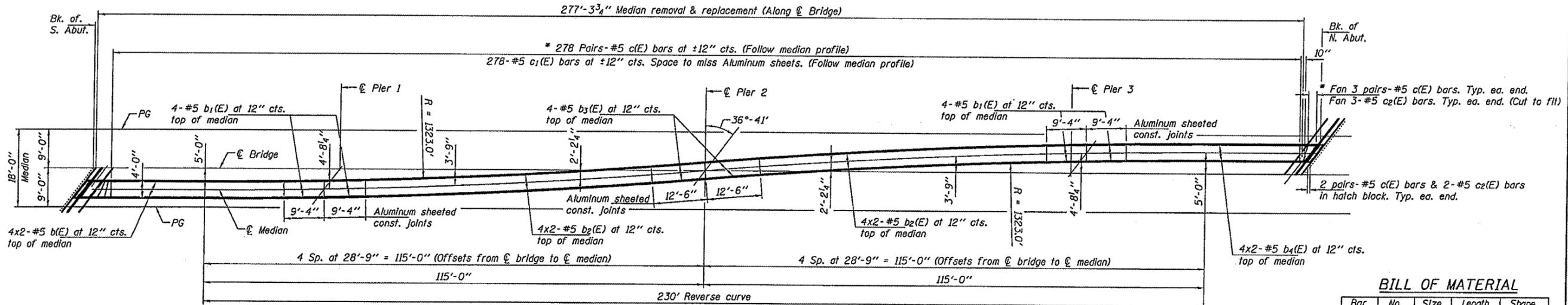
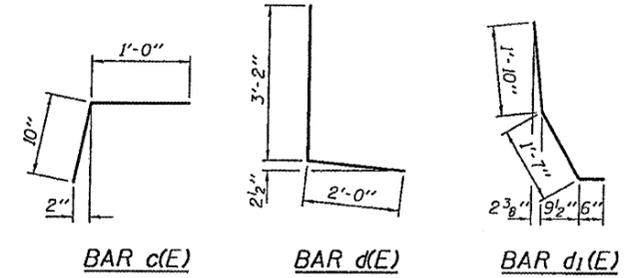
SN 057-0073

DESIGNED	GGE
CHECKED	AJB
DRAWN	ballva
CHECKED	GGE AJB

SEPTEMBER 16, 2009  
EXAMINED *Carl Perry*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 3 7 SHEETS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2466	(57-18)BJR	Mc LEAN	17	13
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 70807					

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



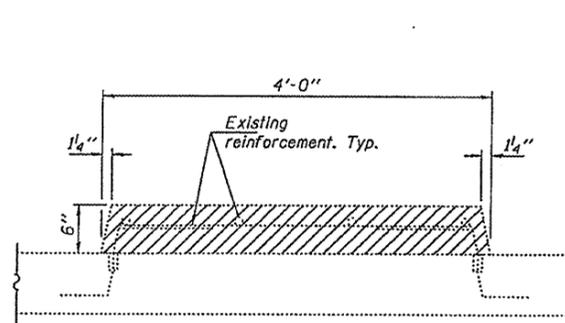
**MEDIAN PLAN**

\* Epoxy grout c(E) bars in 6" max. holes according to Article 584 of the Standard Specifications.  
Space between existing inserts.  
Space to miss Aluminum sheets.

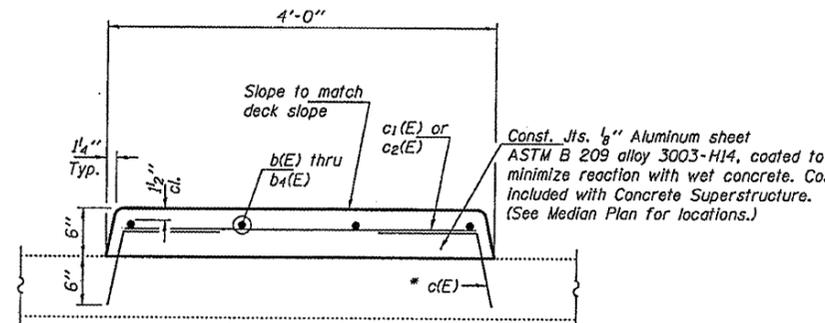
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	32	#5	23'-3"	—
a1(E)	32	#5	33'-0"	—
b(E)	8	#5	26'-8"	—
b1(E)	16	#5	9'-0"	—
b2(E)	16	#5	32'-0"	—
b3(E)	8	#5	12'-2"	—
b4(E)	8	#5	24'-0"	—
c(E)	576	#5	1'-10"	┌
c1(E)	278	#5	3'-6"	—
c2(E)	10	#5	4'-4"	—
d(E)	14	#5	5'-2"	└
d1(E)	14	#5	3'-11"	└
h(E)	16	#6	23'-3"	—
h1(E)	16	#6	33'-3"	—
Reinforcement Bars, Epoxy Coated		Pound	7430	
Concrete Superstructure		Cu. Yds.	51.8	
Concrete Removal		Cu. Yds.	51.8	

Bars indicated thus 4 x 2-#5 etc. indicates 4 lines of bars with 2 lengths per line.



**MEDIAN REMOVAL**  
Hatched area indicates concrete removal



**SECTION THRU MEDIAN**

**MINIMUM BAR LAPS**  
#5 bar = 2'-2"

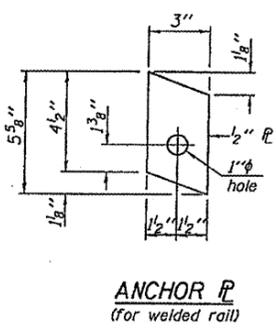
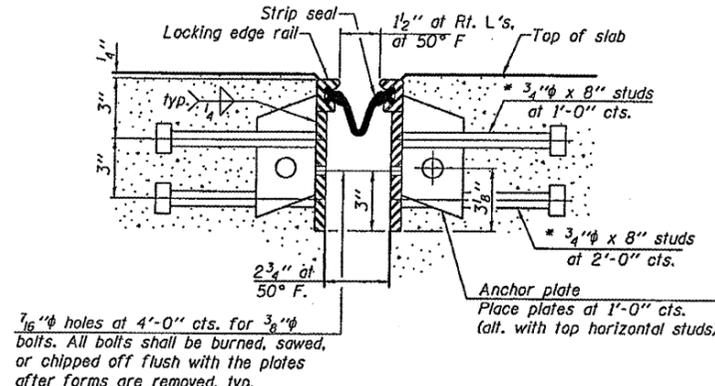
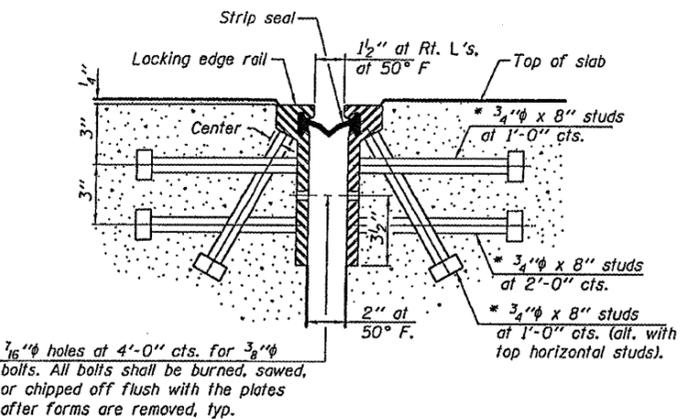
**MEDIAN DETAILS**  
US RTE 150 OVER I-74  
SN 057-0073

DESIGNED	GGE
CHECKED	AJB
DRAWN	baliva
CHECKED	GGE AJB

SEPTEMBER 16, 2009  
EXAMINED *Carl Perry*  
PASSED *Ralph E. Anderson*  
ENGINEER OF STRUCTURAL SERVICES  
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 4 7 SHEETS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2466	(57-18)BJR	Mc LEAN	17	14
CONTRACT NO. 70807					
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

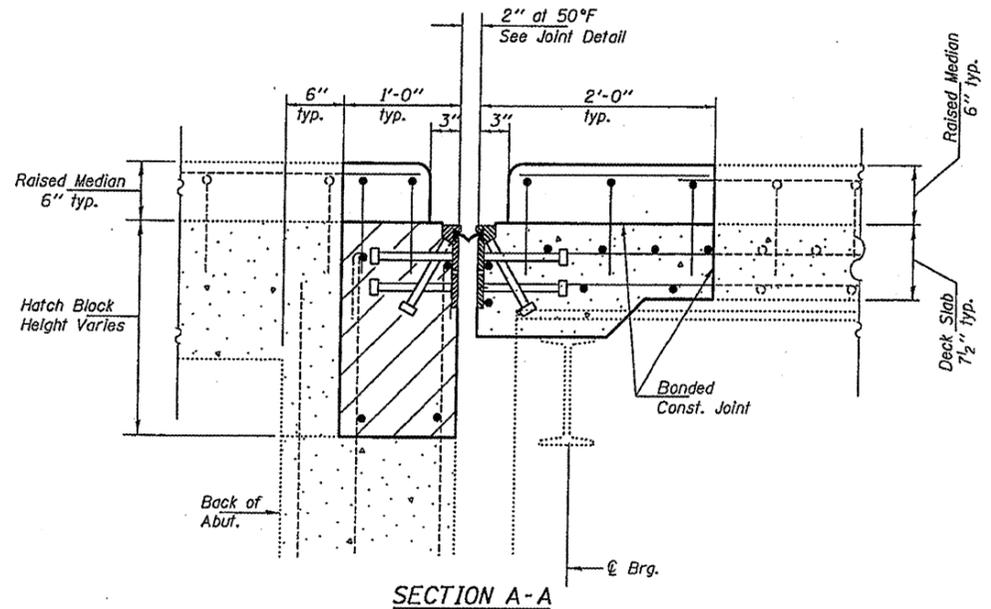
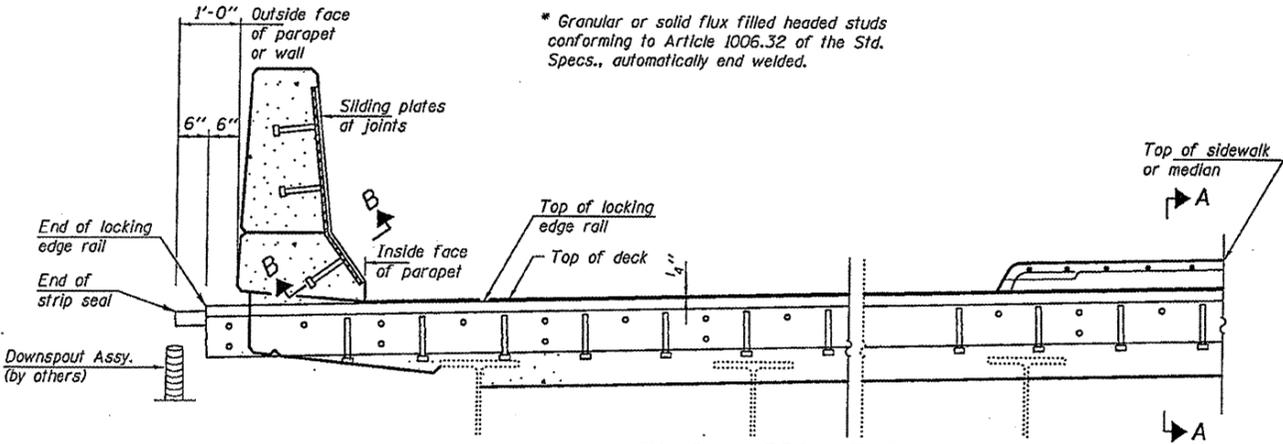
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



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 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. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints. 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.

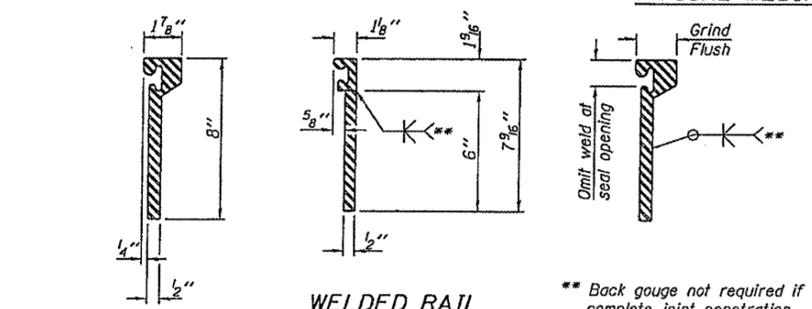
SECTION THRU ROLLED RAIL JOINT

SECTION THRU WELDED RAIL JOINT



TYPICAL MEDIAN TREATMENTS

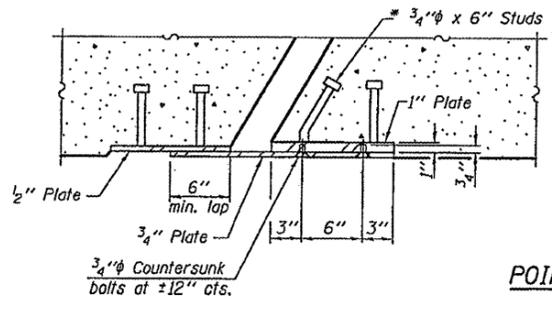
SECTION A-A



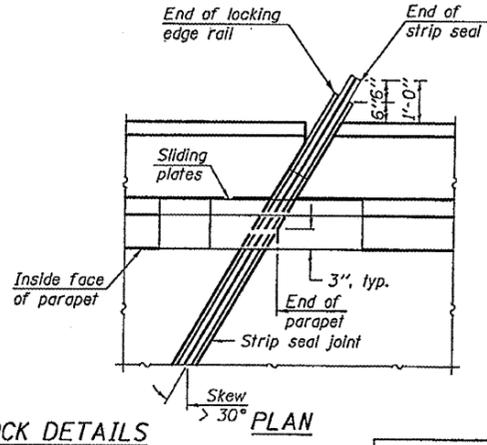
WELDED RAIL

ROLLED EXTRUDED RAIL

LOCKING EDGE RAIL SPLICE



SECTION B-B



POINT BLOCK DETAILS  
(for skews > 30°)

Notes:  
Locking edge rails are to be placed 1/4" below the deck elevation through the median. Stop raised median 3" short of deck ends and 3" short of face of abutments. See median details for reinforcement required.

BILL OF MATERIAL

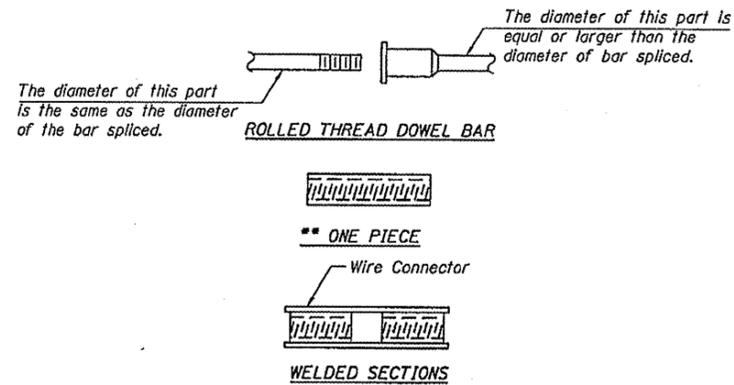
Item	Unit	Total
Preformed Joint Strip Seal	Foot	220

PREFORMED JOINT STRIP SEAL  
US RTE 150 OVER I-74  
SN 057-0073

DESIGNED	GGE	SEPTEMBER 16, 2009
CHECKED	AJB	EXAMINED <i>Carl Proyer</i> ENGINEER OF STRUCTURAL SERVICES
DRAWN	balva	PASSED <i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	GGE AJB	

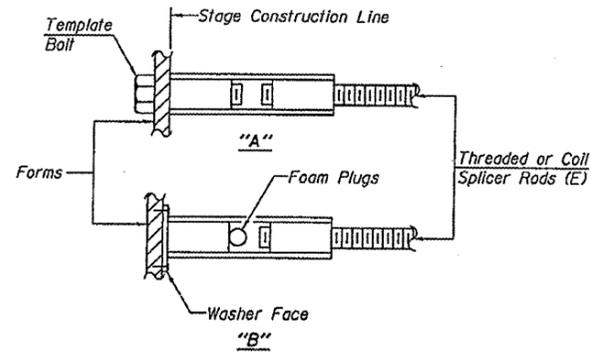
SHEET NO. 5	F.A.S. RTE. 2466	SECTION (57-18)BJR	COUNTY MC LEAN	TOTAL SHEETS 17	SHEET NO. 15
7 SHEETS	CONTRACT NO. 70807				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**BAR SPLICER ASSEMBLY ALTERNATIVES**

\*\* Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



**INSTALLATION AND SETTING METHODS**

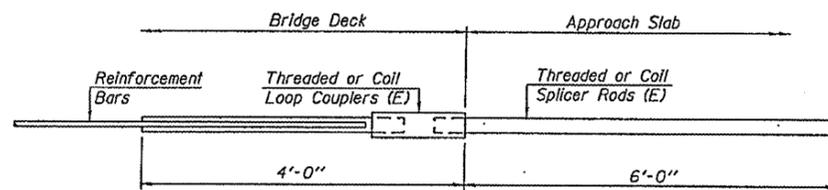
"A": Set bar splicer assembly by means of a template bolt.  
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
(E) : Indicates epoxy coating.

**NOTES**

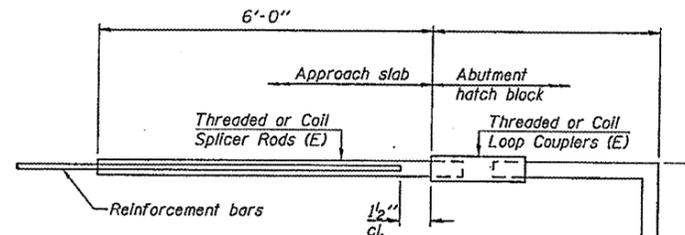
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
Splicer rods shall be of minimum 60 ksi yield strength, threaded or rolled full length.  
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.  
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity =  $1.25 \times f_y \times A_l$   
(Tension in kips)
  - ② Minimum \* Pull-out Strength =  $0.66 \times f_y \times A_l$   
(Tension in kips)
- Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $A_l$  = Tensile stress area of lapped reinforcement bars.  
\* = 28 day concrete

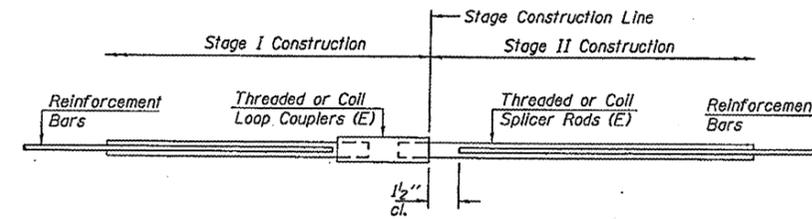
BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**



**FOR STUB ABUTMENTS**



**STANDARD**

Bar Size	No. Assemblies Required	Location
#5	16	Each abutment
#6	8	Each backwall

Bar Splicer for #6 bar	
Min. Capacity	= 33.1 kips - tension
Min. Pull-out Strength	= 17.4 kips - tension
No. Required	= 16

Bar Splicer for #5 bar	
Min. Capacity	= 23.0 kips - tension
Min. Pull-out Strength	= 12.3 kips - tension
No. Required	= 32

DESIGNED	GGE
CHECKED	AJB
DRAWN	ballva
CHECKED	GGE AJB

SEPTEMBER 16, 2009

EXAMINED *Carl Perry*  
ENGINEER OF STRUCTURAL SERVICES

PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

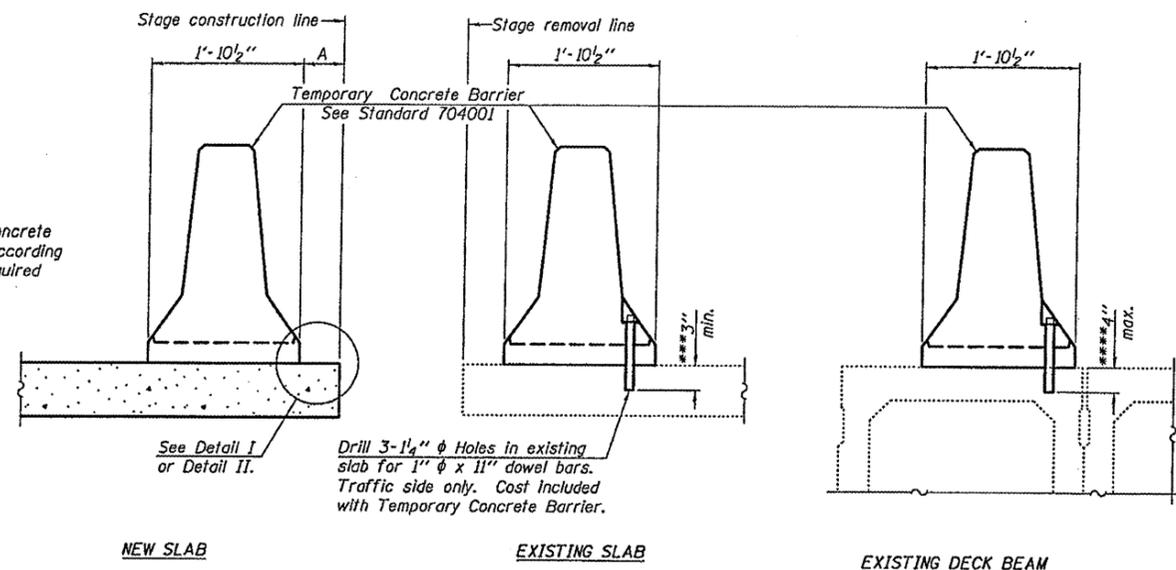
BSD-1 5-16-08

**BAR SPLICER ASSEMBLY DETAILS**  
**US RTE 150 OVER I-74**  
**SN 057-0073**

SHEET NO.	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	2466	(57-18)BJR	Mc LEAN	17	16
7 SHEETS					
CONTRACT NO. 70807					
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

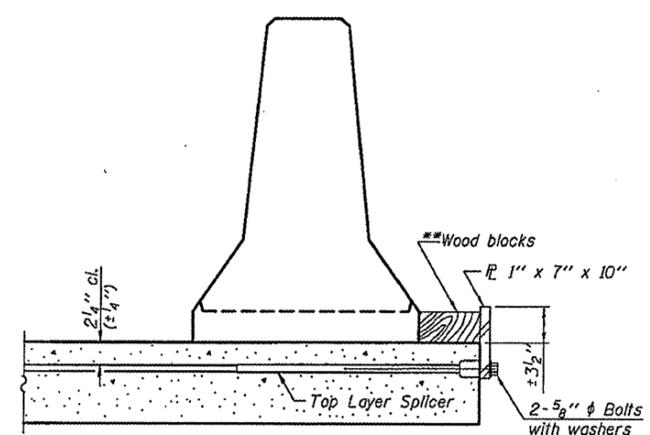
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1"x7"x10" steel  $\bar{L}$  to the top layer of couplers with 2-5/8"  $\phi$  bolts screwed to coupler at approximate  $\bar{C}$  of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1"x7"x10" steel  $\bar{L}$  to the concrete slab or concrete wearing surface with 2-5/8"  $\phi$  Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate  $\bar{C}$  of each barrier panel.

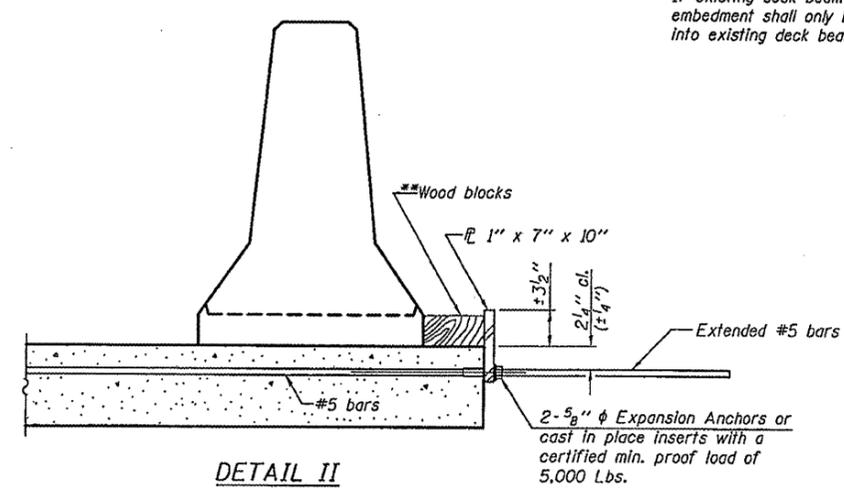
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

\*\*\* Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

\*\*\*\* If existing deck beam is to remain in place after construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

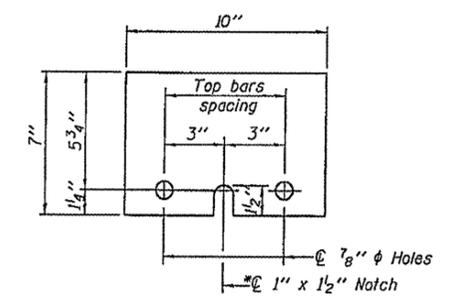


DETAIL I



DETAIL II

\*\*\*Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.



STEEL RETAINER  $\bar{L}$  1" x 7" x 10"  
\* Required only with Detail II

DESIGNED	GGE	SEPTEMBER 16, 2009
CHECKED	AJB	EXAMINED <i>Carl Perry</i>
DRAWN	balva	PASSED <i>Ralph E. Anderson</i>
CHECKED	GGE AJB	ENGINEER OF BRIDGES AND STRUCTURES

R-27 10-1-08

TEMPORARY CONCRETE BARRIER  
US RTE 150 OVER I-74  
SN 057-0073

SHEET NO. 7	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2466	(57-18)BJR	Mc LEAN	17	17
7 SHEETS	CONTRACT NO. 70807				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		