

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

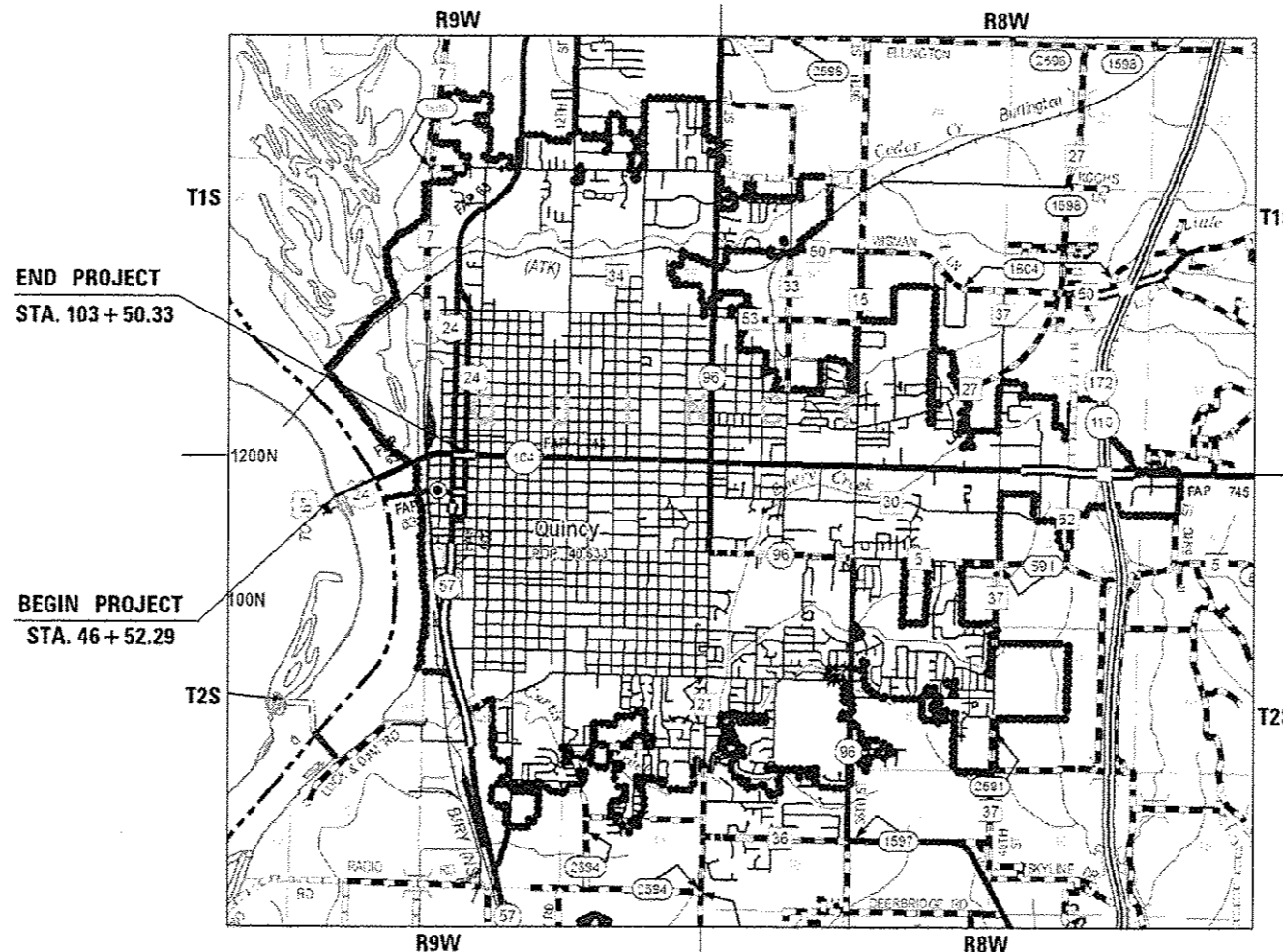
**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 63 (US 24)
SECTION (1Z-B) BJR, I-7
PROJECT: ACNHPP-0063(062)
BRIDGE JOINT REPAIR
ADAMS COUNTY

C-96-051-14

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B) BJR, I-7	ADAMS	31	1
		ILLINOIS	CONTRACT NO. 72G80	

FOR INDEX OF SHEETS, SEE SHEET NO. 2



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

SR. TEAM ENGINEER MARK DUST (217) 785-0591
TEAM LEADER GLENN STARKE (217) 524-8918

CONTRACT NO. 72G80

GROSS LENGTH = 5,698.04 FT. = 1.079 MILE
NET LENGTH = 5,698.04 FT. = 1.079 MILE

AADT = 10,100
MU = 400
SU = 175

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED May 9 20 14
Roger Z. Duskaj
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

June 27 20 14
John D. Baranzelli PE
ENGINEER OF DESIGN AND ENVIRONMENT

June 27 20 14
Omer Osman PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

- ① ANY REFERENCE TO A STANDARD IN THE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION, AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS.
- ② THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE JULIE NUMBER IS 800-892-0123. A MINIMUM OF FORTY-EIGHT HOURS ADVANCED NOTICE IS REQUIRED. ANY DAMAGE TO THE UNDERGROUND FACILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE, INCLUDING TEMPORARY REPAIRS WHICH MAY BE REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS.
- ③ THE RESIDENT ENGINEER SHALL CONTACT STUDIES & PLANS CONCERNING ANY MAJOR PLAN CHANGE TO MAKE SURE NO PREVIOUS COMMITMENTS (NOT LISTED) WERE MADE AFFECTING THE DESIGN AND ALLOW AN IMPROVED DESIGN FOR FUTURE PROJECTS.
- ④ IN ADDITION TO FIELD SURVEYS AND AERIAL SURVEYS, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
- ⑤ EXISTING ROAD SIGNS THAT CONFLICT WITH STAGE CONSTRUCTION TRAFFIC PATTERNS SHALL BE COVERED OR REMOVED UNTIL NORMAL TRAFFIC PATTERNS ARE RE-ESTABLISHED.

STANDARDS

000001-06	701400-07
001001-02	701423-07
643001-02	701601-09
701101-04	701901-03
701201-04	704001-07

INDEX OF SHEETS

1	COVER SHEET
2	INDEX OF SHEETS, LISTS OF STANDARDS, GENERAL NOTES AND COMMITMENTS
3 - 4	SUMMARY OF QUANTITIES
5	SCHEDULE OF QUANTITIES
6	STAGING DETAILS
7 - 11	STAGE I TRAFFIC CONTROL SHEETS
12 - 16	STAGE II TRAFFIC CONTROL SHEETS
17 - 31	BRIDGE REPAIR SHEETS

DISTRICT SIX	
EXAMINED <u>March 18</u> 20 <u>14</u> <i>Michael P. for Roger L. Diskell</i>	
OPERATIONS ENGINEER	
EXAMINED <u>MARCH 17</u> 20 <u>14</u> <i>Jerry J. [Signature]</i>	
PROJECT IMPLEMENTATION ENGINEER	
EXAMINED <u>March 24</u> 20 <u>14</u> <i>2RML</i>	
PROGRAM DEVELOPMENT ENGINEER	

CONSTR. CODE
 URBAN
 80% FEDERAL
 20% STATE
 BRIDGE
 0014
 001-0068

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
50102400	CONCRETE REMOVAL	CU YD	67.8	67.8
50157300	PROTECTIVE SHIELD	SQ YD	87	87
50300255	CONCRETE SUPERSTRUCTURE	CU YD	64.6	64.6
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	13770	13770
50800515	BAR SPLICERS	EACH	156	156
50800530	MECHANICAL SPLICERS	EACH	672	672
52100540	ANCHOR BOLTS, 1 1/2"	EACH	25	25
59000200	EPOXY CRACK INJECTION	FOOT	120	120
67100100	MOBILIZATION	L SUM	1	1
70100325	TRAFFIC CONTROL AND PROTECTION, STANDARD 701423	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	6	6
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1150	1150

FILE NAME :	USER NAME : eparkegn	DESIGNED -	REVISED -
c:\p\work\p\ad\eparkgn\0301163\0672080-sh1-300.dgn		DRAWN -	REVISED -
	PLOT SCALE * 100.0000 * / IN	CHECKED -	REVISED -
Default	PLOT DATE * May-12-2014 08:56:33AM	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(12-B)BJR.1-7	ADAMS	31	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72680	

CONSTR. CODE
 URBAN
 80% FEDERAL
 20% STATE
 BRIDGE
 0014
 001-0068

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1150	1150
70600240	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 2	EACH	4	4
70600340	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 2	EACH	4	4
* 78005120	EPOXY PAVEMENT MARKING - LINE 5"	FOOT	10779	10779
78300100	PAVEMENT MARKING REMOVAL	SQ FT	10727.12	10727.12
X5210130	HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 300K	EACH	6	6
X7010410	SPEED DISPLAY TRAILER	CAL MO	4	4
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	1
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	6	6
Z0001905	STRUCTURAL STEEL REPAIR	POUND	40	40
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	8	8
Z0034393	MODULAR EXPANSION JOINT 9"	FOOT	136	136
Z0034806	MODULAR EXPANSION JOINT-SWIVEL 6"	FOOT	34	34
Z0034815	MODULAR EXPANSION JOINT-SWIVEL 15"	FOOT	34	34

14

* SPECIALTY ITEM

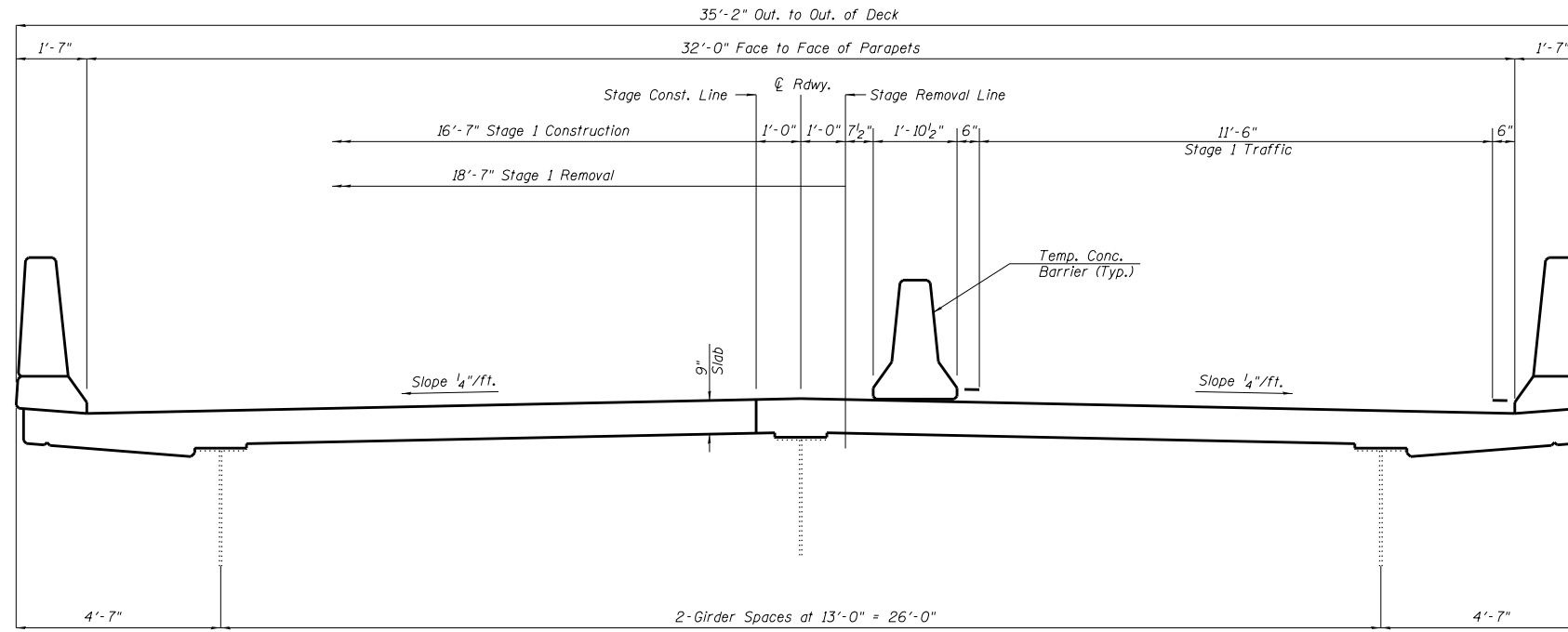
FILE NAME :	USER NAME : sparksg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RATE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	200-ght-500.dgn	DRAWN -	REVISED -					63	11Z-B)BJR-1-7	ADAMS	31	4
	PLOT SCALE : 100.0000' / in	CHECKED -	REVISED -		SCALE:	SHEET 2	OF 2	SHEETS	STA.	TO STA.	CONTRACT NO. 72080	
	PLOT DATE : May-12-2014 09:56:33AM	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

TEMPORARY CONCRETE BARRIER					
LOCATION		DESCRIPTION	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY BARRIER	
STATION TO STATION			LENGTH (FT)	LENGTH (FT)	
F.A.P. 63 - US 24					
STA 47+36.35	TO STA 49+48.58	STAGE 1	212.5		
STA 59+35.89	TO STA 63+09.25	STAGE 1	375.0		
STA 79+12.59	TO STA 82+85.99	STAGE 1	375.0		
STA 92+50.58	TO STA 94+38.15	STAGE 1	187.5		
STA 47+36.49	TO STA 49+48.72	STAGE 2		212.5	
STA 59+35.82	TO STA 63+09.22	STAGE 2		375.0	
STA 79+10.90	TO STA 82+84.30	STAGE 2		375.0	
STA 92+50.10	TO STA 94+37.68	STAGE 2		187.5	
TOTAL			1150.00	1150.00	

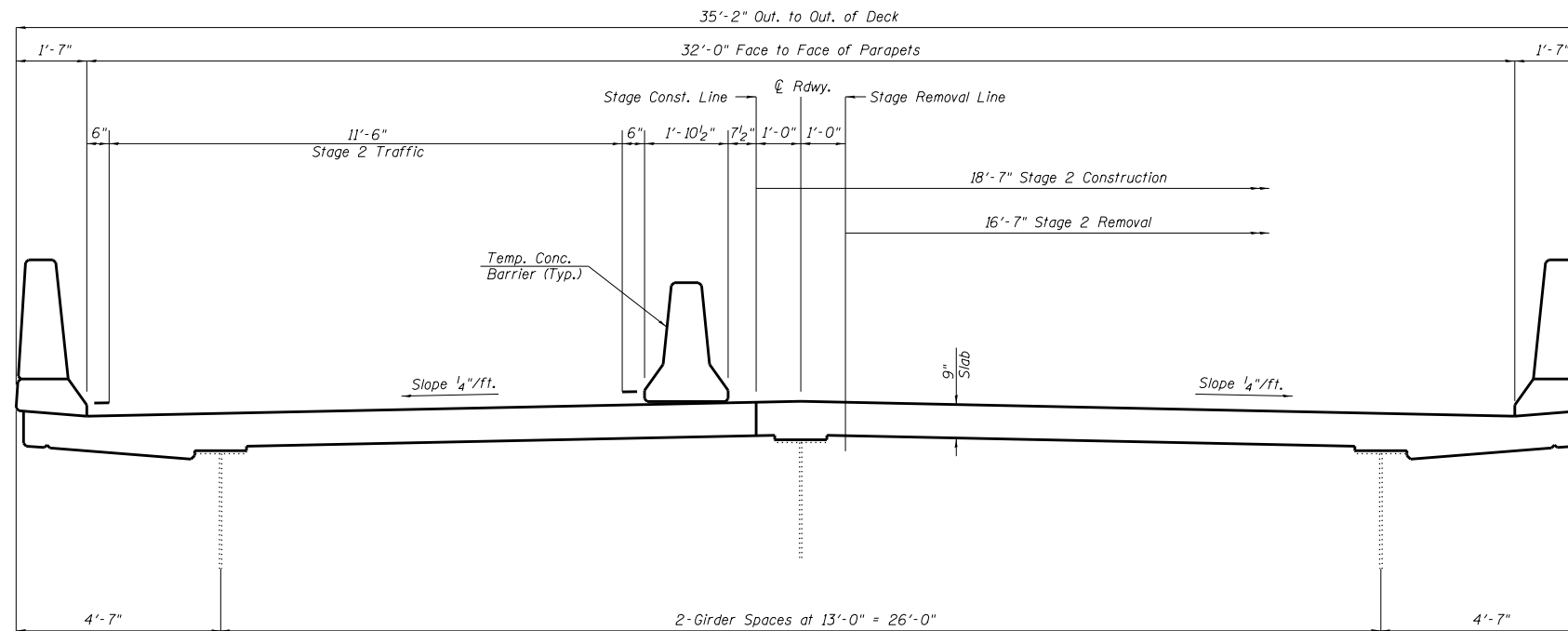
PROTECTIVE SHIELD				
LOCATION		DESCRIPTION	PROTECTIVE SHIELD	
STATION TO STATION			AREA (SQ YD)	
F.A.P. 63 - US 24				
STA 47+63.50	TO STA 47+69.50	WEST ABUTMENT	8.70	
STA 59+56.00	TO STA 59+62.00	WEST PIER 7	8.70	
STA 59+68.00	TO STA 59+74.00	EAST PIER 7	8.70	
STA 61+54.00	TO STA 61+60.00	WEST PIER 8	8.70	
STA 61+70.00	TO STA 61+76.00	EAST PIER 8	8.70	
STA 79+34.00	TO STA 79+40.00	WEST PIER 11	8.70	
STA 79+50.00	TO STA 79+56.00	EAST PIER 11	8.70	
STA 81+36.00	TO STA 81+42.00	WEST PIER 12	8.70	
STA 81+48.00	TO STA 81+54.00	EAST PIER 12	8.70	
STA 92+64.00	TO STA 92+70.00	EAST ABUTMENT	8.70	
TOTAL			87.0	

PAVEMENT MARKING REMOVAL			
LOCATION		DESCRIPTION	AREA (SQ FT)
STATION TO STATION			
F.A.P. 63 - US 24			
STA 46+52.33	TO STA 94+41.14	STAGE 1 EDGE LINE - 5 INCH	1995.34
STA 46+52.33	TO STA 99+72.14	STAGE 1 TEMPORARY LINES - 4 INCH	3278.01
STA 46+52.46	TO STA 94+35.79	STAGE 2 EDGE LINE - 5 INCH	1993.05
STA 46+52.46	TO STA 103+50.33	STAGE 2 TEMPORARY LINES - 4 INCH	3460.72
TOTAL			10727.12

EPOXY PAVEMENT MARKINGS					
LOCATION		DESCRIPTION	SPACING	LINE 5"	
STATION TO STATION				WHITE (FT)	YELLOW (FT)
F.A.P. 63 - US 24					
STA 46+52.33	TO STA 94+41.14	EDGE LINE		4,789	
STA 46+88.35	TO STA 95+16.12	SKIP-DASH	10' @ 40'	1,207	
STA 46+52.46	TO STA 94+35.79	EDGE LINE		4,783	
SUB-TOTAL				5990	4789
TOTAL				10779	



STAGE 1



STAGE 2

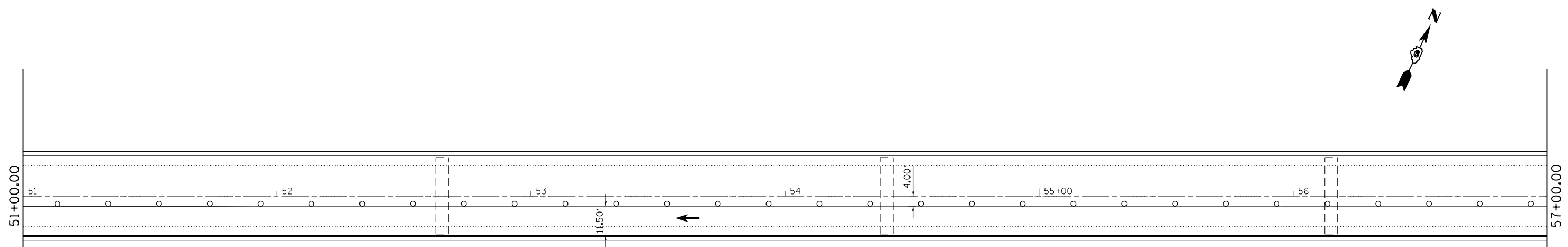
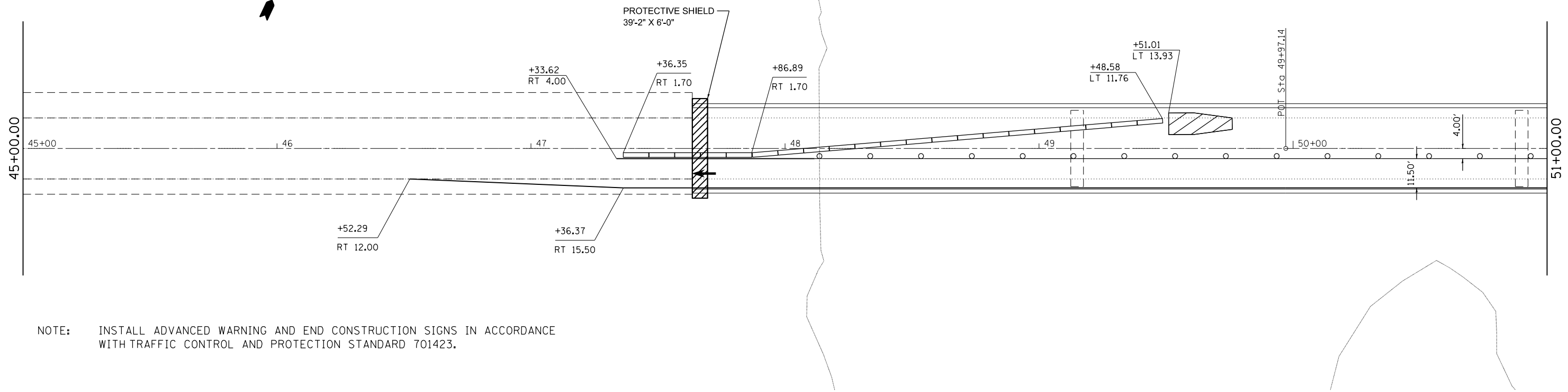
FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
c:\pwwork\pwwork\sparksgw\0381163\0672080-sht-staging.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 00.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = May-12-2014 08:59:00AM	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGING DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B)BJR,1-7	ADAMS	31	6
CONTRACT NO. 72G80			ILLINOIS FED. AID PROJECT	



LEGEND	
	SHORT TERM PAVEMENT MARKING
	CONSTRUCTION BARREL
	TYPE III BARRICADE
	TEMPORARY CONCRETE BARRIER
	IMPACT ATTENUATOR

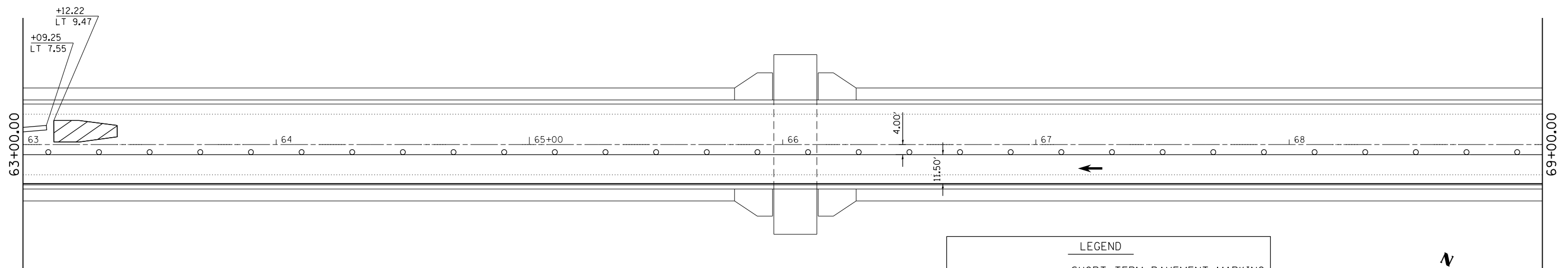
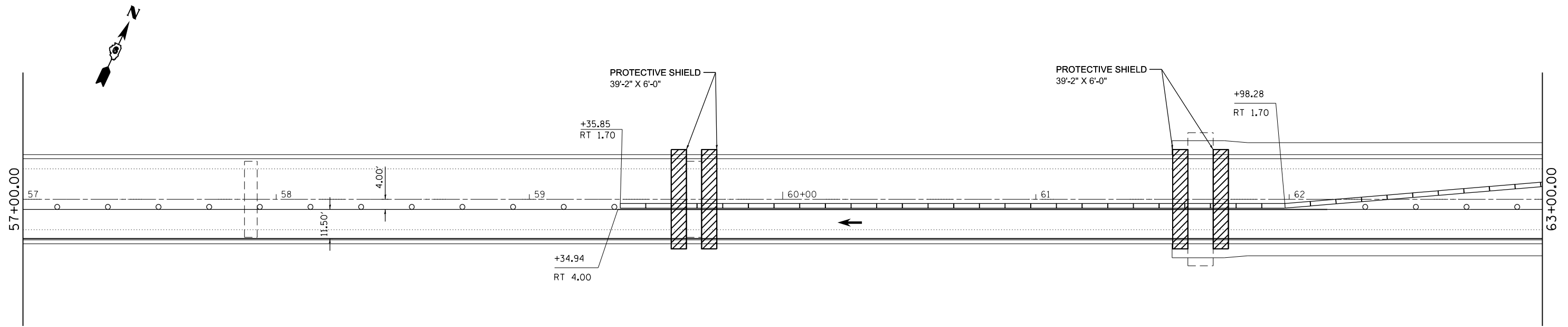
FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
c:\pw\work\p\dot\sparksgw\0381163\0672680-sht-staging1.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = May-12-2014 08:59:01AM	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 1 TRAFFIC CONTROL

SCALE: SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B)BJR,1-7	ADAMS	31	7
CONTRACT NO. 72G80			ILLINOIS FED. AID PROJECT	



LEGEND	
	SHORT TERM PAVEMENT MARKING
	CONSTRUCTION BARREL
	TYPE III BARRICADE
	TEMPORARY CONCRETE BARRIER
	IMPACT ATTENUATOR

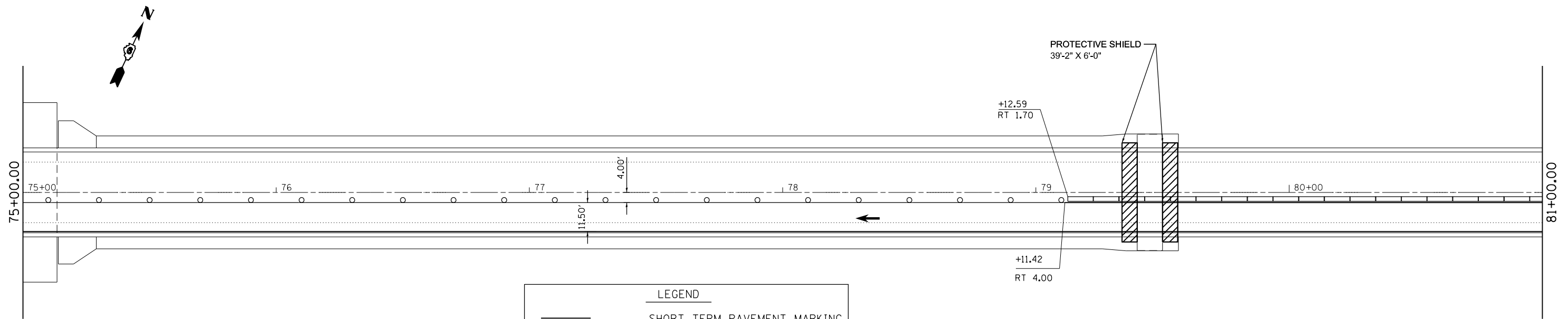
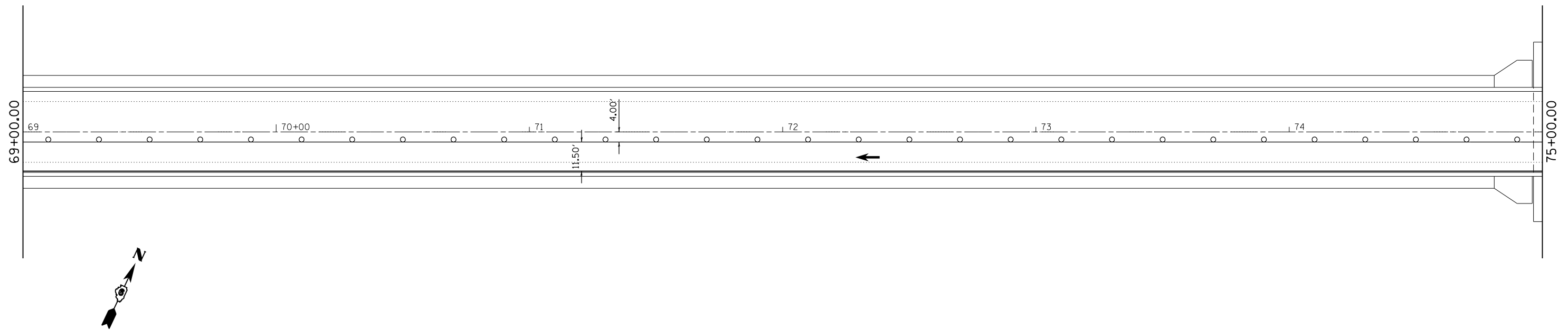
FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
ci:\pw\work\p\dot\sparksgw\0381163\0672080-sht-staging\dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = May-12-2014 08:59:02AM	DATE -	REVISED -

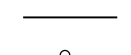


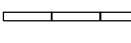

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 1 TRAFFIC CONTROL

SCALE: SHEET 2 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B)BJR,I-7	ADAMS	31	8
CONTRACT NO. 72G80			ILLINOIS FED. AID PROJECT	



LEGEND	
	SHORT TERM PAVEMENT MARKING
	CONSTRUCTION BARREL
	TYPE III BARRICADE
	TEMPORARY CONCRETE BARRIER
	IMPACT ATTENUATOR

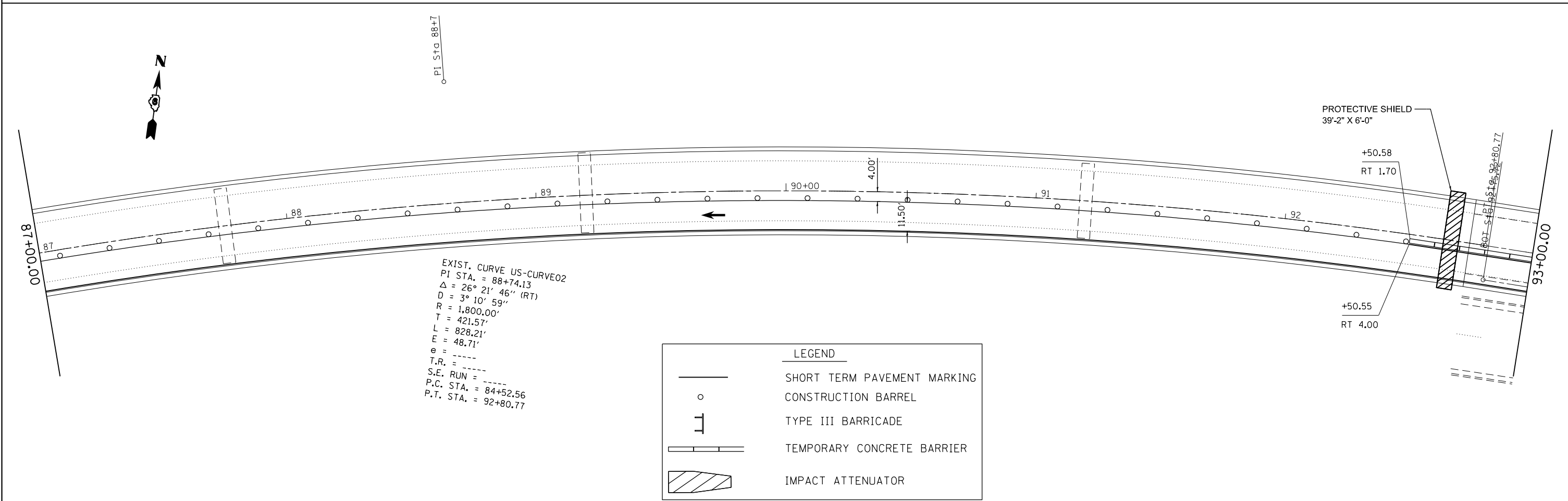
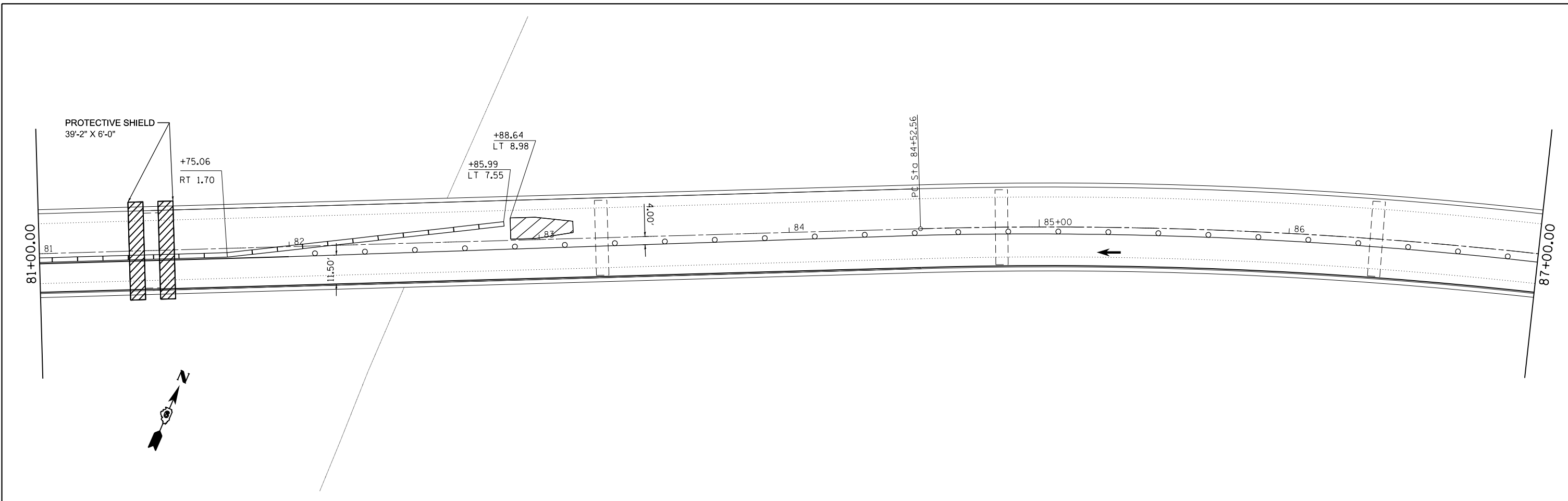
FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
c:\pwork\work\pwork\sparksgw\0381163\0672080-sht-staging.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = May-12-2014 08:59:02AM	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 1 TRAFFIC CONTROL

SCALE: SHEET 3 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B)BJR,I-7	ADAMS	31	9
CONTRACT NO. 72G80			ILLINOIS FED. AID PROJECT	



EXIST. CURVE US-CURVE02
 PI STA. = 88+74.13
 Δ = 26° 21' 46" (RT)
 D = 3° 10' 59"
 R = 1,800.00'
 T = 421.57'
 L = 828.21'
 E = 48.71'
 e = ----
 T.R. = ----
 S.E. RUN = ----
 P.C. STA. = 84+52.56
 P.T. STA. = 92+80.77

LEGEND	
	SHORT TERM PAVEMENT MARKING
	CONSTRUCTION BARREL
	TYPE III BARRICADE
	TEMPORARY CONCRETE BARRIER
	IMPACT ATTENUATOR

FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
ci:\pw_work\p\dot\sparksgw\0381163\0672680-sht-staging\dgn		DRAWN -	REVISED -
Default	PLOT DATE = May-12-2014 08:59:02AM	CHECKED -	REVISED -
		DATE -	REVISED -

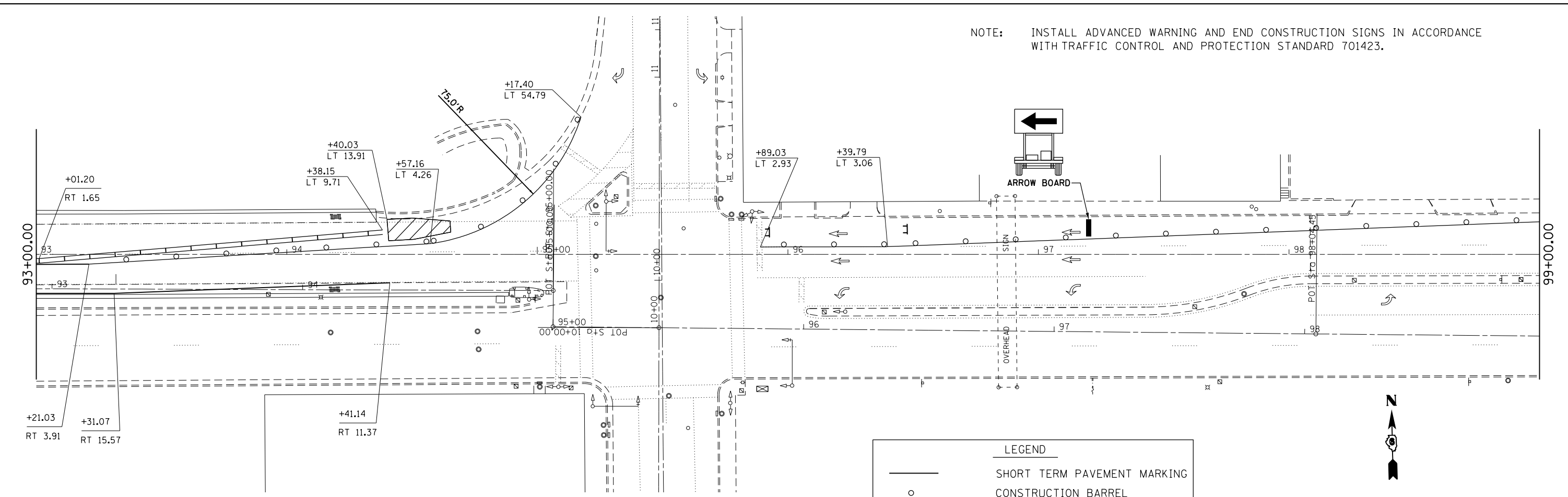
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

STAGE 1 TRAFFIC CONTROL

SCALE: SHEET 4 OF 5 SHEETS STA. TO STA.

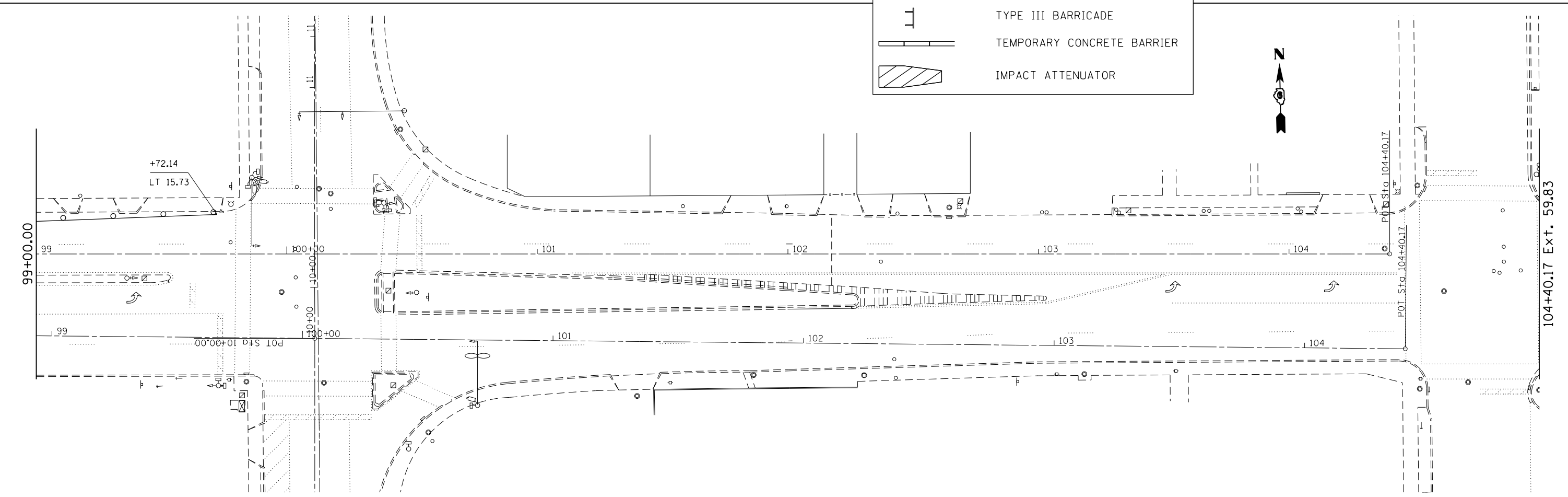
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B)BJR,I-7	ADAMS	31	10
CONTRACT NO. 72G80			ILLINOIS FED. AID PROJECT	

NOTE: INSTALL ADVANCED WARNING AND END CONSTRUCTION SIGNS IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701423.



LEGEND

- SHORT TERM PAVEMENT MARKING
- CONSTRUCTION BARREL
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR

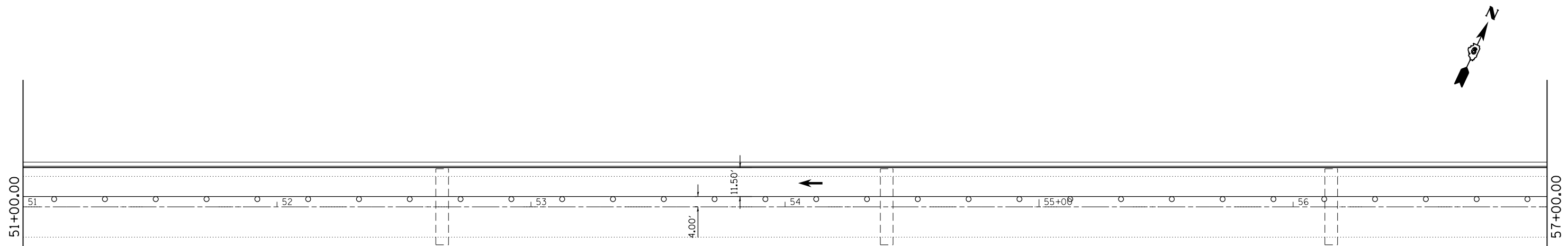
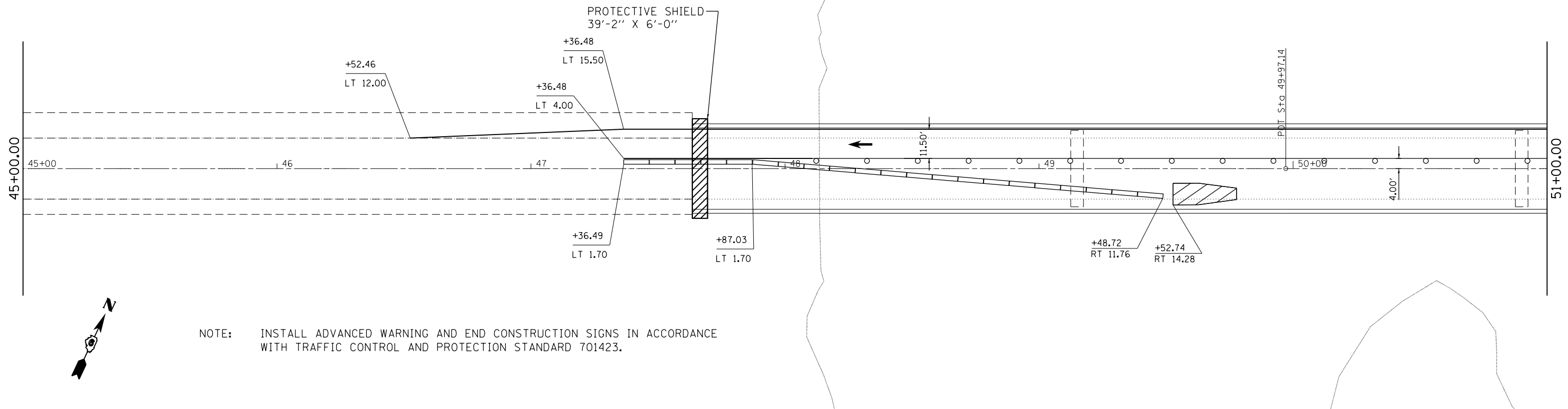


FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
ei:\pw\work\p\dot\sparksgw\10381163\0672080-sht-staging1.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = May-12-2014 08:59:02AM	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 1 TRAFFIC CONTROL			
SCALE:	SHEET 5	OF 5 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B)BJR,I-7	ADAMS	31	11
CONTRACT NO. 72G80			ILLINOIS FED. AID PROJECT	



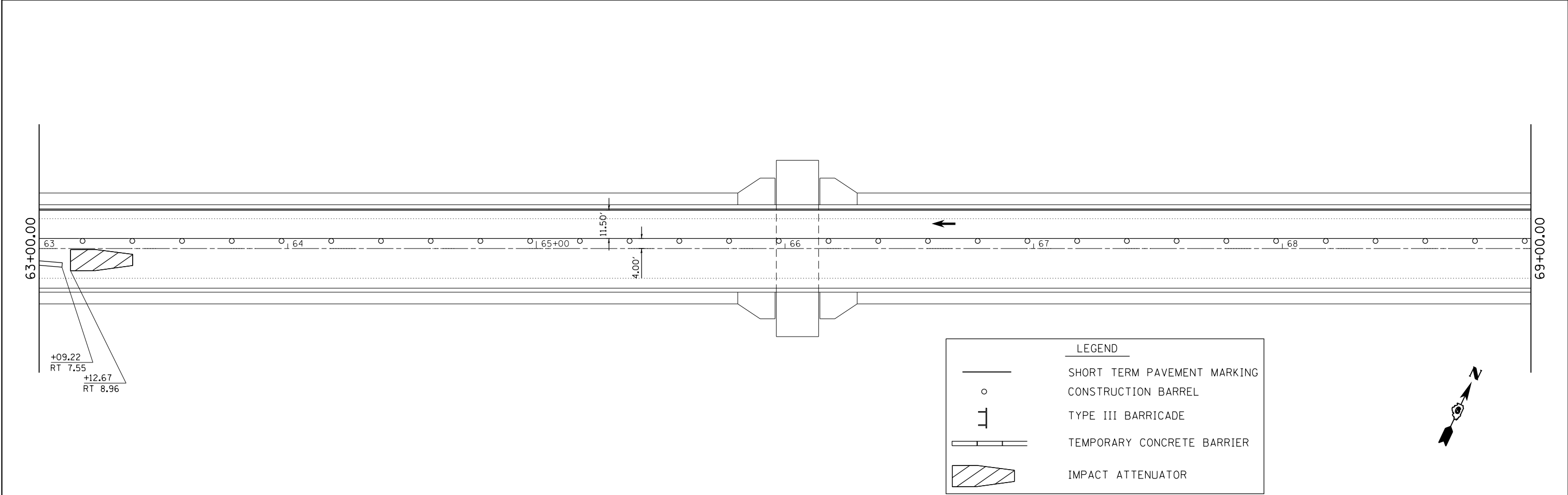
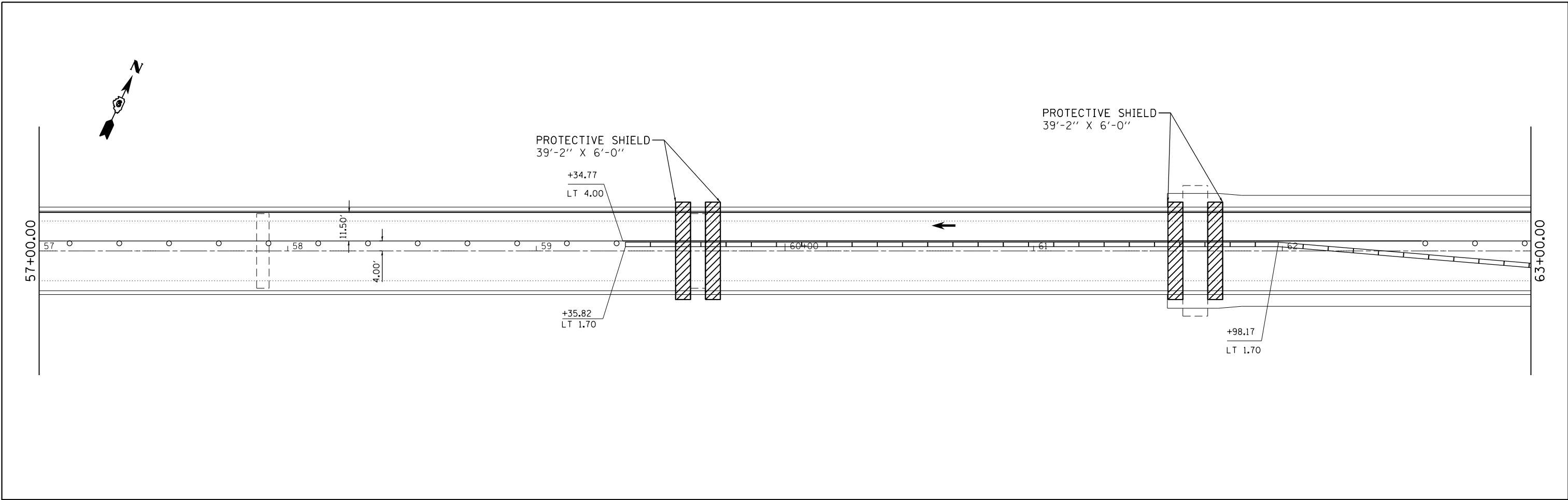
FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
ei:\pw\work\p\id\sparksgw\0381163\0672680-sht-staging2.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = May-12-2014 08:59:04AM	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 2 TRAFFIC CONTROL

SCALE: SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B)BJR,1-7	ADAMS	31	12
CONTRACT NO. 72G80			ILLINOIS FED. AID PROJECT	



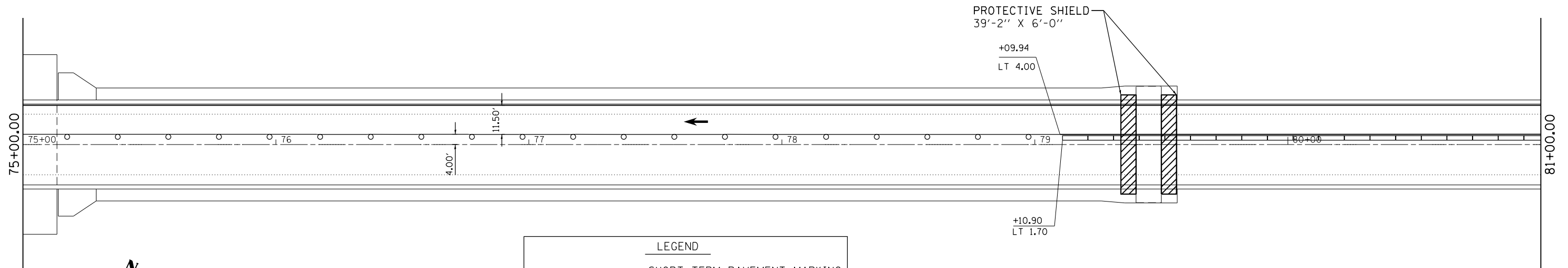
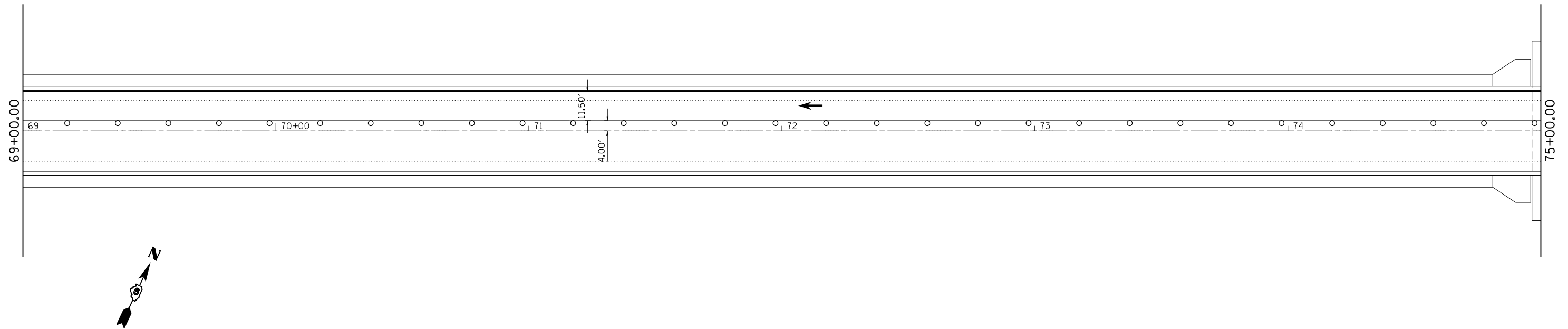
LEGEND	
	SHORT TERM PAVEMENT MARKING
	CONSTRUCTION BARREL
	TYPE III BARRICADE
	TEMPORARY CONCRETE BARRIER
	IMPACT ATTENUATOR

FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
c:\pwork\work\pwork\sparksgw\0381163\0672080-sht-staging2.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = May-12-2014 08:59:04AM	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 2 TRAFFIC CONTROL			
SCALE:	SHEET 2	OF 5 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B)BJR,I-7	ADAMS	31	13
CONTRACT NO. 72G80				
ILLINOIS FED. AID PROJECT				



LEGEND	
	SHORT TERM PAVEMENT MARKING
	CONSTRUCTION BARREL
	TYPE III BARRICADE
	TEMPORARY CONCRETE BARRIER
	IMPACT ATTENUATOR

FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
c:\pw\work\p\idot\sparksgw\0381163\0672680-sht-staging2.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = May-12-2014 08:59:04AM	DATE -	REVISED -

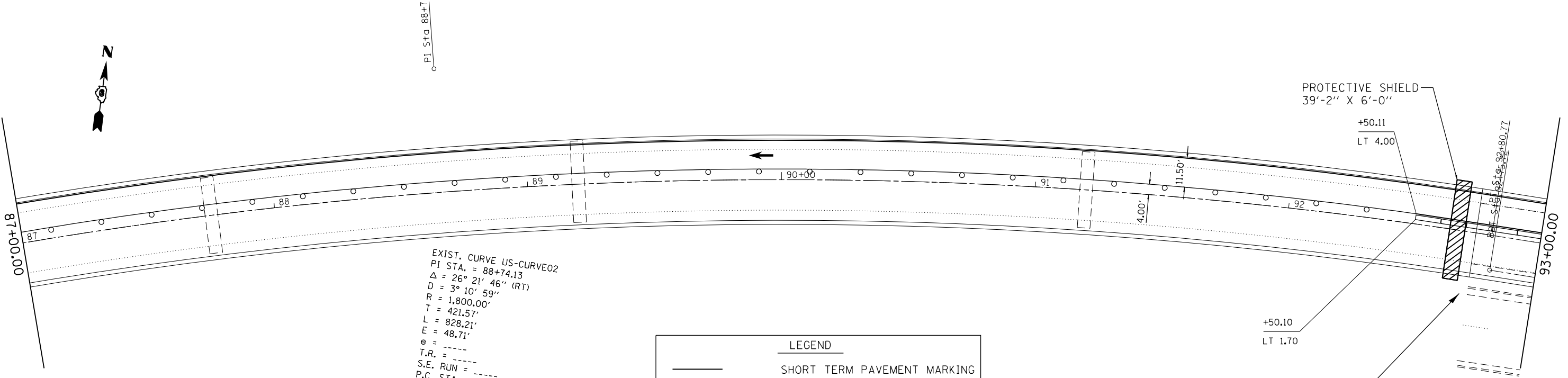
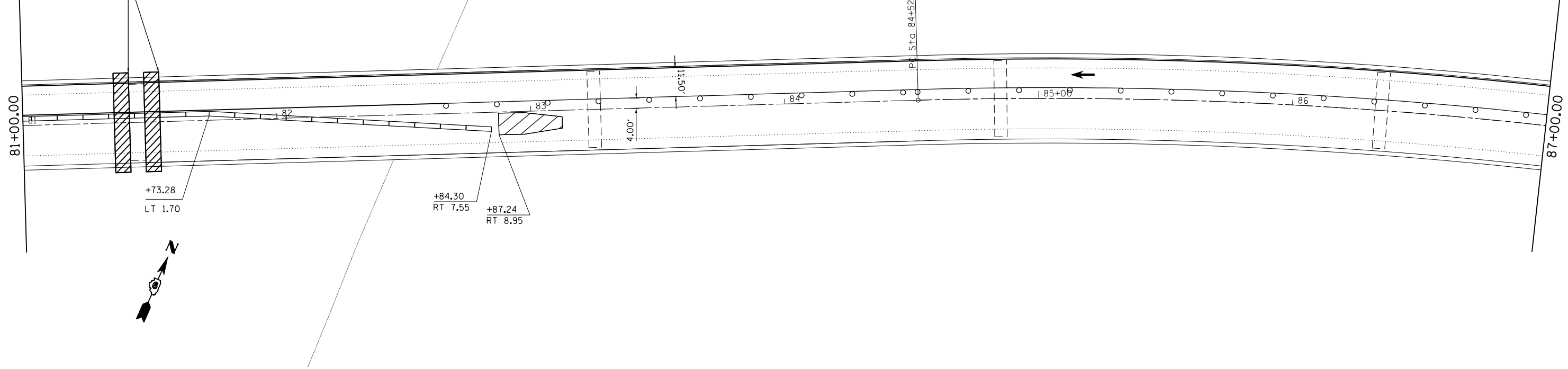
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 2 TRAFFIC CONTROL

SCALE: SHEET 3 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B)BJR,I-7	ADAMS	31	14
CONTRACT NO. 72G80			ILLINOIS FED. AID PROJECT	

PROTECTIVE SHIELD
39'-2" X 6'-0"



EXIST. CURVE US-CURVE02
 PI STA. = 88+74.13
 Δ = 26° 21' 46" (RT)
 D = 3° 10' 59"
 R = 1,800.00'
 T = 421.57'
 L = 828.21'
 E = 48.71'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 84+52.56
 P.T. STA. = 92+80.77

LEGEND	
	SHORT TERM PAVEMENT MARKING
	CONSTRUCTION BARREL
	TYPE III BARRICADE
	TEMPORARY CONCRETE BARRIER
	IMPACT ATTENUATOR

NOTE: TRAFFIC CONTROL AND PROTECTION STANDARD 701201
NEEDED ON OLD US 24 WHEN WORKING ON EAST ABUTMENT.

FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
ei:\pw_work\pwork\sparksgw\0381163\0672080-sht-staging2.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = May-12-2014 08:59:04AM	DATE -	REVISED -

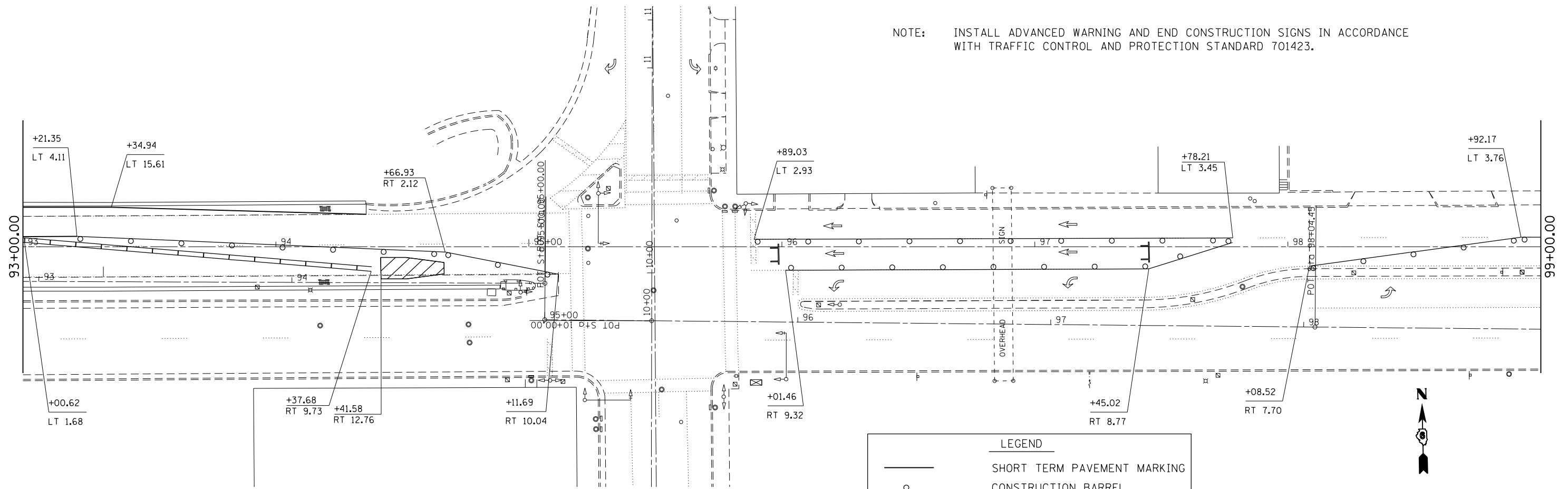
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2 TRAFFIC CONTROL

SCALE: SHEET 4 OF 5 SHEETS STA. TO STA.

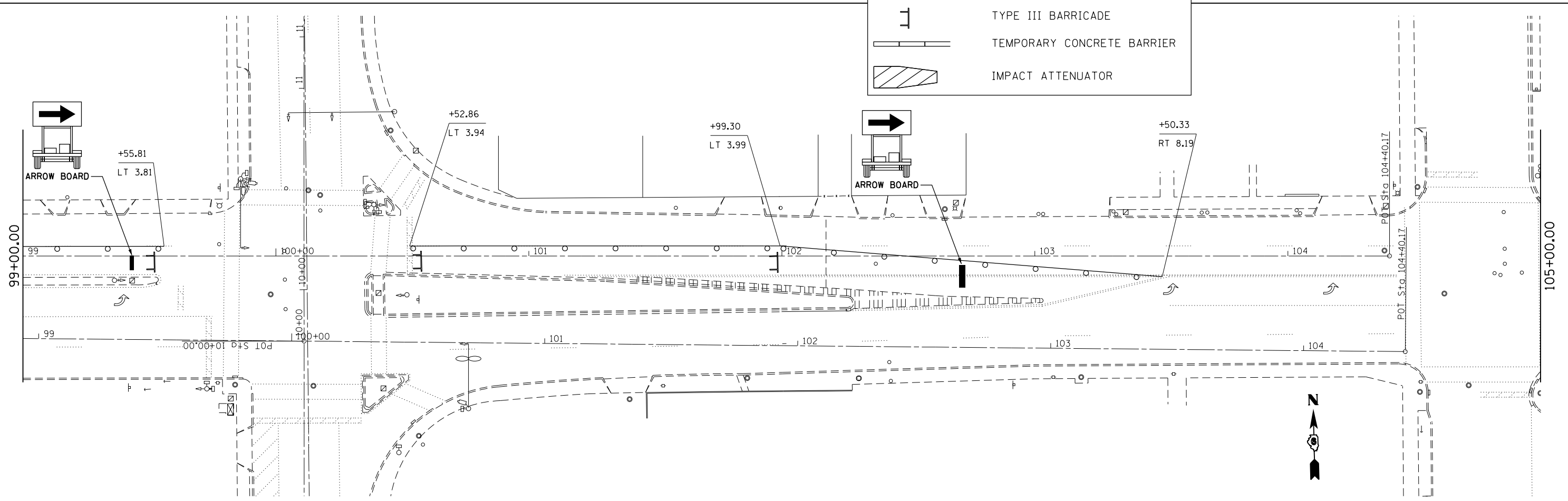
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(1Z-B)BJR,I-7	ADAMS	31	15
CONTRACT NO. 72G80			ILLINOIS FED. AID PROJECT	

NOTE: INSTALL ADVANCED WARNING AND END CONSTRUCTION SIGNS IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701423.

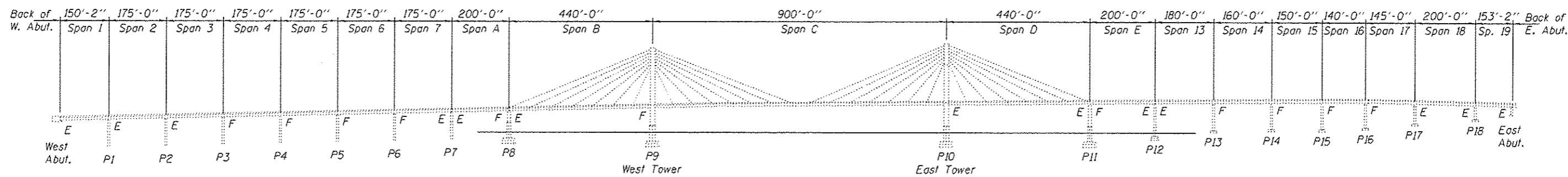


LEGEND

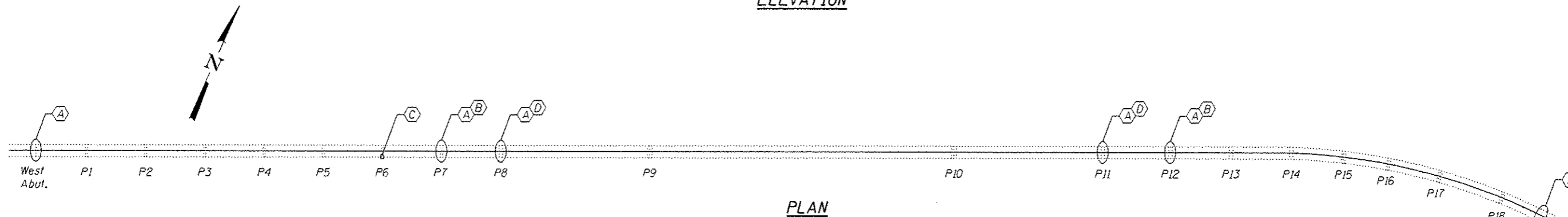
- SHORT TERM PAVEMENT MARKING
- CONSTRUCTION BARREL
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR



FILE NAME = c:\pwork\pwork\sparksgw\0381163\0672080-sht-staging2.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE 2 TRAFFIC CONTROL			F.A.P. RTE. = 63	SECTION = (1Z-BIBJR,I-7)	COUNTY = ADAMS	TOTAL SHEETS = 31	SHEET NO. = 16
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -		SCALE:	SHEET 5	OF 5 SHEETS	STA. TO STA.	CONTRACT NO. 72G80			
Default	PLOT DATE = May-12-2014 08:59:05AM	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



ELEVATION



PLAN

GENERAL NOTES

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

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

Reinforcement bars designated (E) shall be epoxy coated.

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

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

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

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.

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

All structural steel shall be shop primed with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Modular Expansion Joint Swivel, 6".

Modular Expansion Joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.

Modular Expansion Joints shall be fabricated and installed according to the manufacturer's recommendations and as approved by the Engineer.

Modular Expansion Joints shall be fabricated to conform to the existing cross slopes of the bridge.

- (A) Remove & Replace Existing Expansion Joint with Modular Expansion Joint
- (B) Remove & Replace Existing Bearings (West Brgs. at Pier 7; East Brgs. at Pier 12)
- (C) Repair Broken Bearing Anchor Bolt (08/20/2012 NBIS Report Item No. 6) (See sheet 11 of 15 for details)
- (D) Epoxy Crack Sealing on Pier (See sheet 13 of 15 for details)
- (E) Fix Loose & Missing Bolts (For Locations see Table this sheet)

(E) - TABLE OF LOOSE & MISSING BOLTS

08/20/2012 NBIS Report Item No.	Span	Member	Deficiency	Repair
41	4, 5	Girder 3 at Pier 4	1-Loose Top Brg. Bolt	**** Replace
46	B	Cable Stay W4N, T. Deck Support	4-Loose Bolts to Deck	*** Tighten Bolts
48	C	Cable Stay W4N, T. Deck Support	4-Loose Bolts to Deck	*** Tighten Bolts
49	C	Stringer 2 at FB 40, Panel 39	2-Loose Bolts	* Replace Bolts
50	C	Cable Stay W13S, T. Deck Support	4-Loose Bolts to Deck	*** Tighten Bolts
51	C	Cable Stay W14N, T. Deck Support	4-Loose Bolts to Deck	*** Tighten Bolts
52	C	Cable Stay W14S, T. Deck Support	4-Loose Bolts to Deck	*** Tighten Bolts
53	C	Stringer 5 btwn, FB 46 & 47, Panel 46	2-Missing Bolts	** Install 3/4"φ Bolts
67	5, 6	Girder 1 at Pier 5	1-Loose Top Brg. Bolt	**** Replace

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	67.8
Concrete Superstructure	Cu. Yd.	64.6
Modular Expansion Joint - Swivel, 6"	Foot	34
Modular Expansion Joint, 9"	Foot	136
Modular Expansion Joint - Swivel, 15"	Foot	34
Reinforcement Bars, Epoxy Coated	Pound	13,770
Bar Splicers	Each	156
Mechanical Splicers	Each	672
Jack and Remove Existing Bearings	Each	6
High Load Multi-Rotational Bearings, Guided Expansion, 300k	Each	6
Anchor Bolts, 1/2"φ	Each	25
Epoxy Crack Injection	Foot	120
Structural Steel Repair	Pounds	40
Structural Repair of Concrete ≤ 5"	Sq. Ft.	6

- * Replace Bolts. Field verify size and lengths of bolts.
- ** 3/4"φ H.S. Bolt. Use holes in L to field drill holes in beam. Field verify bolt length.
- *** Contact the Bureau of Bridges & Structures Repairs Unit for further disposition if bolts cannot be tightened.
- **** Replace 7/8"φ x 4 3/8" Threaded Stud (M164, Type 3) with hex nut & flat washer.
- ***** The Contractor shall salvage 2 of the existing bearings and deliver them to the Bureau of Materials & Physical Research. The Bureau of Bridges & Structures shall be notified when the bearings are ready to be delivered.



EXPIRES 11-30-2014

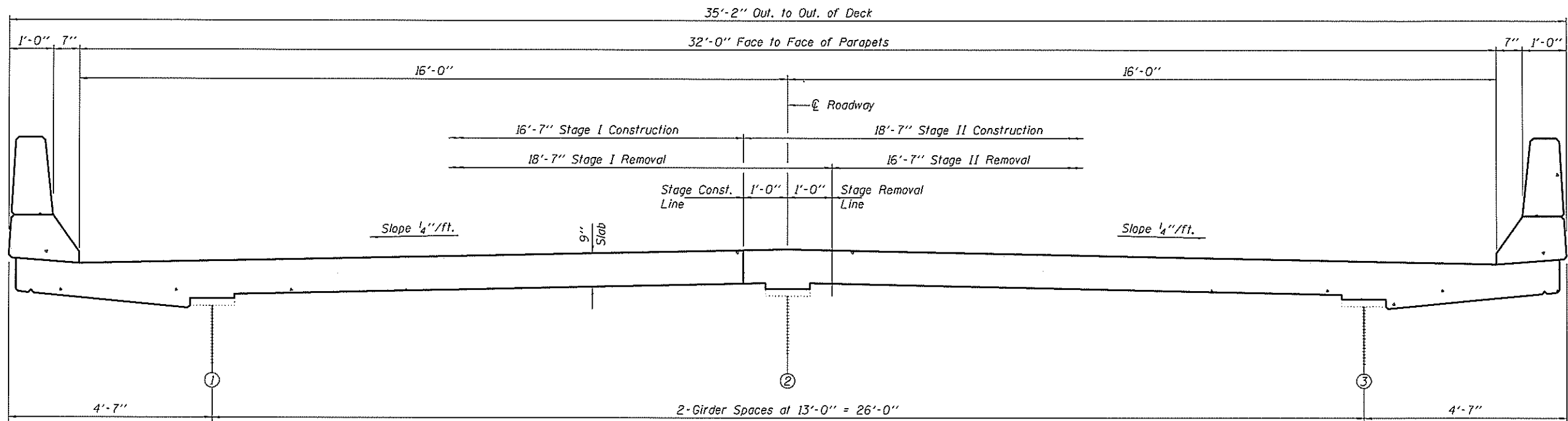
DESIGNED <i>Adrian T. Holloway</i>	EXAMINED <i>Timothy A. ...</i>	DATE JUNE 24, 2014
CHECKED <i>Gary ...</i>	PASSED <i>...</i>	REVISED
DRAWN <i>Kyle M. Steffen</i>		REVISED
CHECKED <i>ATH</i>		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
U.S. ROUTE 24 (QUINCY BAYVIEW BRIDGE) OVER MISSISSIPPI RIVER
SN 001-0068

F.A. RTE. 63	SECTION (12B)BJR, I-7	COUNTY ADAMS	TOTAL SHEETS 31	SHEET NO. 17
CONTRACT NO. 72G80			ILLINOIS FED. AID PROJECT	

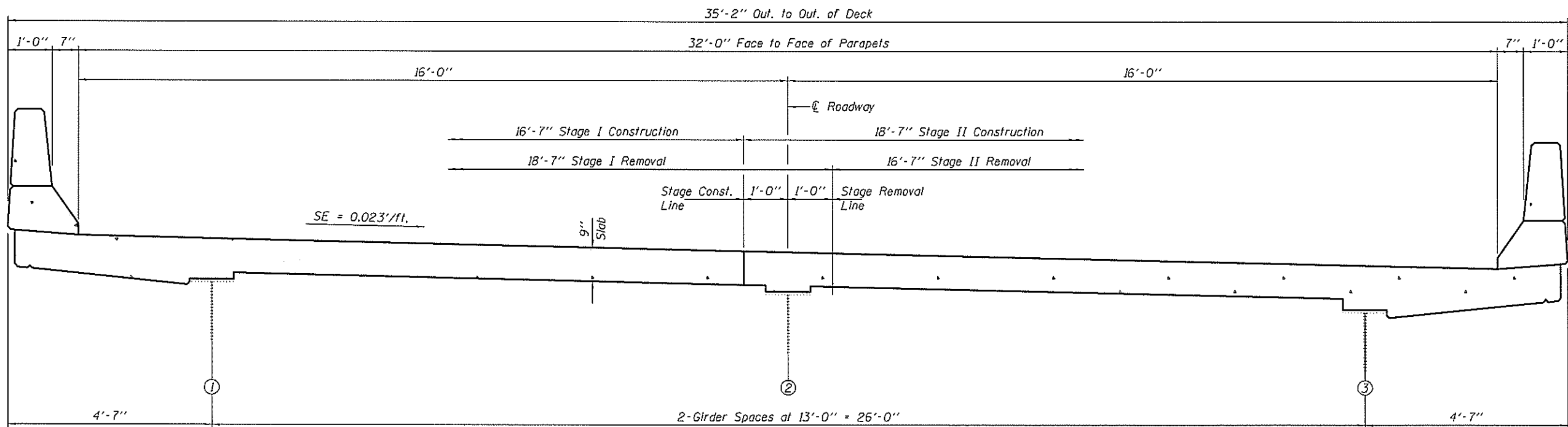
SHEET NO. 1 OF 15 SHEETS



*** CROSS SECTION AT WEST ABUTMENT AND PIERS 7, 8 & 12**
(Looking East)

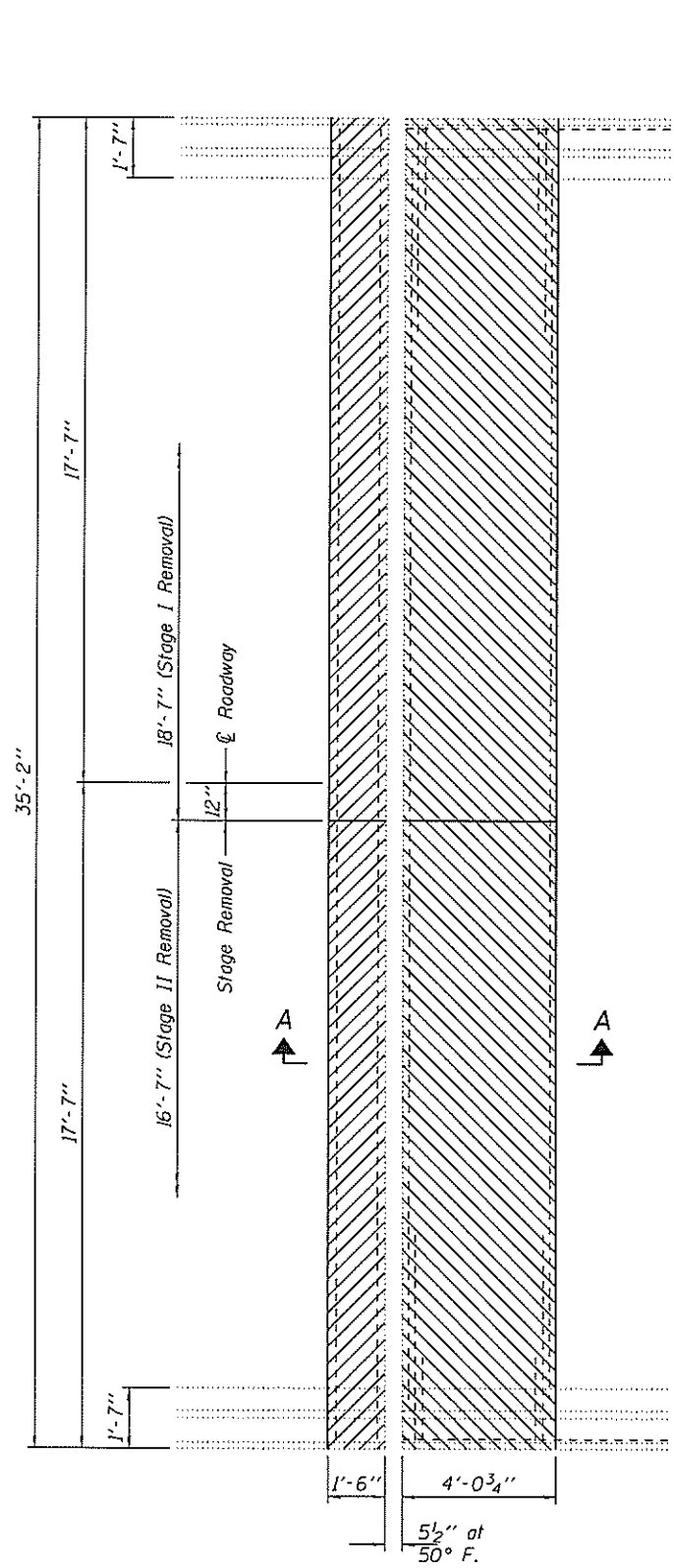
Note:
For Parapet Details see sheet 7 of 15.

* Except at Spans B, C & D.
Details omitted for clarity.

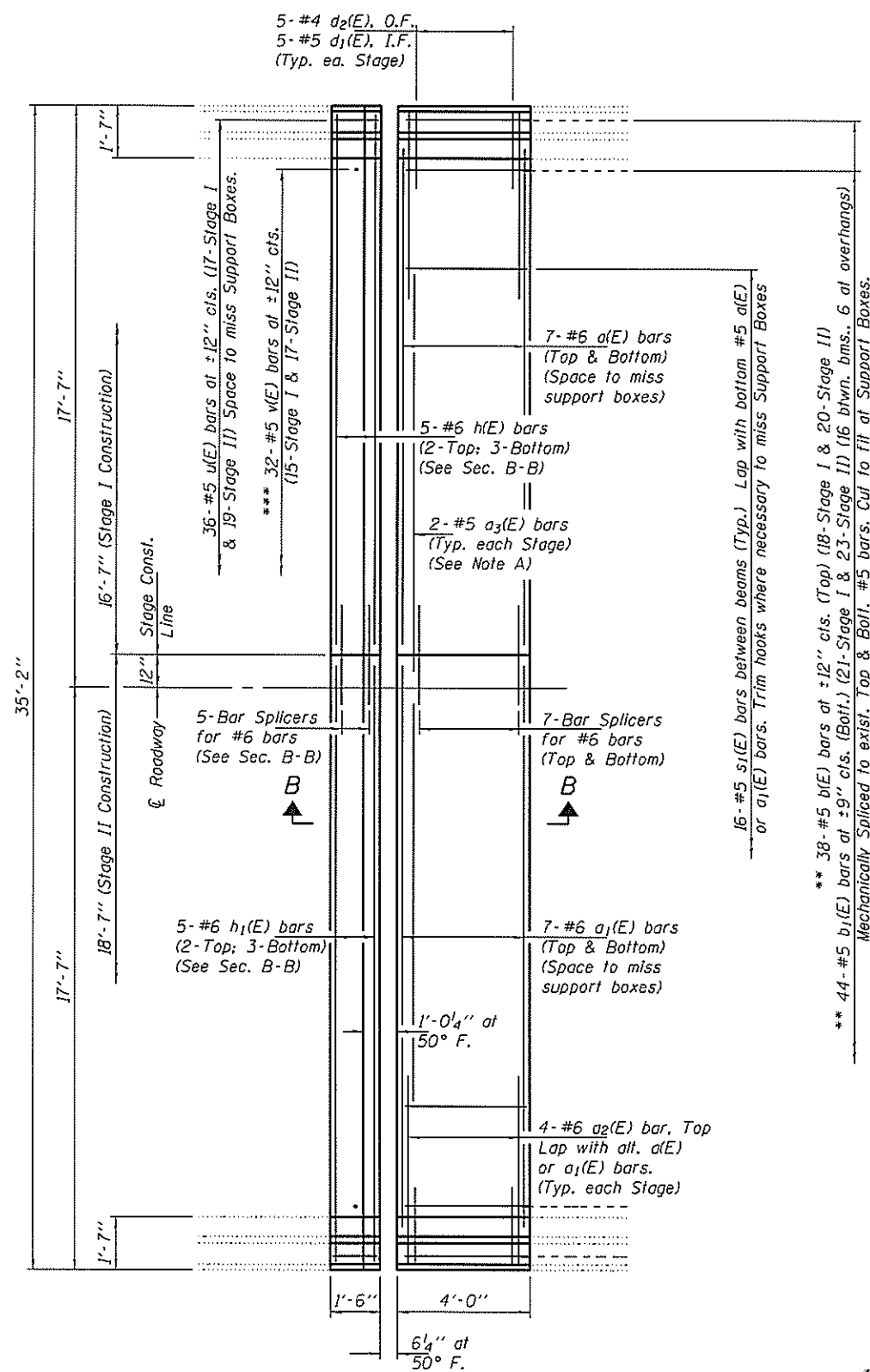


CROSS SECTION AT EAST ABUTMENT
(Looking East)

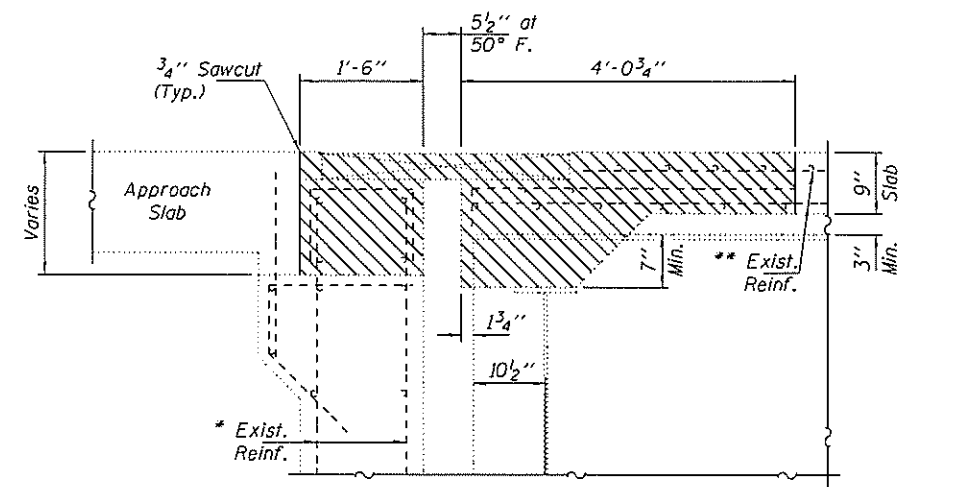
DESIGNED <i>ATH</i>	EXAMINED <i>Timothy A. Andj</i>	DATE <i>JUNE 24, 2014</i>	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTION AND STAGE CONSTRUCTION DETAILS SN 001-0068	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CHECKED <i>GGE</i>	PASSED <i>Carl Perry</i>	REVISIONS			63	12B)BJR, I-7	ADAMS	31	18	
DRAWN <i>Kyle M. Steffen</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISIONS			CONTRACT NO. 72G80					
CHECKED <i>ATH GGE</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISIONS			SHEET NO. 2 OF 15 SHEETS					



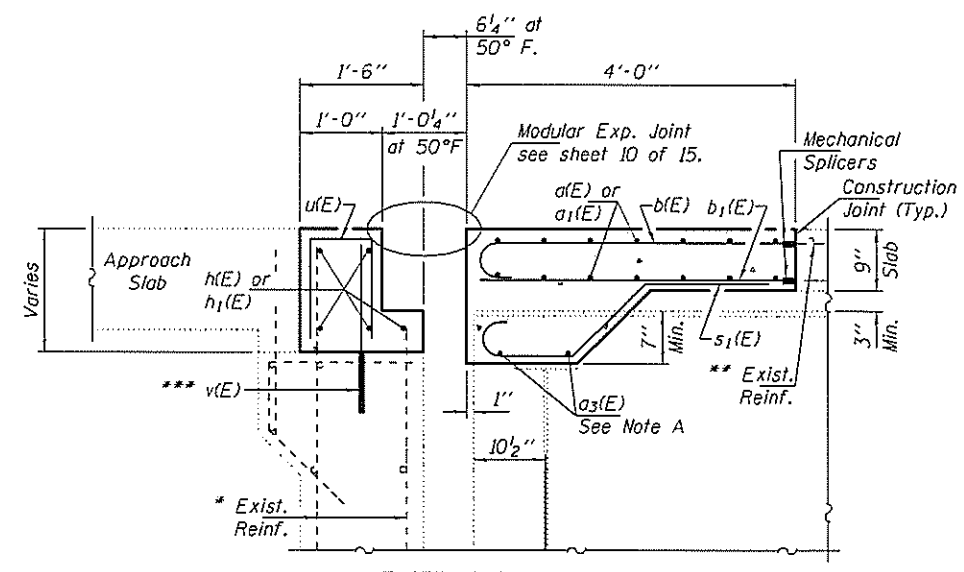
WEST ABUTMENT REMOVAL PLAN



WEST ABUTMENT REPLACEMENT PLAN



SECTION A-A



SECTION B-B

Note A:
Place $a_3(E)$ bars below Support Boxes. Leave portion of bar exposed during Stage I Construction. See Section B-B.

* 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.

** Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.

*** Epoxy Grout $v(E)$ bars in 9" min. holes according to Article 584 of the Standard Specifications.

BILL OF MATERIAL (W. ABUT.)

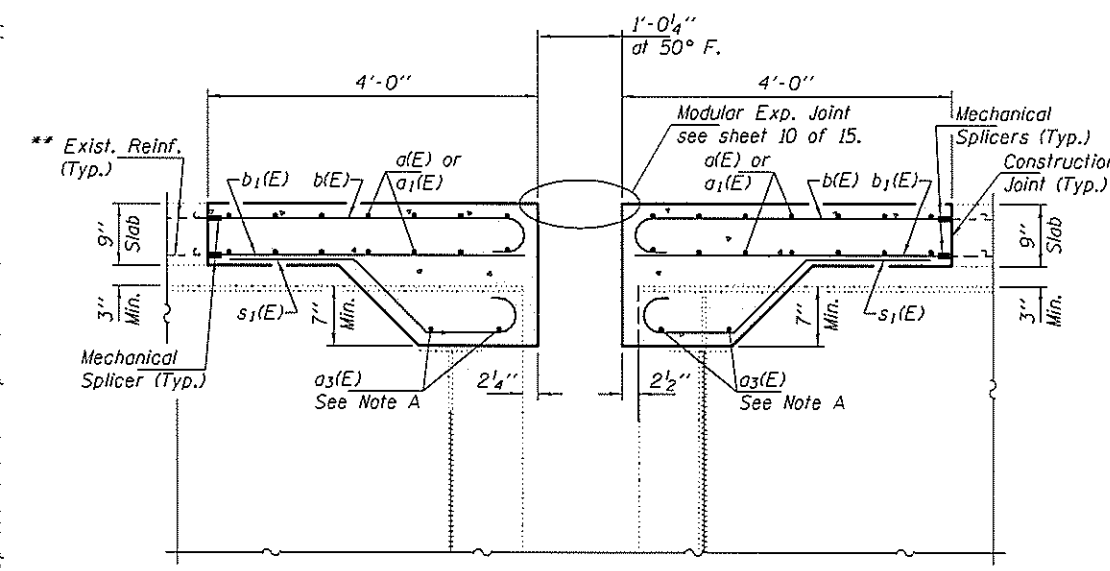
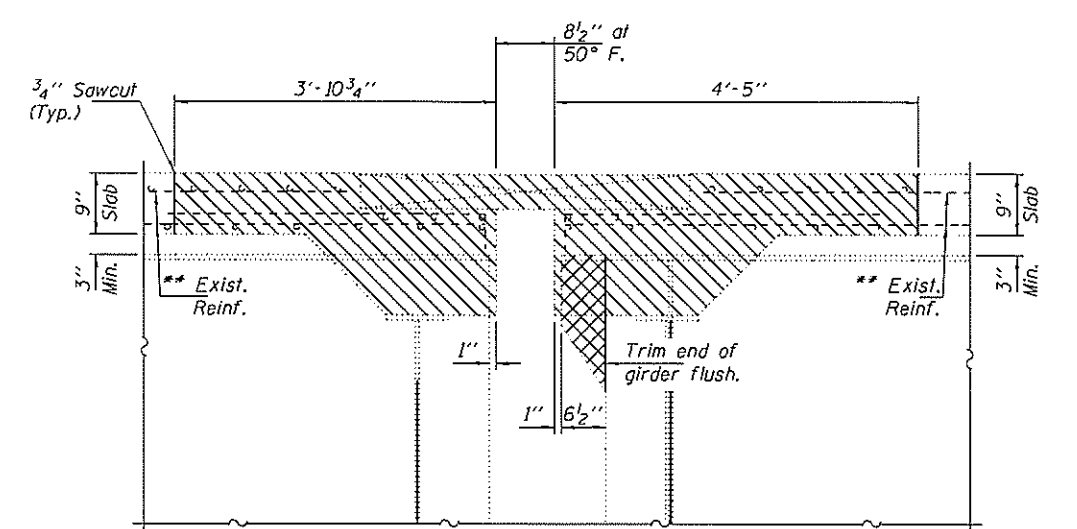
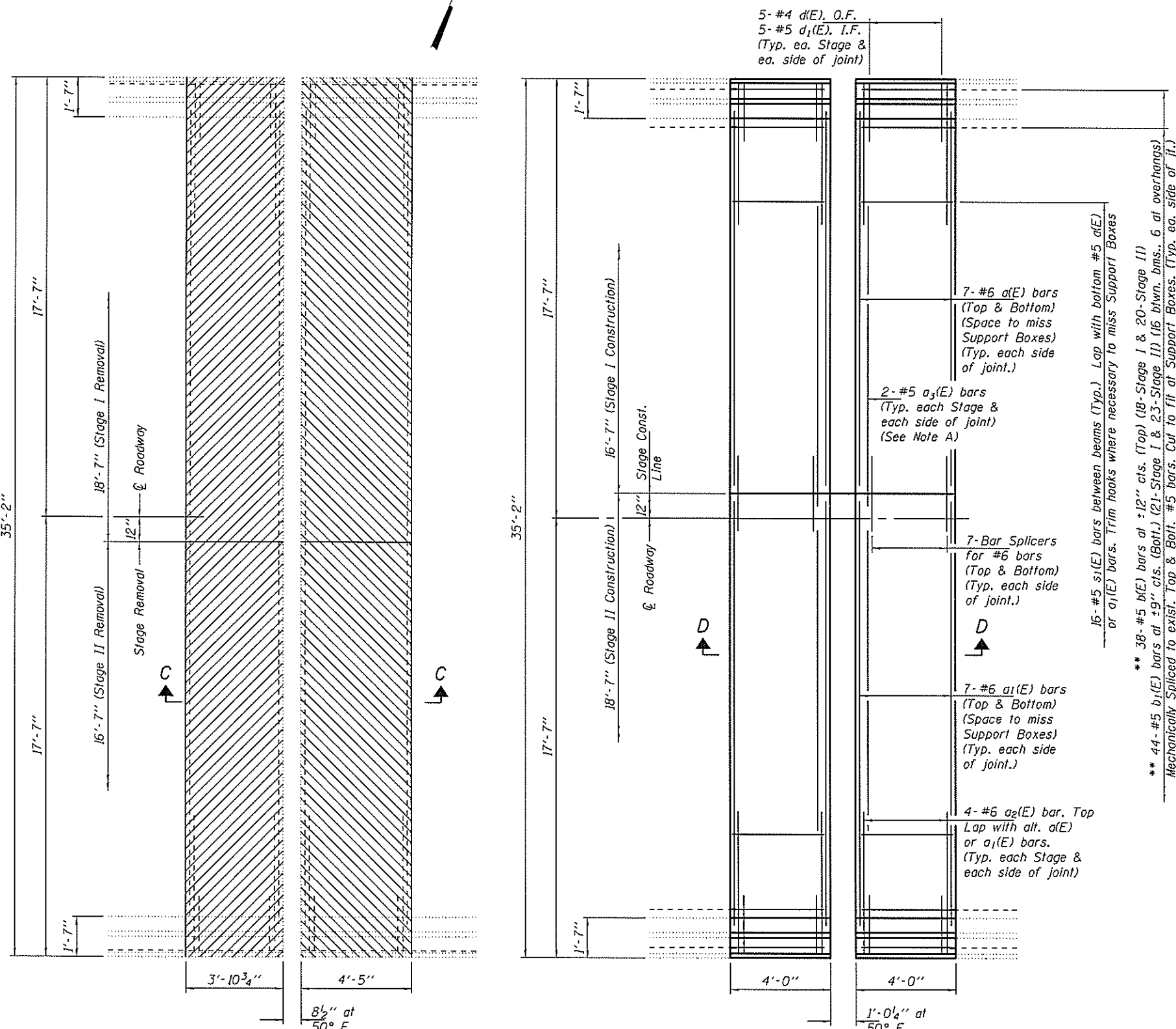
Bar	No.	Size	Length	Shape
$a(E)$	14	#6	15'-6"	—
$a_1(E)$	14	#6	17'-6"	—
$a_2(E)$	8	#6	5'-7"	—
$a_3(E)$	4	#5	13'-8"	—
$b(E)$	38	#5	4'-1"	—
$b_1(E)$	44	#5	3'-9"	—
$d_1(E)$	10	#5	3'-11"	—
$d_2(E)$	10	#4	6'-7"	—
$h(E)$	5	#6	16'-3"	—
$h_1(E)$	5	#6	18'-3"	—
$s_1(E)$	32	#5	4'-5"	—
$u(E)$	32	#5	2'-9"	—
$v(E)$	32	#5	2'-0"	—
Concrete Removal		Cu. Yd.	10.0	
Concrete Superstructure		Cu. Yd.	9.1	
Bar Splicers		Each	19	
Mechanical Splicers		Each	82	
Reinforcement Bars, Epoxy Coated		Pounds	1810	

DESIGNED ATH	EXAMINED	DATE
CHECKED GGE	<i>Timothy A. Anzani</i>	JUNE 24, 2014
DRAWN Kyle M. Steffen	PASSED	REVISED
CHECKED ATH GGE		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT JOINT REMOVAL & REPLACEMENT DETAILS
SN 001-0068

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(125)B.R.-1	ADAMS	31	19
				CONTRACT NO. T2G80
ILLINOIS FED. AID PROJECT				



Note:
Hatched areas indicate Concrete Removal.
Cross-hatched areas indicate steel removal.
Cost of steel removal included with Concrete Removal.

Note A:
Place a₃(E) bars below Support Boxes.
Leave portion of bar exposed during Stage I Construction. See Section D-D.

* 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.

** Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.

BILL OF MATERIAL (EACH PIER)

Bar	No.	Size	Length	Shape
a(E)	28	#6	15'-6"	—
a ₁ (E)	28	#6	17'-6"	—
a ₂ (E)	16	#6	5'-7"	—
a ₃ (E)	8	#5	13'-8"	⌋
b(E)	76	#5	4'-1"	⌋
b ₁ (E)	88	#5	3'-9"	—
d(E)	20	#4	6'-6"	L
d ₁ (E)	20	#5	3'-11"	L
s ₁ (E)	64	#5	4'-5"	⌋
Concrete Removal			Cu. Yd.	14.4
Concrete Superstructure			Cu. Yd.	13.7
Bar Splicers			Each	28
Mechanical Splicers			Each	164
Reinforcement Bars, Epoxy Coated			Pounds	2770

DESIGNED ATH
CHECKED GGE
DRAWN Kyle M. Steffen
CHECKED ATH GGE

EXAMINED *Timothy A. Anzani*
PASSED *Carl Perry*

DATE JUNE 24, 2014

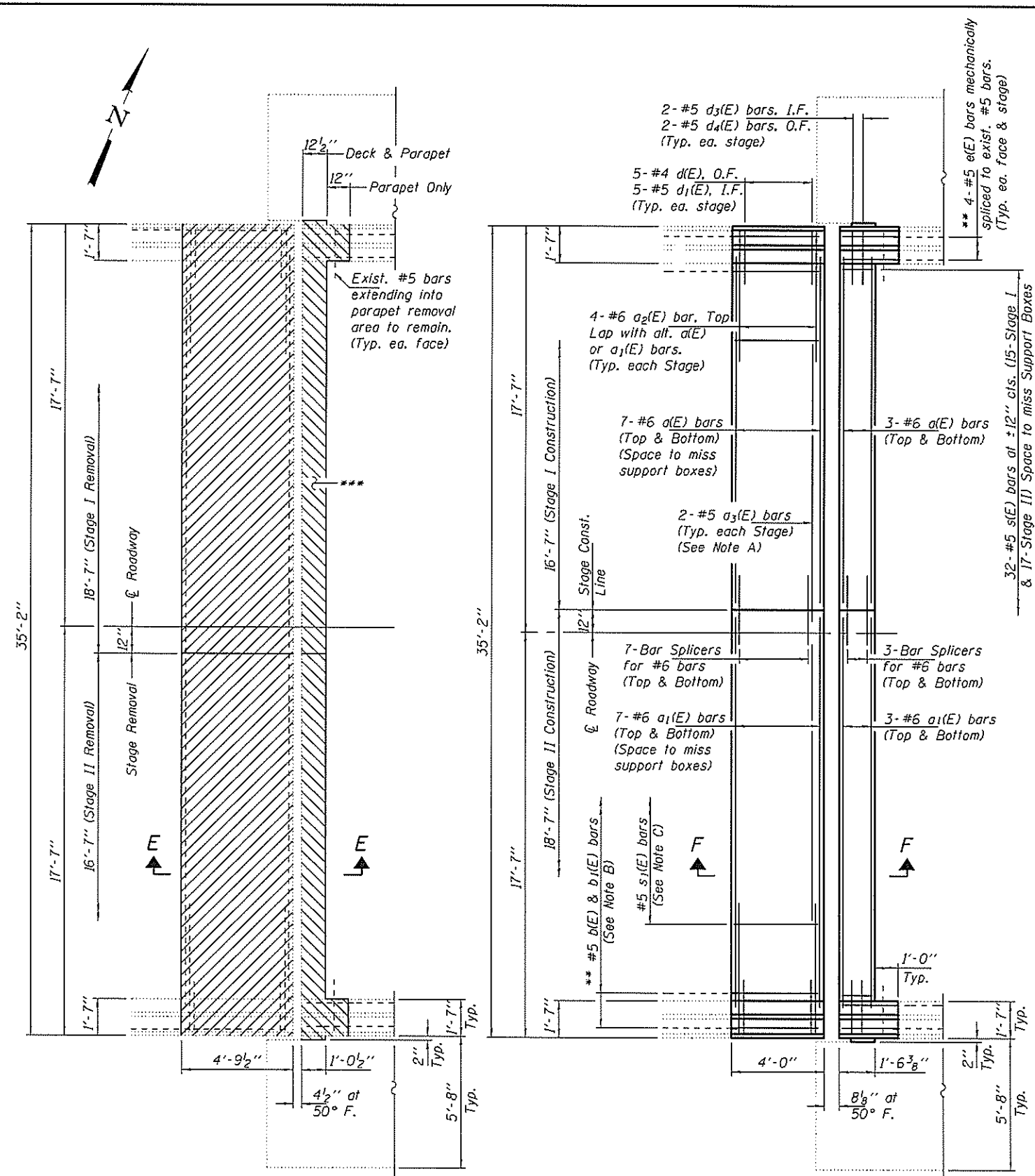
ACTING ENGINEER OF STRUCTURAL SERVICES
ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIERS 7 & 12 JOINT REMOVAL & REPLACEMENT DETAILS
SN 001-0068

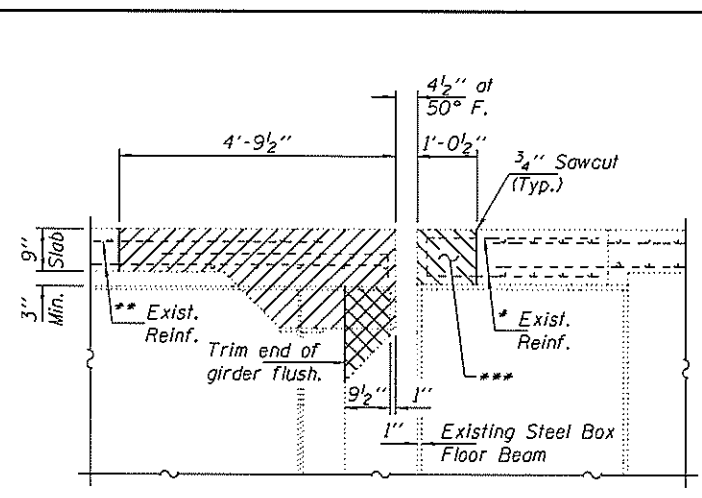
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(12B)JR-1-7	ADAMS	31	20

CONTRACT NO. 72G80
ILLINOIS FED. AID PROJECT



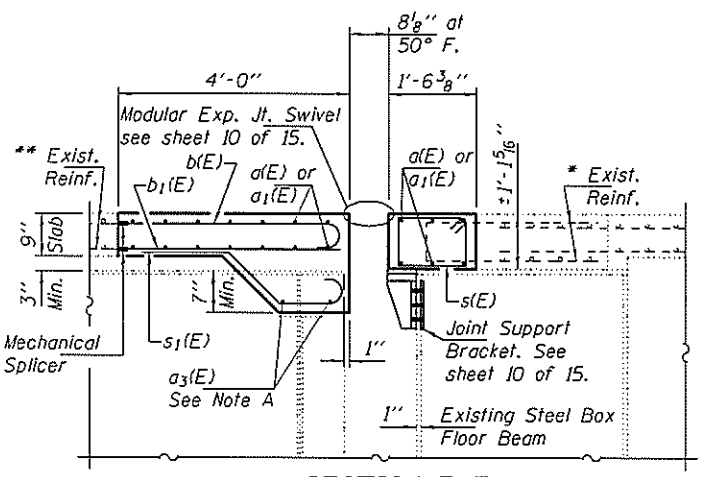
PIERS 8 JOINT REMOVAL PLAN

PIERS 8 JOINT REPLACEMENT PLAN

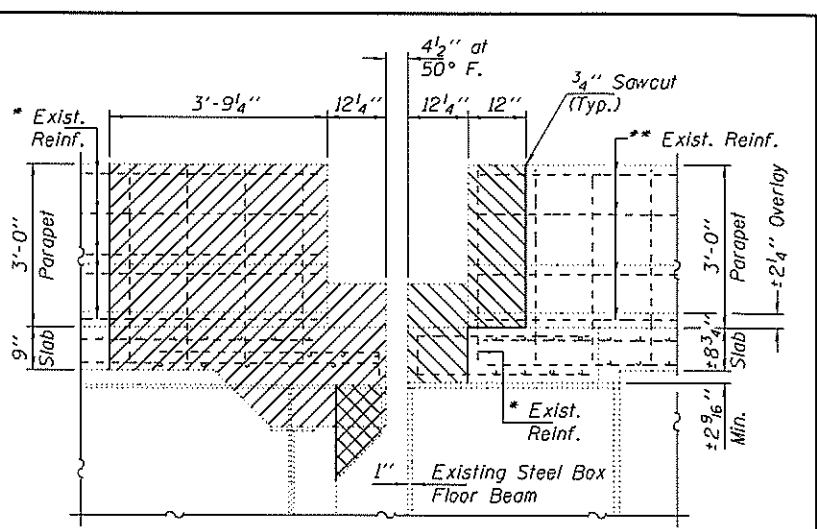


SECTION E-E

Note:
Hatched areas indicate Concrete Removal.
Cross-hatched areas indicate steel removal.
Cost of steel removal included with Concrete Removal

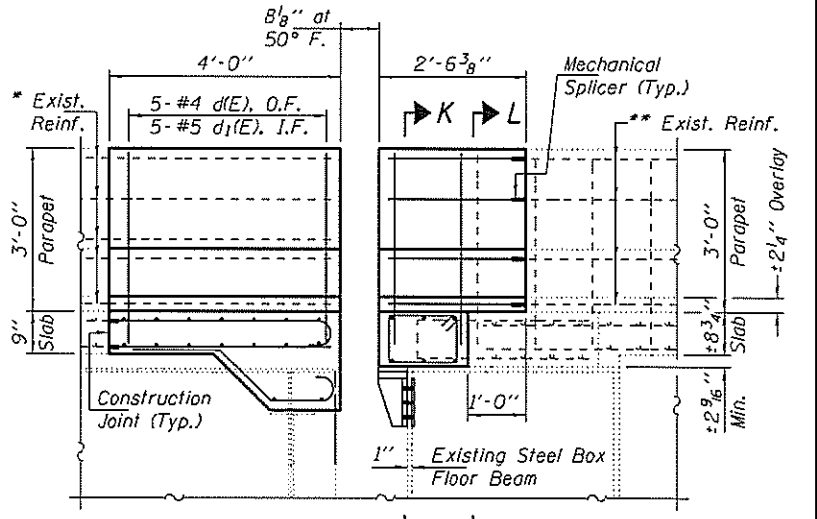


SECTION F-F



SECTION SHOWING PARAPET REMOVAL

(See Section F-F this sheet and Sections K-K & L-L on sheet 10 of 15 for additional information.)



SECTION SHOWING PARAPET REPLACEMENT

(See Section F-F this sheet and Sections K-K & L-L on sheet 10 of 15 for additional information.)

BILL OF MATERIAL (PIER 8)

Bar	No.	Size	Length	Shape
a(E)	20	#6	15'-6"	
a ₁ (E)	20	#6	17'-6"	
a ₂ (E)	8	#6	5'-7"	
a ₃ (E)	4	#5	13'-8"	
b(E)	38	#5	4'-1"	
b ₁ (E)	44	#5	3'-9"	
d(E)	10	#4	6'-6"	L
d ₁ (E)	10	#5	3'-11"	
d ₃ (E)	4	#5	4'-6"	
d ₄ (E)	4	#5	4'-11"	L
e(E)	16	#5	2'-2"	
s(E)	32	#5	4'-9"	
s ₁ (E)	32	#5	4'-5"	
Concrete Removal		Cu. Yd.	9.5	
Concrete Superstructure		Cu. Yd.	9.5	
Bar Splicers		Each	20	
Mechanical Splicers		Each	98	
Reinforcement Bars, Epoxy Coated		Pounds	1910	

Note A:
Place a₃(E) bars below Support Boxes.
Leave portion of bar exposed during Stage I Construction. See Section F-F.

Note B:
** 38-#5 b(E) bars at ±12" cts. (Top) (18-Stage I & 20-Stage II)
** 44-#5 b₁(E) bars at ±9" cts. (Bott.) (21-Stage I & 23-Stage II)
Mechanically Spliced to exist. #5 bars.
Cut to fit at Support Boxes.

Note C:
16-#5 s₁(E) bars between beams (Typ.)
Lap with bottom #5 a(E) or a₁(E) bars.
Trim hooks where necessary to miss Support Boxes.

* 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.

** Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.

*** Care shall be taken during removal not to damage the existing steel box floor beam. Any damage to the floor beam shall be repaired at the Contractor's expense.

DESIGNED ATH
CHECKED GGE
DRAWN Kyle M. Steffen
CHECKED ATH GGE

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

DATE JUNE 24, 2014
REVISED
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

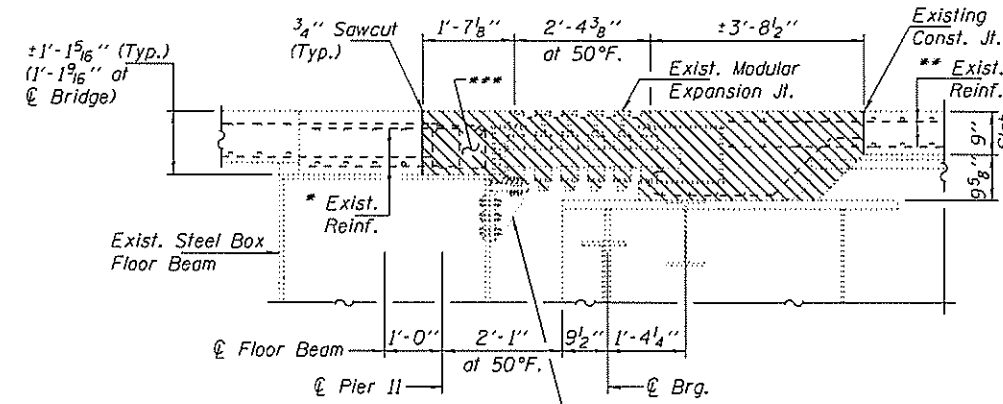
PIER 8 JOINT REMOVAL & REPLACEMENT DETAILS
SN 001-0068

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(12)B1JR,1-T	ADAMS	31	21
CONTRACT NO. T2G80			ILLINOIS FED. AID PROJECT	

Note A:
 ** 38-#5 b₂(E) bars at ±12" cts. (Top) (18-Stage I & 20-Stage II)
 ** 44-#5 b₃(E) bars at ±9" cts. (Bott.) (21-Stage I & 23-Stage II)
 (16 between beams; 6 at overhangs)
 Mechanically Spliced to exist. #5 bars.
 Cut to fit at Support Boxes.

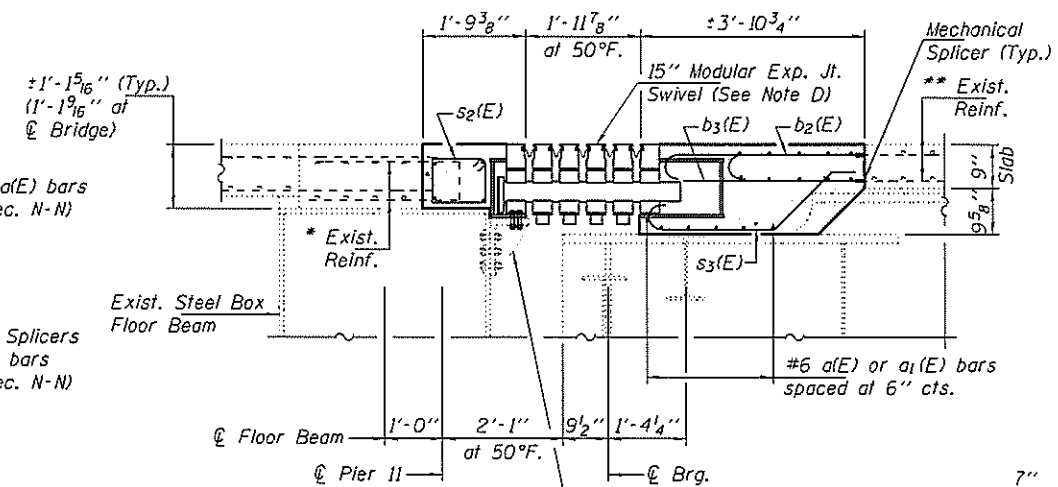
Note B:
 16-#5 s₃(E) bars between beams (Typ.)
 Lap with bottom #5 a₁(E) or a₁(E) bars.
 Trim hooks where necessary to miss
 Support Boxes.

Note C:
 Existing Parapet Plate Assembly to be
 removed, stored & reinstalled after new
 Expansion Joint Construction is complete.
 Use new 5/8" φ H.S. Socket Button-Head Cap
 Screws in existing cast-in-place inserts.



Existing Brackets to be reused.
 For details see sheets 7 & 8 of 15.

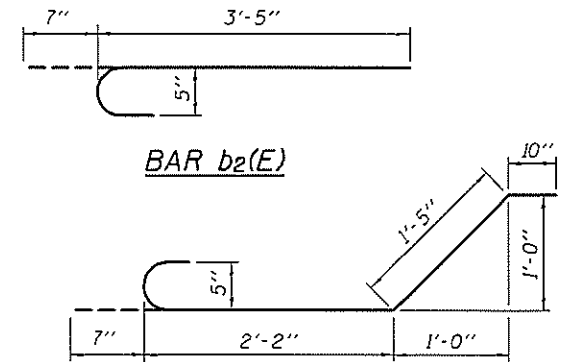
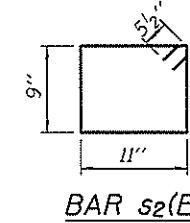
SECTION M-M



Existing Brackets to be reused.
 For details see sheets 7 & 8 of 15.

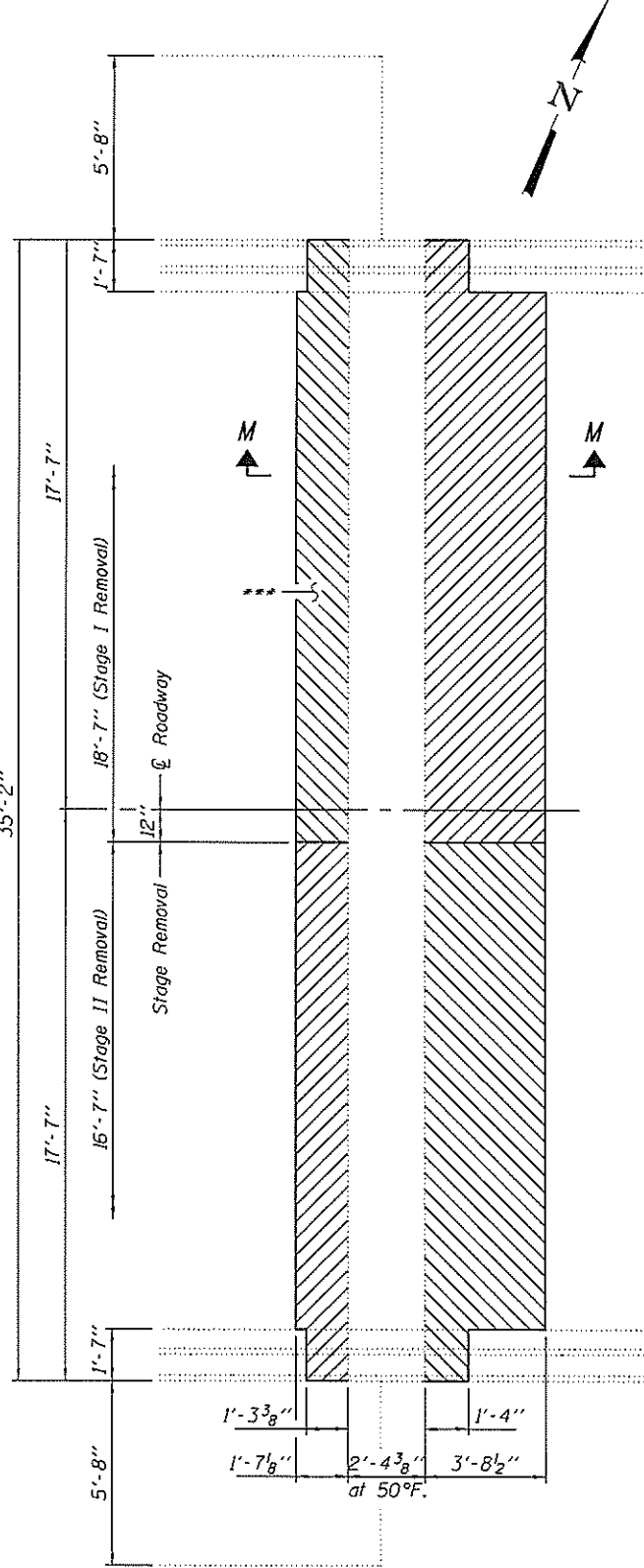
SECTION N-N

Note D:
 Number of rails determined by manufacturer.
 Support Boxes to be rigidly attached to diaphragms,
 beams and floor beam by adjustable brackets, stools
 or shims as determined by manufacturer.

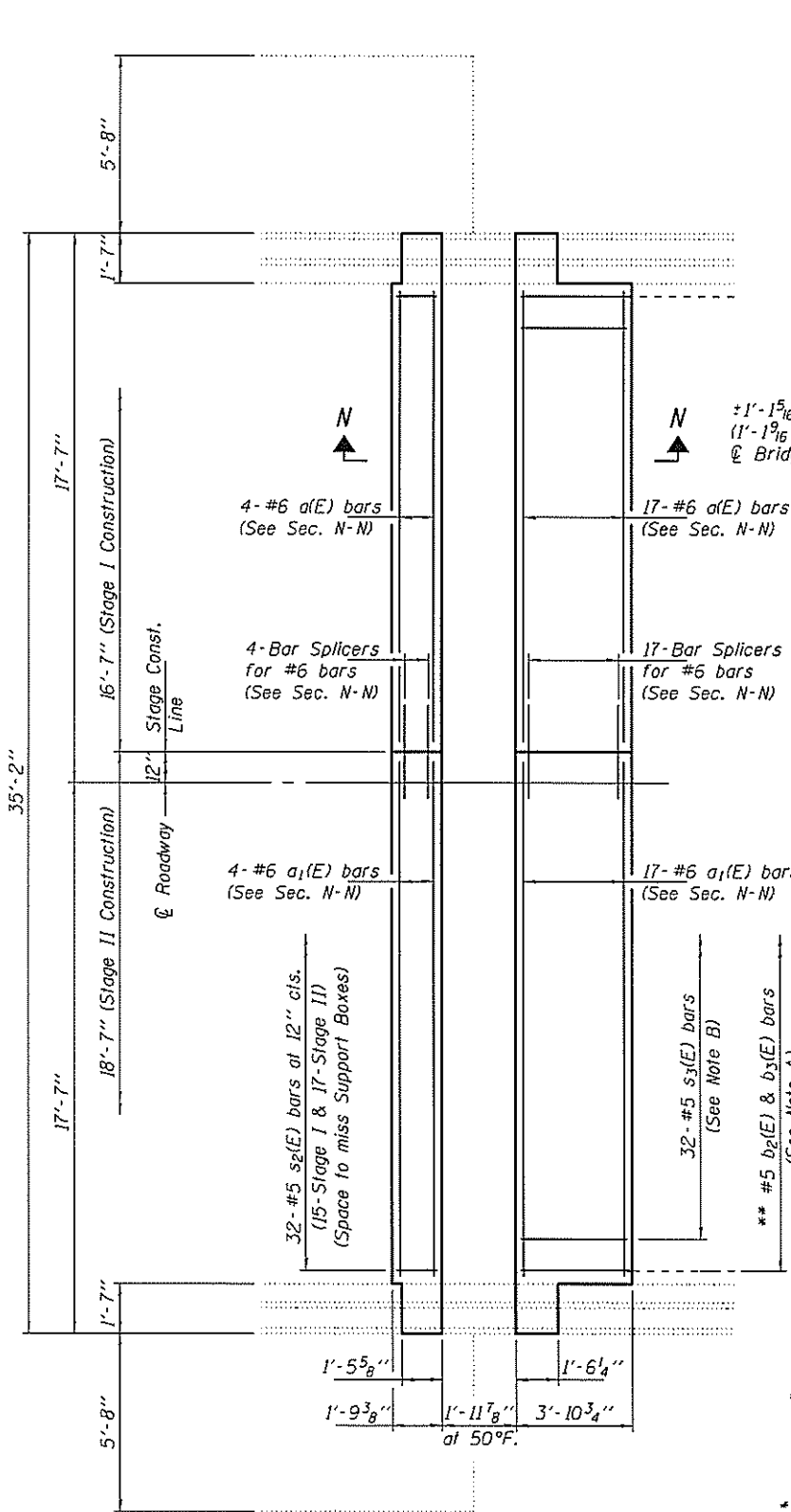


BILL OF MATERIAL (PIER 11)

Bar	No.	Size	Length	Shape
a ₁ (E)	42	#6	15'-6"	—
a ₁ (E)	42	#6	17'-6"	—
b ₂ (E)	38	#5	4'-0"	—
b ₃ (E)	44	#5	3'-6"	—
s ₂ (E)	32	#5	4'-3"	□
s ₃ (E)	32	#5	5'-0"	⌋
Concrete Removal			Cu. Yd.	9.3
Concrete Superstructure			Cu. Yd.	9.3
Bar Splicers			Each	42
Mechanical Splicers			Each	82
Reinforcement Bars, Epoxy Coated			Pounds	2700



PIER 11 JOINT REMOVAL PLAN



PIER 11 JOINT REPLACEMENT PLAN

* 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.

** Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.

*** Care shall be taken during removal not to damage the existing steel box floor beam. Any damage to the floor beam shall be repaired at the Contractor's expense.

DESIGNED ATH
 CHECKED GGE
 DRAWN Kyle M. Steffen
 CHECKED ATH GGE

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

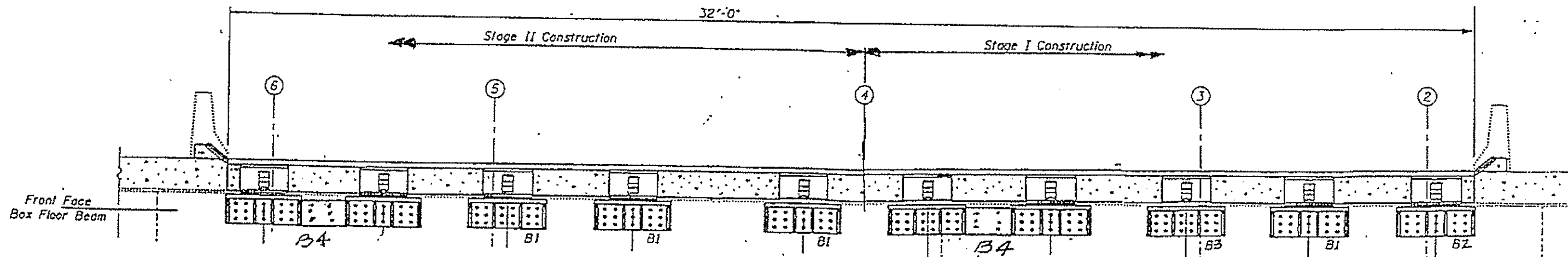
DATE JUNE 24, 2014
 REVISED
 REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 11 JOINT REMOVAL & REPLACEMENT DETAILS
 SN 001-0068

SHEET NO. 6 OF 15 SHEETS

F.A. R.T.E. SECTION COUNTY TOTAL SHEETS SHEET NO.
 63 (I2B)JR,I-7 ADAMS 31 22
 CONTRACT NO. T2G80
 ILLINOIS FED. AID PROJECT



ELEVATION OF BRACKETS AT PIER II

(REFER TO D.S. BROWN DRAWINGS FOR DIMENSIONS, ECT.)

FOR
INFORMATION
ONLY

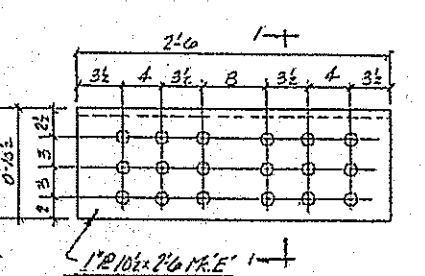
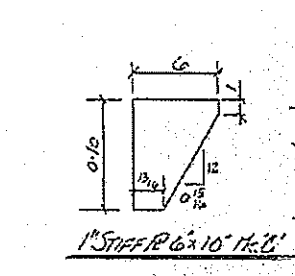
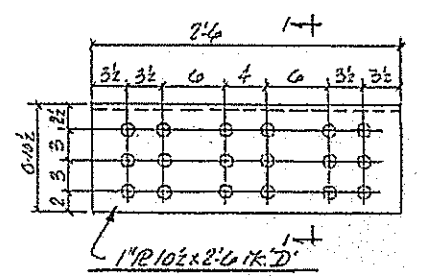
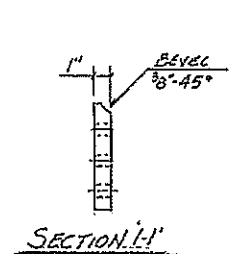
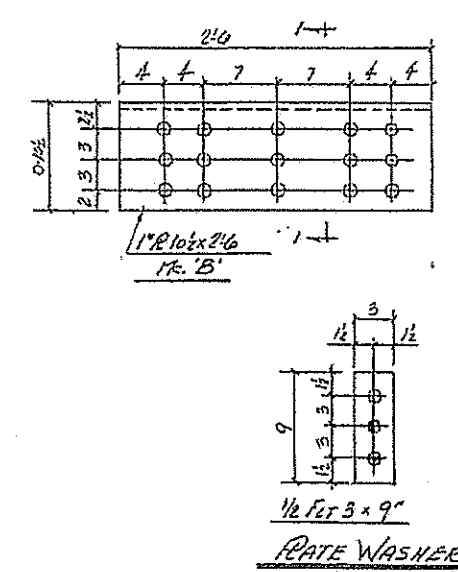
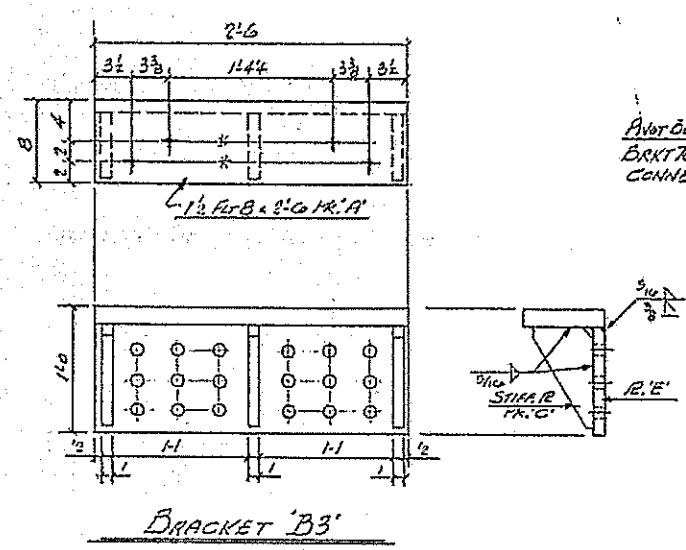
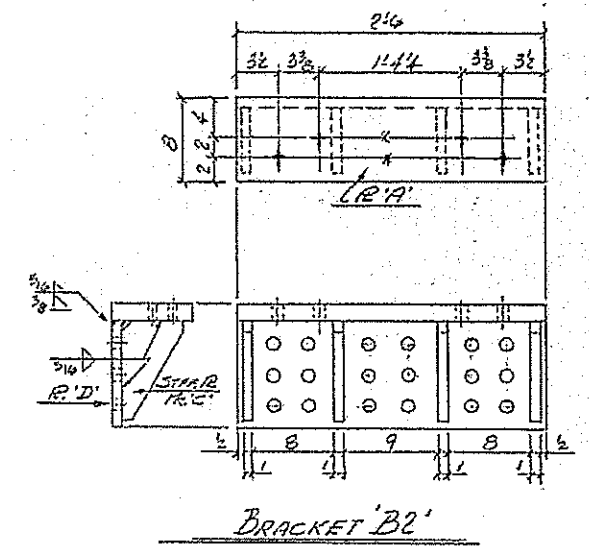
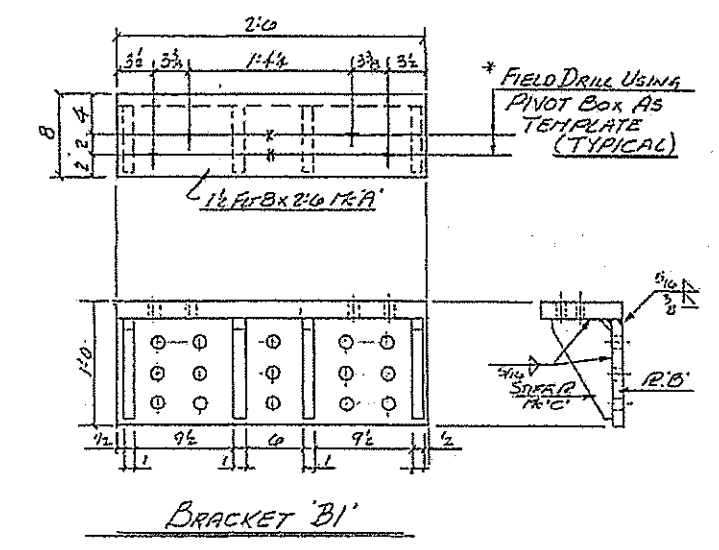
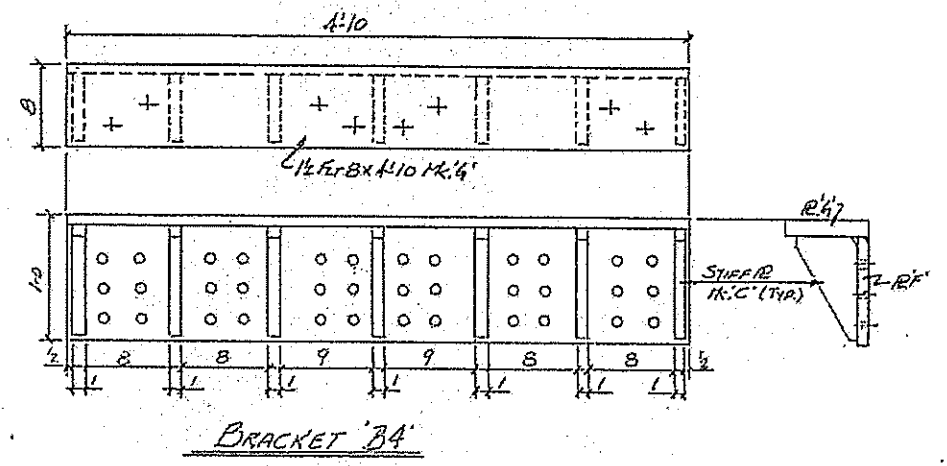
DESIGNED <i>ATH</i>	EXAMINED <i>Timothy A. Anick</i>	DATE <i>JUNE 24, 2014</i>
CHECKED <i>GGE</i>	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN <i>Kyle M. Steffen</i>	PASSED <i>Carl Perry</i>	REVISED
CHECKED <i>ATH GGE</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MODULAR JOINT SUPPORT BRACKETS - FOR INFORMATION ONLY
SN 001-0068

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	112B)BJR, I-T	ADAMS	31	23
CONTRACT NO. T2G80			ILLINOIS FED. AID PROJECT	

FOR INFORMATION ONLY



MATERIAL - A36 STEEL
 BOLTS - A325
 NOTE - ALL HOLES 1/8" MIN.
 FINISH
 STRESS RELIEVE AFTER FAB.
 PER SECT 4.4 OF BRIDGE WELDING CODE
 HOT DIP GALV. PER M111
 BOLTS, NUTS & WASHERS - HOT DIP GALV. PER ARSHTO 14232

BILL OF MATERIALS

ITEM	QUANTITY	UNIT	MATERIAL DESCRIPTION	PRICE	AMOUNT	REMARKS
4	51	6	BRACKETS		1038	
4	A		1/2" LB X 2'-0"		408	
4	B		1" LB 10 1/2" X 2'-6"		358	
16	C		1" LB 6 X 10		272	
1	B2	6	BRACKETS		260	
1	A		1/2" LB X 2'-6"		102	
1	D		1" LB 10 1/2" X 2'-6"		90	
4	C		1" LB 6 X 10		68	
54		6	1/2" FT 3 X 0.9		203	
168		6	7/8" X 3 3/4" HEX HD BOLT	325	138	
168		6	3/4" NYL HEX NUT	DN	51	
168		6	7/8" HARD WSHR		12	
1	B3	4	BRACKET		243	
1	A		1/2" LB X 2'-6"		102	
1	E		1" LB 10 1/2" X 2'-6"		90	
3	C		1" LB 6 X 10		51	
40		6	7/8" X 3 3/4" HEX HD BOLT	325	33	
40		6	3/4" NYL HEX NUT	DN	12	
40		6	7/8" HARD WSHR		3	
2	B4	4	BRACKET		979	
2	F		1" LB 10 1/2" X 4'-10"		346	
2	G		1/2" LB X 4'-10"		395	
14	C		1" LB 6 X 10		238	

TOTAL WEIGHT = 2972 LBS

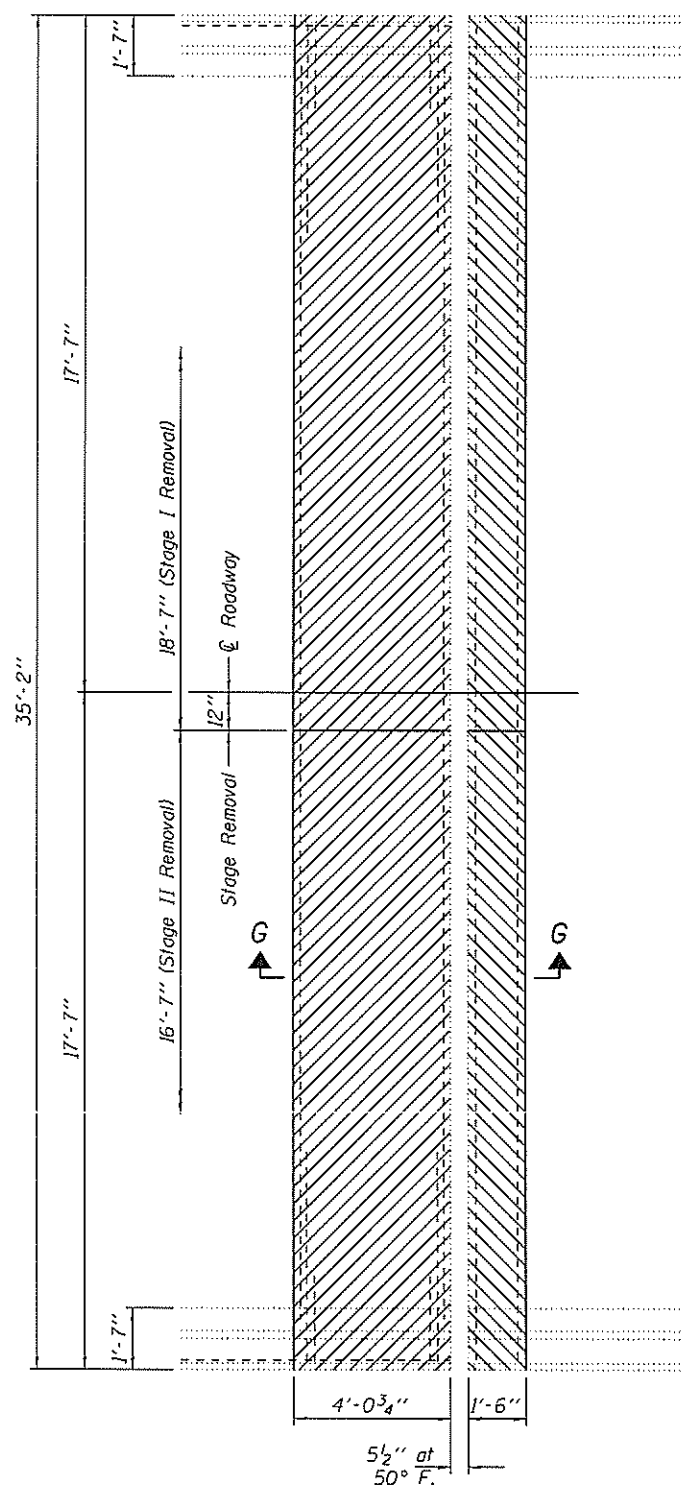
NOTE - (2) 14" x 1/2" (2) 1/2" DIA. SHIM PLATES BY PIVOT BOX MFG.

FAP 63 (US24)
 SECTION (1-2B-1) I-2
 ADAMS COUNTY, ILLINOIS
 CONTRACT # 92999
 S.N. 001-0008

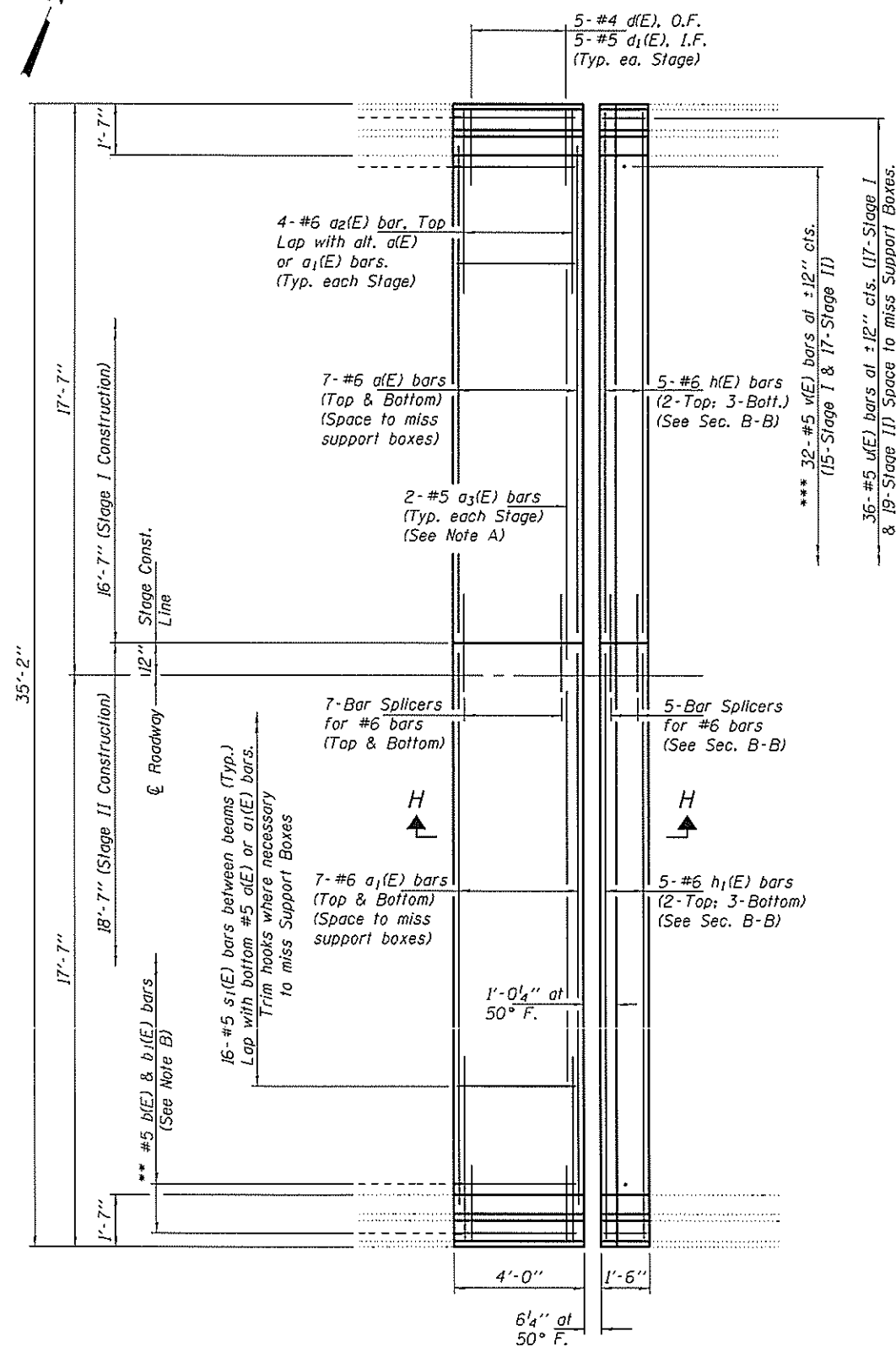
BRACKETS	
SCALE: 1/8" = 1'-0"	APPROVED BY: [Signature]
DATE: 7-7-97	DRAWN BY: B.D.
	REVISED 7/7/97
CONTR: HALVERSON CONST CO.	REV. B-4-97
	DRAWING NUMBER: 1

DESIGNED: ATH	EXAMINED: Timothy A. [Signature]	DATE: JUNE 24, 2014
CHECKED: GGE	PASSED: [Signature]	REVISIONS:
DRAWN: Kyle M. Steffen	ACTING ENGINEER OF BRIDGES AND STRUCTURES	
CHECKED: ATH GGE		

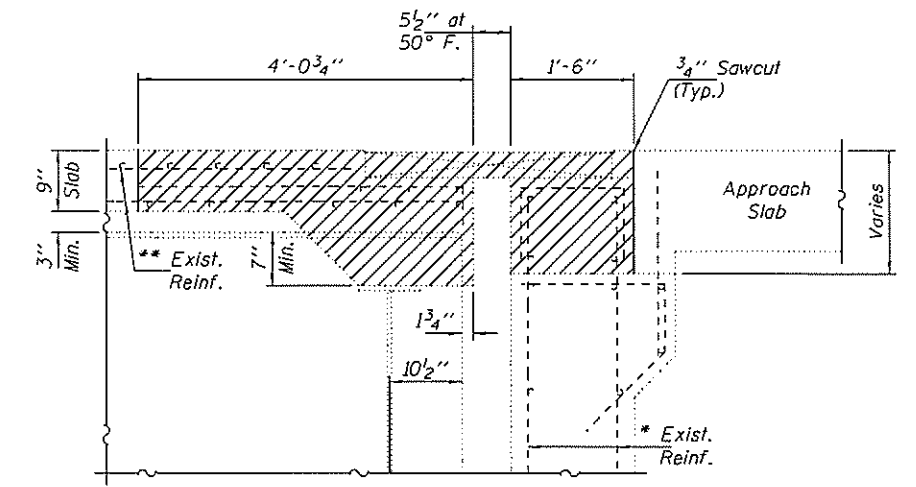
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		MODULAR JOINT SUPPORT BRACKETS - FOR INFORMATION ONLY SN 001-0068		F.A. RTE. 63	SECTION (12B) JR. 1-7	COUNTY ADAMS	TOTAL SHEETS 31	SHEET NO. 24
SHEET NO. 8 OF 15 SHEETS				CONTRACT NO. 72680 ILLINOIS FED. AID PROJECT				



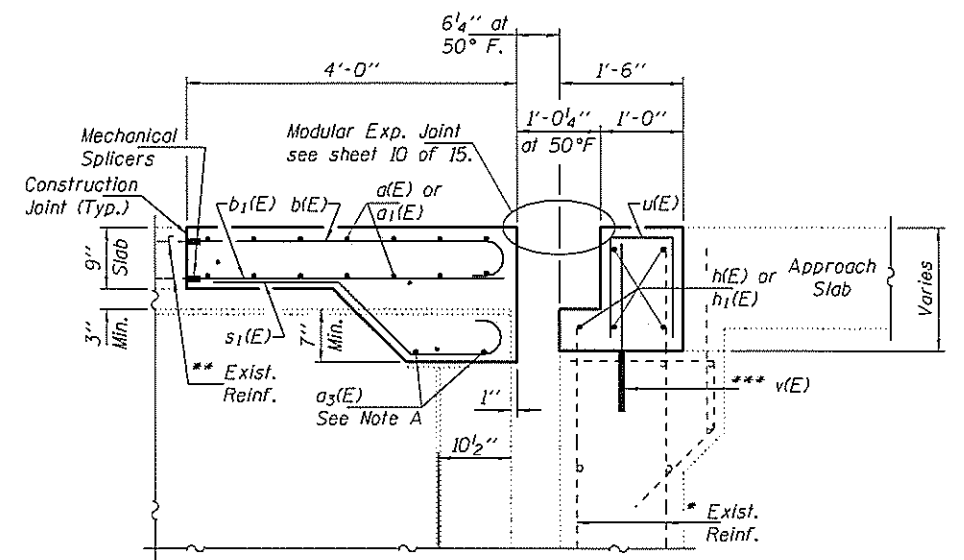
EAST ABUTMENT REMOVAL PLAN



EAST ABUTMENT REPLACEMENT PLAN



SECTION G-G



SECTION H-H

Note A:
Place $a_3(E)$ bars below Support Boxes. Leave portion of bar exposed during Stage I Construction. See Section H-H.

Note B:
** 38-#5 $b(E)$ bars at $\pm 12''$ cts. (Top) (18-Stage I & 20-Stage II)
** 44-#5 $b_1(E)$ bars at $\pm 9''$ cts. (Bott.) (21-Stage I & 23-Stage II) (16 between beams; 6 at overhangs) Mechanically Spliced to exist. #5 bars. Cut to fit at Support Boxes.

* 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.

** Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.

*** Epoxy Grout $v(E)$ bars in 9" min. holes according to Article 584 of the Standard Specifications.

BILL OF MATERIAL (E. ABUT.)

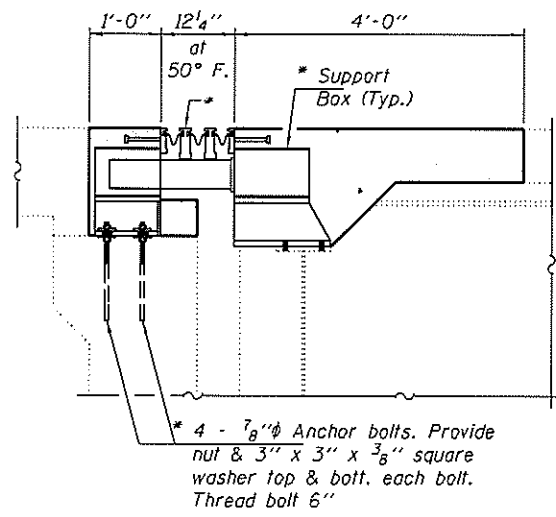
Bar	No.	Size	Length	Shape
$a(E)$	14	#6	15'-6"	—
$a_1(E)$	14	#6	17'-6"	—
$a_2(E)$	8	#6	5'-7"	—
$a_3(E)$	4	#5	13'-8"	—
$b(E)$	38	#5	4'-1"	—
$b_1(E)$	44	#5	3'-9"	—
$d_1(E)$	10	#5	3'-11"	—
$d_2(E)$	10	#4	6'-7"	—
$h(E)$	5	#6	16'-3"	—
$h_1(E)$	5	#6	18'-3"	—
$s_1(E)$	32	#5	4'-5"	—
$u(E)$	32	#5	2'-9"	—
$v(E)$	32	#5	2'-0"	—
Concrete Removal			Cu. Yd.	10.2
Concrete Superstructure			Cu. Yd.	9.3
Bar Splicers			Each	19
Mechanical Splicers			Each	82
Reinforcement Bars, Epoxy Coated			Pounds	1810

DESIGNED <u>ATH</u>	EXAMINED <u>Timothy A. Anzani</u>	DATE <u>JUNE 24, 2014</u>
CHECKED <u>GGE</u>	PASSED <u>ACTING ENGINEER OF STRUCTURAL SERVICES</u>	REVISED
DRAWN <u>Kyle M. Steffen</u>	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
CHECKED <u>ATH GGE</u>		

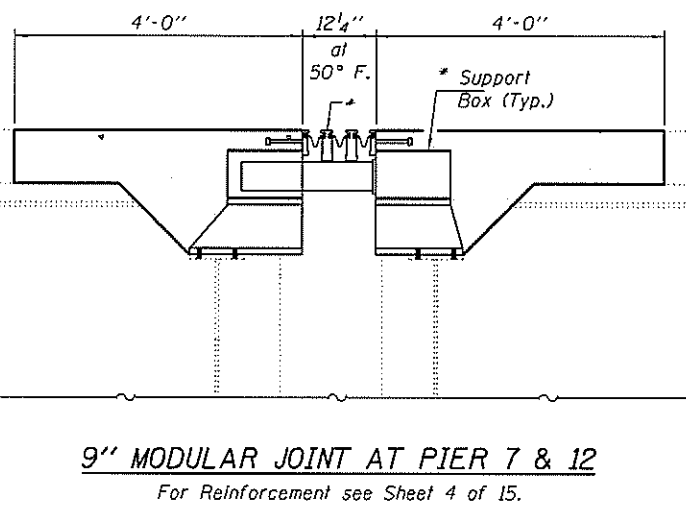
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT JOINT REMOVAL & REPLACEMENT DETAILS
SN 001-0068

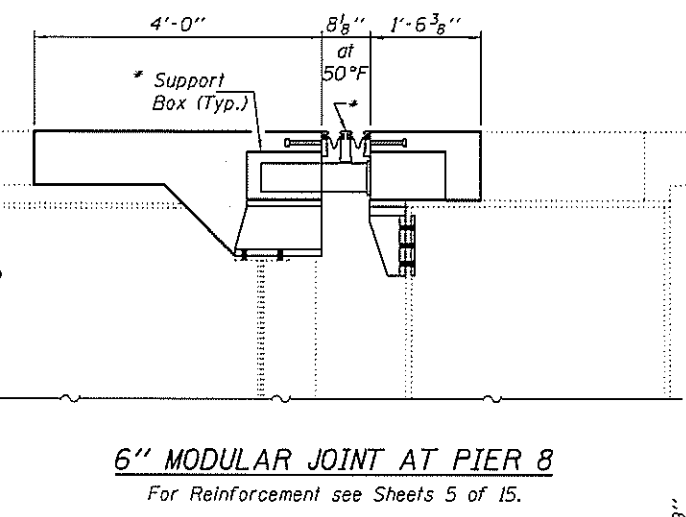
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	112B/JR, I-7	ADAMS	31	25
CONTRACT NO. T2G80			ILLINOIS FED. AID PROJECT	



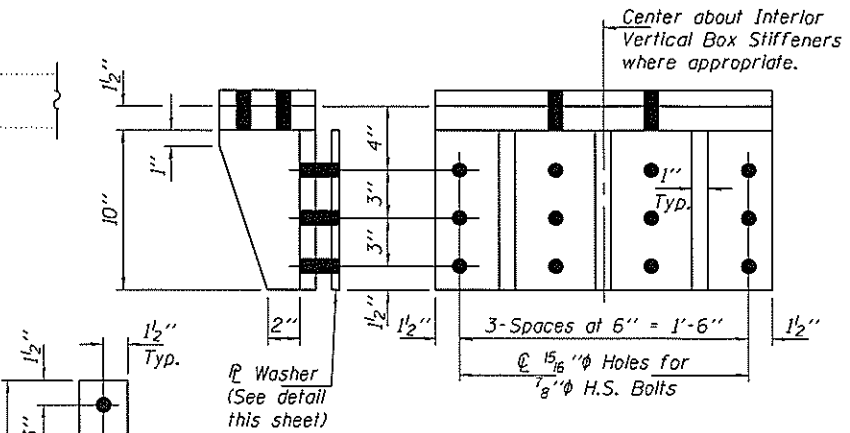
9" MODULAR JOINT AT ABUTMENTS
For Reinforcement see Sheets 3 & 9 of 15.
(Looking North thru W. Abut)
(Looking South thru E. Abut.)



9" MODULAR JOINT AT PIER 7 & 12
For Reinforcement see Sheet 4 of 15.



6" MODULAR JOINT AT PIER 8
For Reinforcement see Sheets 5 of 15.

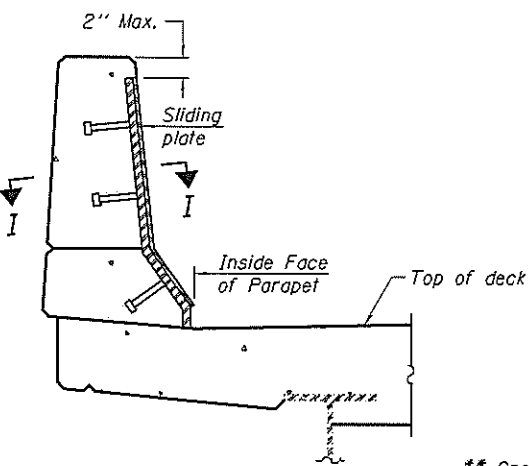


JOINT SUPPORT BRACKET DETAILS
(Subject to Change by Joint Manufacturer)

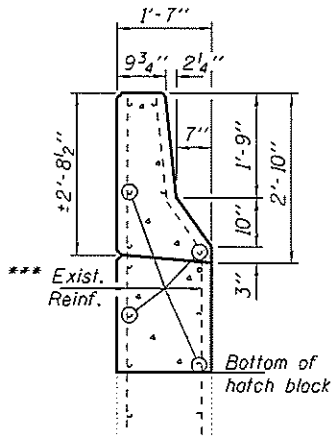
Use Brackets as templates to field drill 15/16" φ holes in existing 1" R of front face of Box Floor Beam. Entry into Box Floor Beam necessary thru access hole on east face of beam. Temporary scaffolding may be required for access. Cost included with Modular Expansion Joint Swivel, 6".

PLATE WASHER
R 1/2" x 3" x 9"
(4-Req'd per Bracket)

* Number of rails determined by manufacturer. Support Boxes to be rigidly attached to diaphragms, beams and abutment wall by adjustable brackets, stools, or shims as determined by manufacturer.

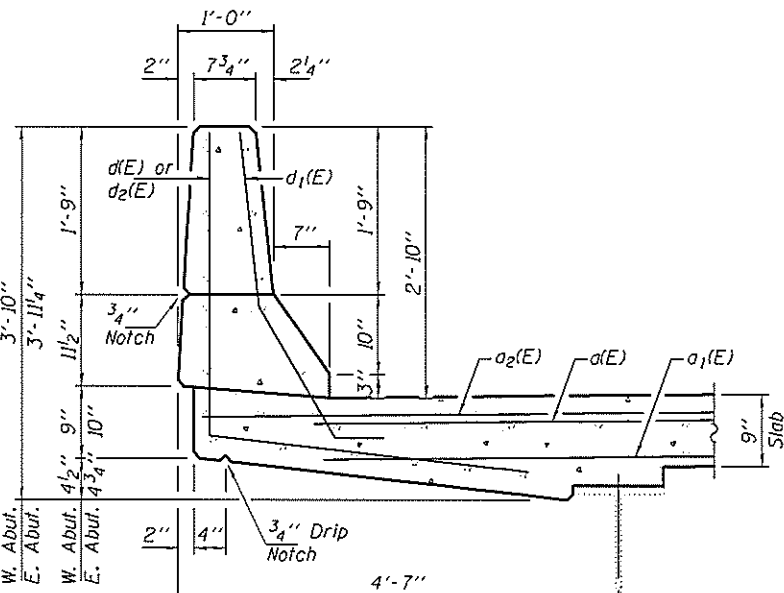


SECTION THRU PARAPET SHOWING SLIDING PLATE

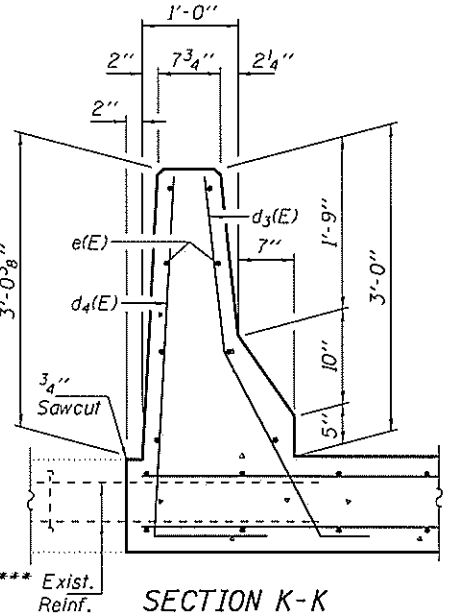


TYPICAL SECTION AT APPROACH PARAPET

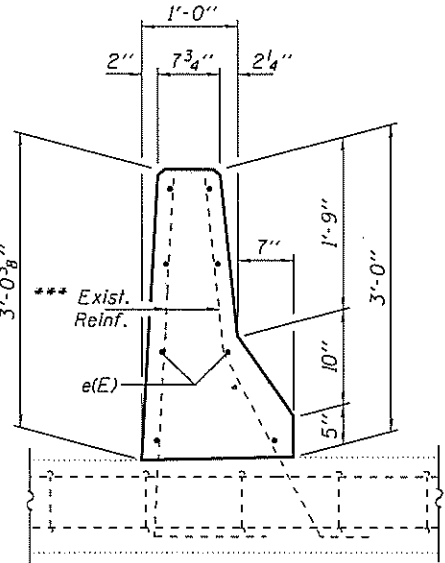
** Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



SECTION THRU PARAPET

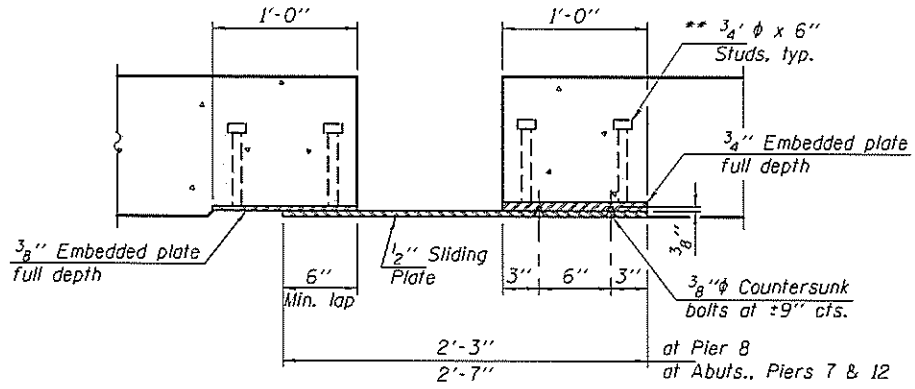


SECTION K-K

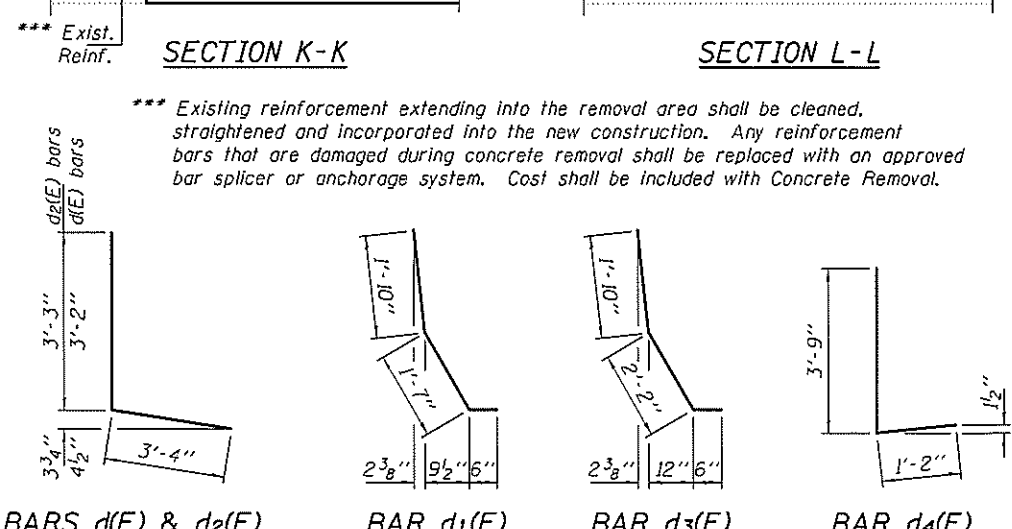
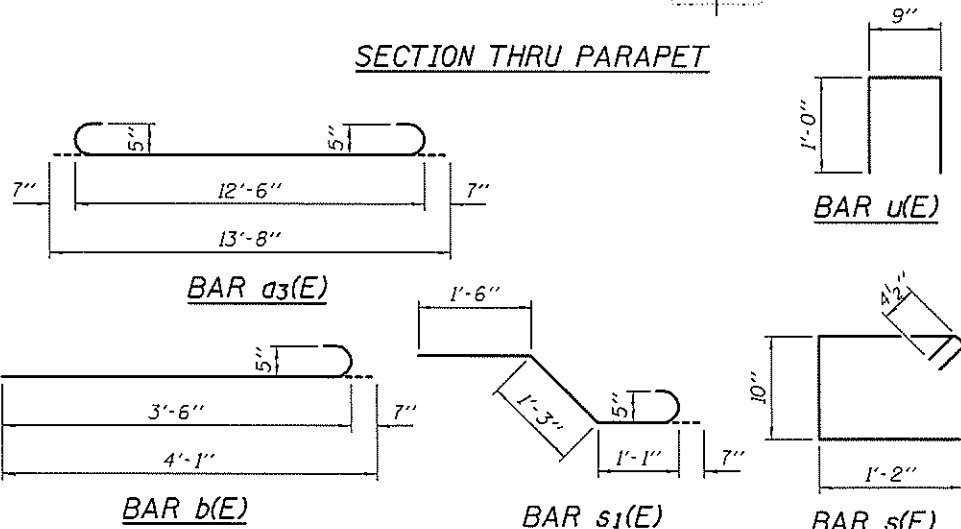


SECTION L-L

*** Existing reinforcement 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 shall be included with Concrete Removal.



SECTION I-I



DESIGNED ATH
CHECKED GGE
DRAWN Kyle M. Steffen
CHECKED ATH GGE

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

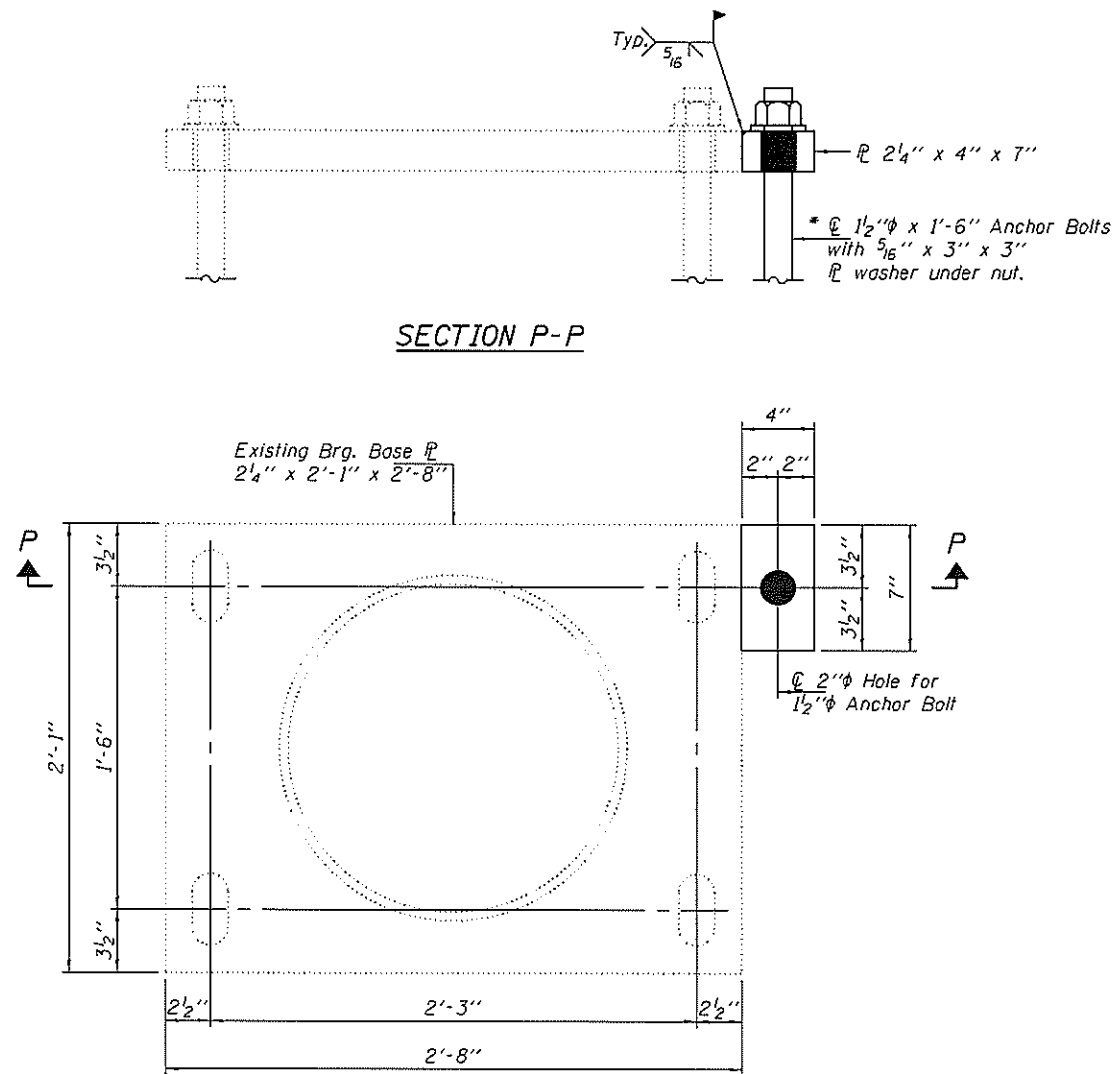
DATE JUNE 24, 2014
REVISED
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR DETAILS
SN 001-0068

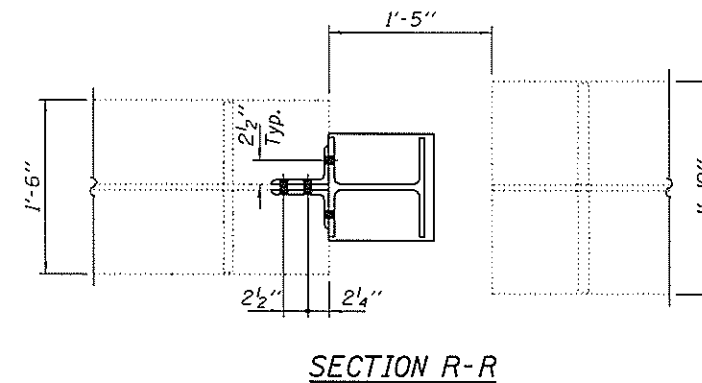
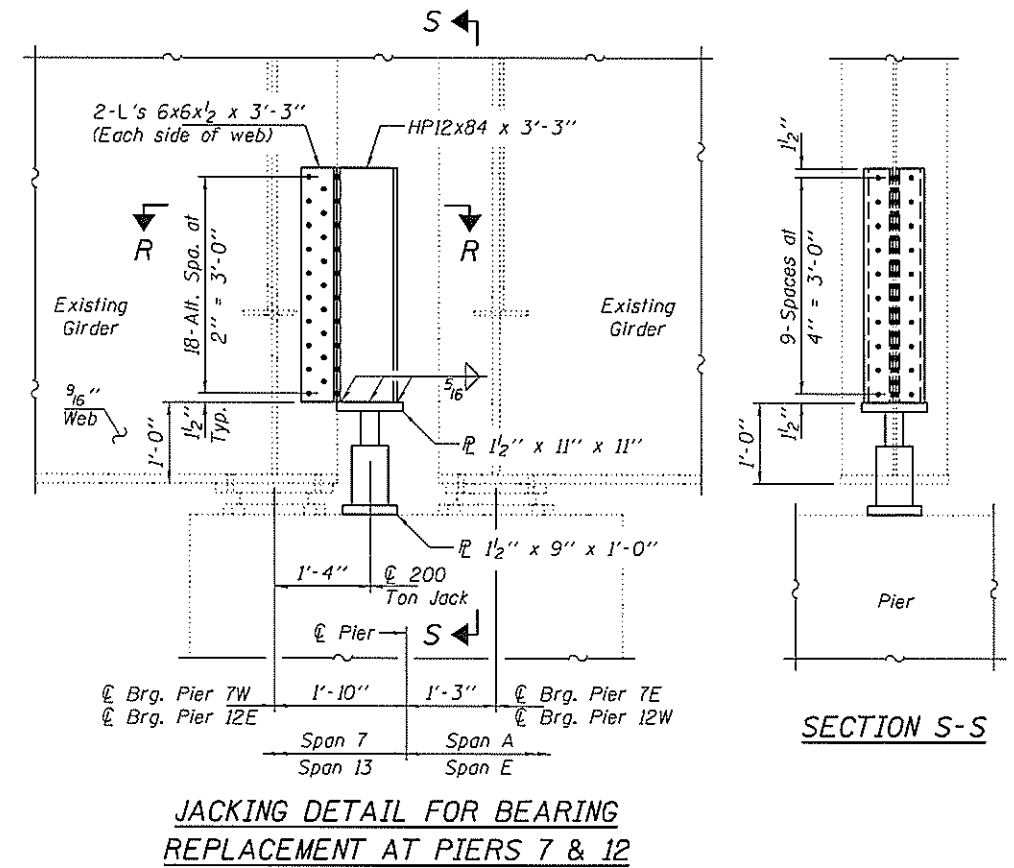
SHEET NO. 10 OF 15 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(12)B/JR, I-7	ADAMS	31	26
CONTRACT NO. T2G80				
ILLINOIS FED. AID PROJECT				



ITEM 6 REPAIR DETAILS

* Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.



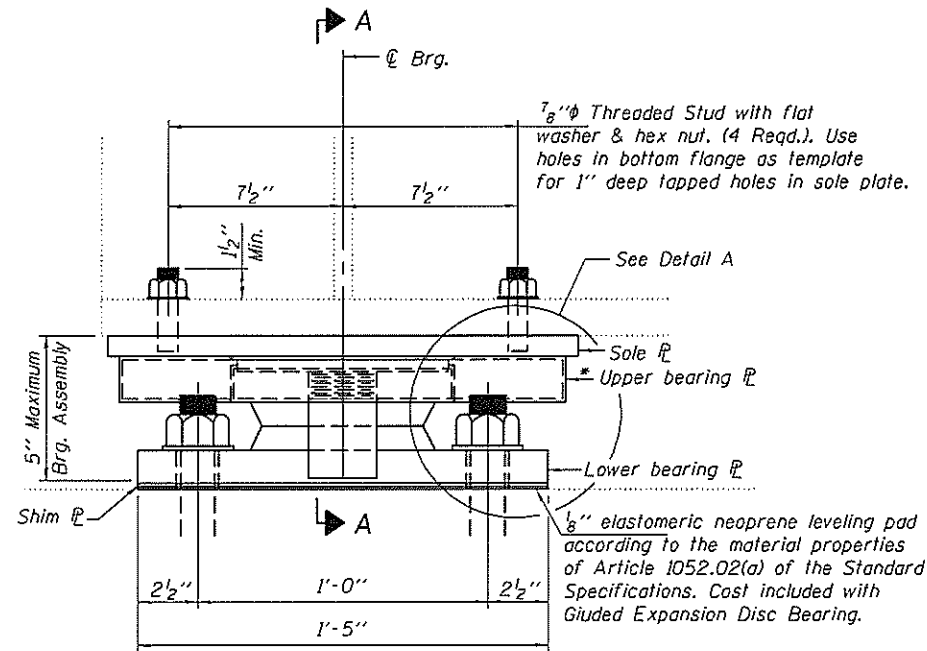
DESIGNED <i>ATH</i>	EXAMINED <i>Timothy A. Anzani</i>	DATE <i>JUNE 24, 2014</i>
CHECKED <i>GGE</i>	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN <i>Kyle M. Steffen</i>	PASSED <i>Carl [Signature]</i>	REVISOR
CHECKED <i>ATH GGE</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISOR

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR DETAILS
SN 001-0068

SHEET NO. 11 OF 15 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
63	(12B)JR, I-7	ADAMS	31	27
CONTRACT NO. T2G80				
ILLINOIS FED. AID PROJECT				



ELEVATION

* Drilled and tapped for Shear Pin

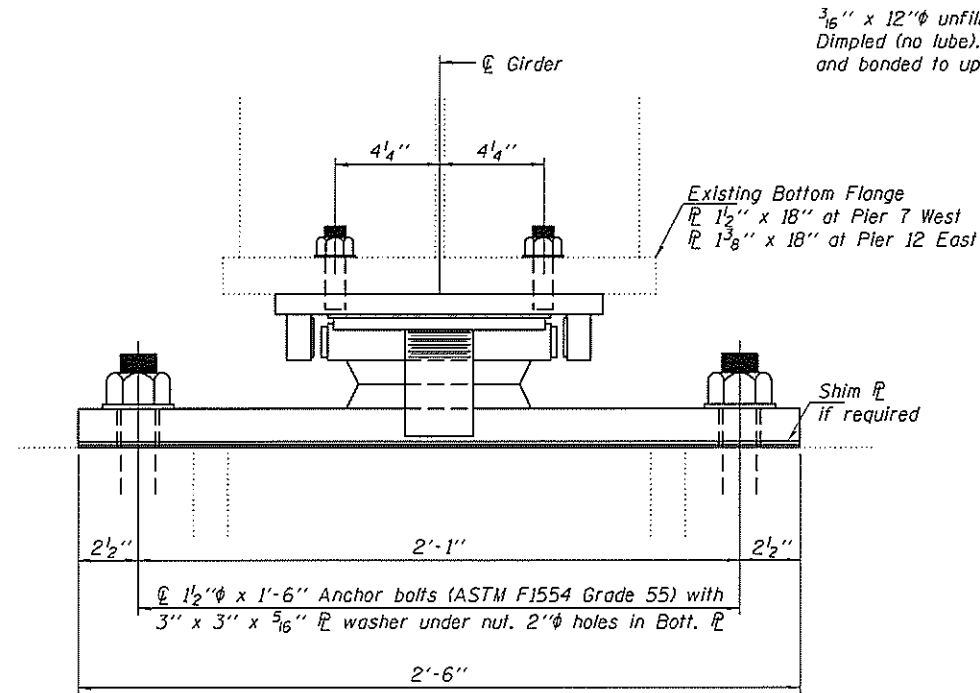
Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

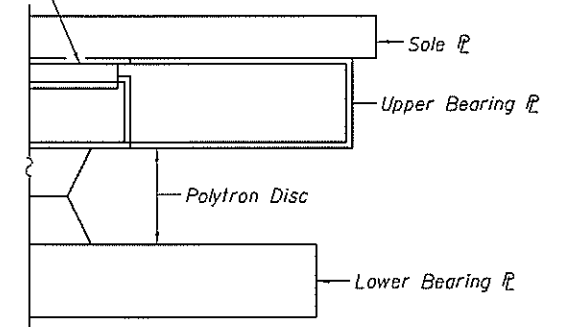
The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270, Grade 50.

Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

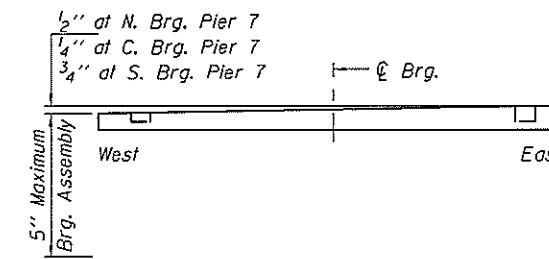


SECTION A-A

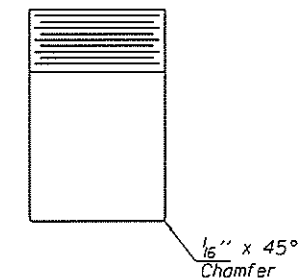
3/16" x 12" ϕ unfilled PTFE. Dimpled (no lube). Recessed 3/32" and bonded to upper bearing ϕ .



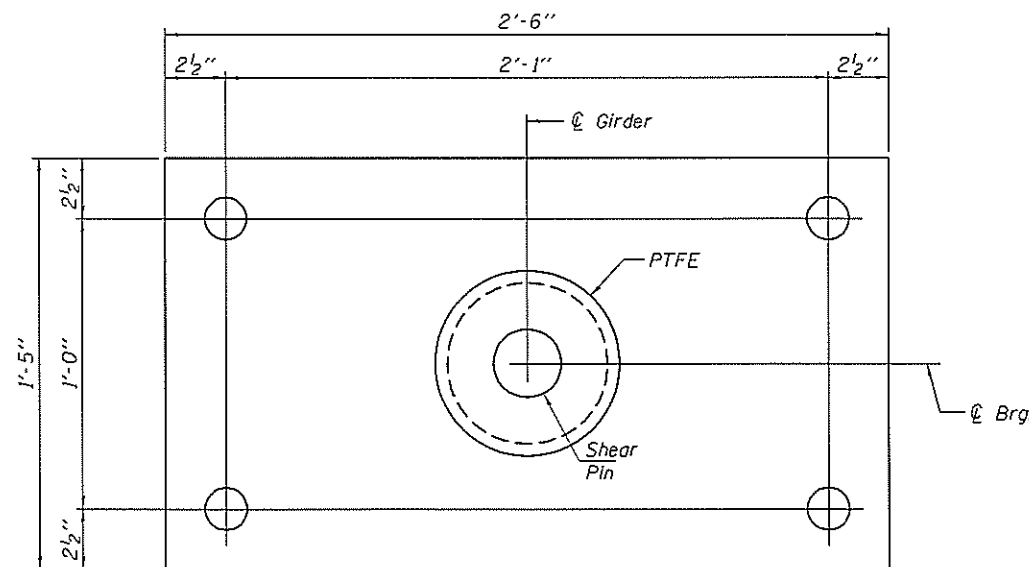
DETAIL A



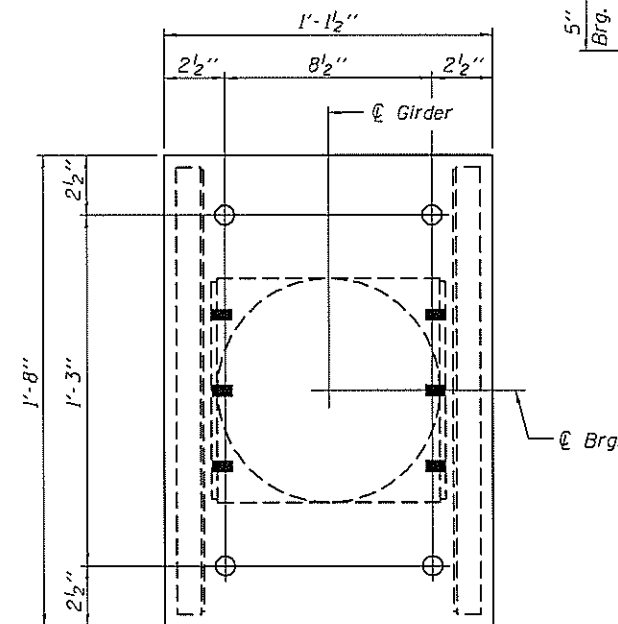
TOP PLATE PIER 7 ONLY
(Bearing Assembly not shown for clarity.)



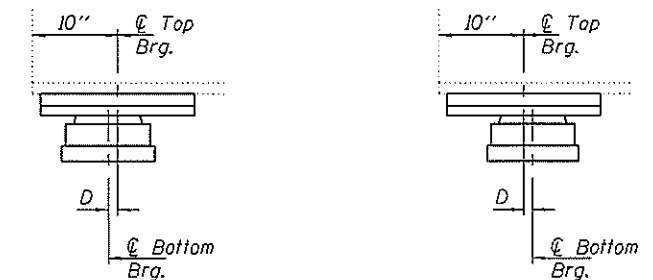
SHEAR PIN DETAIL
(Thread into top bearing plate)



BOTTOM BEARING ϕ AND DISC PLAN



TOP BEARING ϕ PLAN



BELOW 50° F.
(Move bottom brg. away from fixed brg.)

ABOVE 50° F.
(Move bottom brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.
D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

DESIGN DATA

Bearing Manufacturer Design Criteria	Pier 7	Pier 12
Vertical Design Load (kips)	263	267
Horizontal Design Load (kips), H _u	54	54
Design Rotation (rad), θ_u	0.0	0.02
Expansion Length (ft.)	440	440
Total Required Movement (in.)	5 1/2	5 1/4

BILL OF MATERIAL

Item	Unit	Total
High Load Multi-Rotational Bearings, Guided Expansion, 300k	Each	6
Anchor Bolts, 1 1/2"	Each	24

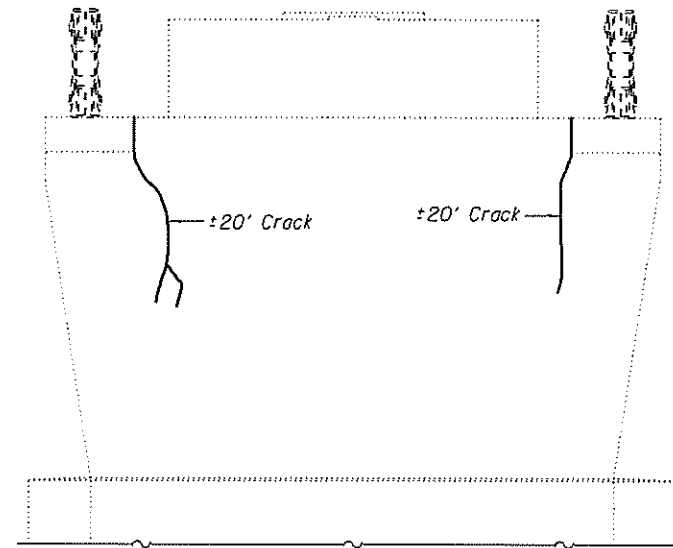
DESIGNED ATH	EXAMINED <i>Timothy A. Anelli</i>	DATE JUNE 24, 2014
CHECKED GGE	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN Kyle M. Steffen	PASSED <i>Carl Prosser</i>	REVISED
CHECKED ATH GGE	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

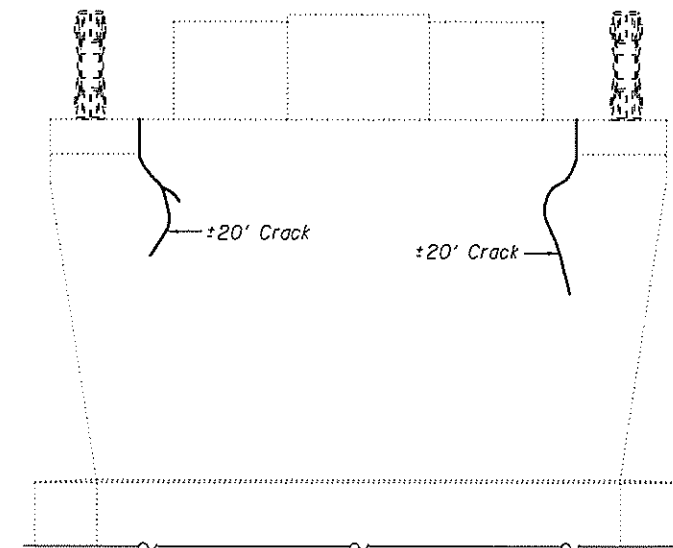
BEARING REPLACEMENT DETAILS
WEST BEARINGS AT PIER 7 & EAST BEARINGS AT PIER 12
SN 001-0068

F.A. RTE. 63	SECTION 112B16JR,1-7	COUNTY ADAMS	TOTAL SHEETS 31	SHEET NO. 28
CONTRACT NO. 72G80				
ILLINOIS FED. AID PROJECT				

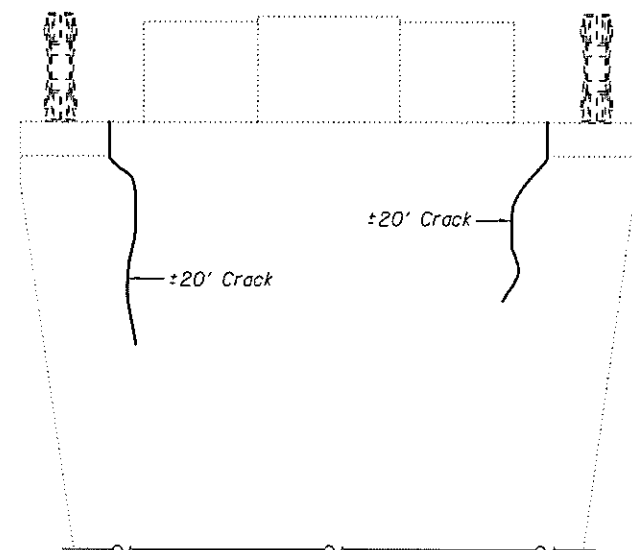
SHEET NO. 12 OF 15 SHEETS



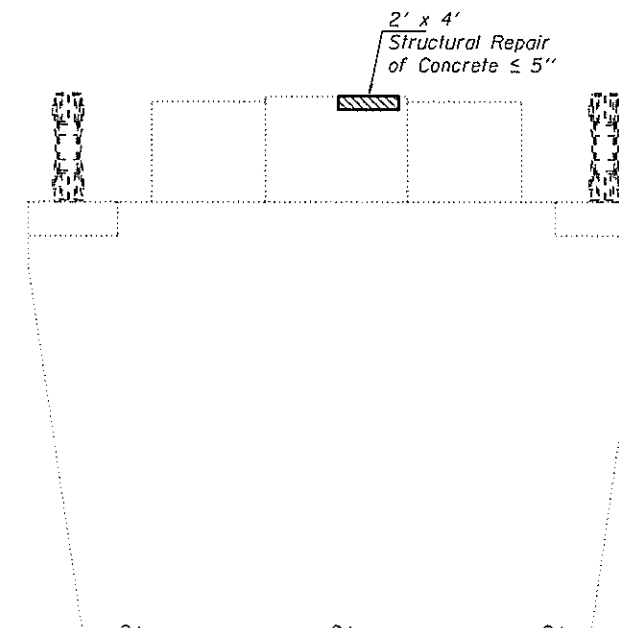
PIER 8 - WEST FACE



PIER 8 - EAST FACE

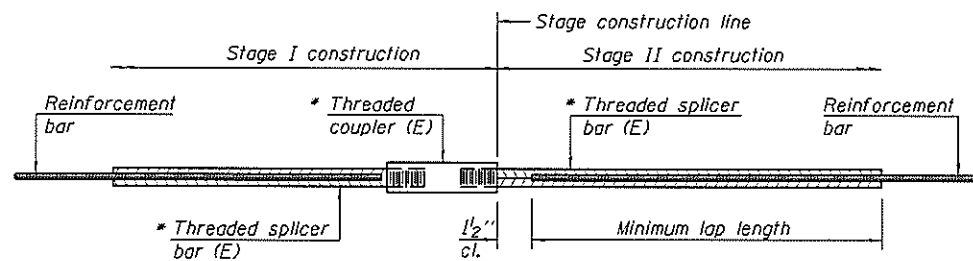


PIER 11 - WEST FACE



PIER 12 - EAST FACE

DESIGNED <i>ATH</i>	EXAMINED <i>Timothy A. Anzani</i>	DATE <i>JUNE 24, 2014</i>	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EPOXY CRACK SEALING & STRUCTURAL REPAIR OF CONCRETE DETAILS SN 001-0068		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED <i>GGE</i>	PASSED <i>Michael J. Perry</i>	REVISED				63	(12B)B.JR.1-7	ADAMS	31	29
DRAWN <i>Kyle M. Steffen</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED				SHEET NO. 13 OF 15 SHEETS		CONTRACT NO. 72G80		ILLINOIS FED. AID PROJECT



STANDARD BAR SPLICER ASSEMBLY

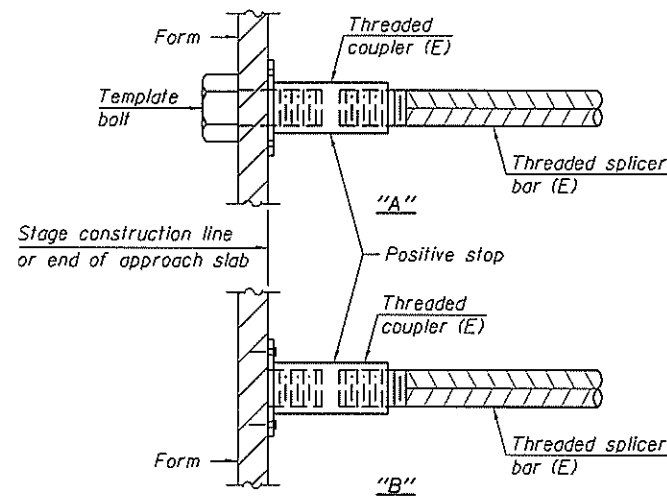
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

- 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, Class C
- Table 6: Epoxy bar, Top bar top, Class C

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

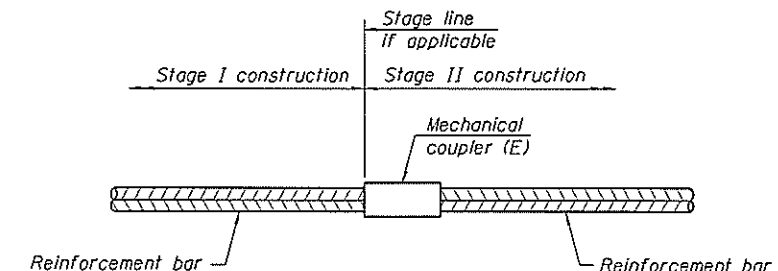
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Abuts. & Deck	#6	114	3



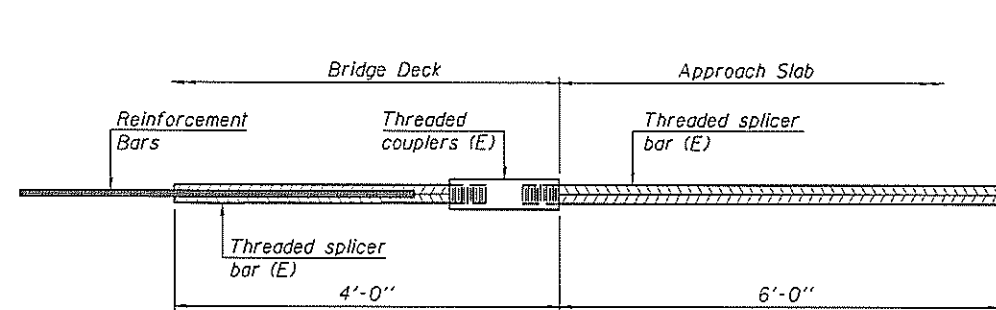
INSTALLATION AND SETTING METHODS

"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.



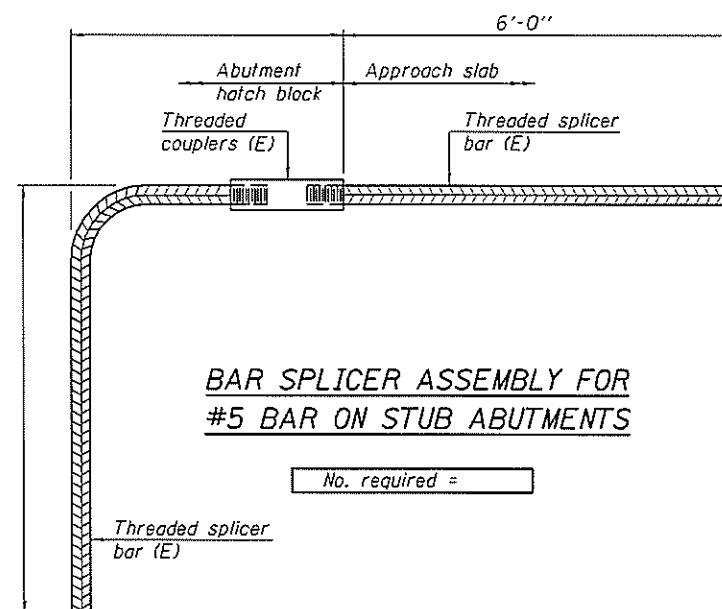
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Deck	#5	574
Parapet (Pier 8, Span 9)	#5	16



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

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

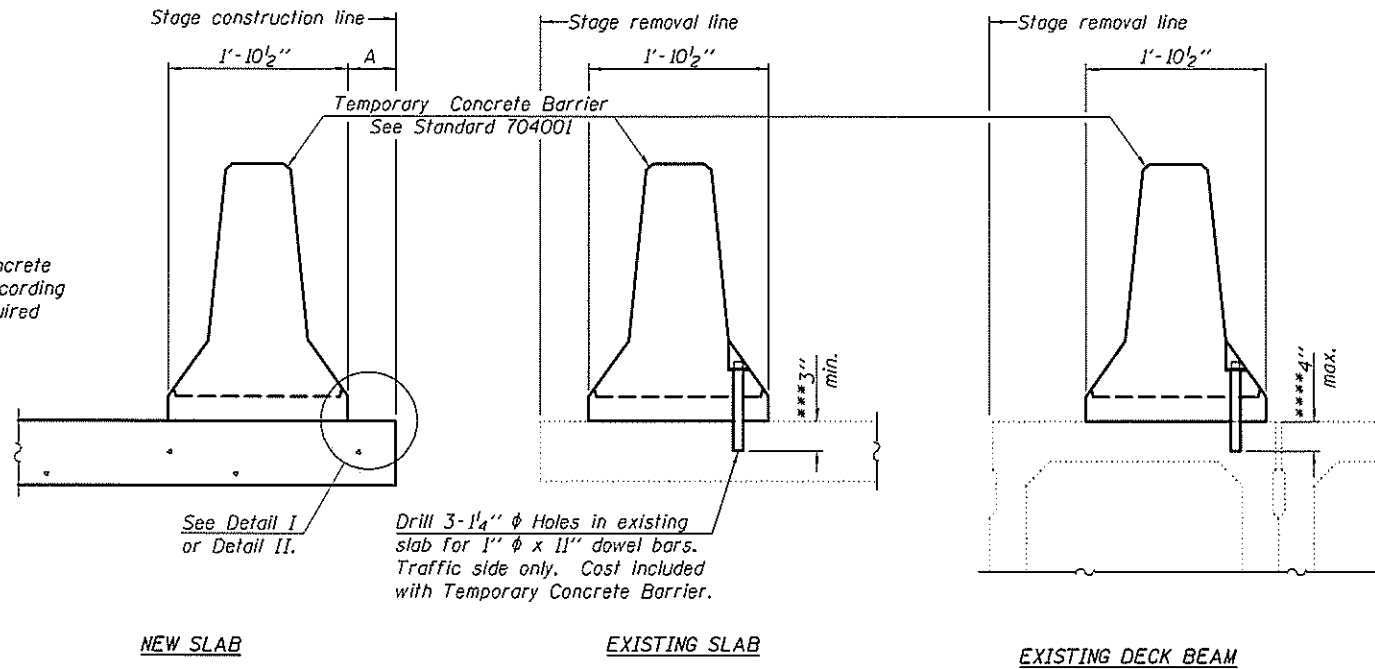
No. required =

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

BSD-1 1-27-12

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

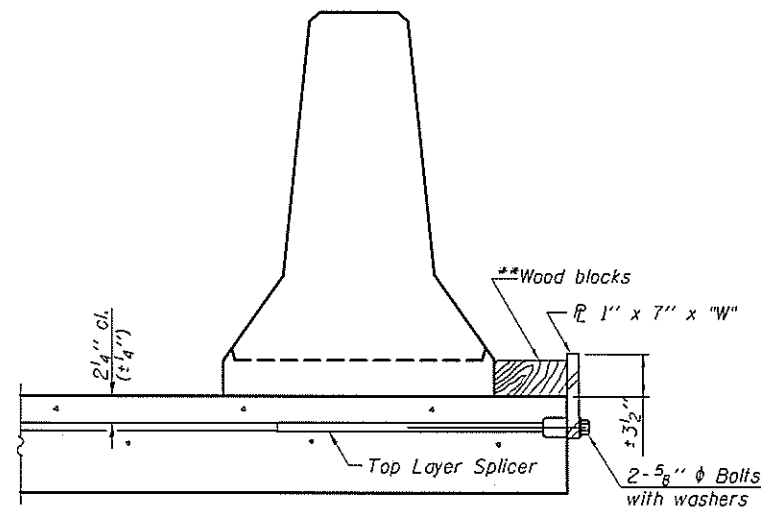
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel \bar{L} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

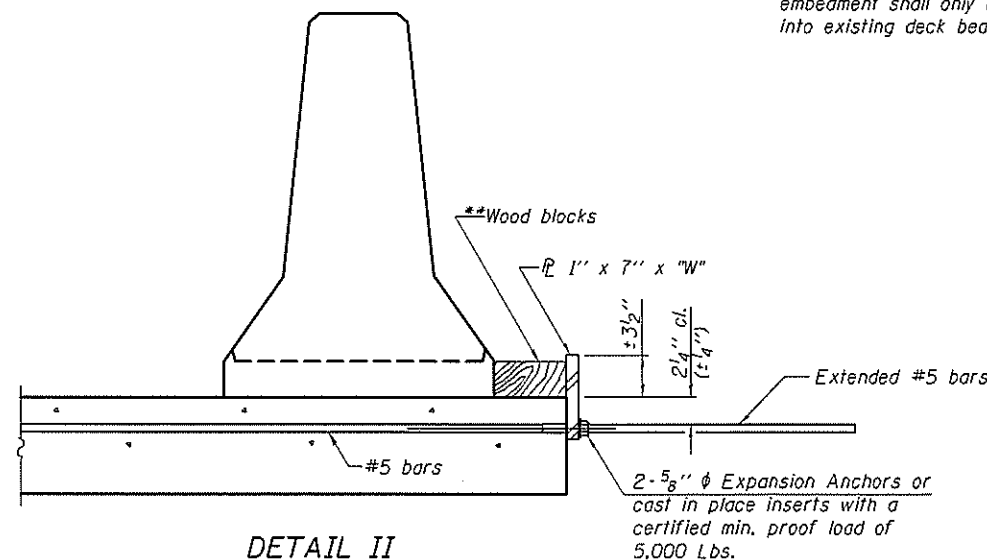
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** 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 stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



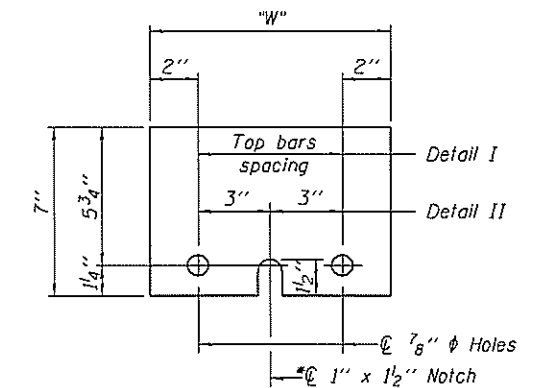
DETAIL I



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.

"W" = Top bars spacing + 4"



STEEL RETAINER \bar{L} 1" x 7" x "W"

* Required only with Detail II

R-27

7-1-10

DESIGNED <i>ATH</i>	EXAMINED <i>Timothy A. Anzani</i>	DATE <i>JUNE 24, 2014</i>	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION SN 001-0068		F.A. RTE. 63	SECTION (12B)BJR,1-7	COUNTY ADAMS	TOTAL SHEETS 31	SHEET NO. 31
CHECKED <i>GGE</i>	PASSED <i>Carl Pappas</i>	REVISIONS					ILLINOIS FED. AID PROJECT				
DRAWN <i>Kyle M. Steffen</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES		CONTRACT NO. 72G80		SHEET NO. 15 OF 15 SHEETS						
CHECKED <i>ATH GGE</i>	ACTING ENGINEER OF STRUCTURAL SERVICES										