

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1B-3-I	ST CLAIR	21	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 76C67		

* 21+2 = 23

D-98-016-09



LOCATION OF SECTION INDICATED THUS: - [black box] -

INDEX OF SHEETS

1. COVER SHEET
2. SUMMARY OF QUANTITIES
- * 3. GENERAL NOTES / SCHEDULE OF QUANTITIES
4. TRAFFIC CONTROL SIGNING PLAN
5. - 7. SUGGESTED STAGE I CONSTRUCTION & TRAFFIC CONTROL
8. - 10. SUGGESTED STAGE II CONSTRUCTION & TRAFFIC CONTROL
11. PAVEMENT MARKING DETAILS
12. - 21. STRUCTURE PLANS

* 3A. TYPICAL SECTION
3B. PLAN VIEW / MISCELLANEOUS DETAILS

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

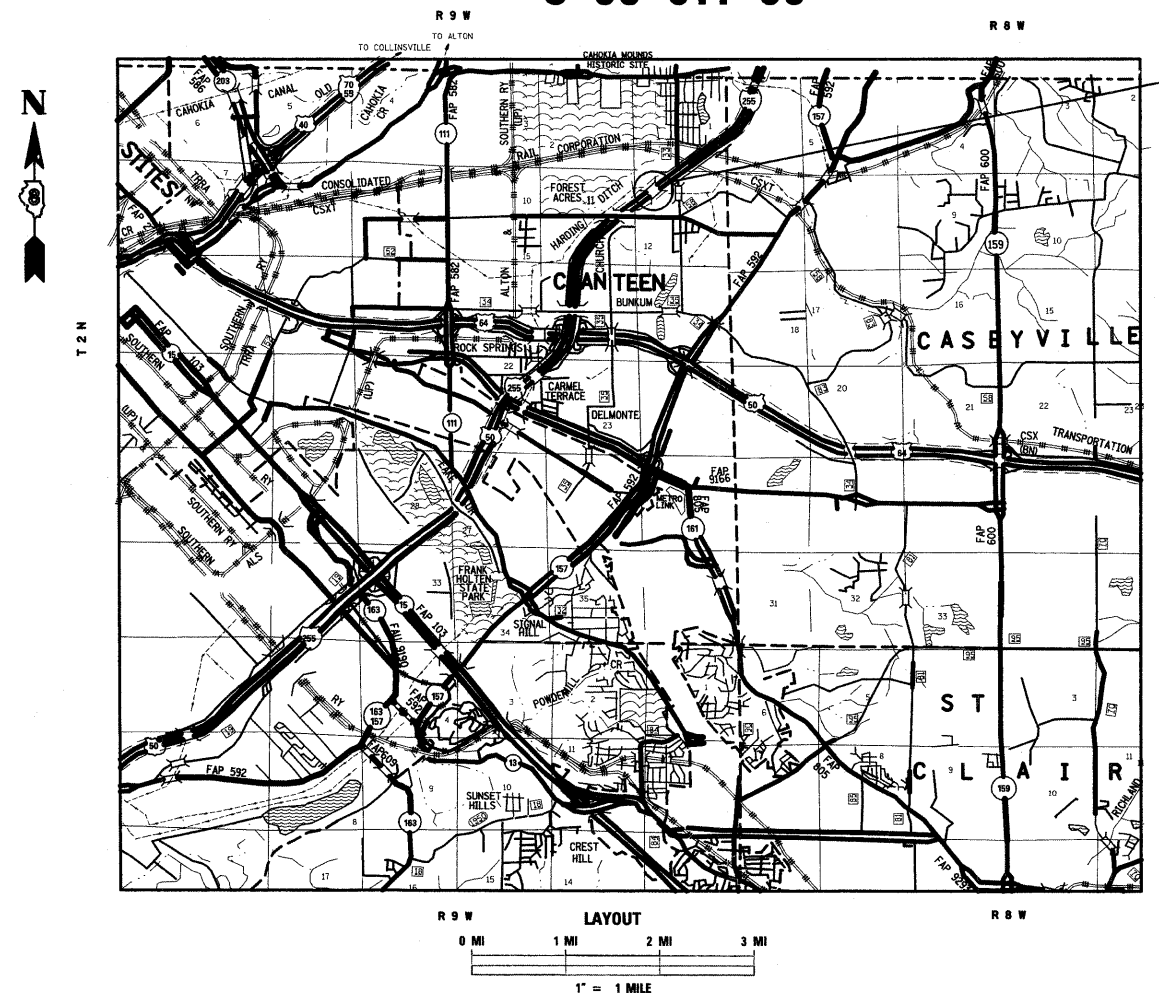
**PROPOSED
HIGHWAY PLANS**

**FAI ROUTE 255 (I-255 NB)
SECTION 82-1B-3-I**

**JOINT REPAIR OVER HARDING DITCH
ST CLAIR COUNTY
C-98-011-09**

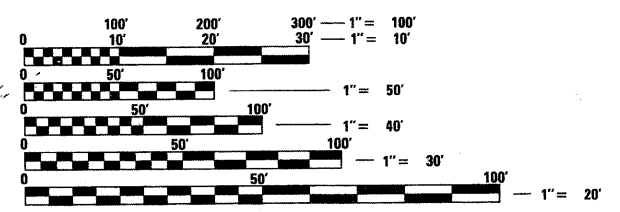
HIGHWAY STANDARDS

000001-05	701406-05
001001-02	701901-01
001006	704001-05
701400-03	780001-02
701402-07	781001-03



**JOINT REPAIR
OVER HARDING DITCH
SN 082-0245
347'-0" BK TO BK OF ABUTMENTS
STA 1148+95.00**

TRAFFIC DATA
ADT: 48700 (2009)
59500 (2029)
SU: 3.1%
MU: 11.3%



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

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

**PROJECT ENGINEER: PATTI LEBEAU (618) 346-3179
PROJECT MANAGER: ART MUEHLFELD (618) 346-3209**

CONTRACT NO. 76C67

SN 082-0245 LATITUDE: 38.64005 LONGITUDE: 90.05246
SN 082-0246 LATITUDE: 38.64014 LONGITUDE: 90.05231

GROSS LENGTH = 1885.50 FT = 0.357 MILES
NET LENGTH = 1885.50 FT = 0.357 MILES

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

SUBMITTED April 7, 2009
Max C. Lami
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

May 1, 2009
Charles J. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

May 1, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES			URBAN 100'-STATE	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	SFTY-2A		
50102400	CONCRETE REMOVAL	CU YD	41	41		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	45	45		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	6650	6650		
50800515	BAR SPLICERS	EACH	27	27		
52000208	FINGER PLATE EXPANSION JOINT, 3"	FOOT	86	86		
52000600	FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	93	93		
67000200	ENGINEER'S FIELD OFFICE, TYPE A	EACH	6	6		
67100100	MOBILIZATION	L SUM	1	1		
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1		
70101605	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)	EACH	1	1		
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	3440	3440		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	15598	15598		
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1288	1288		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	5213	5213		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	675	675		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	612.5	612.5		
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	4850	4850		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	125	125		
78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	92	92		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1367	1367		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	125	125		
X0321781	MECHANICAL SPLICE	EACH	230	230		
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1		
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1		
40300200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.3	0.3		
40600300	AGGREGATE (PRIME COAT)	TON	2	2		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	436	436		
40600990	TEMPORARY RAMP	SQ YD	83	83		
40603575	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX E, N105	TON	252.5	252.5		
48203100	HOT-MIX ASPHALT SHOULDERS	TON	44	44		
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	300	300		
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	2056	2056		

*Specialty Items

FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
o:\p\work\PWIDOT\GELINH\dms88449\0876667-shr-500.dgn		DRAWN -	REVISED -			255	82-1B-3-I	ST CLAIR	21	2	
PLOT SCALE = 50.0000 / IN.		CHECKED -	REVISED -								
PLOT DATE = 4/18/2009		DATE -	REVISED -								
						SCALE: _____		SHEET NO. ___ OF ___ SHEETS		STA. _____ TO STA. _____	
						FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT					
						CONTRACT NO. 76C67					

GENERAL NOTES

1. THE STANDARDS AND REVISION NUMBERS SHALL APPLY TO THIS PROJECT.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
3. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING BY CALLING J.U.L.I.E. AND BY NOTIFYING NON-J.U.L.I.E. MEMBERS INDIVIDUALLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
 - AMERENIP
 - AMERENUE
 - AT&T ILLINOIS
 - VILLAGE OF CASEYVILLE
 - CHARTER COMMUNICATION, INC.
 - MEDIACOM LLC CENTRAL

MEMBERS OF J.U.L.I.E (800) 892-0123 ARE INDICATED BY *. NON-MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

4. A QUANTITY OF 1288 FEET OF "TEMPORARY PAVEMENT MARKING - LINE 6" WHITE HAS BEEN INCLUDED IN THE PLANS FOR PAINTING THE BOTTOM 6" OF THE TEMPORARY CONCRETE BARRIER.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL WOOD SIGN SUPPORTS IN ACCORDANCE WITH SECTION 730 OF THE STANDARD SPECIFICATIONS, HOWEVER, INSTALLATION BY METHOD "A" (ARTICLE 730.04(A)) SHALL BE THE ONLY METHOD PERMITTED.
6. TWO LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.
7. "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE REQUIRED AT INTERSECTING SIDE ROADS THROUGHOUT THE PROJECT. COST TO BE INCLUDED IN BID PRICES FOR TRAFFIC CONTROL AND PROTECTION.

COMMITMENTS

NONE

RESURFACING SCHEDULE

STATION		RT/LT	BITUMINOUS MATERIAL (PRIME COAT) (TON)	AGGREGATE (PRIME COAT) (TON)	HMA SURF. REMOVAL BUTT-JOINT (SQ YD)	POLYMERIZED HMA SURF. CSE., MIX "E", N105 (TON)	HMA SHOULDERS (TON)
1145+90.00	TO 1146+25.00	RT			217.78		
1145+90.00	TO 1146+63.15	RT					7.96
1145+90.00	TO 1146+90.12	RT	0.13	0.60		39.20	
1145+90.00	TO 1147+17.33	RT					13.82
1150+06.25	TO 1151+33.00	RT					13.82
1150+32.97	TO 1151+33.00	RT	0.13	0.60		39.20	
1150+61.69	TO 1151+33.00	RT					7.96
1150+98.00	TO 1151+33.00	RT			217.78		
TOTAL			0.25	1.20	435.56	78.40	43.56

STAGE CONSTRUCTION SCHEDULE

LOCATION		TEMPORARY CONCRETE BARRIER (FT)	RELOCATE TEMPORARY CONCRETE BARRIER (FT)	IMPACT ATTENUATOR TEMPORARY (EA)	RELOCATE IMPACT ATTENUATOR (EA)
1143+81.50				1	
1143+81.50	TO 1146+55.50	275.00			
1146+55.50	TO 1150+55.50	400.00			
1144+43.50					1
1144+43.50	TO 1146+55.50		212.5		
1146+55.50	TO 1150+55.50		400.00		
1151+62.00					
TOTAL		675.00	612.50	1	1

TEMPORARY PAVEMENT MARKING SCHEDULE

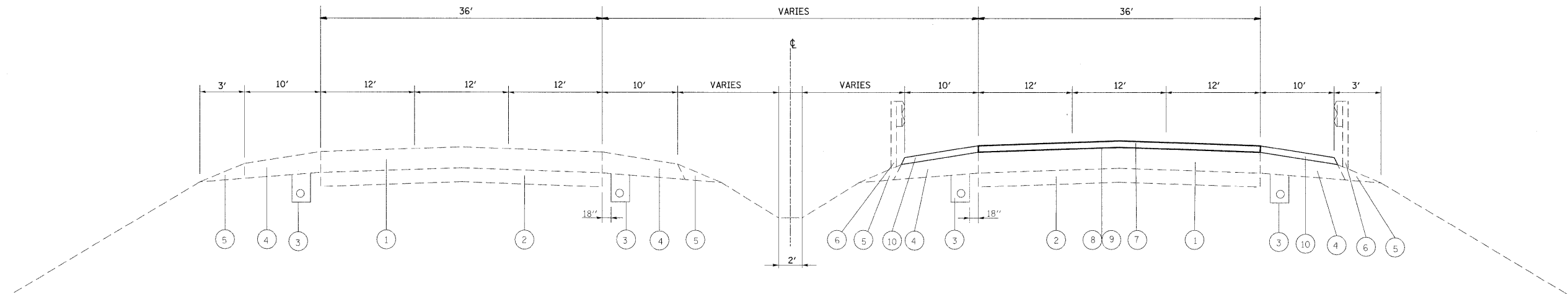
STATION	PAVEMENT MARKING		SHORT-TERM PAVEMENT MARKING (FT)	WORK ZONE PAVEMENT REMOVAL (SQ FT)	RAISED REFLECTIVE PAVEMENT MARKER (EA)	
	LINE 4" (FT)	LINE 6" (FT)				
1121+55.50 TO 1138+55.50	1700.0					
1138+55.50 TO 1156+55.50	EDGE LINES 3600.0		720.0	1440.0	46	
1131+56.50 TO 1156+55.50	CENTERLINE 2499.0		999.6	1166.2		
1143+81.50 TO 1146+55.50	TEMP. BARR.	275.0				
1146+55.50 TO 1150+55.50	TEMP. BARR.	400.00				
1121+55.50 TO 1138+55.50	1700.0					
1138+55.50 TO 1156+55.50	EDGE LINES 3600.0		720.0	1440.0	46	
1131+56.50 TO 1156+55.50	CENTERLINE 2499.0		999.6	1166.2		
1144+43.50 TO 1146+55.50	TEMP. BARR.	212.5				
1146+55.50 TO 1150+55.50	TEMP. BARR.	400.0				
SUB-TOTAL						
TOTAL		15598.0	1287.5	3439.2	5212.4	92

PAVEMENT MARKING SCHEDULE

STATION		4" WHITE LINE (FT)	YELLOW LINE 4" (FT)	RAISED REFLECTIVE PAVEMENT MARKER (EA)
1131+56.00	TO 1156+55.50	SKIP DASH 1249.75		125
1138+55.50	TO 1156+55.50	EDGE LINES 1800.00	1800.00	
SUB-TOTAL		3049.75	1800.00	125
TOTAL		4849.75		125

PAVEMENT MARKING REMOVAL SCHEDULE

STATION		PAVEMENT MARKING REMOVAL (SQ FT)	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL (EA)
1138+55.50	TO 1156+55.50	EDGE LINES 1200.0	
1131+56.50	TO 1156+55.50	SKIP DASH 166.6	125
SUB-TOTAL			
TOTAL		1366.6	125



TYPICAL NORMAL SECTION

I-255 (NB) STA. 1145+90.00 TO STA. 1151+33.00
 I-255 (SB) STA. 1145+90.00 TO STA. 1151+33.00

MIXTURE REQUIREMENTS

MIXTURE USE	SURFACE	SHOULDERS
AC/PG	PG 64-22	PG 58-22
RAP % (MAX)	10%	30%
DESIGN AIR VOIDS	4.0% @ Ndes= 70	2.0% @ Ndes=30
MIX COMPOSITION (GRADATION MIXTURE)		
FRICION AGG	MIXTURE "D"	BAM

TOP LIFT SHOULDERS - DESIGN THIS MIX AT 2.0% VOIDS AND ADD ASPHALT TO REDUCE VOIDS TO 1.5%

PLAN QUANTITIES FOR HOT-MIX ASPHALT SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LB/SQ YD/IN (59.8 KG/SQ M/25 MM THICKNESS).

LEGEND

- ① EXISTING CRPCC PAVEMENT - 10"
- ② EXISTING STABILIZED SUB-BASE - 4"
- ③ EXISTING PIPE UNDERDRAINS
- ④ EXISTING HOT- MIX ASPHALT SHOULDERS - 10"
- ⑤ EXISTING AGGREGATE SHOULDERS, TYPE B
- ⑥ EXISTING GUARDRAIL
- ⑦ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N105 - 1 3/4 "
- ⑧ PROPOSED BITUMINOUS MATERIALS - PRIME COAT
- ⑨ PROPOSED AGGREGATE PRIME COAT
- ⑩ PROPOSED HOT- MIX ASPHALT SHOULDERS - 1 3/4"

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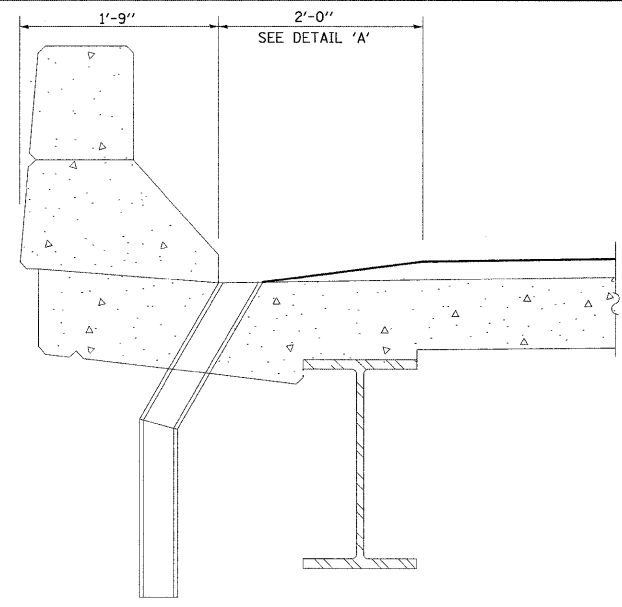
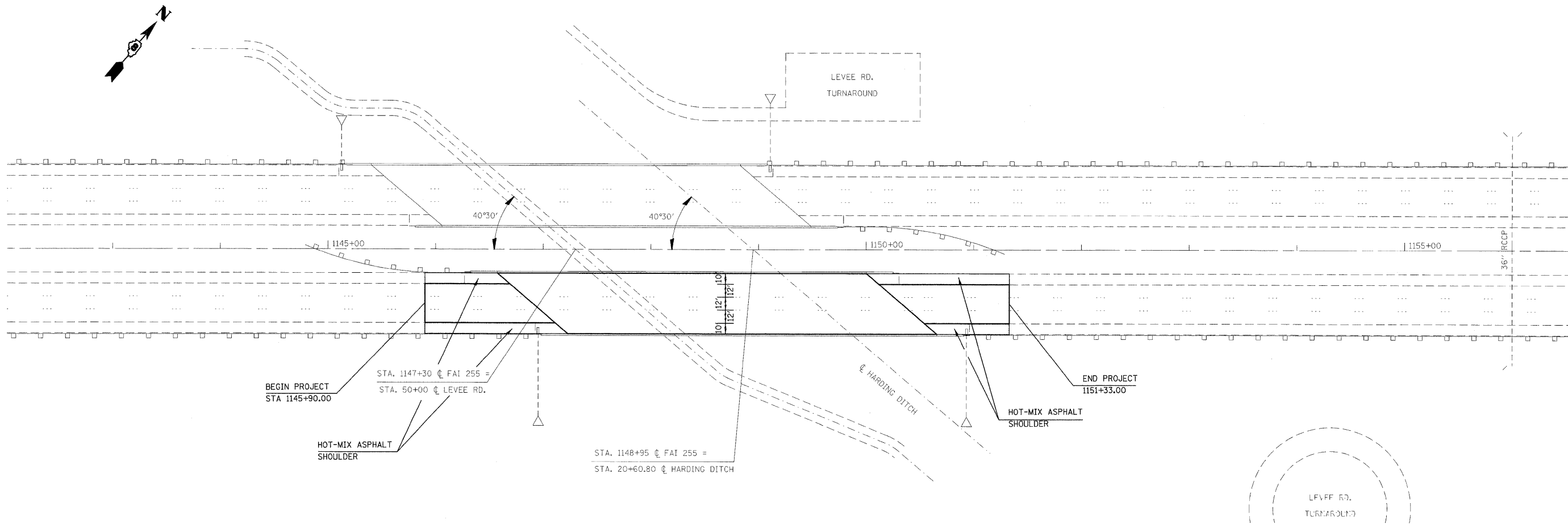
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS

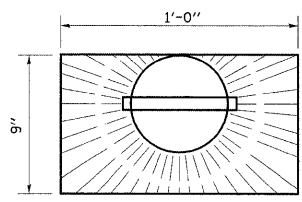
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 76C67				

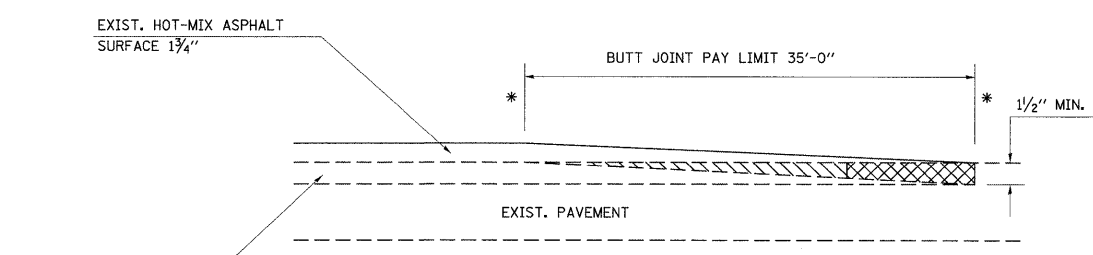
ILLINOIS FED. AID PROJECT



SECTION AT DRAIN



DETAIL 'A' PLAN VIEW DECK DRAIN



* BUTT JOINT PAY LIMITS
 SW APPROACH: STA 1145+90.00 TO STA 1146+25.00
 NE APPROACH: STA 1150+98.00 TO STA 1151+33.00

BUTT JOINT DETAIL

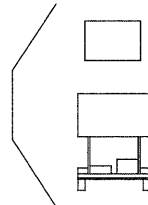
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PLOT DATE = 5/18/2009	DATE -	REVISED -	REVISED -									

LOCATION

ADDITIONAL SIGNS

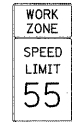


W20-1(O)-48
W16-3A(O)-3612



WORK ZONE PUBLIC INFORMATION SIGN

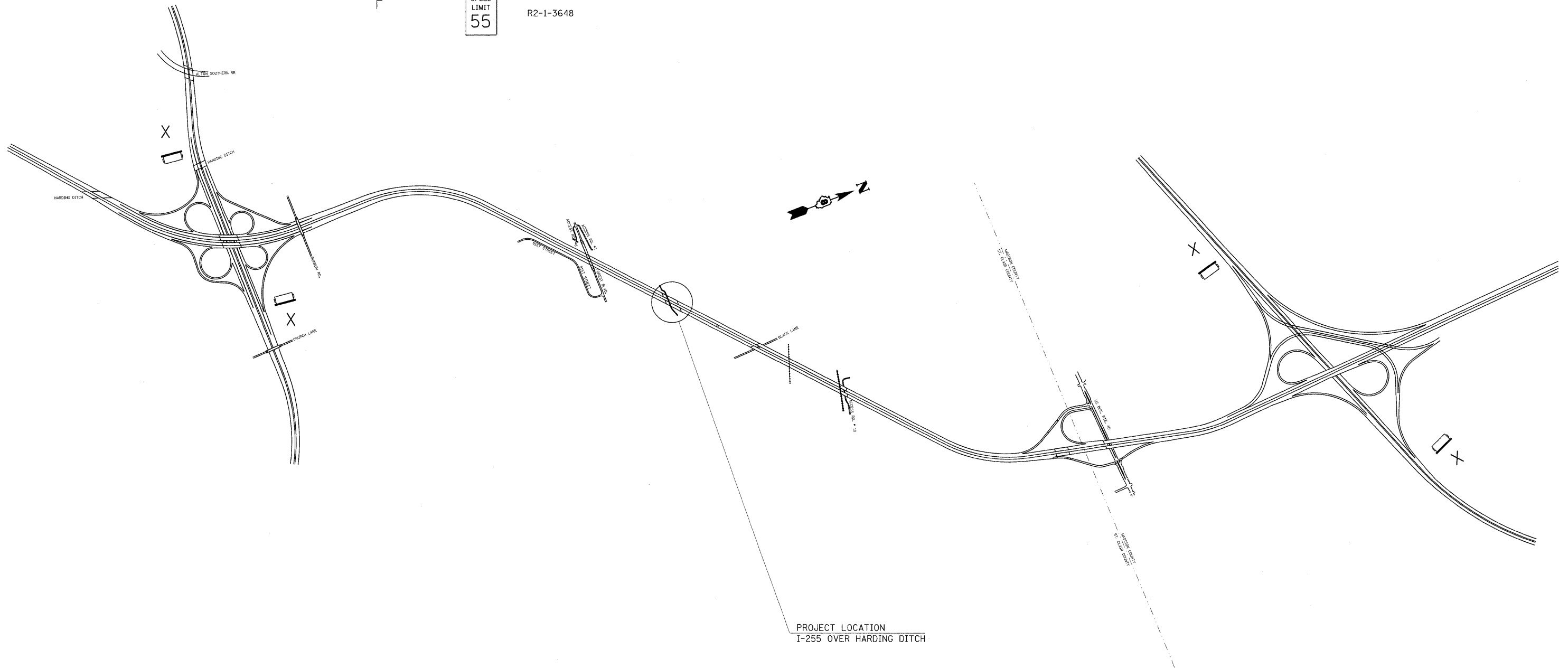
PORTABLE CHANGEABLE MESSAGE SIGN



W2-I115(O)-3618
R2-1-3648

NOTE:

ADDITIONAL SIGNS AT THE FOUR LOCATIONS SHOWN BELOW IN ACCORDANCE WITH HIGHWAY STANDARD 701400, SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE, LUMP SUM, FOR "TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)".



PROJECT LOCATION
I-255 OVER HARDING DITCH

FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL SIGNING PLAN	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT DATE = 4/18/2009	DATE -	CHECKED -	REVISED -			CONTRACT NO. 76C67					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

STAGE I DESCRIPTION OF WORK

TRAFFIC CONTROL SHALL BE INSTALLED AS SHOWN IN THE PLANS. THE COST OF THIS TRAFFIC CONTROL SHALL BE INCLUDED IN THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)".

TWO LANES OF THE ROADWAY SHALL BE OPENED ON THE RIGHT SIDE OF THE DIRECTION OF TRAFFIC.

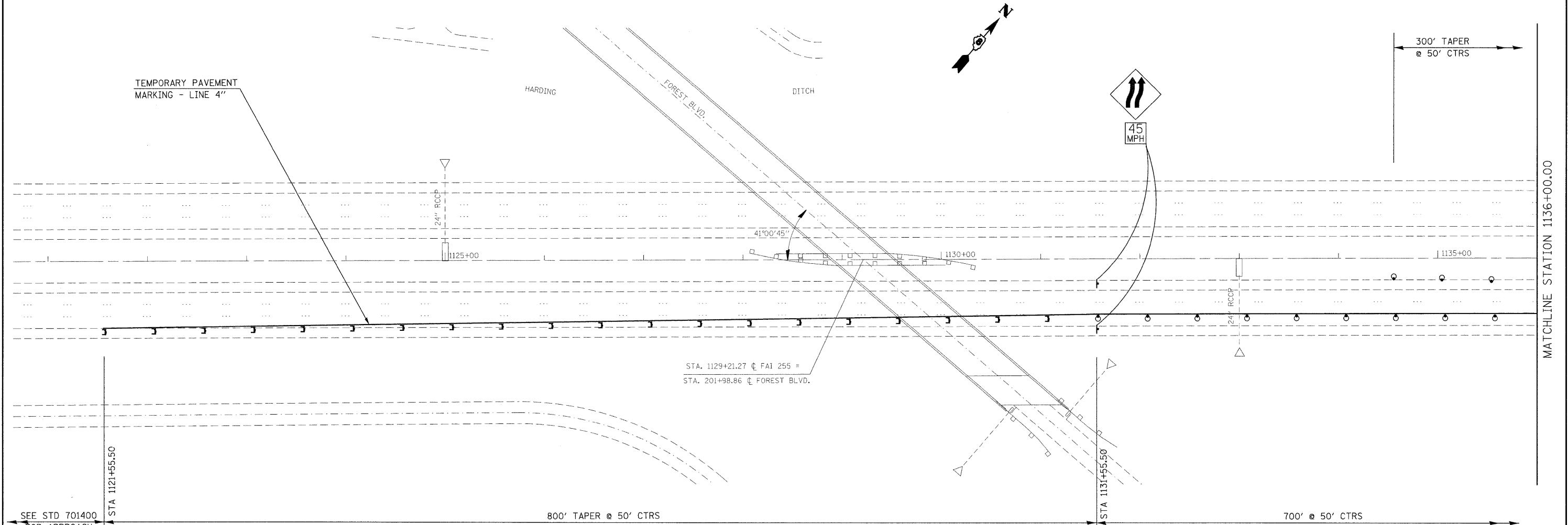
SEQUENCE OF CONSTRUCTION, STAGE I

REMOVE SKIP-DASH AND CONFLICTING SOLID EDGE PAVEMENT MARKINGS.

PLACE TRAFFIC CONTROL DETAILS ACCORDING TO PLANS.

PLACE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS, TEMPORARY.

PERFORM ALL NECESSARY BRIDGE WORK IN STAGE I WORK ZONE.

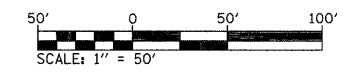


LEGEND

- W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
- 45 MPH
- W13-1-(0)-24
4' x 8'; 1" BORDER WITH 10" CAPITAL LETTERS
BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)
- W1-6(0) 7236 ATOP TYPE III BARRICADE
(DIRECTION OF ARROW SHALL MATCH DIRECTION OF TRAVEL.)
- END WORK ZONE SPEED LIMIT
- G20-I103(0)-4830

LEGEND

- DRUM WITH STEADY BURNING LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURNING LIGHT
- TYPE III BARRICADE WITH STEADY BURNING LIGHTS
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS
- WORK AREA



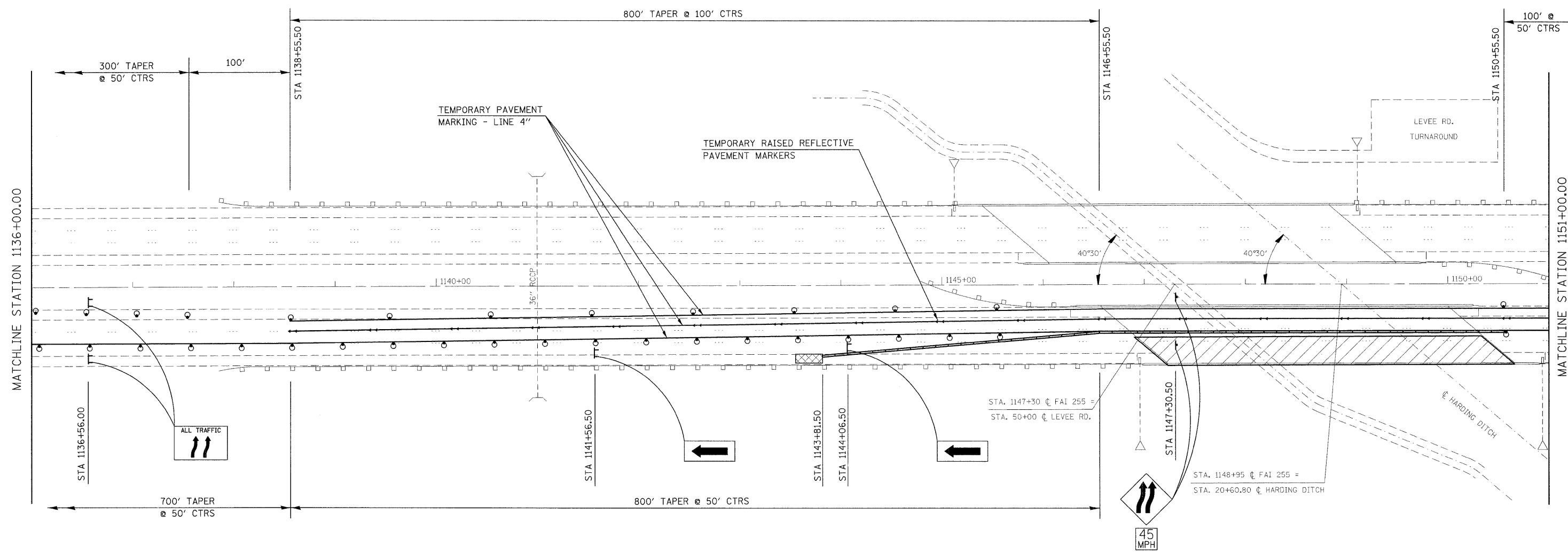
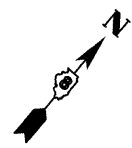
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**



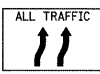
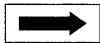
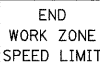
SUGGESTED STAGE I CONSTRUCTION & TRAFFIC CONTROL

SCALE: _____ SHEET NO. ____ OF ____ SHEETS STA. _____ TO STA. _____







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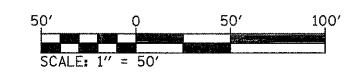


LEGEND

-  W1-4b-(0)-48
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-  45 MPH
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-  W1-6(0) 7236 ATOP TYPE III BARRICADE
(DIRECTION OF ARROW SHALL MATCH DIRECTION OF TRAVEL.)
-  G20-1103(0)-4830
END WORK ZONE SPEED LIMIT

LEGEND

-  DRUM WITH STEADY BURNING LIGHT
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURNING LIGHT
-  TYPE III BARRICADE WITH STEADY BURNING LIGHTS
-  TEMPORARY CONCRETE BARRIER
-  IMPACT ATTENUATORS
-  WORK AREA



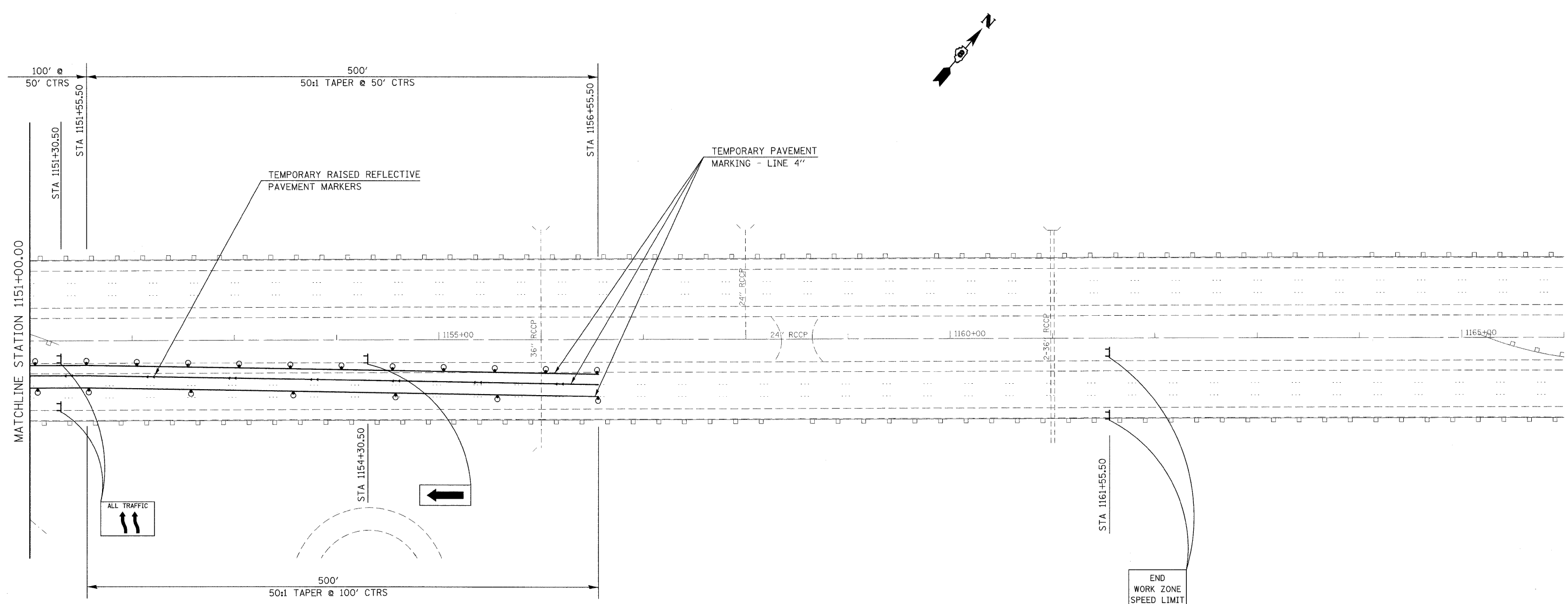
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUGGESTED STAGE I CONSTRUCTION & TRAFFIC CONTROL

SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____

F.A.I. RTE. 255	SECTION 82-1B-3-1	COUNTY ST CLAIR	TOTAL SHEETS 21	SHEET NO. 6
CONTRACT NO. 76C67				
ILLINOIS FED. AID PROJECT				

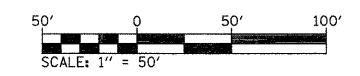


LEGEND

- W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
- 45 MPH
- W13-1-(0)-24
4' x 8'; 1" BORDER WITH 10" CAPITAL LETTERS
BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)
- W1-6(0) 7236 ATOP TYPE III BARRICADE
(DIRECTION OF ARROW SHALL MATCH DIRECTION OF TRAVEL.)
- G20-1103(0)-4830

LEGEND

- DRUM WITH STEADY BURNING LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURNING LIGHT
- TYPE III BARRICADE WITH STEADY BURNING LIGHTS
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS
- WORK AREA



FILE NAME =	USER NAME = gelnh	DESIGNED -	REVISED -
o:\pw\work\p\dot\gelnh\dms88449\087667-ehs-staging.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUGGESTED STAGE I CONSTRUCTION & TRAFFIC CONTROL

SCALE: _____ SHEET NO. ____ OF ____ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1B-3-1	ST CLAIR	21	7
CONTRACT NO. 76C67				
ILLINOIS FED. AID PROJECT				

STAGE II DESCRIPTION OF WORK

TRAFFIC CONTROL SHALL BE INSTALLED AS SHOWN IN THE PLANS. THE COST OF THIS TRAFFIC CONTROL SHALL BE INCLUDED IN THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)."

TWO LANES OF THE ROADWAY SHALL BE OPENED ON THE LEFT SIDE OF THE DIRECTION OF TRAFFIC.

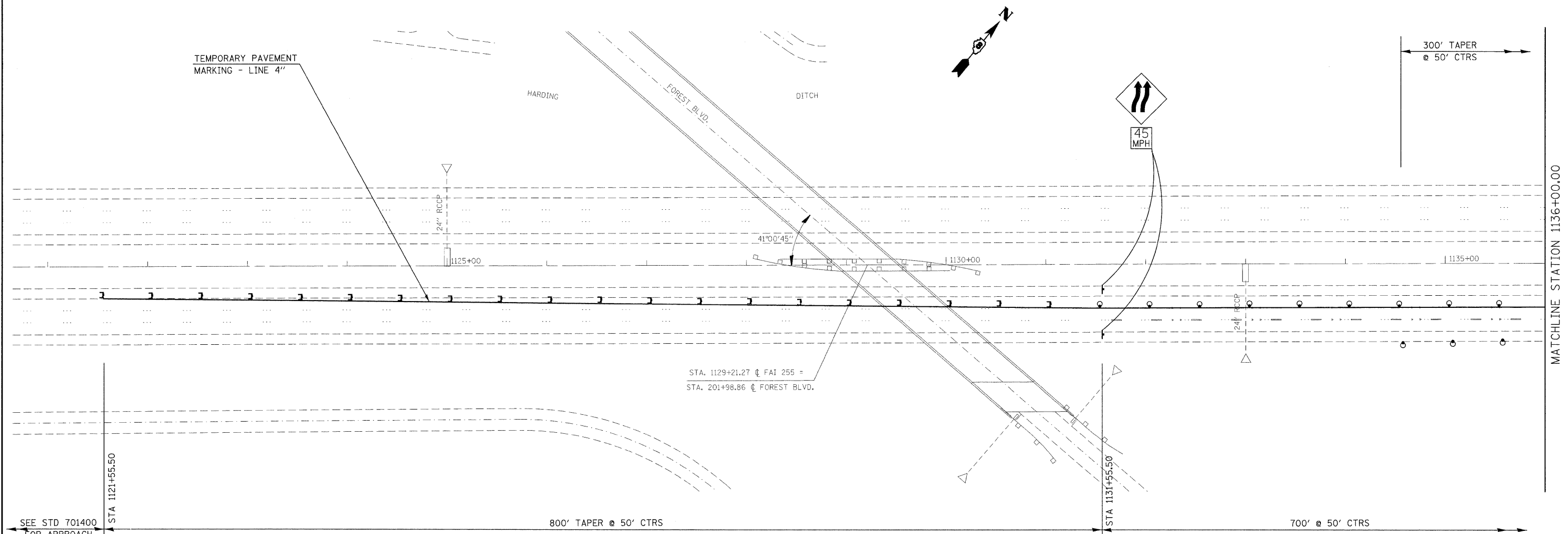
SEQUENCE OF CONSTRUCTION, STAGE II

REMOVE SKIP-DASH AND CONFLICTING SOLID EDGE PAVEMENT MARKINGS.

PLACE TRAFFIC CONTROL DETAILS ACCORDING TO PLANS.

RELOCATE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS, TEMPORARY.

PERFORM ALL NECESSARY BRIDGE WORK IN STAGE II WORK ZONE.

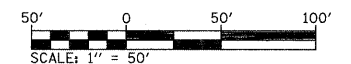


LEGEND

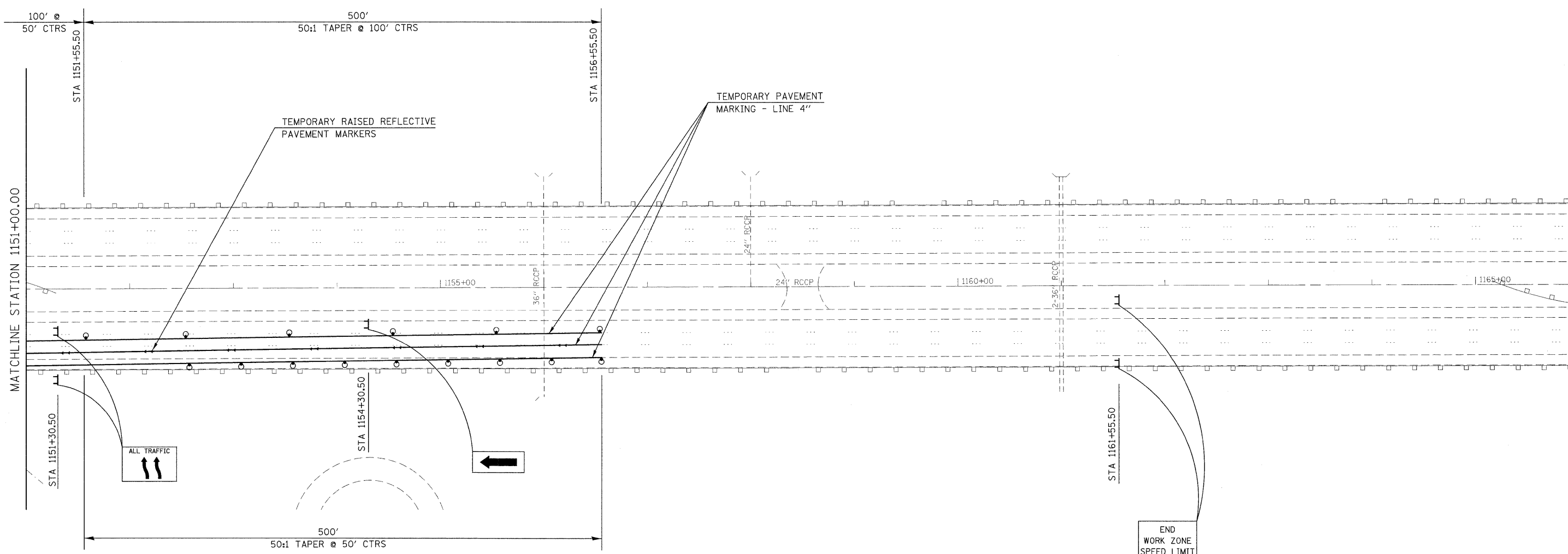
- W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
- W13-1-(0) -24
- 4' x 8'; 1" BORDER WITH 10" CAPITAL LETTERS
BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)
- W1-6(0) 7236 ATOP TYPE III BARRICADE
(DIRECTION OF ARROW SHALL MATCH DIRECTION OF TRAVEL.)
- G20-I103(0)-4830

LEGEND






- DRUM WITH STEADY BURNING LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURNING LIGHT
- TYPE III BARRICADE WITH STEADY BURNING LIGHTS
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS
- WORK AREA









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PLOT DATE = 4/10/2009	DATE -	CHECKED -	REVISED -		SCALE: _____ SHEET NO. ____ OF ____ SHEETS STA. _____ TO STA. _____		CONTRACT NO. 76C67				
					ILLINOIS FED. AID PROJECT						

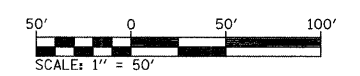


LEGEND

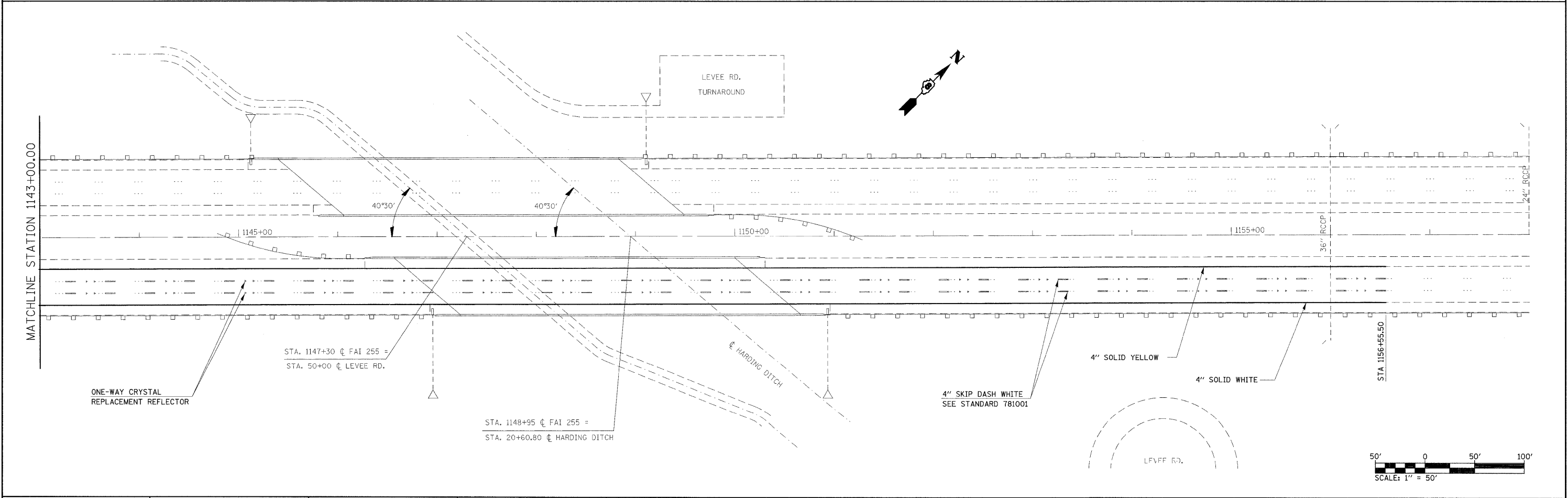
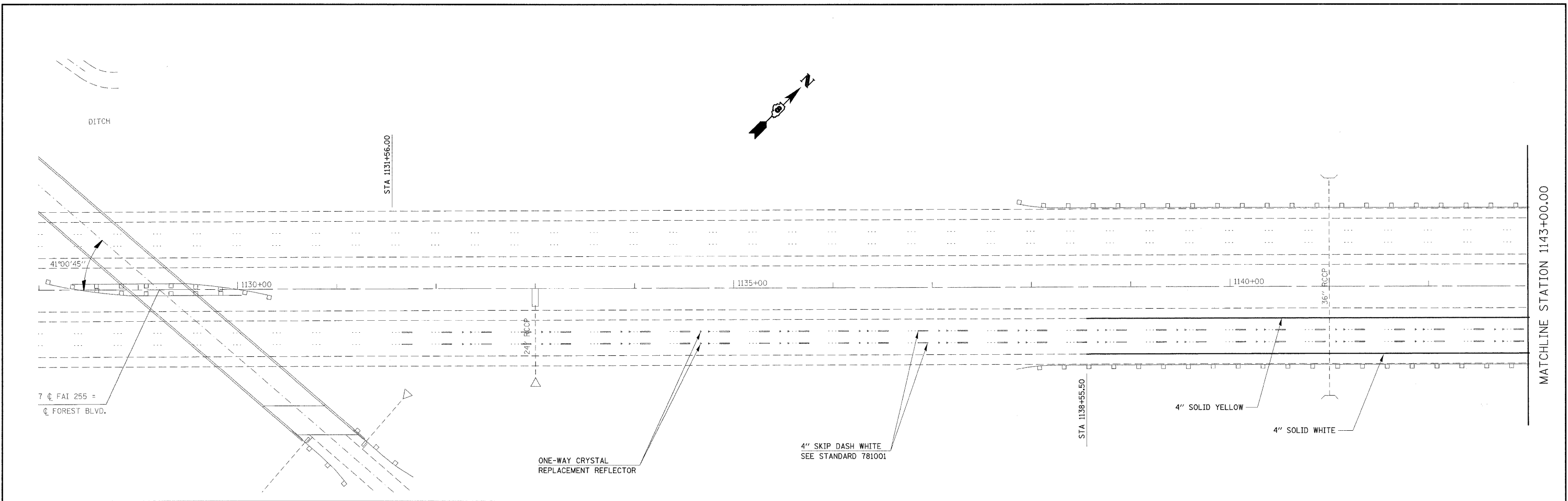
-  W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
-  45 MPH
-  W13-1-(0)-24
- 4' x 8'; 1" BORDER WITH 10" CAPITAL LETTERS
BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)
-  W1-6(0) 7236 ATOP TYPE III BARRICADE
(DIRECTION OF ARROW SHALL MATCH DIRECTION OF TRAVEL.)
-  G20-I103(0)-4830

LEGEND

-  DRUM WITH STEADY BURNING LIGHT
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURNING LIGHT
-  TYPE III BARRICADE WITH STEADY BURNING LIGHTS
-  TEMPORARY CONCRETE BARRIER
-  IMPACT ATTENUATORS
-  WORK AREA



FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUGGESTED STAGE II CONSTRUCTION & TRAFFIC CONTROL			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		CONTRACT NO. 76C67							
PLOT DATE = 4/6/2009		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



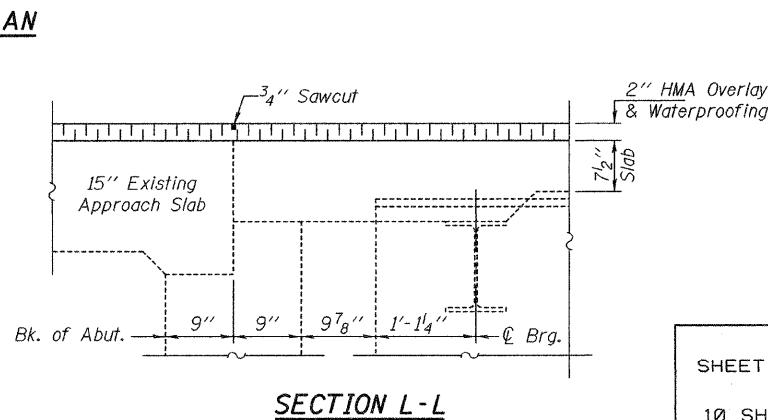
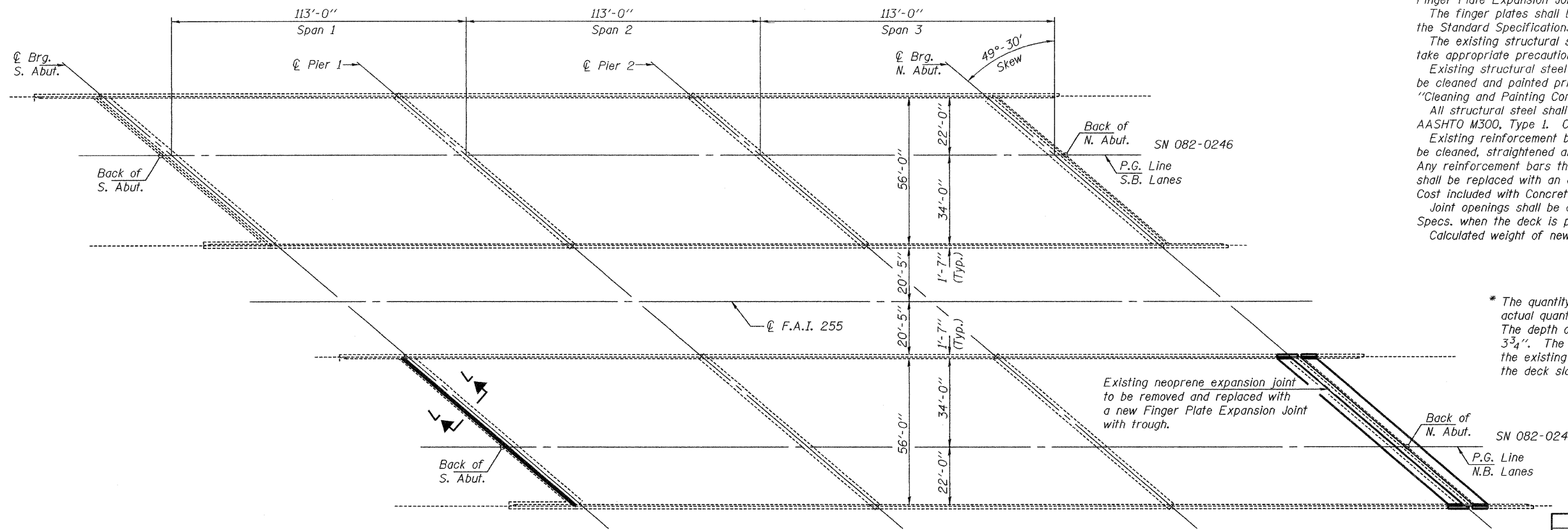
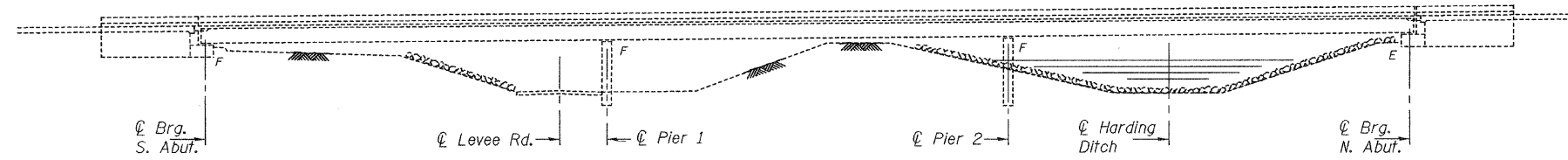
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et\pw\work\PWIDOT\GELINH\dms88449\10876167-sht-pmk.dgn	PLOT SCALE = 50.0000 "/td> <td>DRAWN -</td> <td>REVISED -</td> <td>255</td> <td>82-1B-3-1</td> <td>ST CLAIR</td> <td>21</td> <td>11</td>	DRAWN -	REVISED -			255	82-1B-3-1	ST CLAIR	21	11		
PLOT DATE = 4/10/2009	DATE -	CHECKED -	REVISED -			CONTRACT NO. 76C67						
						ILLINOIS FED. AID PROJECT						
						SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 50, unless otherwise noted.
Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$ " ϕ , open holes $\frac{13}{16}$ " ϕ , unless otherwise noted.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
Reinforcement bars designated (E) shall be epoxy coated.
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.
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.
Finger Plate Expansion Joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
Tapered shims shall be added under the stools, as required by the Engineer, to make a smooth finger joint. Cost shall be included with Finger Plate Expansion Joint.
The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
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".
All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type I. Cost included with Finger Plate Expansion Joint, 3".
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.
Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.
Calculated weight of new structural steel = 29,490 pounds

* The quantity of Deck Slab Repair (Partial) is estimated. The actual quantity and location is to be determined by the Engineer. The depth of any partial depth patch shall not be deeper than 3 $\frac{3}{4}$ ". The Contractor should be extremely careful not to damage the existing precast prestressed concrete planks while completing the deck slab repairs.



TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	41.0
Concrete Superstructure	Cu. Yd.	45.1
Reinforcement Bars, Epoxy Coated	Pound	6650
Mechanical Splice	Each	230
Bar Splicers	Each	27
Finger Plate Expansion Joint, 3"	Foot	86
Fabric Reinforced Elastomeric Trough	Foot	93
* Deck Slab Repair (Partial)	Sq. Yd.	300
Waterproofing Membrane System	Sq. Yd.	2056
Polymerized Hot-Mix Asphalt Surface, Course Mix "E", NI05	Ton	173.5

**PLAN & ELEVATION
SN 082-0245 (N.B.)**

DESIGNED	<i>[Signature]</i>
CHECKED	Victor H. Veliz
DRAWN	Kyle M. Steffen
CHECKED	VHV ASB

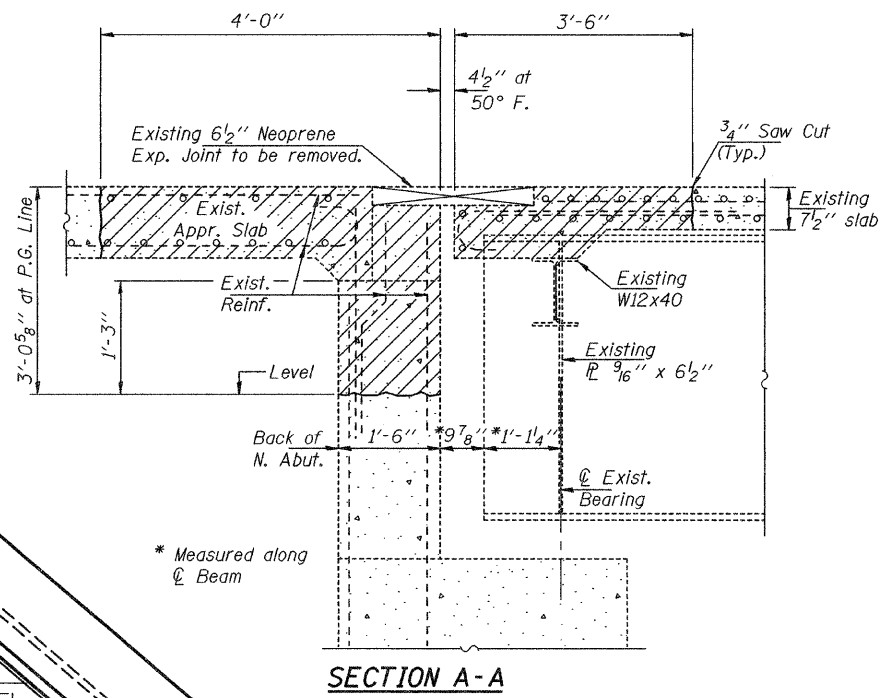
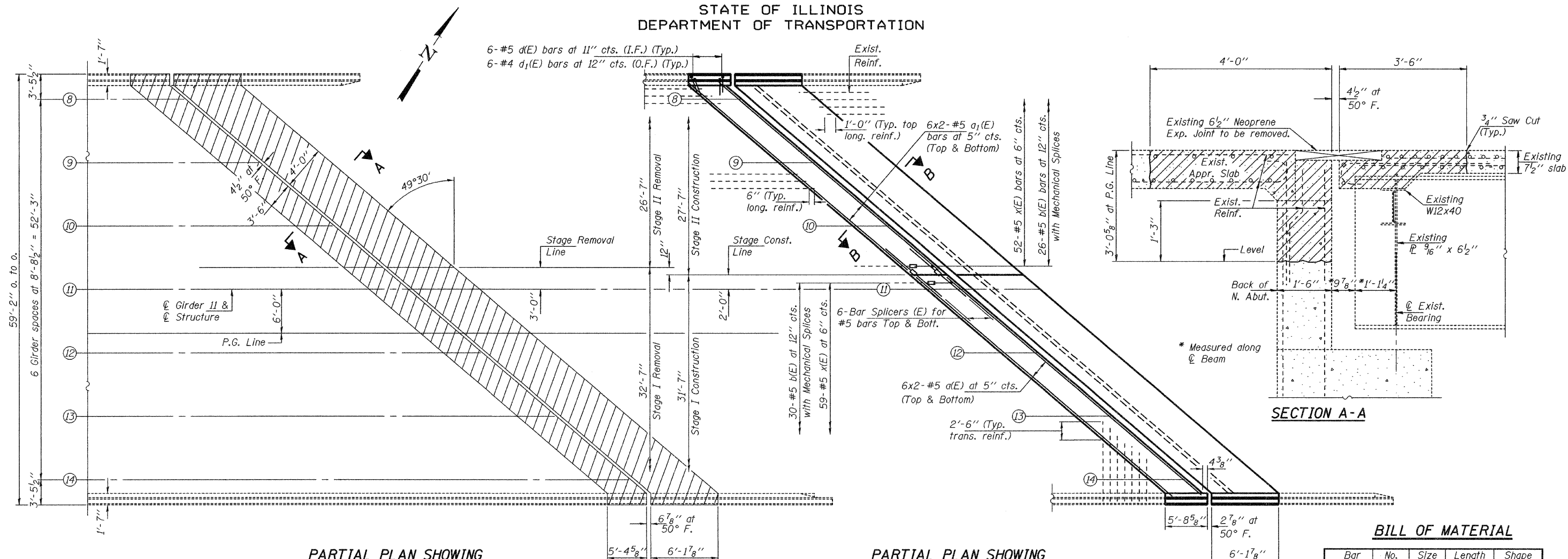
MAY 28, 2009
EXAMINED *[Signature]*
PASSED *[Signature]*
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES



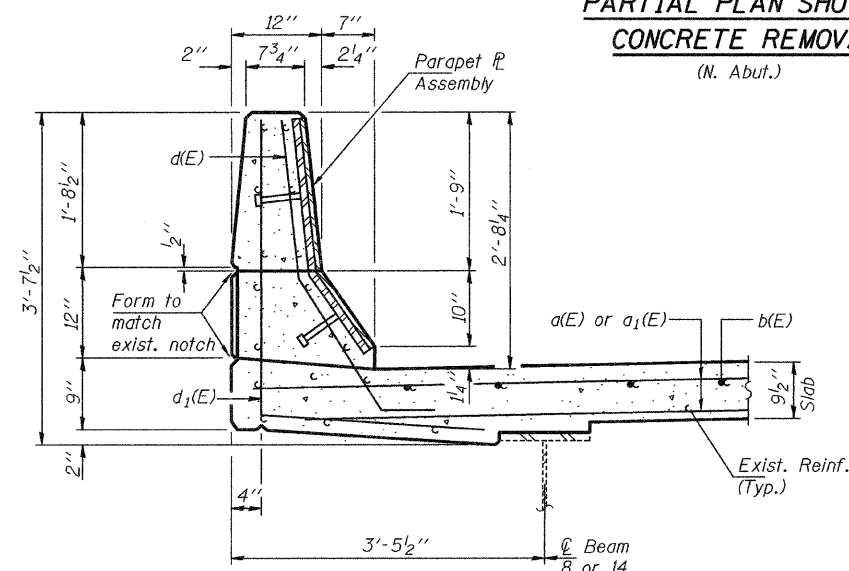
Expires: November 30, 2010

SHEET NO. 1 10 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1B-3-I	ST. CLAIR	21	12
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 76C67					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

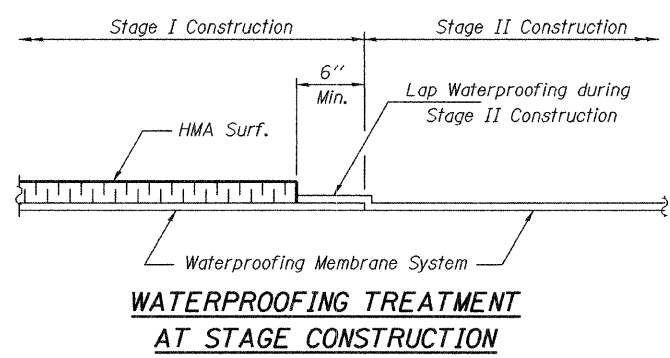


**PARTIAL PLAN SHOWING
CONCRETE REMOVAL**
(N. Abut.)

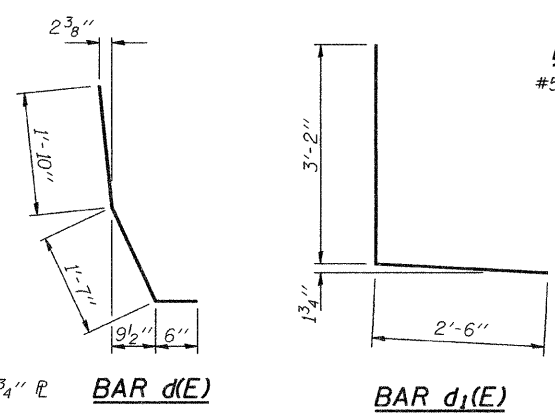


SECTION THRU CURB

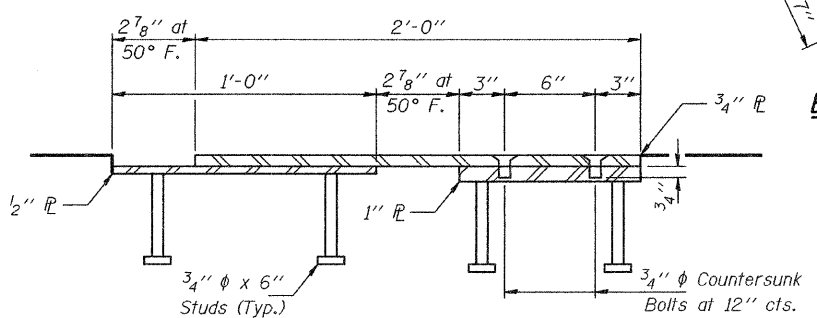
**PARTIAL PLAN SHOWING
CONCRETE REPLACEMENT**
(N. Abut.)



**WATERPROOFING TREATMENT
AT STAGE CONSTRUCTION**



MIN. LAP
#5 Bars = 1'-8"



PARAPET PLATE ASSEMBLY DETAIL

BILL OF MATERIAL

Bar No.	Size	Length	Shape
a(E)	#5	24'-8"	—
a1(E)	#5	21'-7"	—
b(E)	#5	4'-1"	—
d(E)	#5	3'-11"	⌋
d1(E)	#4	5'-8"	⌋
x(E)	#5	4'-8"	⌋
Bar Splicer	Each	12	
Mechanical Splice	Each	58	
Concrete Removal	Cu. Yd.	12.6	
Concrete Superstructure	Cu. Yd.	14.3	
Reinforcement Bars, Epoxy Coated	Pound	2030	

Bars indicated thus 6 x 2-#5 etc. indicates 6 lines of bars with 2 lengths per line.
For Section B-B, see sheet 3 of 10.
For Concrete Removal details at the abutment, see sheet 6 of 10.
For Concrete Replacement and Reinforcement details at the abutment, see sheet 8 of 10.
Hatched areas indicate Concrete Removal.

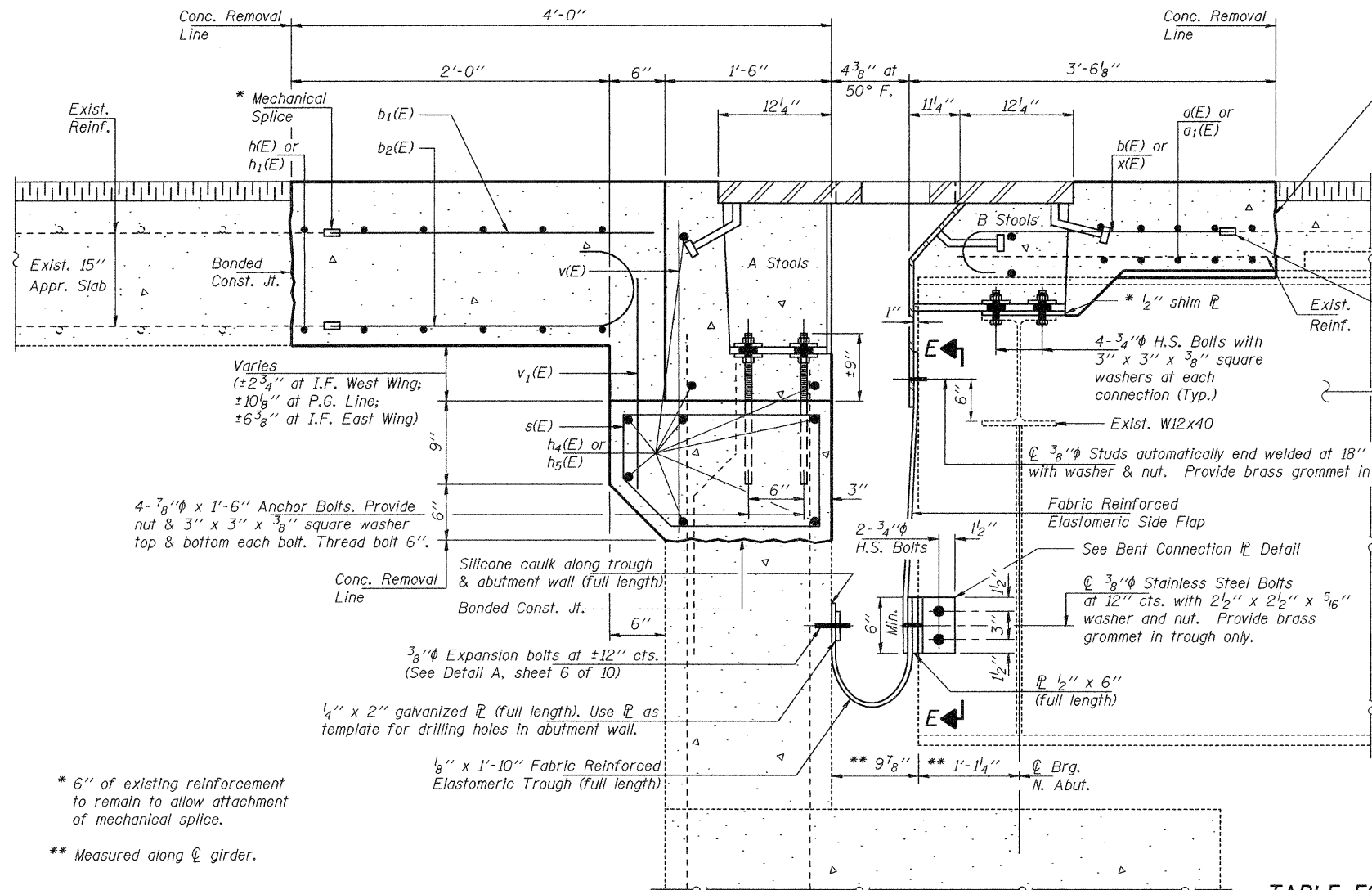
**CONCRETE REMOVAL &
REPLACEMENT DETAILS**
SN 082-0245 (N.B.)

DESIGNED	AJB
CHECKED	VHV
DRAWN	Kyle M. Steffen
CHECKED	AJB VHV

MAY 28, 2009
EXAMINED *A. Carl Krueger*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

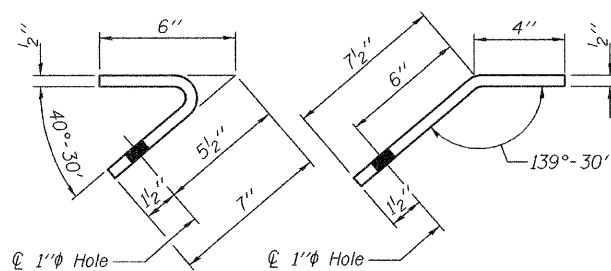
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	255	82-1B-3-I	ST. CLAIR	21	13
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 76C67		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



* 6" of existing reinforcement to remain to allow attachment of mechanical splice.

** Measured along centerline of girder.



BENT CONNECTION PLATE DETAIL

DESIGNED	AJB
CHECKED	VHV
DRAWN	Kyle M. Steffen
CHECKED	AJB VHV

MAY 28, 2009
EXAMINED *Carl Krueger*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

TABLE FOR DIMENSIONS A & B

Stool No.	Dim. A	Stool No.	Dim. A	Stool No.	Dim. B	Stool No.	Dim. B
A1	13"	A23	15"	B1	7 3/8"	B23	17 7/16"
A2	13"	A24	15"	B2	14 3/8"	B24	17 9/16"
A3	13"	A25	15"	B3	14 9/16"	B25	17 5/8"
A4	13"	A26	15"	B4	14 3/4"	B26	17 1/16"
A5	13"	A27	15"	B5	14 7/8"	B27	17 1/16"
A6	13"	A28	15"	B6	15 1/16"	B28	17 5/16"
A7	13"	A29	15"	B7	15 1/4"	B29	7 1/16"
A8	13"	A30	15"	B8	7 7/16"	B30	16 9/16"
A9	13"	A31	15"	B9	15 9/16"	B31	16 3/16"
A10	13"	A32	13"	B10	15 3/4"	B32	15 13/16"
A11	13"	A33	13"	B11	15 7/8"	B33	15 7/16"
A12	13"	A34	13"	B12	16 1/16"	B34	15 1/16"
A13	13"	A35	13"	B13	16 1/4"	B35	15 1/16"
A14	13"	A36	13"	B14	16 3/8"	B36	7 1/16"
A15	15"	A37	13"	B15	7 7/16"	B37	13 7/8"
A16	15"	A38	13"	B16	16 1/16"	B38	13 7/16"
A17	15"	A39	13"	B17	16 13/16"	B39	12 15/16"
A18	15"	A40	10"	B18	16 7/8"	B40	12 1/2"
A19	15"	A41	10"	B19	17"	B41	12 1/16"
A20	15"	A42	10"	B20	17 1/8"	B42	11 5/8"
A21	15"	A43	10"	B21	17 1/4"	B43	7 3/8"
A22	15"	A44	10"	B22	7 3/8"		

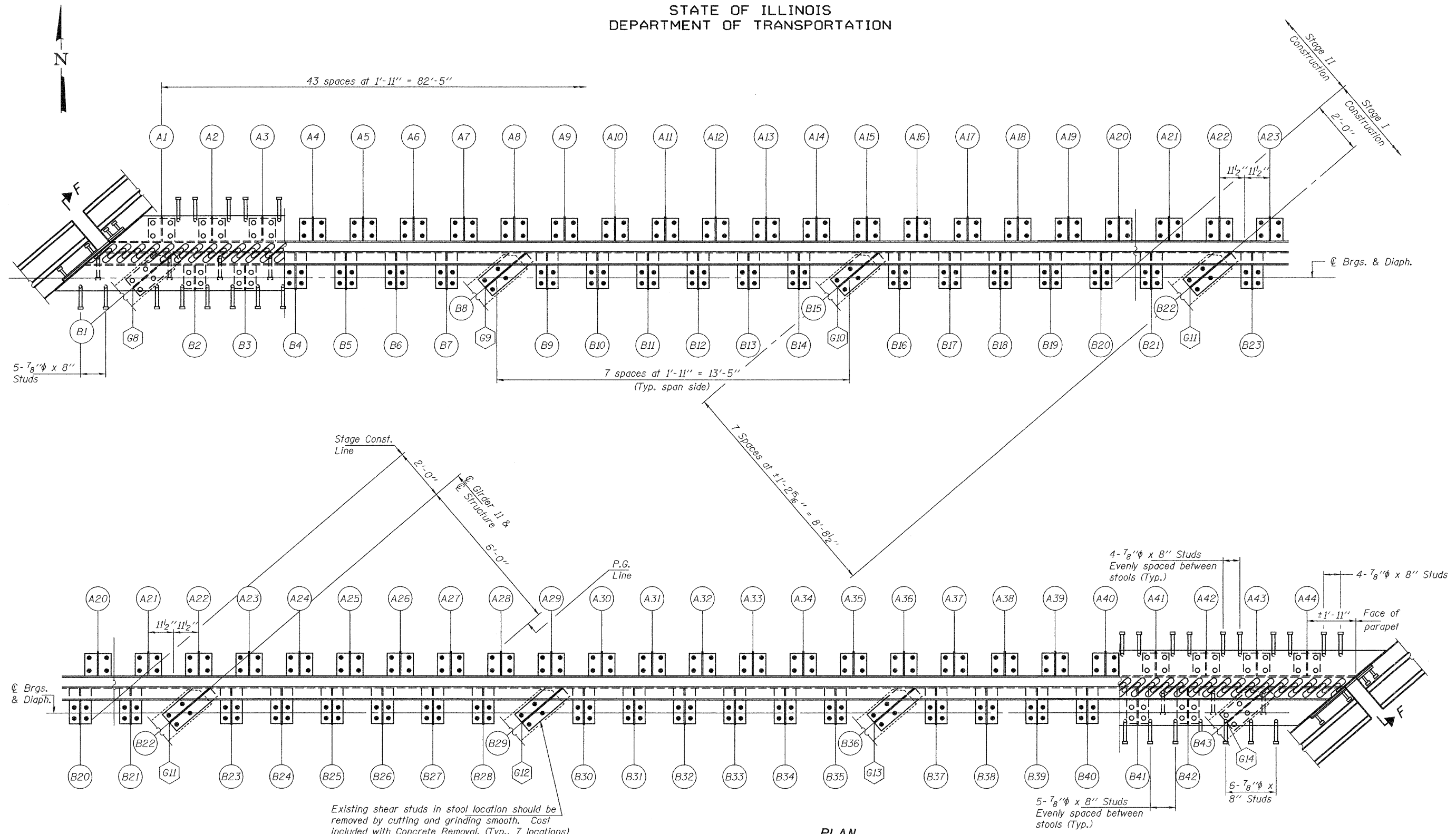
Notes:
For Stool locations, see sheet 4 of 10.
For View E-E, see sheet 6 of 10.
Existing shear studs that interfere with the finger plate stools shall be removed using the air-arc method and grind smooth all weld material remaining on the top flange. Cost included with Finger Plate Expansion Joint, 3".

Dimensions "A" is measured at front face of backwall.
Dimensions "B" is measured at centerline of bearing.

**JOINT DETAILS AT
NORTH ABUTMENT
SN 082-0245 (N.B.)**

SHEET NO. 3	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1B-3-I	ST. CLAIR	21	14
10 SHEETS	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 76C67		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN

Note:
For Section F-F, see sheet 5 of 10.

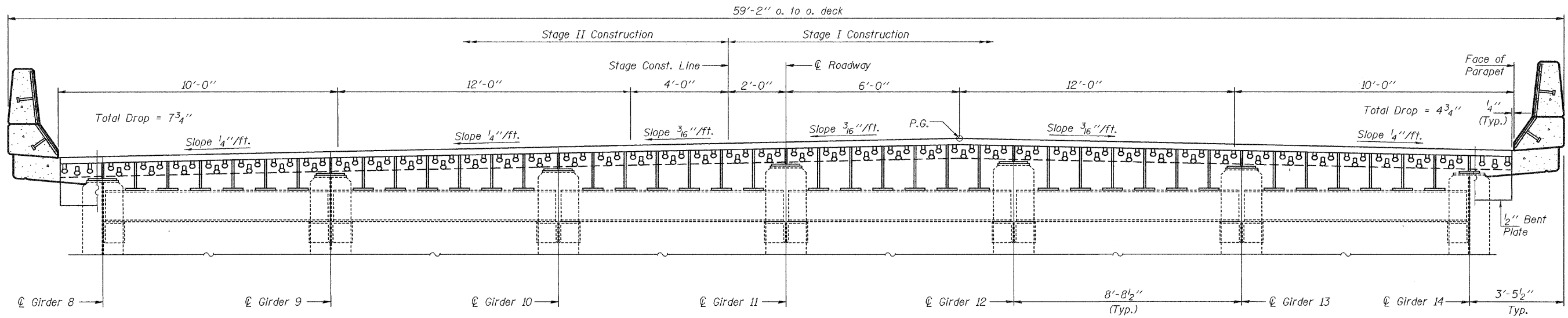
JOINT DETAILS AT
NORTH ABUTMENT
SN 082-0245 (N.B.)

DESIGNED	AJB
CHECKED	VHV
DRAWN	Kyle M. Steffen
CHECKED	AJB VHV

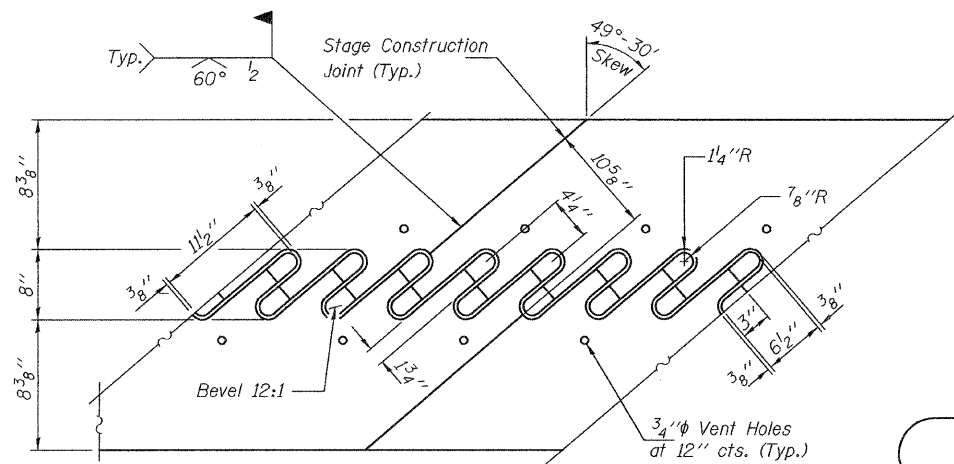
APRIL 27, 2009
 EXAMINED *Carl Proyer*
 ENGINEER OF STRUCTURAL SERVICES
 PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 4 10 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	-	ST. CLAIR	21	15
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	CONTRACT NO. 76067	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

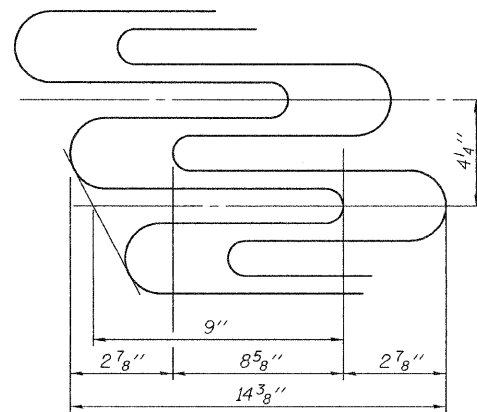


SECTION F-F
(Looking North)

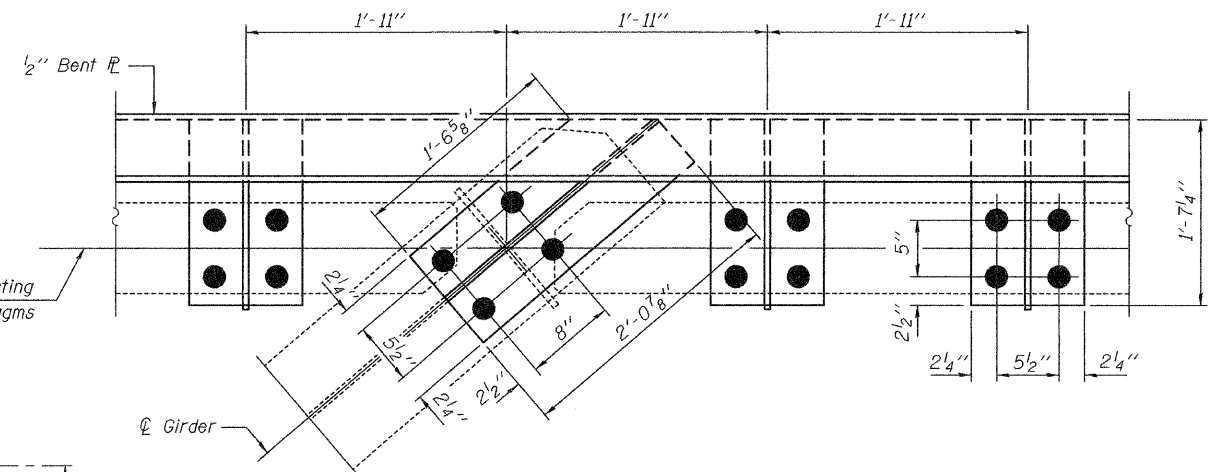


FLAME CUTTING DIAGRAM

Cut From
E 2" x 2'-0 3/4" x 88'-6 1/8"



JOINT OPENING AND GEOMETRY DETAIL



PARTIAL PLAN
SPAN SIDE
(Showing Stool Layout)

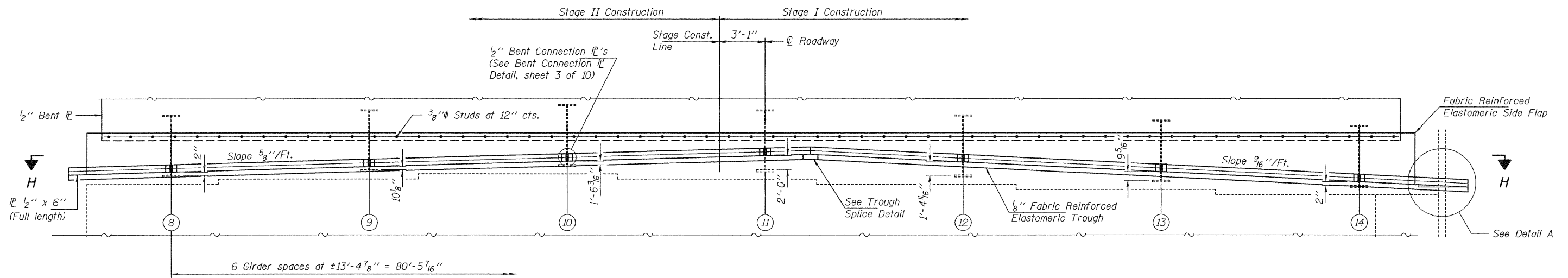
JOINT DETAILS AT
NORTH ABUTMENT
SN 082-0245 (N.B.)

DESIGNED	AJB
CHECKED	VHV
DRAWN	Kyle M. Steffen
CHECKED	AJB VHV

APRIL 27, 2009
EXAMINED *A. Carl Pronger*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

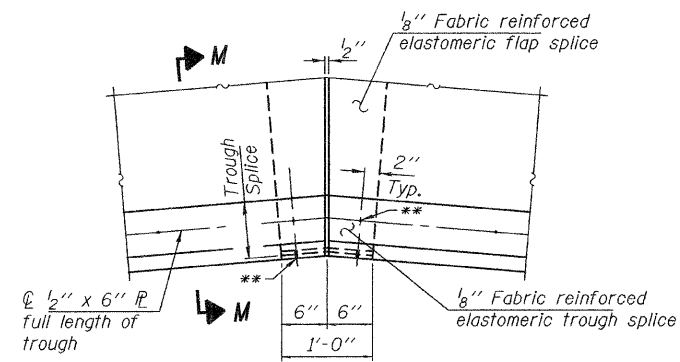
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	255	-	ST. CLAIR	21	16
10 SHEETS	FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		
			CONTRACT NO. 76C67		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

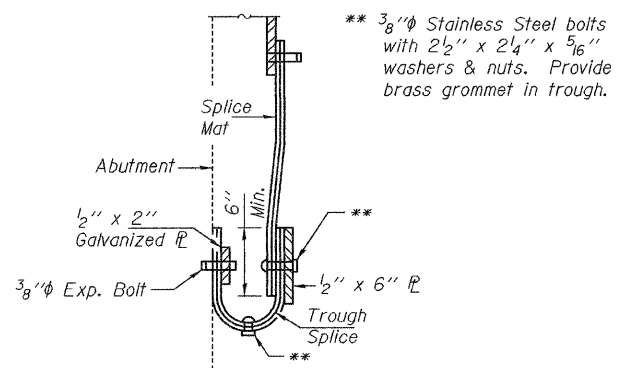


VIEW E-E

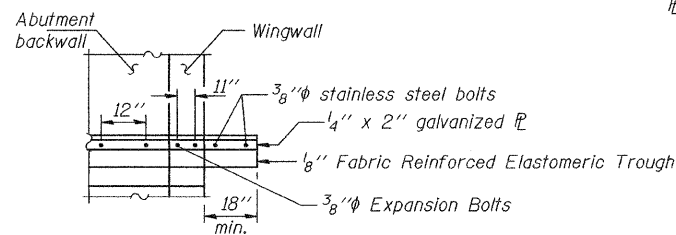
(Horizontal dimensions are measured along skew.)



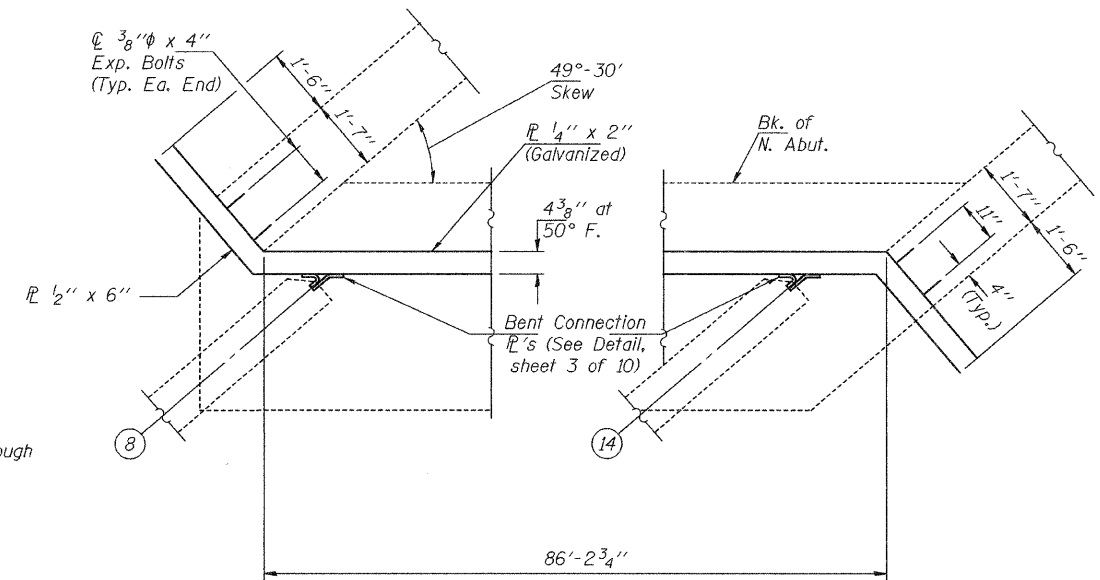
TROUGH SPLICE DETAIL



SECTION M-M



DETAIL A



SECTION H-H

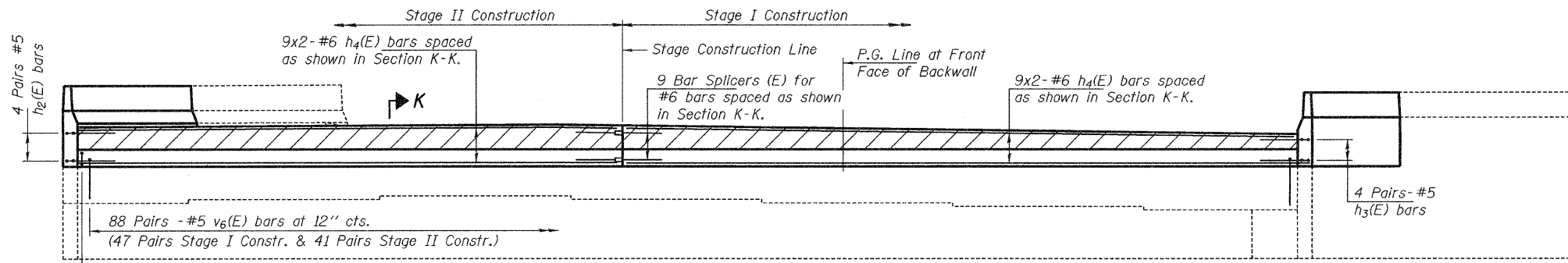
DESIGNED	AJB
CHECKED	VHV
DRAWN	Kyle M. Steffen
CHECKED	AJB VHV

APRIL 27, 2009
 EXAMINED *Carl Krueger*
 ENGINEER OF STRUCTURAL SERVICES
 PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES

TROUGH DETAILS
SN 082-0245 (N.B.)

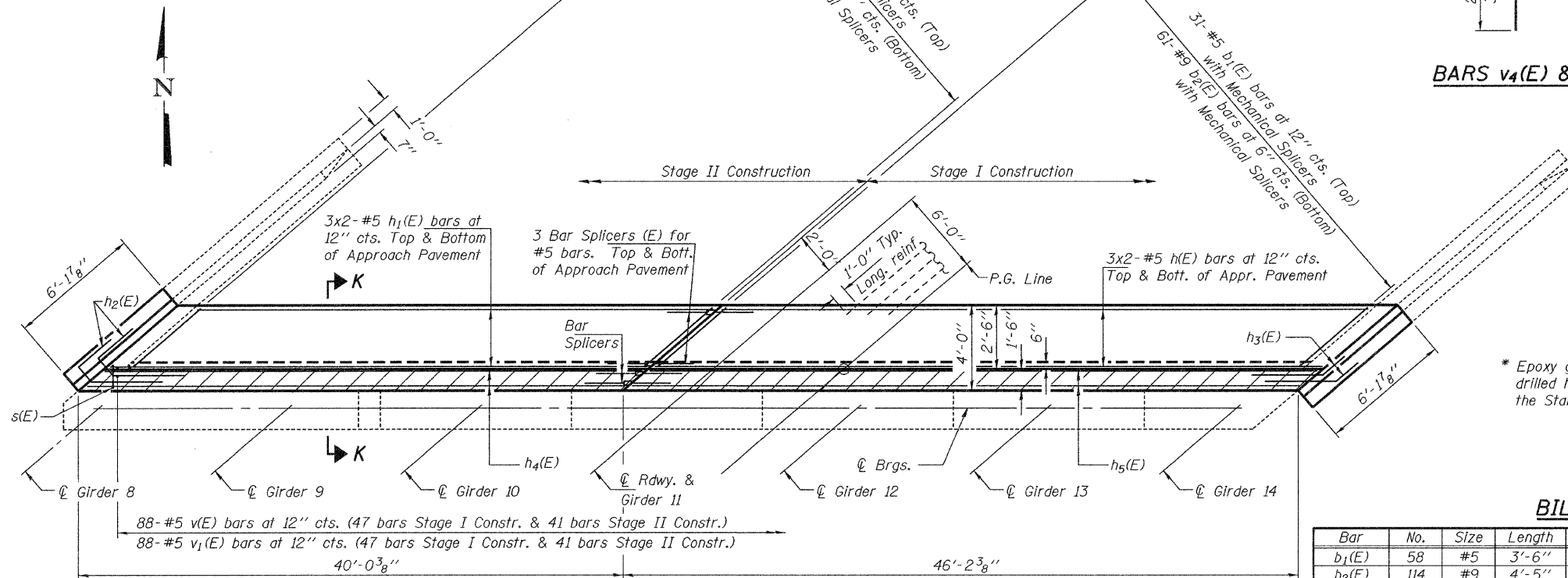
SHEET NO. 6 10 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	-	ST. CLAIR	21	17
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 76 C67		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



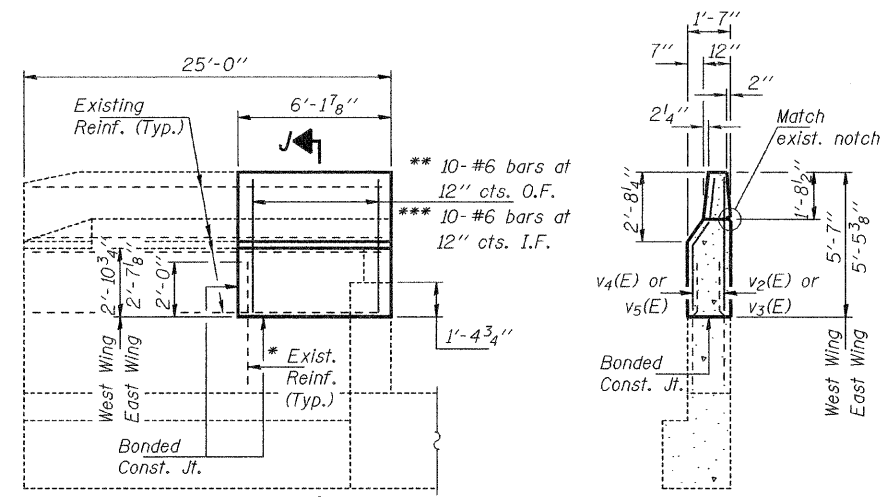
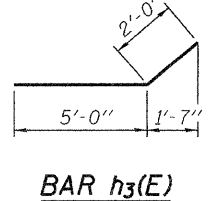
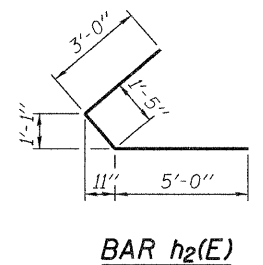
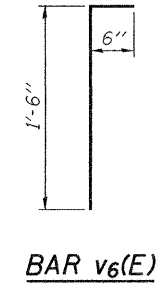
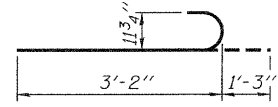
ELEVATION

Note:
Hatched area to be poured after new Finger Plate is in place.



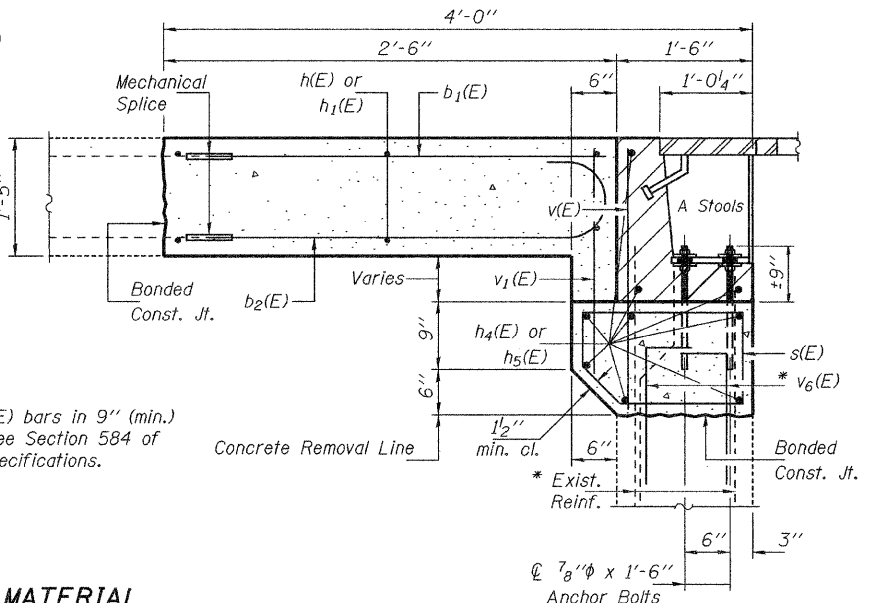
PLAN

MIN. LAP
#5 Bars = 1'-8"
#6 Bars = 2'-2"



INSIDE ELEVATION WING WALL

SECTION J-J



BILL OF MATERIAL

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
$b_1(E)$	58	#5	3'-6"	—	$v(E)$	88	#5	2'-6"	—
$b_2(E)$	114	#9	4'-5"	—	$v_1(E)$	88	#5	2'-0"	—
					$v_2(E)$	10	#6	5'-1"	—
$h(E)$	6	#5	23'-10"	—	$v_3(E)$	10	#6	5'-8"	—
$h_1(E)$	6	#5	20'-9"	—	$v_4(E)$	10	#6	5'-4"	—
$h_2(E)$	8	#5	9'-5"	—	$v_5(E)$	10	#6	5'-11"	—
$h_3(E)$	8	#5	7'-0"	—	$v_6(E)$	176	#5	2'-0"	—
$h_4(E)$	9	#6	23'-10"	—	Concrete Removal		Cu. Yd.	28.4	
$h_5(E)$	9	#6	20'-9"	—	Concrete Superstructure		Cu. Yd.	30.3	
$s(E)$	88	#5	6'-2"	—	Reinforcement Bars, Epoxy Coated		Pound	4620	
					Mechanical Splice		Each	172	
					Bar Splicers		Each	15	

Bars indicated thus 3 x 2-#5 etc. indicates 3 lines of bars with 2 lengths per line.

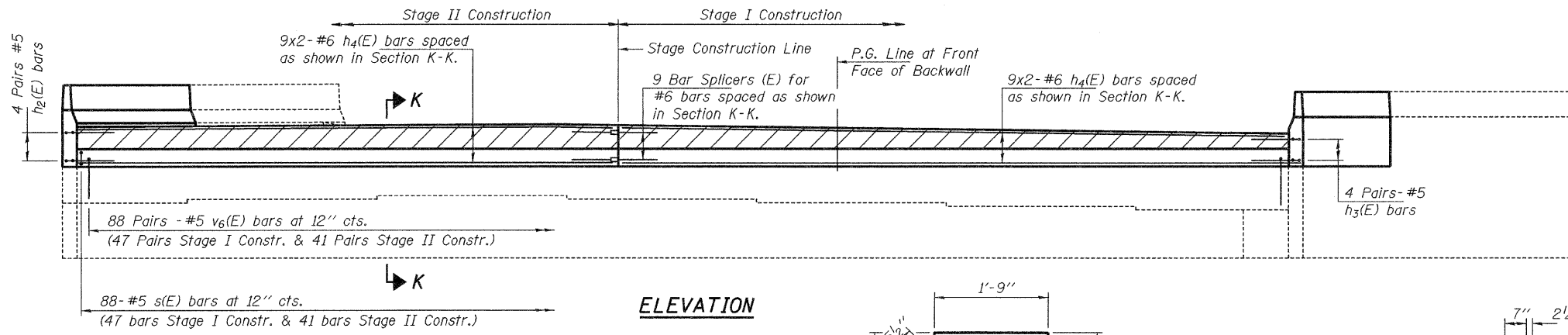
CONCRETE REPLACEMENT
DETAILS AT NORTH ABUTMENT
SN 082-0245 (N.B.)

DESIGNED	AJB
CHECKED	VHV
DRAWN	Kyle M. Steffen
CHECKED	AJB VHV

MAY 28, 2009
EXAMINED *Carl Proyer*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

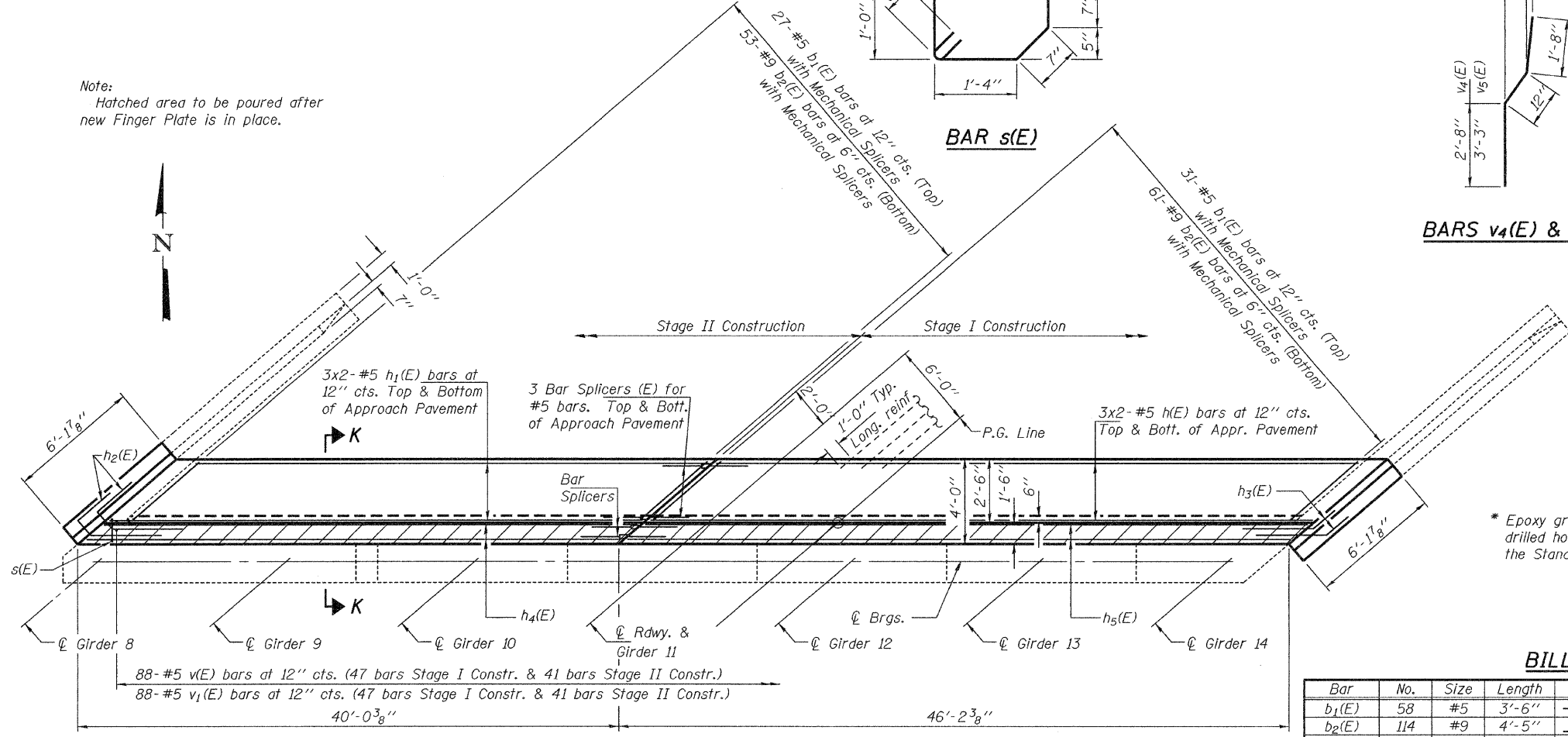
SHEET NO. 8	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1B-3-1	ST. CLAIR	21	18
10 SHEETS	FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		
		CONTRACT NO. 76C67			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



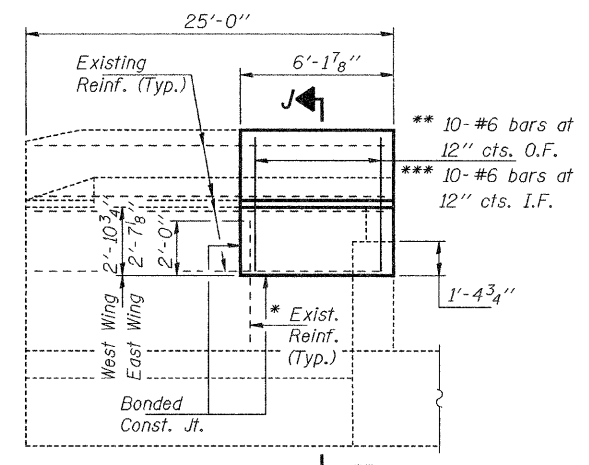
ELEVATION

BAR s(E)

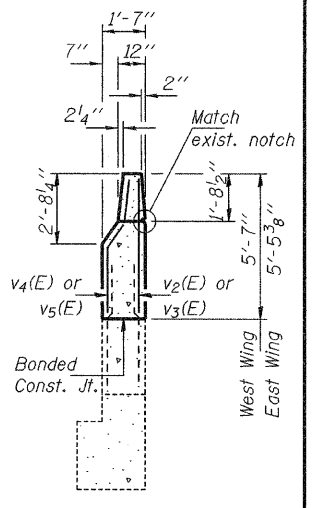


PLAN

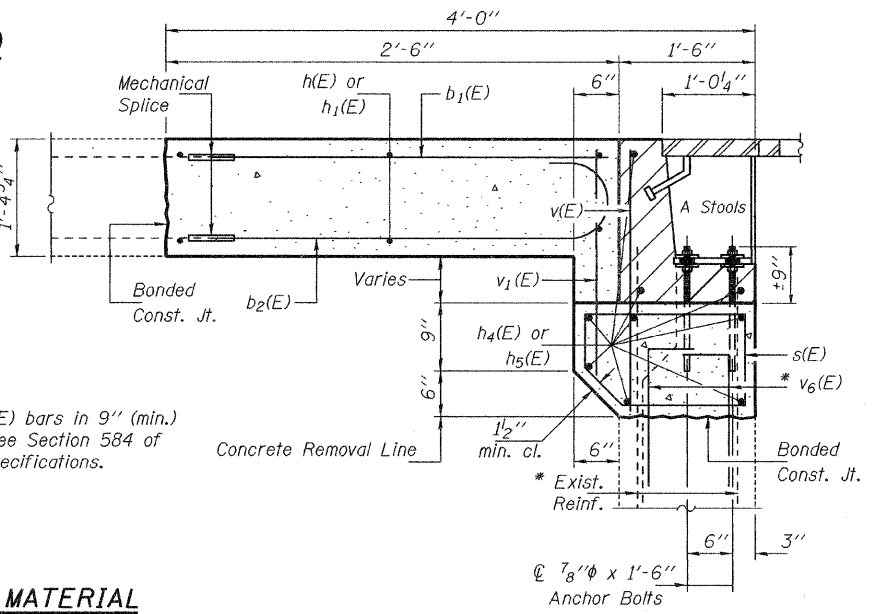
MIN. LAP
#5 Bars = 1'-8"
#6 Bars = 2'-2"



**INSIDE ELEVATION
WING WALL**
(E. Wing shown, W. Wing similar)



SECTION J-J



SECTION K-K

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
b ₁ (E)	58	#5	3'-6"	—	v(E)	88	#5	2'-6"	—
b ₂ (E)	114	#9	4'-5"	—	v ₁ (E)	88	#5	2'-0"	—
h(E)	6	#5	23'-10"	—	v ₂ (E)	10	#6	5'-1"	—
h ₁ (E)	6	#5	20'-9"	—	v ₃ (E)	10	#6	5'-8"	—
h ₂ (E)	8	#5	9'-5"	—	v ₄ (E)	10	#6	5'-4"	—
h ₃ (E)	8	#5	7'-0"	—	v ₅ (E)	10	#6	5'-11"	—
h ₄ (E)	9	#6	23'-10"	—	v ₆ (E)	176	#5	2'-0"	—
h ₅ (E)	9	#6	20'-9"	—	Concrete Removal			Cu. Yd.	28.4
s(E)	88	#5	6'-2"	—	Concrete Superstructure			Cu. Yd.	30.3
					Reinforcement Bars, Epoxy Coated			Pound	4620
					Mechanical Splice			Each	172
					Bar Splicers			Each	15

Bars indicated thus 3 x 2-#5 etc. indicates 3 lines of bars with 2 lengths per line.

**CONCRETE REPLACEMENT
DETAILS AT NORTH ABUTMENT
SN 082-0245 (N.B.)**

DESIGNED	AJB
CHECKED	VHV
DRAWN	Kyle M. Steffen
CHECKED	AJB VHV

APRIL 27, 2009
EXAMINED *Carl Hoyer*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

BAR v6(E)

BAR h2(E)

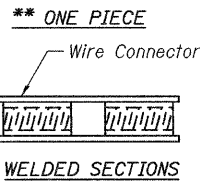
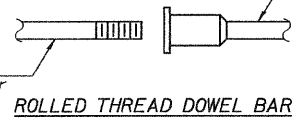
BAR h3(E)

SHEET NO. 8 10 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	-	ST. CLAIR	21	19
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	CONTRACT NO. 76c67	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

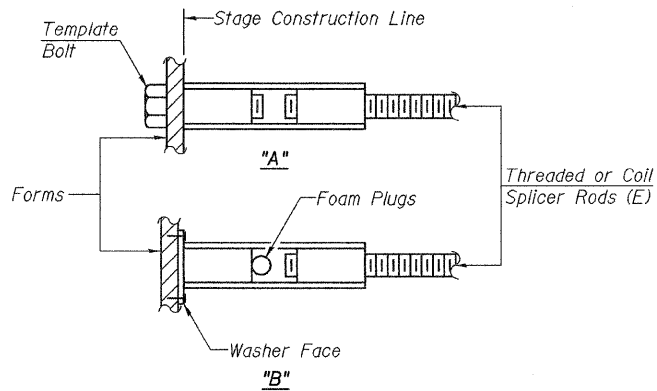
The diameter of this part is equal or larger than the diameter of bar spliced.

The diameter of this part is the same as the diameter of the bar spliced.



BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

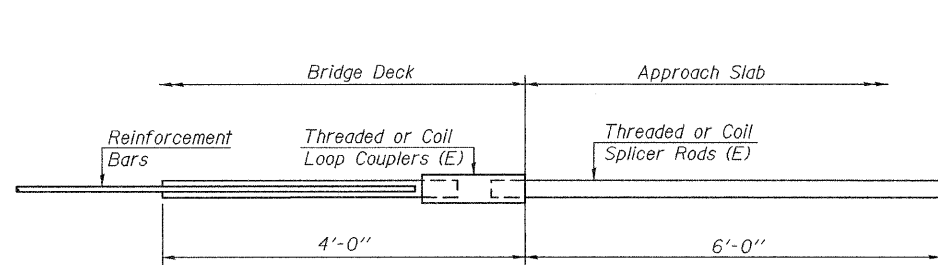
"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

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 coiled 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:

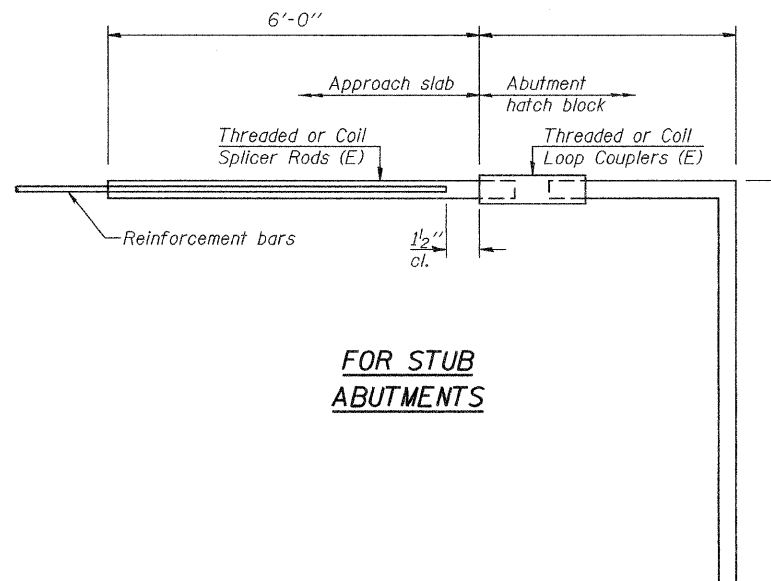
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum * Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

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'-2"	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



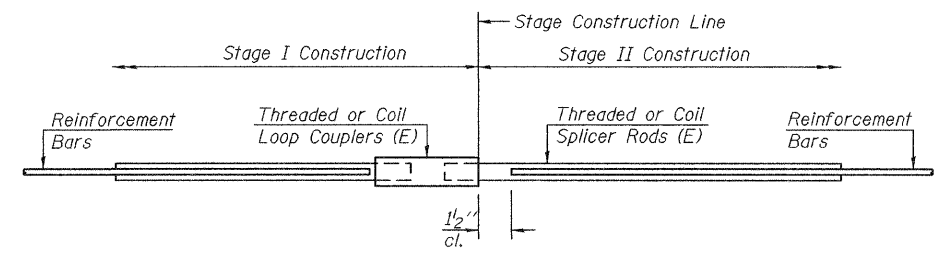
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



FOR STUB ABUTMENTS

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



STANDARD

Bar Size	No. Assemblies Required	Location
#6	9	Abutment
#5	18	Appr. Slab & Deck

**BAR SPLICER ASSEMBLY DETAILS
SN 082-0245 (N.B.)**

DESIGNED	AJB
CHECKED	VHV
DRAWN	Kyle M. Steffen
CHECKED	AJB VHV

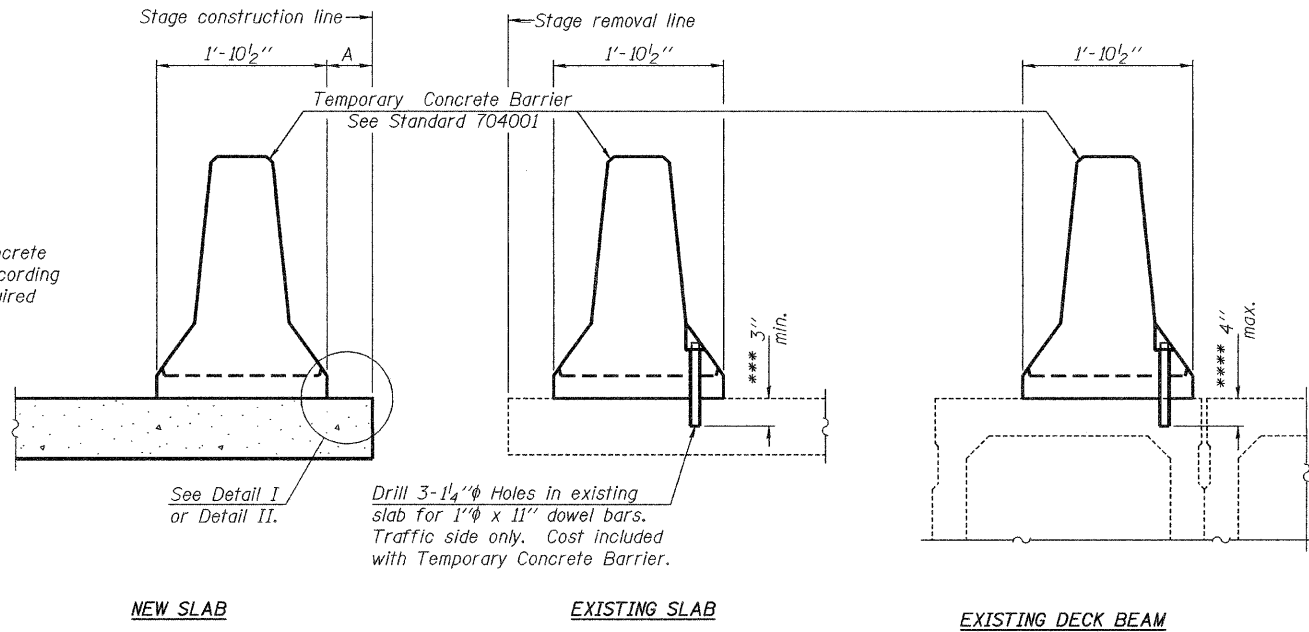
APRIL 27, 2009
 EXAMINED *A. Carl P... ENGINEER OF STRUCTURAL SERVICES*
 PASSED *Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES*

BSD-1 10-1-08

SHEET NO. 9 10 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	-	ST. CLAIR	21	20
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	CONTRACT NO. 76C67	

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".



Drill 3-1 1/4" ϕ Holes in existing slab for 1" ϕ x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x 10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

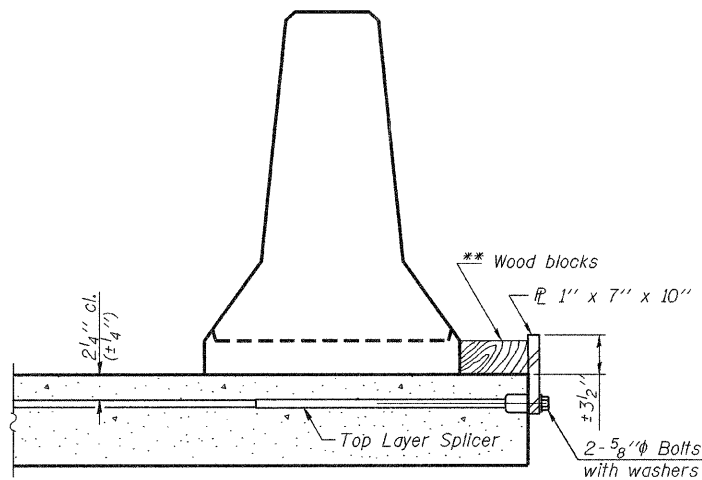
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x 10" steel \bar{P} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 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.

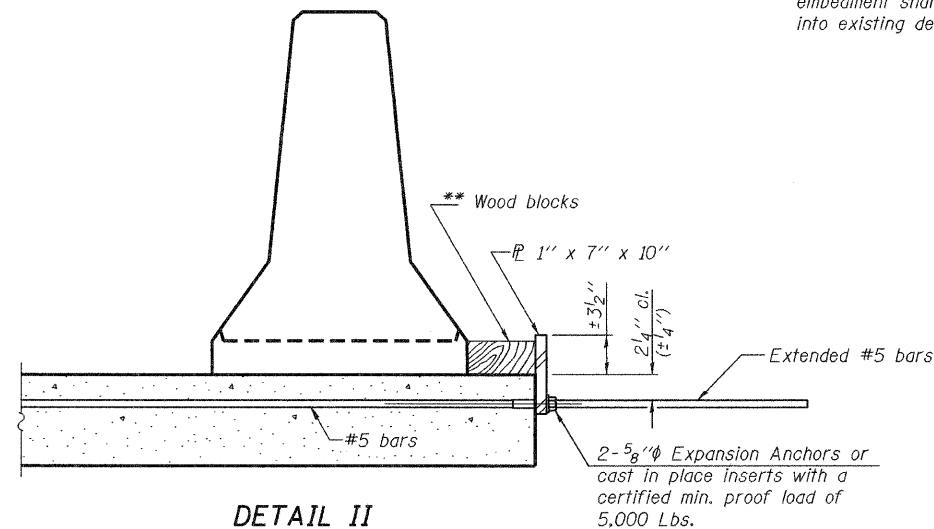
SECTIONS THRU SLAB OR DECK BEAM

*** 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.

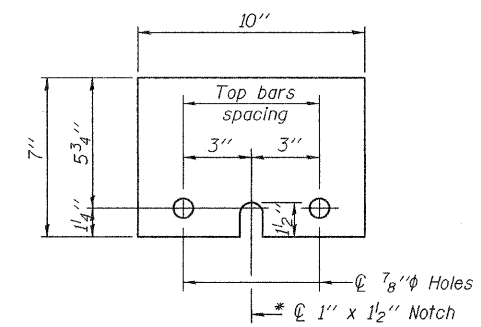


DETAIL I



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.



STEEL RETAINER \bar{P} 1" x 7" x 10"

* Required only with Detail II

**TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
SN 082-0245 (N.B.)**

DESIGNED	AJB
CHECKED	VHV
DRAWN	Kyle M. Steffen
CHECKED	AJB VHV

APRIL 27, 2009
EXAMINED *A. Carl Hoyer*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

R-27

10-1-08

SHEET NO. 10 10 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	-	ST. CLAIR	21	21
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 76067		