

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

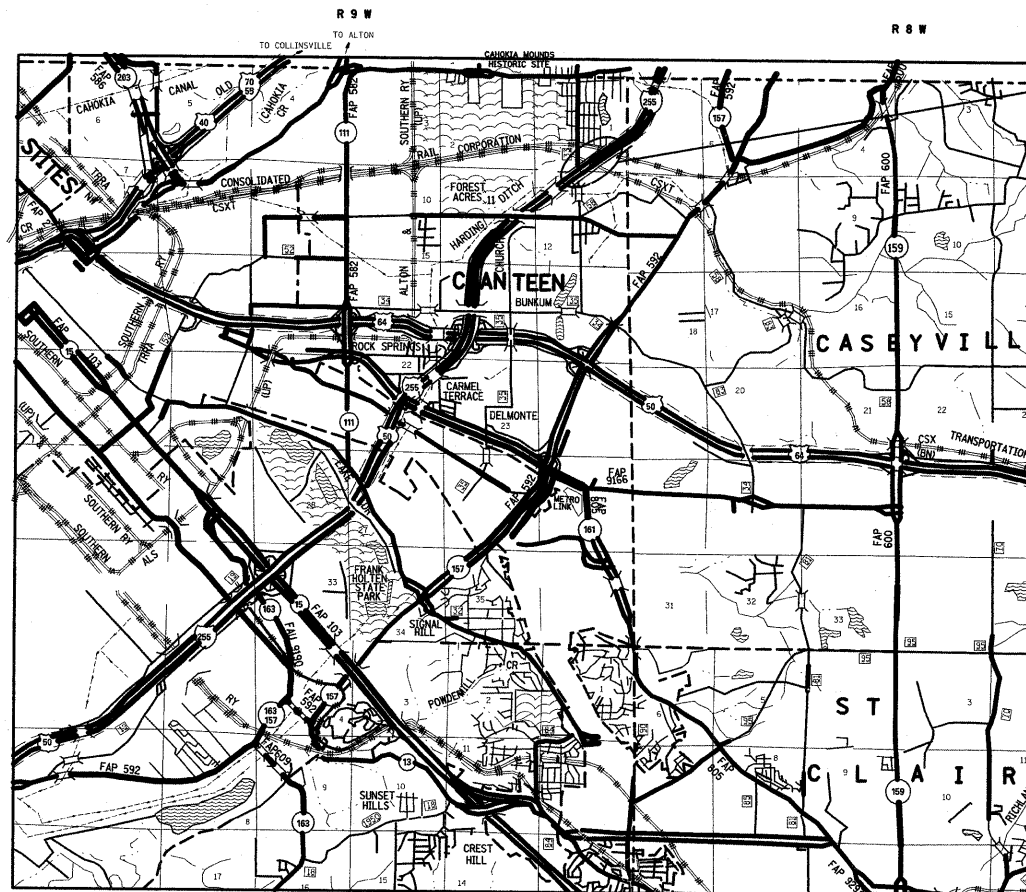
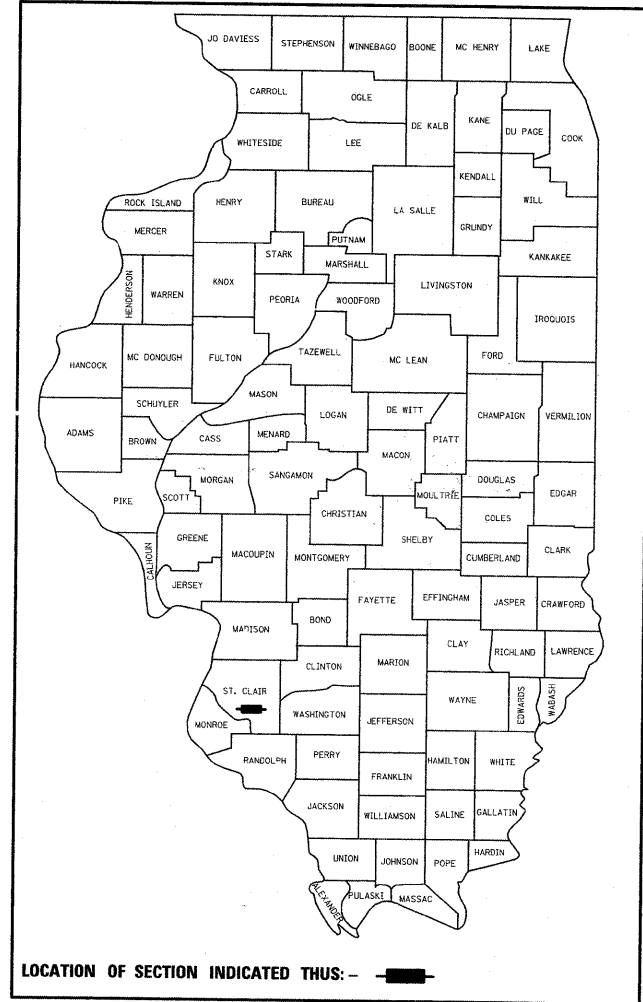
**PROPOSED
 HIGHWAY PLANS**

FAI ROUTE 255
 SECTION 82-1HVB-I-1
 PROJECT NO: IM-255-7 (216) 008
 BRIDGE JOINT REPLACEMENT OVER BLACK LANE AND RAILROADS
 ST CLAIR COUNTY
 C-98-087-05

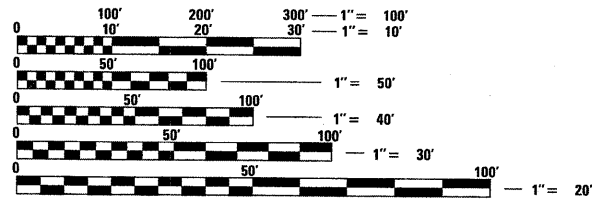
FOR INDEX OF SHEETS, SEE SHEET NO. 2

FAI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1HVB-I-1	ST CLAIR	45	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 76926		

D-98-069-05



JOINT REPLACEMENT
 OVER BLACK LANE & RRS
 SN 082-247
 1980'-0" BK TO BK OF ABUTMENTS
 SN 082-0248
 2214'-0" BK TO BK OF ABUTMENTS
 STA 1167+92.63

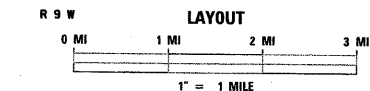


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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. 76926



SN 082-0247 LATITUDE: 38.64378 LONGITUDE: 90.04707
 SN 082-0248 LATITUDE: 38.64362 LONGITUDE: 90.04705

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

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED May 7 2009
Mary C. Janel
 DEPUTY DIRECTOR OF HIGHWAYS, REGION 5
December 4, 2009
Charles G. Ingersoll
 ENGINEER OF DESIGN AND ENVIRONMENT
December 4, 2009
Christine M. Reed
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

INDEX OF SHEETS

1. COVER SHEET
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4. TYPICAL SECTIONS, MIXTURE REQUIREMENTS, AND MISC. DETAILS
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12. - 15. SUGGESTED STAGE II CONSTRUCTION & TRAFFIC CONTROL - NB
16. - 19. SUGGESTED STAGE I CONSTRUCTION & TRAFFIC CONTROL - SB
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26. - 45. STRUCTURE PLANS

HIGHWAY STANDARDS

- 000001-05
- 001001-02
- 001006
- 701400-04
- 701402-07
- 701406-05
- 701901-01
- 704001-06
- 780001-02
- 781001-03

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
- PAETEC/McLEOD USA TELECOMMUNICATIONS, INC
- MEDIACOM LLC CENTRAL
- QWEST SOLUTIONS CENTER

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

4. A QUANTITY OF 9525 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.
8. IT IS THE CONTRACTOR'S OPTION TO USE THE MATERIAL TRANSFER DEVICE ON ANY LIFT. THE PAY ITEM FOR MATERIAL TRANSFER DEVICE WILL NOT BE INCLUDED IN THIS CONTRACT.

COMMITMENTS

NONE

FILE NAME =	USER NAME = gelnh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS /HIGHWAY STANDARDS GENERAL NOTES /COMMITMENTS	F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\p\WIDOT\GELINH\d0116760\0876928-Plans.dgn	DRAWN -	REVISED -	255			82-1HVB-I-1	ST CLAIR	45	2	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	CONTRACT NO. 76926							
PLOT DATE = 10/6/2009	DATE -	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
					SCALE:	SHEET NO. 1 OF 1 SHEET		STA. TO STA.		

SUMMARY OF QUANTITIES

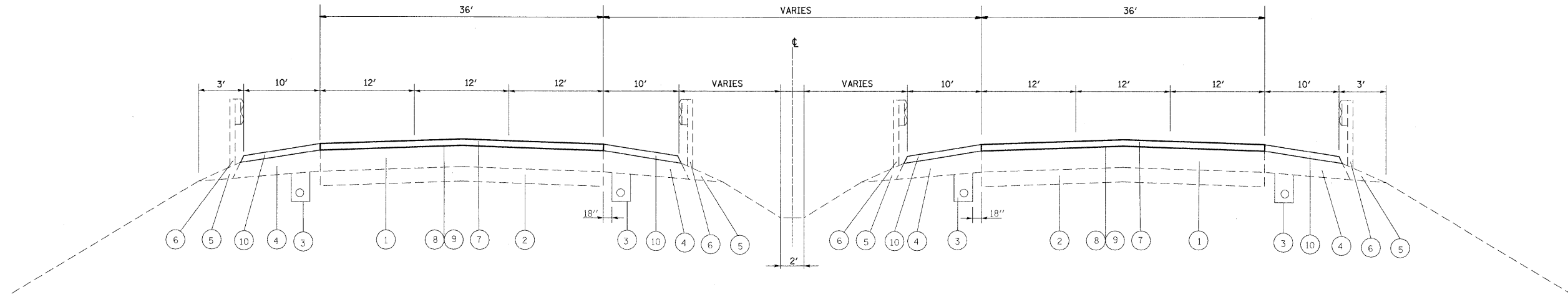
SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	SFTY-2A	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	1.6	1.6	
40600300	AGGREGATE (PRIME COAT)	TON	8	8	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	623	623	
40600990	TEMPORARY RAMP	SQ YD	249	249	
40603575	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N105	TON	2524	2524	
45200300	JOINT OR CRACK FILLING	POUND	330	330	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	197	197	
50102400	CONCRETE REMOVAL	CU YD	171.7	171.7	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	164.1	164.1	
50300300	PROTECTIVE COAT	SQ YD	61	61	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5840	5840	
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH	28	28	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	14780	14780	
50800515	BAR SPLICERS	EACH	144	144	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	289.5	289.5	
52000216	FINGER PLATE EXPANSION JOINT, 5"	FOOT	129	129	
52000220	FINGER PLATE EXPANSION JOINT, 6"	FOOT	410.5	410.5	
52000600	FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	550	550	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	14	14	
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	14	14	
52100530	ANCHOR BOLTS, 1 1/4"	EACH	56	56	
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	25800	25800	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12	
67100100	MOBILIZATION	L SUM	1	1	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	18840	18840	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	53900	53900	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	11100	11100	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	24247	24247	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	5550	5550	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	5550	5550	
*78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	20415	20415	
*78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	472	472	
78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	392	392	

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	SFTY-2A	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	5863	5863	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	472	472	
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	200	200	
X7010820	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)	L SUM	1	1	
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	31	31	
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	60	60	
Z0018800	DRAINAGE SYSTEM	L SUM	1	1	
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1	
@ 20076600	TRAINEES	HOURL	1,000	1,000	
	@ Y080				

*SPECIALTY ITEMS

FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.I. RTE. 255	SECTION 82-1HVB-I-1	COUNTY ST CLAIR	TOTAL SHEETS 45	SHEET NO. 3
ca:\pw\work\puidot\gelinh\d0116760\0876926-Plans.dgn		DRAWN -	REVISED -							
PLOT SCALE = 50.0000 / IN.		CHECKED -	REVISED -							
PLOT DATE = 10/9/2009		DATE -	REVISED -							
						SCALE: _____ SHEET NO. 1 OF 1 SHEET		STA. _____ TO STA. _____		CONTRACT NO. 76926
						FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

Rev.



TYPICAL NORMAL SECTION

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, 2"
- ⑧ PROPOSED BITUMINOUS MATERIALS - PRIME COAT
- ⑨ PROPOSED AGGREGATE PRIME COAT
- ⑩ PROPOSED HOT-MIX ASPHALT SHOULDERS - 2"

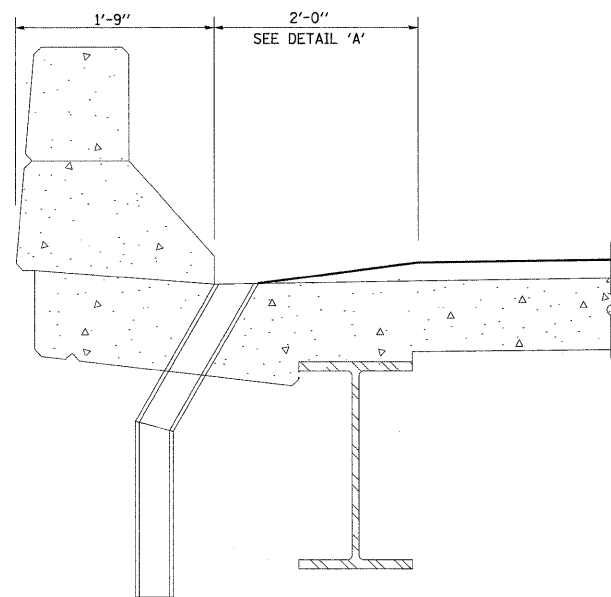
I-255 (NB) STA. 1165+00.00 TO STA. 1190+00.00
 I-255 (SB) STA. 1165+00.00 TO STA. 1190+00.00

MIXTURE REQUIREMENTS

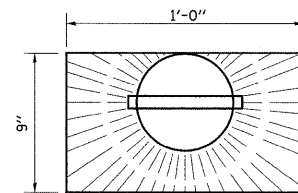
MIXTURE USE	POLY SURFACE	SHOULDERS
AC/PG	SBS PG 76-22	PG 64-22
RAP % (MAX)	10%	30%
DESIGN AIR VOIDS	4.0% @ Ndes= 105	2.0% @ Ndes=30
MIX COMPOSITION (GRADATION MIXTURE)		
FRICITION AGG	MIXTURE "E"	BAM

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

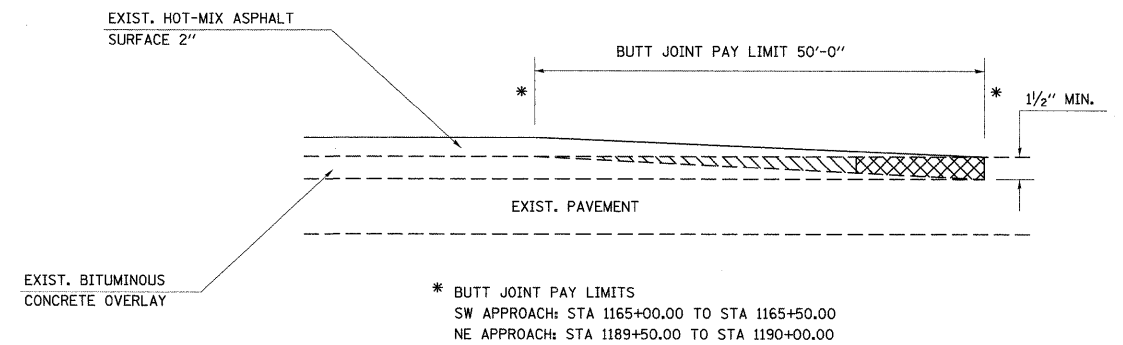
PLAN QUANTITIES FOR HOT-MIX ASPHALT SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LB/SQ YD/IN (59.8 KG/SQ M/25 MM THICKNESS).



SECTION AT DRAIN



DETAIL 'A' PLAN VIEW DECK DRAIN



BUTT JOINT DETAIL

RESURFACING SCHEDULE

STATION			BITUMINOUS MATERIAL (PRIME COAT) (TON)	AGGREGATE (PRIME COAT) (TON)	HMA SURF. REMOVAL BUTT-JOINT (SQ-YD)	POLYM. HMA SURF. CSE., MIX "E" N105 (TON)	HMA SHOULDERS (TON)
NORTH BOUND							
1165+00.00	TO 1166+50.00	RT	0.05	0.25			18.67
1165+00.00	TO 1166+68.13	RT	0.21	1.01		75.32	
1165+00.00	TO 1166+86.25	RT	0.06	0.31			23.18
1165+00.00	TO 1165+50.00	RT			311.11		
1166+61.49	TO 1188+51.03	BRIDGE				1083.60	
1188+29.64	TO 1190+00.00	RT	0.06	0.28			21.20
1188+46.60	TO 1190+00.00	RT	0.19	0.92		68.72	
1188+63.57	TO 1190+00.00	RT	0.05	0.23			16.98
SOUTH BOUND							
1165+00.00	TO 1167+65.08	LT	0.09	0.44			32.99
1165+00.00	TO 1167+46.95	LT	0.31	1.48		110.63	
1165+00.00	TO 1167+28.82	LT	0.08	0.38			28.48
1167+49.77	TO 1187+68.41	BRIDGE				1083.60	
1187+55.87	TO 1190+00.00	LT	0.08	0.41			30.38
1187+72.84	TO 1190+00.00	LT	0.28	1.36		101.76	
1187+89.80	TO 1190+00.00	LT	0.07	0.34			25.01
1189+50.00	TO 1190+00.00	LT			311.11		
TOTAL			1.55	7.41	622.22	2523.63	196.89

STAGE CONSTRUCTION SCHEDULE (NB)

LOCATION			TEMPORARY CONCRETE BARRIER (FT)	RELOCATE TEMPORARY CONCRETE BARRIER (FT)	IMPACT ATTENUATOR TEMPORARY (EA)	RELOCATE IMPACT ATTENUATOR (EA)
STAGE I - NB						
1162+46.50					1	
1162+46.50	TO 1164+83.50		237.50			
1164+83.50	TO 1190+08.50		2525.00			
STAGE II - NB						
1162+46.50						1
1162+46.50	TO 1164+83.50			237.5		
1164+83.50	TO 1190+08.50			2525.00		
TOTAL			2762.50	2762.50	1	1

STAGE CONSTRUCTION SCHEDULE (SB)

LOCATION			TEMPORARY CONCRETE BARRIER (FT)	RELOCATE TEMPORARY CONCRETE BARRIER (FT)	IMPACT ATTENUATOR TEMPORARY (EA)	RELOCATE IMPACT ATTENUATOR (EA)
STAGE I - SB						
1164+87.50	TO 1190+12.50		2525.00			
1190+12.50	TO 1192+75.00		262.50			
1192+75.00					1	
STAGE II - SB						
1164+87.50	TO 1190+12.50			2525.00		
1190+12.50	TO 1192+75.00			262.5		
1192+75.00						1
TOTAL			2787.50	2787.50	1	1

PAVEMENT MARKING SCHEDULE

STATION			4" WHITE LINE (FT)	YELLOW LINE 4" (FT)	RAISED REFLECTIVE PAVEMENT MARKER (EA)
NORTH BOUND					
1149+00.00	TO 1196+09.00	SKIP DASH	2354.50		236
1156+83.00	TO 1196+09.00	EDGE LINES	3926.00	3926.00	
SOUTH BOUND					
1158+87.00	TO 1206+00.00	SKIP DASH	2356.50		236
1158+87.00	TO 1203+00.00	EDGE LINES	3926.00	3926.00	
SUB-TOTAL			12563.00	7852.00	
TOTAL			20415.00		472

PAVEMENT MARKING REMOVAL SCHEDULE

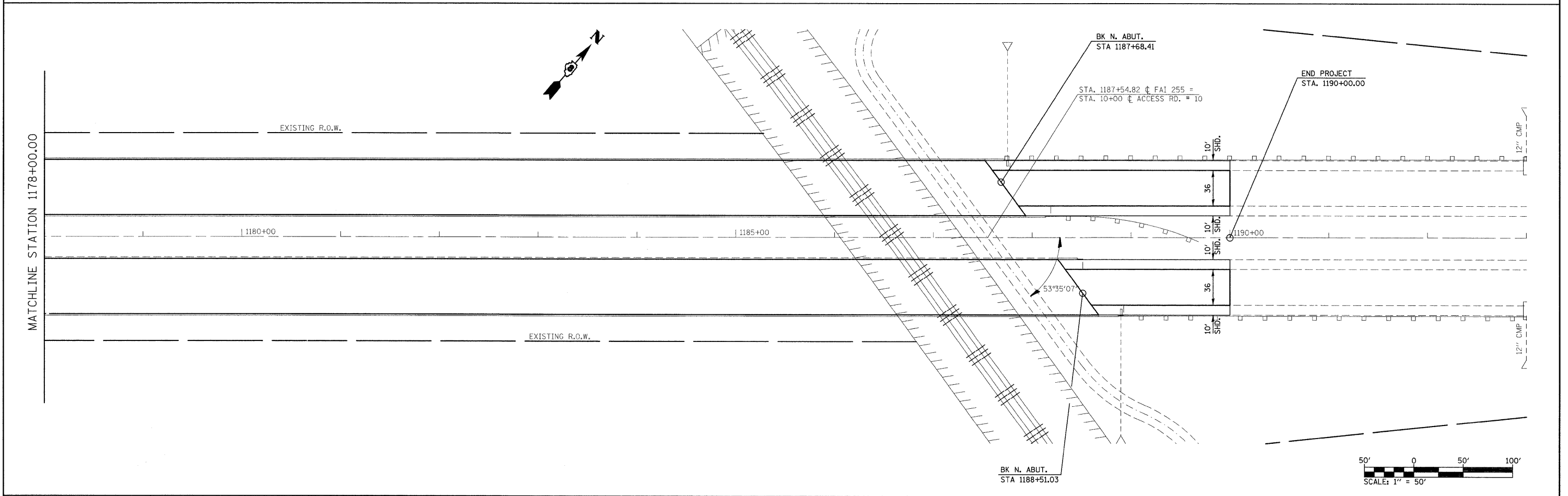
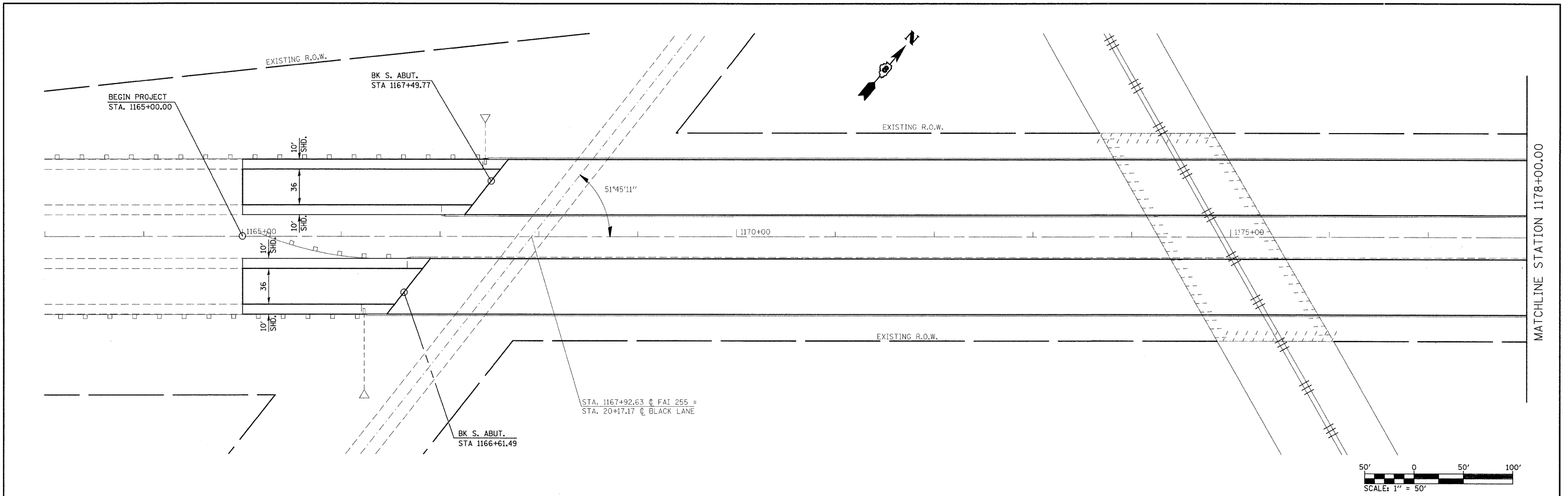
STATION			PAVEMENT MARKING REMOVAL (SQ FT)	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL (EA)
NB	1149+00.00	TO 1196+09.00	SKIP DASH	313.9
	1156+83.00	TO 1196+09.00	EDGE LINES	2617.3
SB	1158+87.00	TO 1198+13.00	EDGE LINES	2617.3
	1158+87.00	TO 1206+00.00	SKIP DASH	314.2
SUB-TOTAL				
TOTAL			5862.7	472

TEMPORARY PAVEMENT MARKING SCHEDULE (NB)

STATION		PAVEMENT MARKING		SHORT TERM PAVEMENT MARKING (FT)	WORK ZONE PAVEMENT REMOVAL (SQ FT)	RAISED REFLECTIVE PAVEMENT MARKER (EA)
		LINE 4" PAVEMENT (FT)	LINE 6" (FT)			
STAGE I - NB						
1139+83.50	TO 1156+83.50				566.67	
1156+83.50	TO 1196+08.50	EDGE LINES		3140.00	3663.33	
1156+83.50	TO 1196+08.50	CENTERLINE		1570.00	1831.67	98
1162+46.50	TO 1164+83.50	TEMP. BARR.			237.50	
1164+83.50	TO 1190+08.50	TEMP. BARR.			2525.00	
STAGE II - NB						
1139+83.50	TO 1156+83.50				566.67	
1156+83.50	TO 1196+08.50	EDGE LINES		3140.00	3663.33	
1156+83.50	TO 1196+08.50	CENTERLINE		1570.00	1831.67	98
1162+46.50	TO 1164+83.50	TEMP. BARR.			237.50	
1164+83.50	TO 1190+08.50	TEMP. BARR.			2525.00	
SUB-TOTAL						
TOTAL		26950.00	5525.00	9420.00	12123.34	196

TEMPORARY PAVEMENT MARKING SCHEDULE (SB)

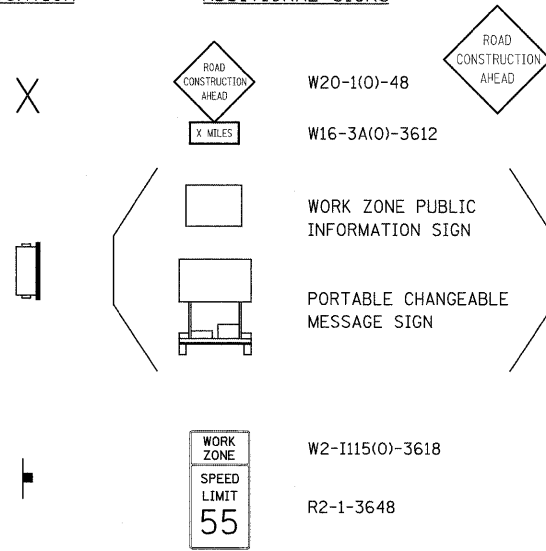
STATION		PAVEMENT MARKING		SHORT TERM PAVEMENT MARKING (FT)	WORK ZONE PAVEMENT REMOVAL (SQ FT)	RAISED REFLECTIVE PAVEMENT MARKER (EA)
		LINE 4" PAVEMENT (FT)	LINE 6" (FT)			
STAGE I - NB						
1158+87.50	TO 1198+12.50	EDGE LINES		3140.00	3663.33	
1158+87.50	TO 1198+12.50	CENTERLINE		1570.00	1831.67	98
1164+87.50	TO 1190+12.50	TEMP. BARR.			2525.00	
1190+12.50	TO 1192+75.00	TEMP. BARR.			262.50	
1198+12.50	TO 1215+12.50				1700.00	
STAGE II - SB						
1158+87.50	TO 1198+12.50	EDGE LINES		3140.00	3663.33	
1158+87.50	TO 1198+12.50	CENTERLINE		1570.00	1831.67	98
1164+87.50	TO 1190+12.50	TEMP. BARR.			2525.00	
1190+12.50	TO 1192+75.00	TEMP. BARR.			262.50	
1196+00.00	TO 1213+00.00				1700.00	
SUB-TOTAL						
TOTAL		26950.00	5575.00	9420.00	12123.34	196



FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN SHEET			F.A.I. RTE. 255	SECTION 82-1HVB-I-1	COUNTY ST CLAIR	TOTAL SHEETS 45	SHEET NO. 6
c:\pwork\PWIDOT\GELINH\0116760\0876926-Plans.dgn	PLT SCALE = 50.0000' / IN.	DRAWN -	REVISED -		SCALE: 1" = 50'	SHEET NO. 1 OF 1 SHEET	STA. 1163+00.00 TO STA. 1193+00.00	CONTRACT NO. 76926				
	PLT DATE = 10/9/2009	CHECKED -	REVISED -		FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT							
		DATE -	REVISED -									

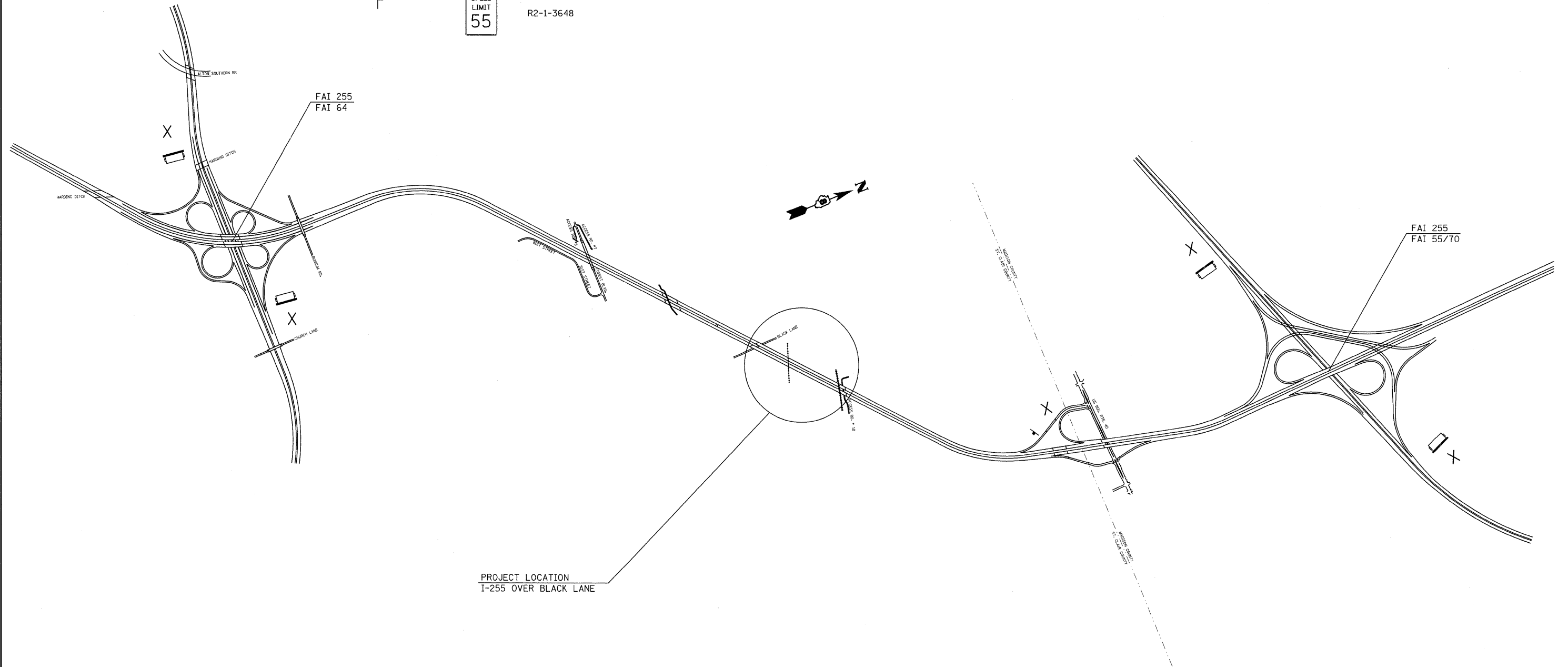
LOCATION

ADDITIONAL SIGNS



NOTE:

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



PROJECT LOCATION
I-255 OVER BLACK LANE

FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -
c:\pw\work\p\dot\gelinh\d0116762\0876925-StagingA.dgn		DRAWN -	REVISED -
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 10/7/2009		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL SIGNING PLAN

SCALE: 1" = 50' SHEET NO. 1 OF 1 SHEET STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-IHVB-1-1	ST CLAIR	45	7
CONTRACT NO. 76926				
ILLINOIS FED. AID PROJECT				

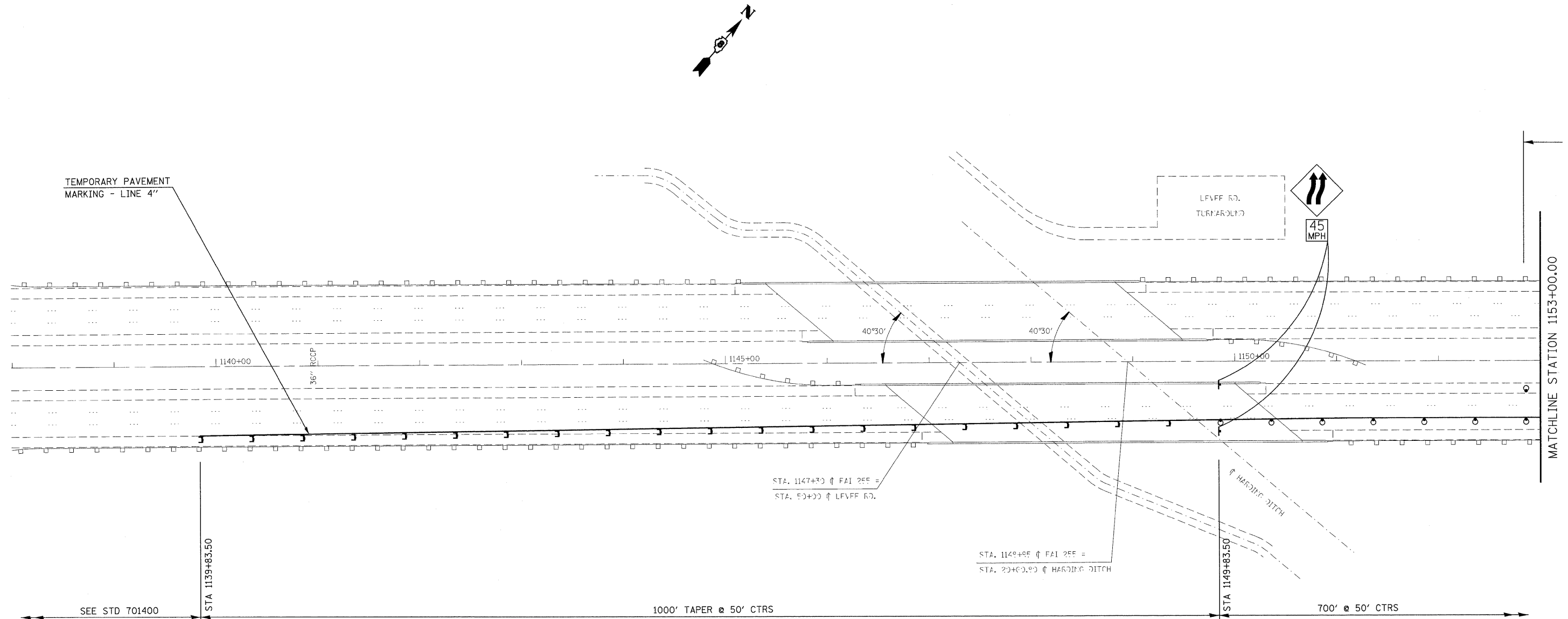
STAGE I DESCRIPTION OF WORK

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)."





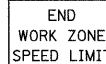
TWO LANES OF THE ROADWAY SHALL BE OPENED ON THE RIGHT SIDE OF THE DIRECTION OF TRAFFIC.

SEQUENCE OF CONSTRUCTION, STAGE I







1. REMOVE SKIP-DASH AND CONFLICTING SOLID EDGE PAVEMENT MARKINGS.
2. PLACE TRAFFIC CONTROL DETAILS ACCORDING TO PLANS.
3. PLACE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS, TEMPORARY.
4. PERFORM ALL NECESSARY BRIDGE WORK RESURFACING IN STAGE I WORK ZONE.

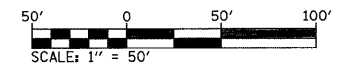


LEGEND

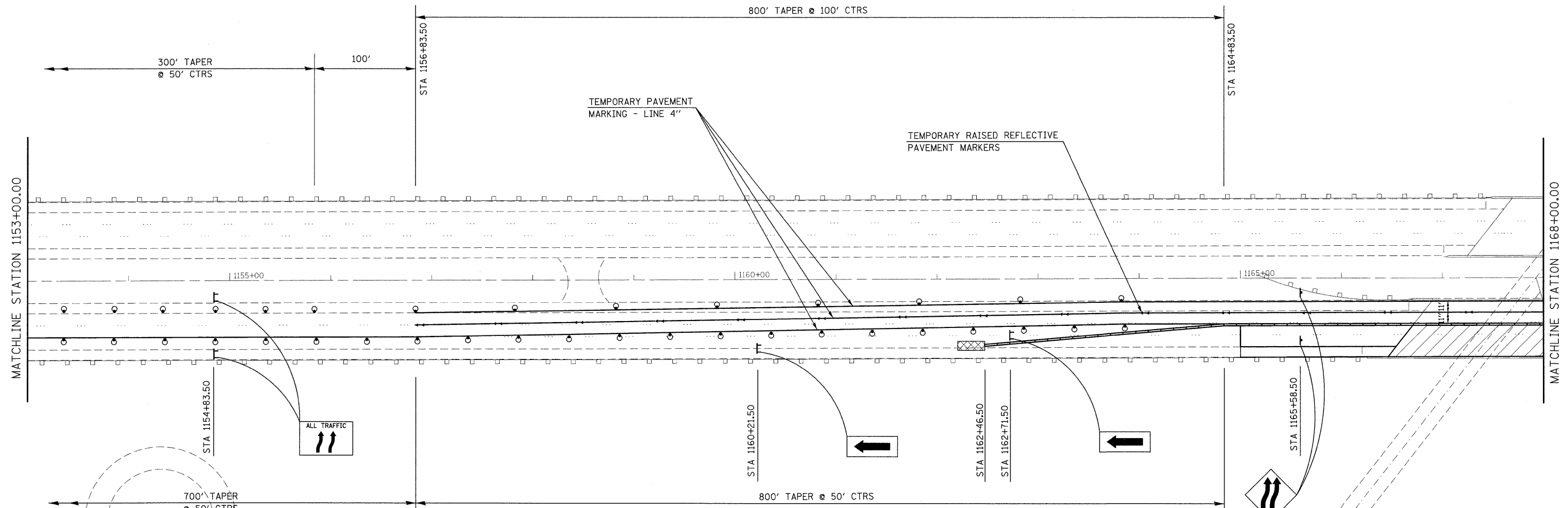
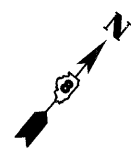
-  W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
-  W13-1-(0) -24
-  4' x 8'; 1" BORDER WITH 10" CAPITAL LETTERS
BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)
-  W1-6(0) 7236 ATOP TYPE III BARRICADE
(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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c:\pwork\pwork\gelnh\d0116760\0876928-StageI.dgn	DRAWN -	REVISED -	255			82-IHVB-I-1	ST. CLAIR	45	8	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	CONTRACT NO. 76926							
PLOT DATE = 10/8/2009	DATE -	REVISED -	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT							
				SCALE: 1" = 50'		SHEET NO. 1 OF 4 SHEETS		STA. 1138+00.00 TO STA. 1153+00.00		

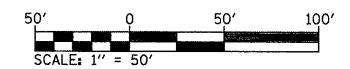


LEGEND

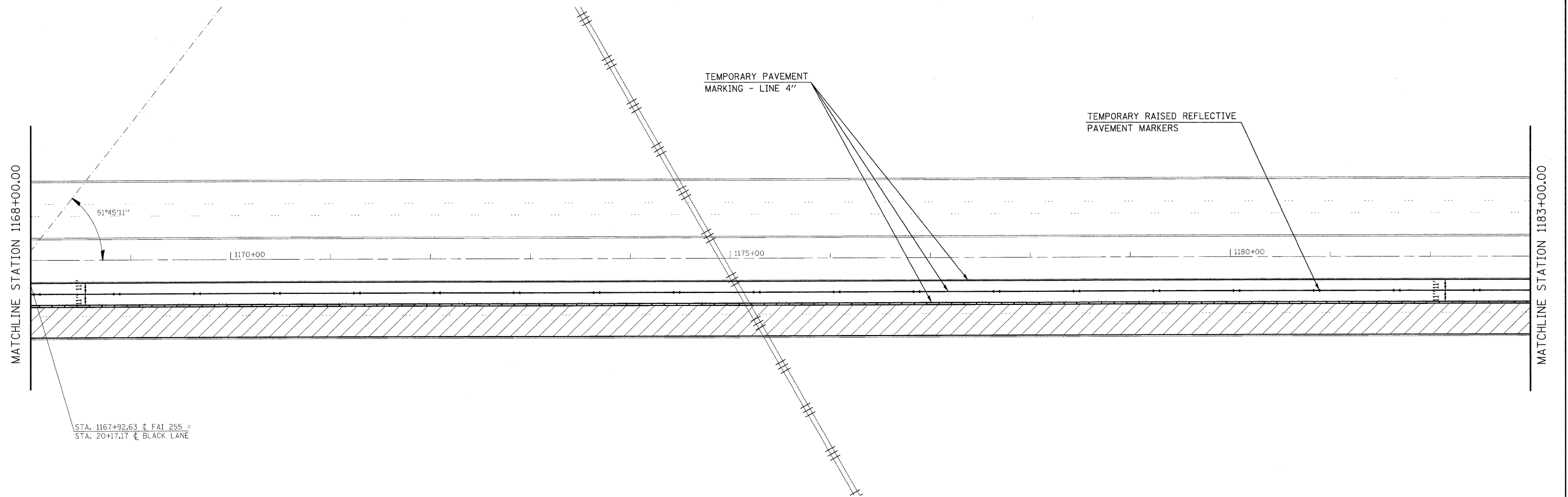
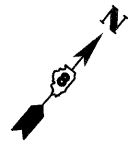
-  W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
-  W13-1-(0) -24
-  4' x 8'; 1" BORDER WITH 10" CAPITAL LETTERS
BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)
-  W1-6(0) 7236 ATOP TYPE III BARRICADE
(DIRECTION OF ARROW SHALL MATCH DIRECTION OF TRAVEL.)
-  G20-1103(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 = gelinh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL - STAGE I (NB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\gelinh\d0116760\0876925	StagingBldgn	DRAWN -	REVISED -			255	82-1HVB-I-1	ST. CLAIR	45	9
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 76926				
	PLOT DATE = 10/8/2009	DATE	REVISED -			SCALE: 1" = 50' SHEET NO. 2 OF 4 SHEETS STA. 1153+00.00 TO STA. 1168+00.00			FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT	



STA. 1167+92.63 @ FAI 255 =
STA. 20+17.17 @ BLACK LANE

LEGEND



W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)



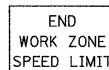
W13-1-(0) -24



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

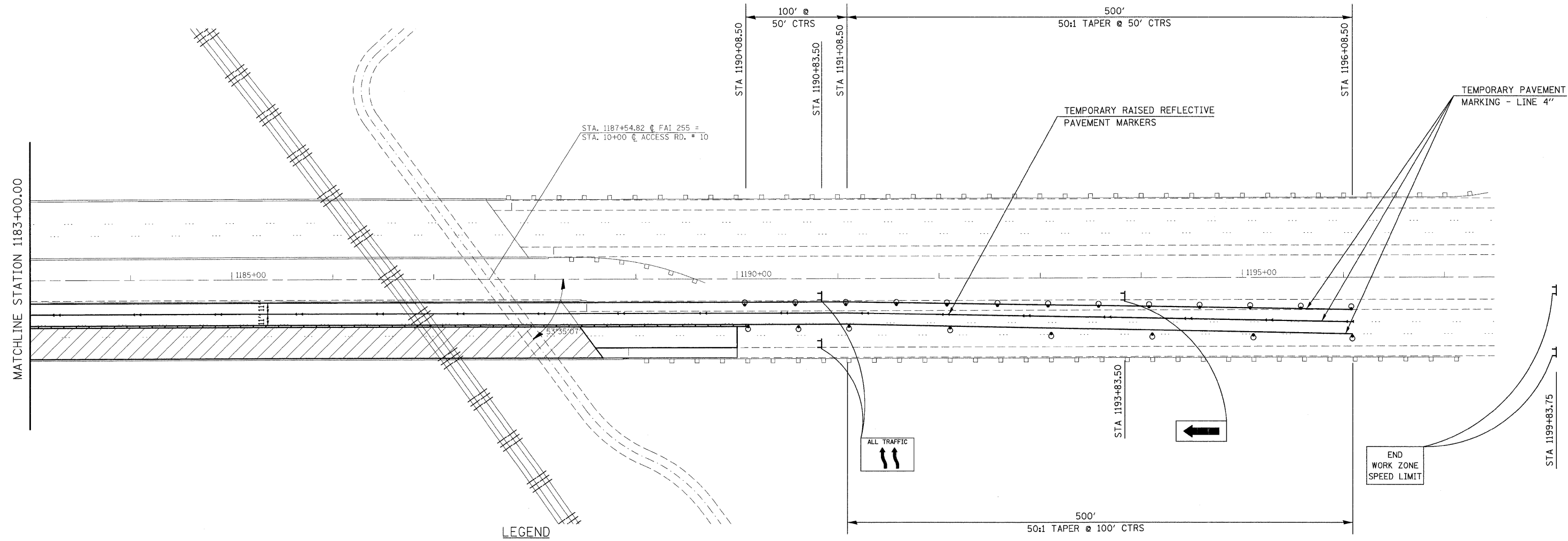
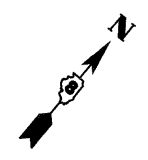


WORK AREA



FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL - STAGE I (NB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
es:\pw_work\pxidot\gelinh\d0116760\187692	StagingBdgn	DRAWN -	REVISD -			255	82-IHVB-1-1	ST. CLAIR	45	10	
PLOT SCALE = 50,0000' / IN.	CHECKED -	REVISD -	REVISD -			CONTRACT NO. 76926					
PLOT DATE = 10/8/2009	DATE -	REVISD -	REVISD -			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

SCALE: 1" = 50' SHEET NO. 3 OF 4 SHEETS STA. 1168+00.00 TO STA. 1183+00.00

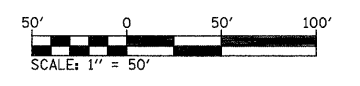


LEGEND

- 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.)
- G20-1103(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 = c:\p\work\p\dot\gelinh\d0116760\0876928-StagingB.dgn	USER NAME = gelinh	DESIGNED - ---	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL - STAGE I (NB)			F.A.I. RTE. 255	SECTION 82-IHVB-1-1	COUNTY ST. CLAIR	TOTAL SHEETS 45	SHEET NO. 11	
	PLOT SCALE = 50,0000' / IN.	CHECKED - ---	REVISED - ---		SCALE: 1" = 50'	SHEET NO. 4 OF 4 SHEETS	STA. 1183+00.00 TO STA. 1197+00.00	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					
	PLOT DATE = 10/8/2009	DATE - ---	REVISED - ---		STA. 1183+00.00 TO STA. 1197+00.00	CONTRACT NO. 76926							

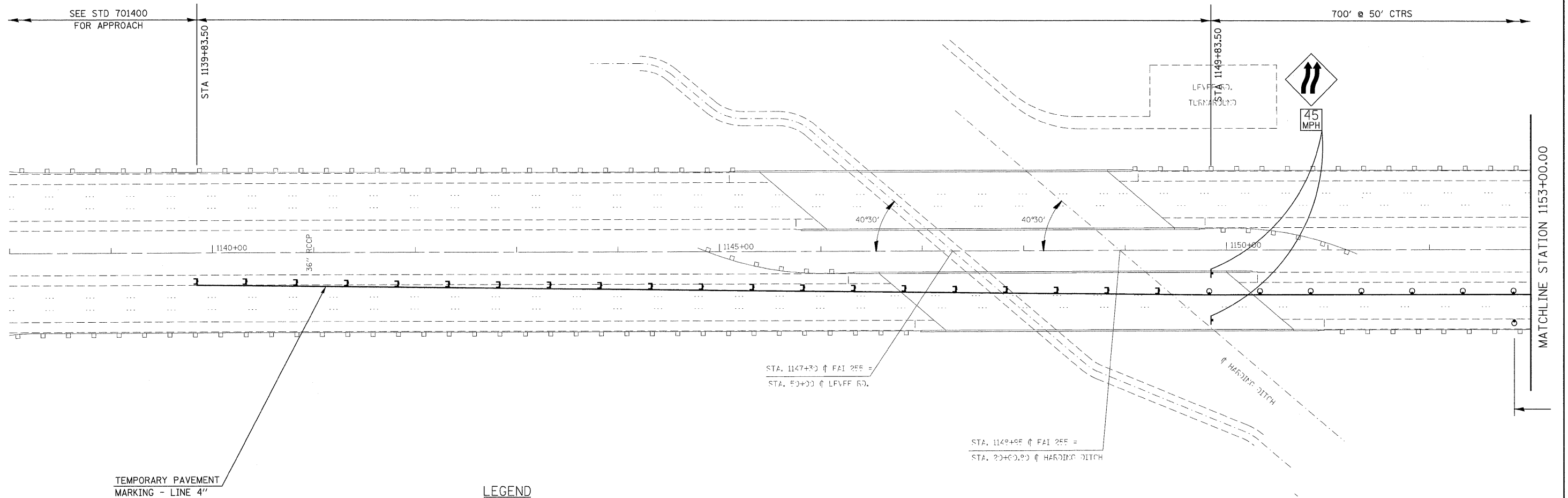
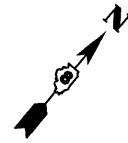
STAGE II DESCRIPTION OF WORK

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

1. REMOVE SKIP-DASH AND CONFLICTING SOLID EDGE PAVEMENT MARKINGS.
2. PLACE TRAFFIC CONTROL DETAILS ACCORDING TO PLANS.
3. RELOCATE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS, TEMPORARY.
4. PERFORM ALL NECESSARY BRIDGE WORK AND RESURFACING IN STAGE II WORK ZONE.









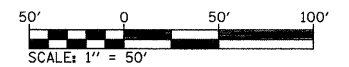
TEMPORARY PAVEMENT MARKING - LINE 4"

LEGEND

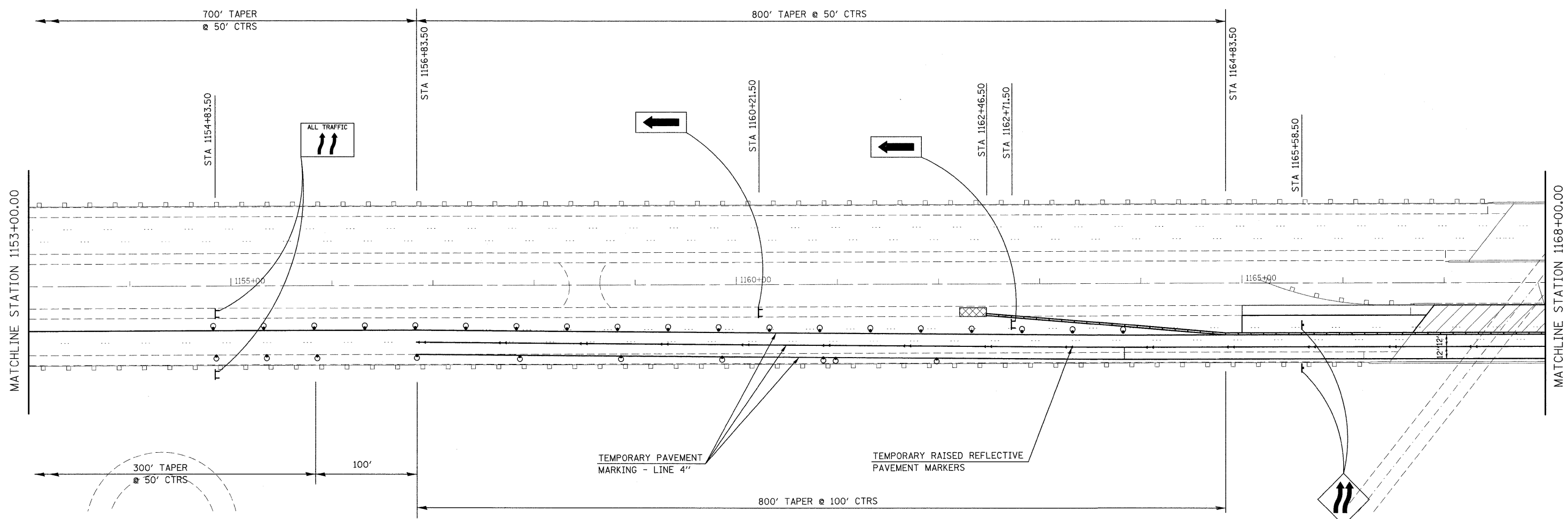
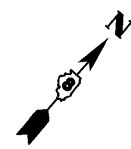
-  W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
-  W13-1-(0) -24
-  4' x 8'; 1" BORDER WITH 10" CAPITAL LETTERS
BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)
-  W1-6(0) 7236 ATOP TYPE III BARRICADE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









FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL - STAGE II (NB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\pwidot\gelinh\d0116760\087692	StagingBdgn	DRAWN -	REVISED -			255	82-IHVB-1-1	ST. CLAIR	45	12	
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 76926					
	PLOT DATE = 10/8/2009	DATE -	REVISED -			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

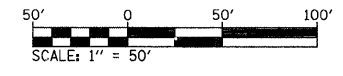


LEGEND

-  W1-4b-(O)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
-  W13-1-(O) -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(O) 7236 ATOP TYPE III BARRICADE
(DIRECTION OF ARROW SHALL MATCH DIRECTION OF TRAVEL.)
-  G20-I103(O)-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

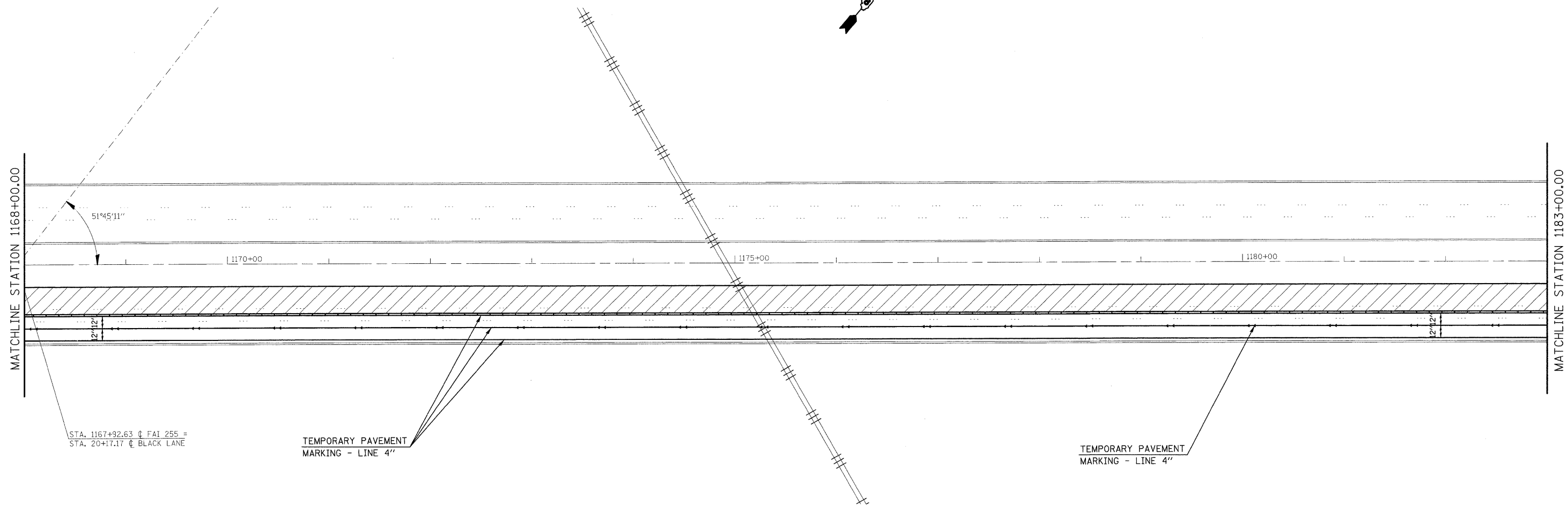


FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -
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PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 10/8/2009		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL - STAGE II (NB)		
SCALE: 1" = 50'	SHEET NO. 2 OF 4 SHEETS	STA. 1153+00.00 TO STA. 1168+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1HVB-1-1	ST. CLAIR	45	13
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
CONTRACT NO. 76926				



STA. 1167+92.63 @ FAI 255 =
STA. 20+17.17 @ BLACK LANE

TEMPORARY PAVEMENT
MARKING - LINE 4"

TEMPORARY PAVEMENT
MARKING - LINE 4"

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



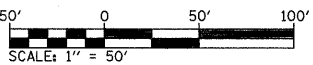
TEMPORARY CONCRETE BARRIER



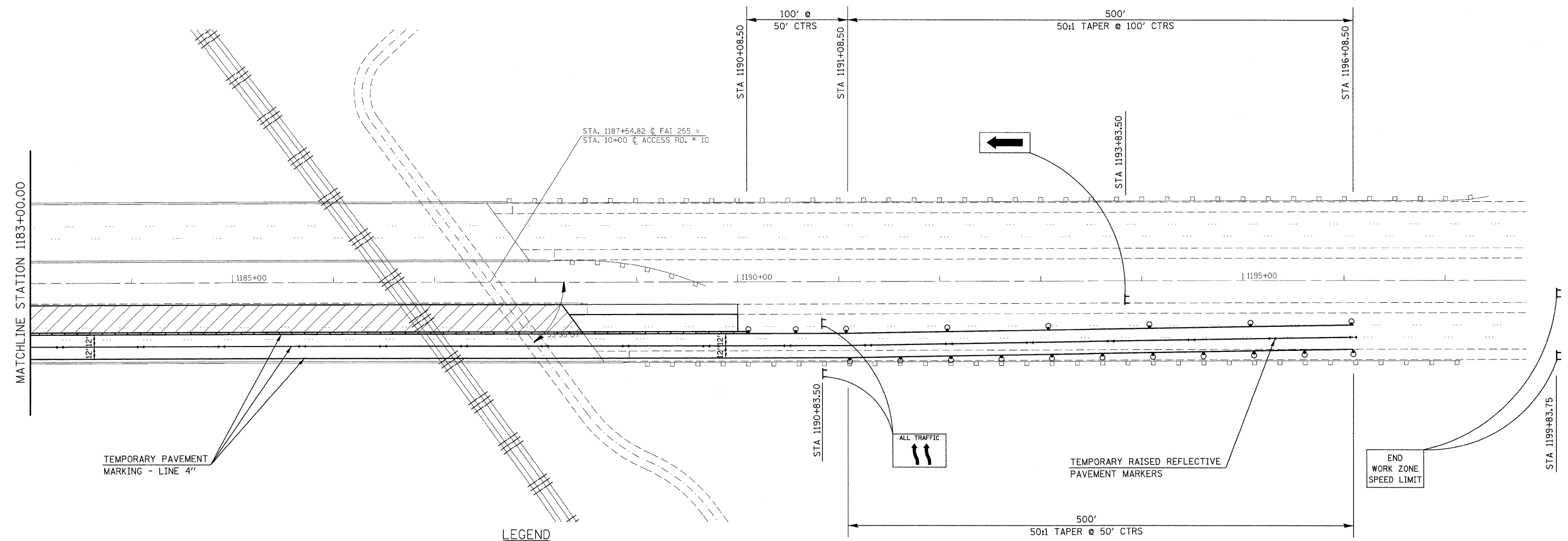
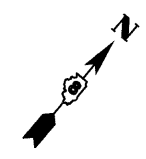
IMPACT ATTENUATORS



WORK AREA



FILE NAME = c:\pv_work\pwidot\gelinh\d0116760\0876925-StagingB.dgn	USER NAME = gelinh	DESIGNED - ---	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL - STAGE II (NB)			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50,0000' / IN.	DRAWN - ---	REVISED - ---					255	82-IHVB-I-1	ST. CLAIR	45	14
	PLOT DATE = 10/3/2009	CHECKED - ---	REVISED - ---					CONTRACT NO. 76926				
	DATE - ---	REVISED - ---	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT									
				SCALE: 1" = 50'			SHEET NO. 3 OF 4 SHEETS			STA. 1168+00.00 TO STA. 1183+00.00		



TEMPORARY PAVEMENT MARKING - LINE 4"

LEGEND

TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS

END WORK ZONE SPEED LIMIT



W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)



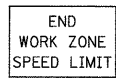
W13-1-(0)-24



4' x 8'; 1" BORDER WITH 10" CAPITAL LETTERS
BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)



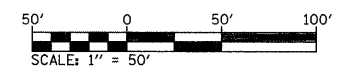
W1-6(0) 7236 ATOP TYPE III BARRICADE
(DIRECTION OF ARROW SHALL MATCH DIRECTION OF TRAVEL.)



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



FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -
es:\pw_work\pw\dot\gelinh\d2116760\0876925-StagingB.dgn		DRAWN -	REVISED -
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 10/8/2009		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL - STAGE II (NB)

SCALE: 1" = 50' SHEET NO. 4 OF 4 SHEETS STA. 1183+00.00 TO STA. 1198+00.00

F.A.I. RTE. 255	SECTION 82-1HVB-1-1	COUNTY ST. CLAIR	TOTAL SHEETS 45	SHEET NO. 15
CONTRACT NO. 76926				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

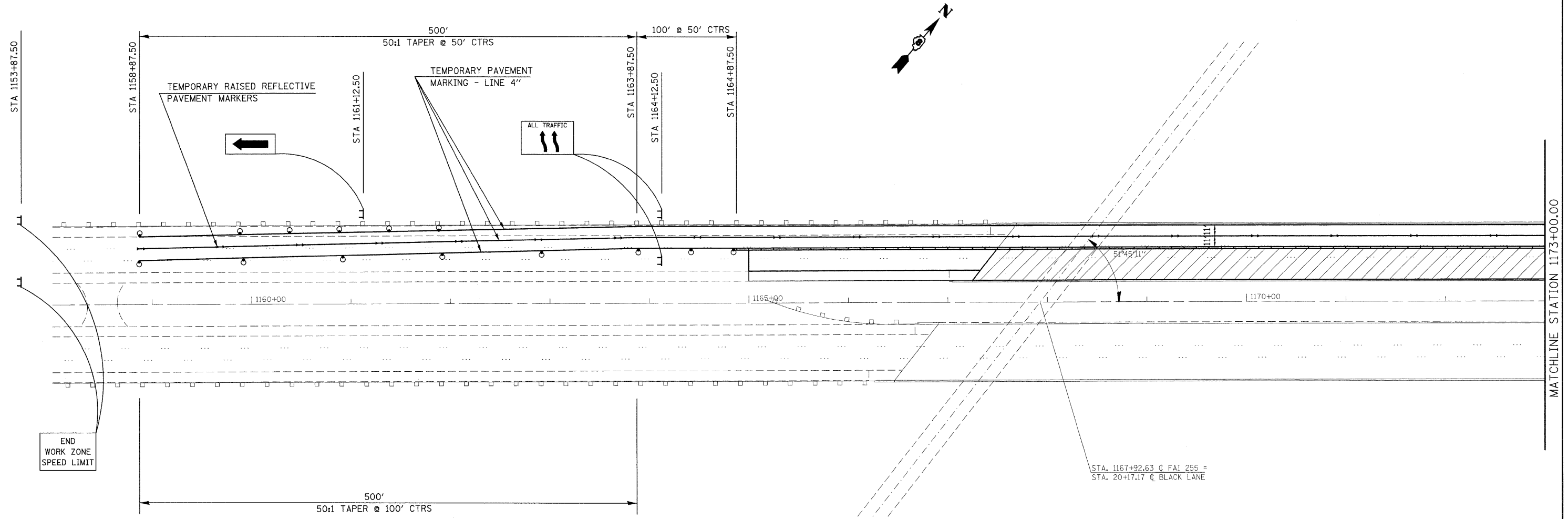
STAGE I DESCRIPTION OF WORK

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

1. REMOVE SKIP-DASH AND CONFLICTING SOLID EDGE PAVEMENT MARKINGS.
2. PLACE TRAFFIC CONTROL DETAILS ACCORDING TO PLANS.
3. PLACE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS, TEMPORARY.
4. PERFORM ALL NECESSARY BRIDGE WORK AND RESURFACING IN STAGE I WORK ZONE.

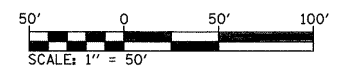


LEGEND

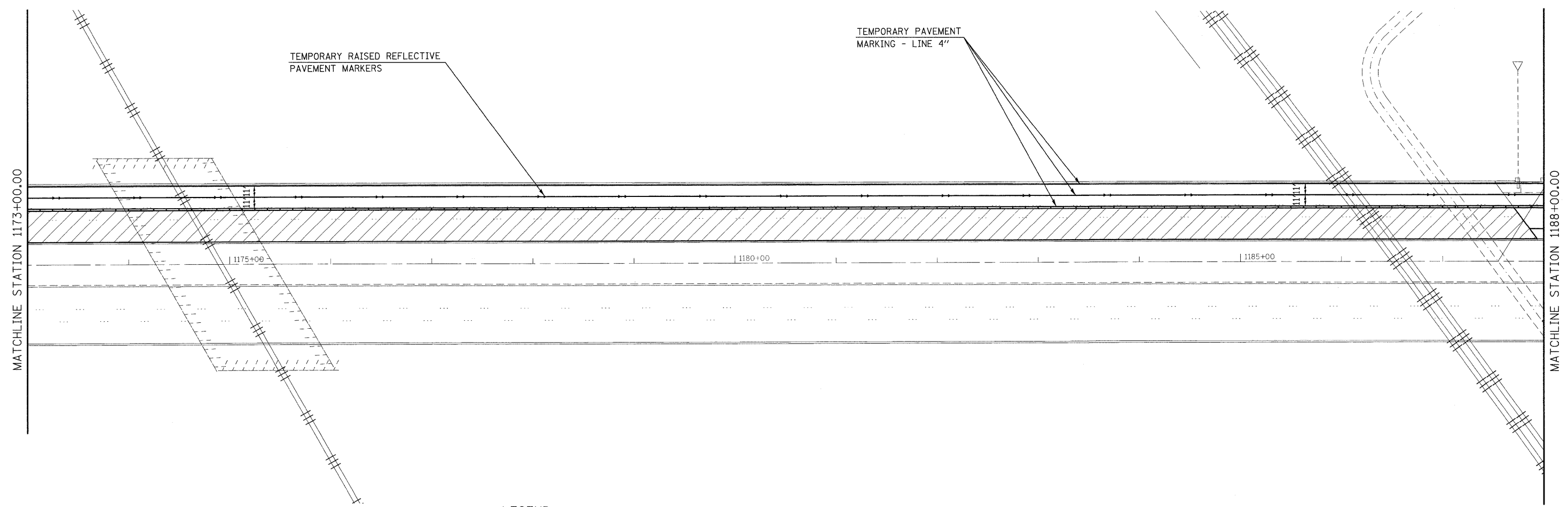
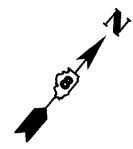
- W1-4b-(O)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
- 45 MPH
- W13-1-(O)-24
- 4' x 8'; 1" BORDER WITH 10" CAPITAL LETTERS
BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)
- W1-6(O) 7236 ATOP TYPE III BARRICADE
(DIRECTION OF ARROW SHALL MATCH DIRECTION OF TRAVEL.)
- G20-I103(O)-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	TRAFFIC CONTROL - STAGE I (SB)		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw_work\pw\dot\gelinh\d0116768\087692	-StagingAdgn	DRAWN -	REVISED -		255	82-IHVB-I-1	ST. CLAIR	45	16		
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PLOT DATE = 10/7/2009		DATE -	REVISED -		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT						
				SCALE: 1" = 50'	SHEET NO. 1 OF 4 SHEETS	STA. 1158+00.00 TO STA. 1173+00.00					



TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS

TEMPORARY PAVEMENT MARKING - LINE 4"

MATCHLINE STATION 1173+00.00

MATCHLINE STATION 1188+00.00

LEGEND



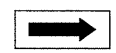
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(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)



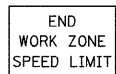
W13-1-(0) -24



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



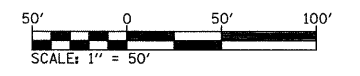
TEMPORARY CONCRETE BARRIER



IMPACT ATTENUATORS



WORK AREA



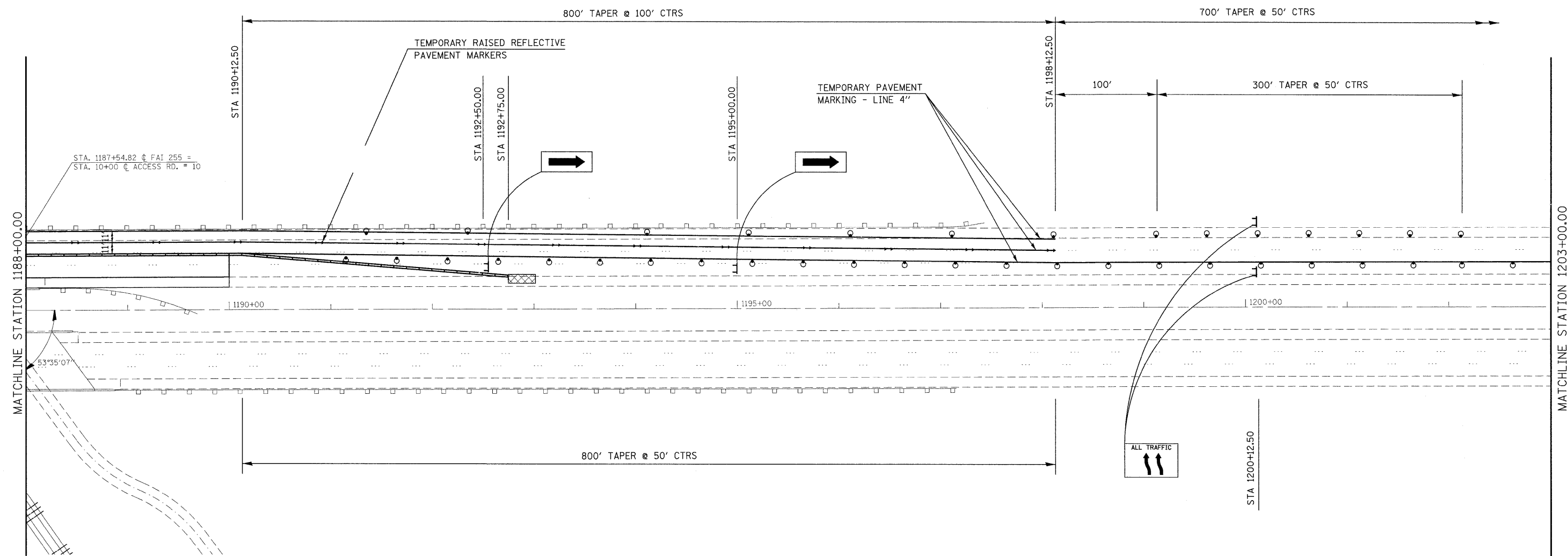
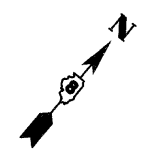
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PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 10/7/2009		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL - STAGE I (SB)

SCALE: 1" = 50' SHEET NO. 2 OF 4 SHEETS STA. 1173+00.00 TO STA. 1188+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 76926				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

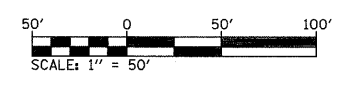


LEGEND

- 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
END WORK ZONE SPEED LIMIT

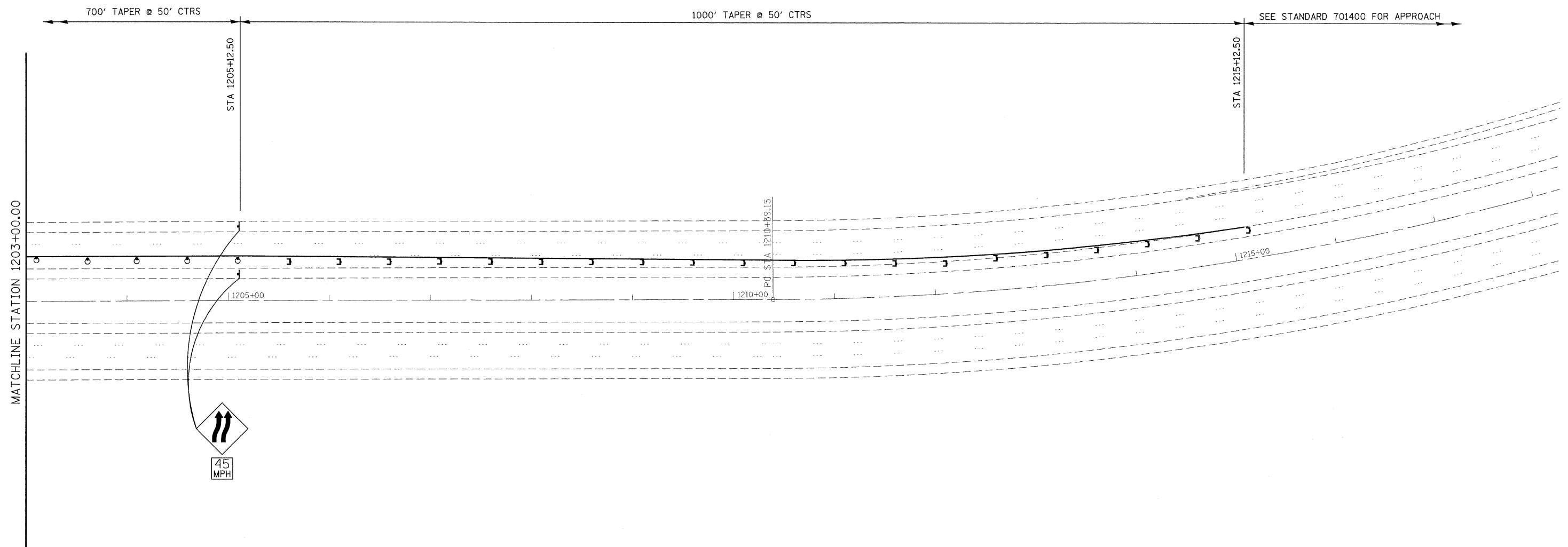
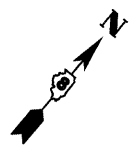
LEGEND

- 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



FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL - STAGE I (SB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca\pwwork\pwwdot\gelinh\d0116760\087692	StagingRdgn	DRAWN -	REVISED -			255	82-IHVB-I-1	ST. CLAIR	45	18	
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 76926					
	PLOT DATE = 10/7/2009	DATE -	REVISED -			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

SCALE: 1" = 50' SHEET NO. 3 OF 4 SHEETS STA. 1188+00.00 TO STA. 1203+00.00

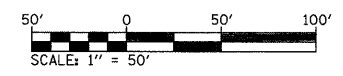


LEGEND

- 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	TRAFFIC CONTROL - STAGE I (SB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca\pw_work\pwtdot\gelinh\d0116760\087625-Staginghdgn	Staginghdgn	DRAWN - ---	REVISED - ---			255	82-IHVB-I-1	ST. CLAIR	45	19	
PLOT SCALE = 50,0000' / IN.		CHECKED - ---	REVISED - ---			CONTRACT NO. 76926					
PLOT DATE = 10/7/2009		DATE - ---	REVISED - ---			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

SCALE: 1" = 50' SHEET NO. 4 OF 4 SHEETS STA. 1203+00.00 TO STA. 1218+00.00

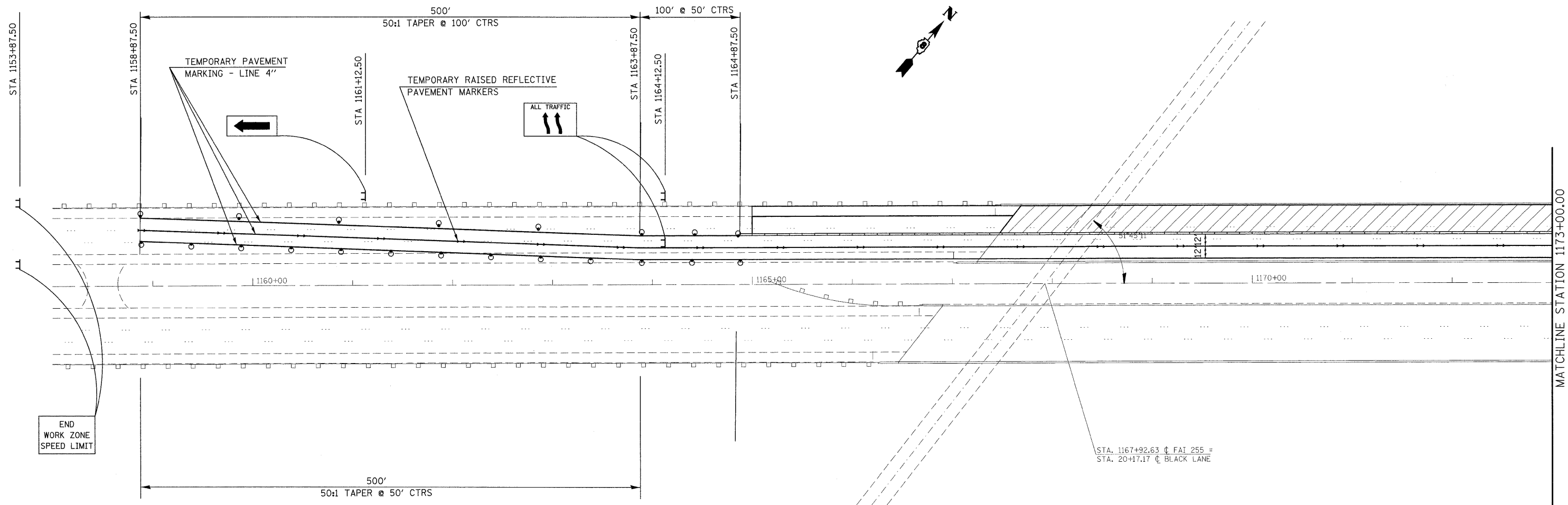
STAGE II DESCRIPTION OF WORK

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

1. REMOVE SKIP-DASH AND CONFLICTING SOLID EDGE PAVEMENT MARKINGS.
2. PLACE TRAFFIC CONTROL DETAILS ACCORDING TO PLANS.
3. RELOCATE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS, TEMPORARY.
4. PERFORM ALL NECESSARY BRIDGE WORK AND RESURFACING IN STAGE II WORK ZONE.

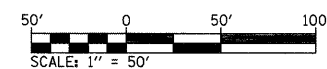


LEGEND

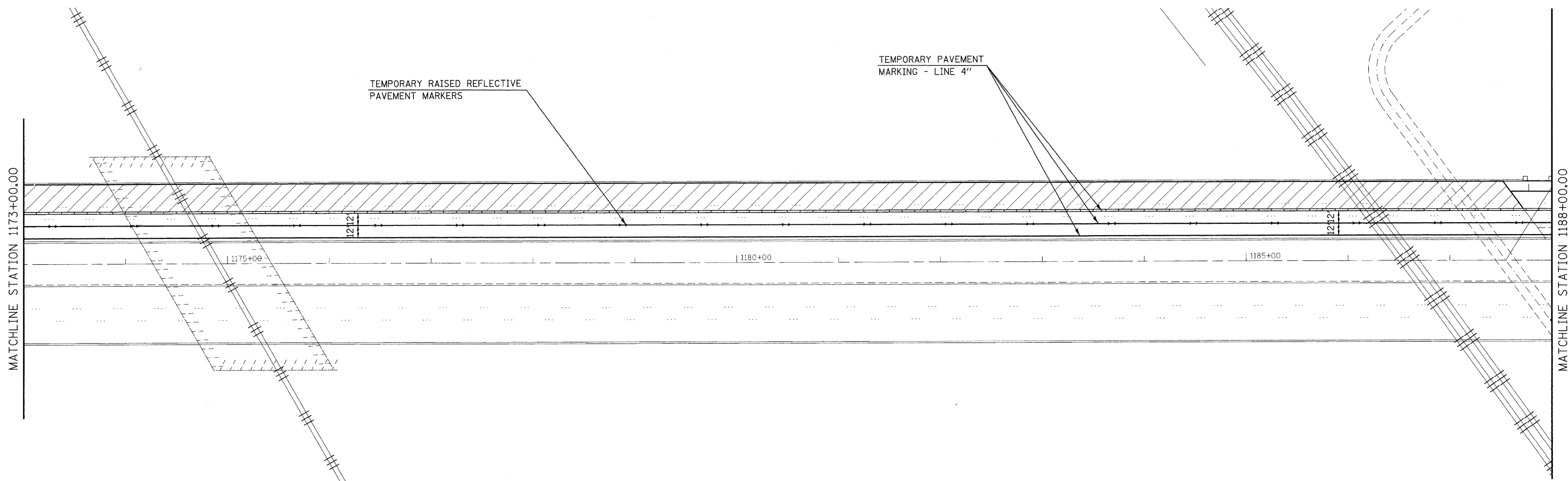
- W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
- 45 MPH
- W13-1-(0) -24
- 4' x 8'; 1" BORDER WITH 10" CAPITAL LETTERS
BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)
- W1-6(0) 7236 ATOP TYPE III BARRICADE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









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c:\pw_work\p\dot\gelinh\d0116760\0876925-Staging\hdgn		DRAWN -	REVISED -		255	82-IHVB-I-1	ST. CLAIR	45	20			
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		SCALE: 1" = 50'			SHEET NO. 1 OF 4 SHEETS		STA. 1158+00.00 TO STA. 1173+00.00	CONTRACT NO. 76926	
PLOT DATE = 10/7/2009		DATE -	REVISED -		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT							

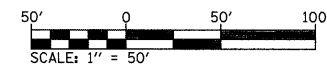


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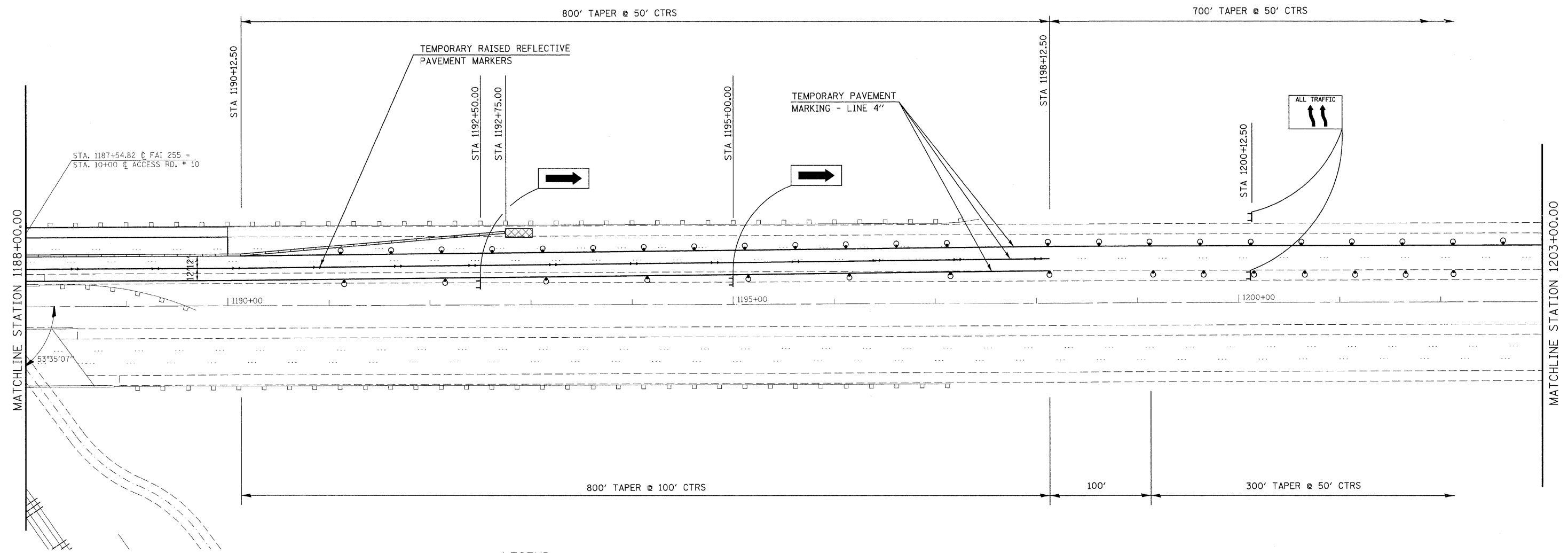
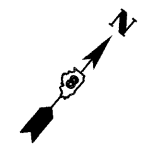
- 
 W1-4b-(0)-48
 (NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
- 
 45 MPH
- 
 ALL TRAFFIC
- 
 4' x 8' 1" BORDER WITH 10" CAPITAL LETTERS
 BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS. (STATE OWNED)
- 
 END WORK ZONE SPEED LIMIT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



FILE NAME =	USER NAME = gelinh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL - STAGE II (SB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 76926					
PLOT DATE = 10/7/2009		DATE -	REVISED -			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

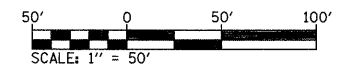


LEGEND

- 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-II03(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



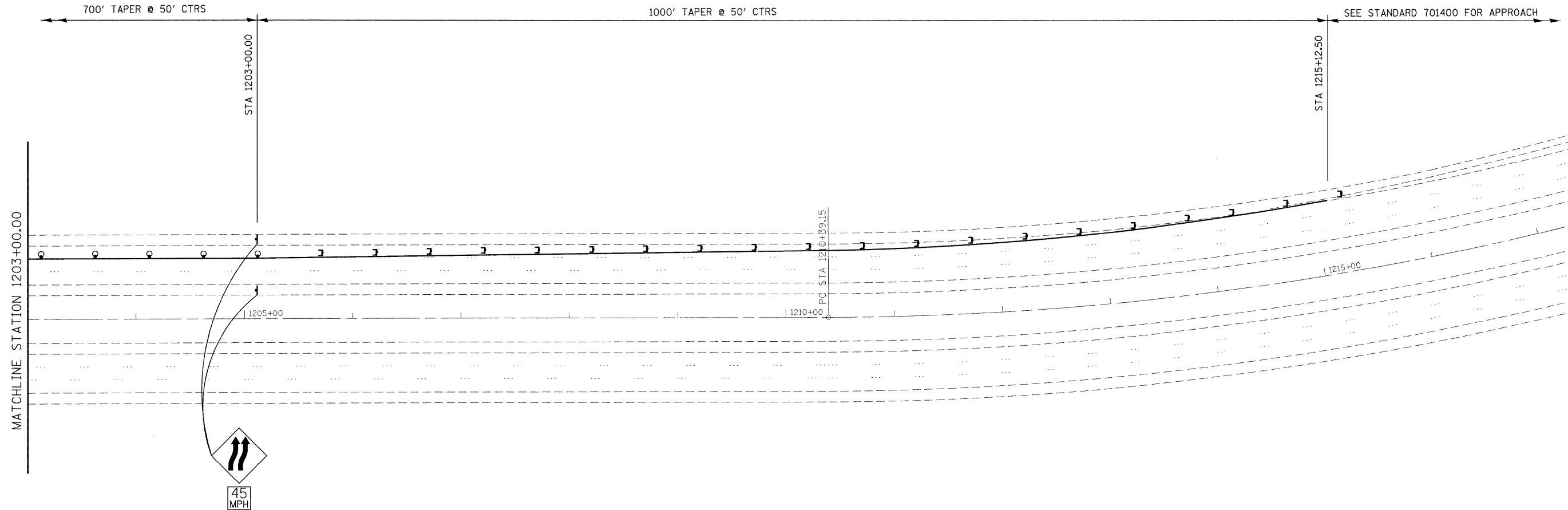
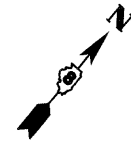
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		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL - STAGE II (SB)

SCALE: 1" = 50' SHEET NO. 3 OF 4 SHEETS STA. 1188+00.00 TO STA. 1203+00.00

F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-IHVB-I-1	ST. CLAIR	45	22
CONTRACT NO. 76926				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

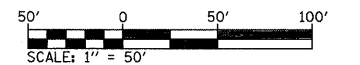


LEGEND

- W1-4b-(0)-48
(NO. OF ARROW SHALL MATCH THE NO. OF LANES OPEN TO TRAFFIC AND THE DIRECTION OF TRAVEL.)
- 45 MPH
- ALL TRAFFIC
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)
- 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



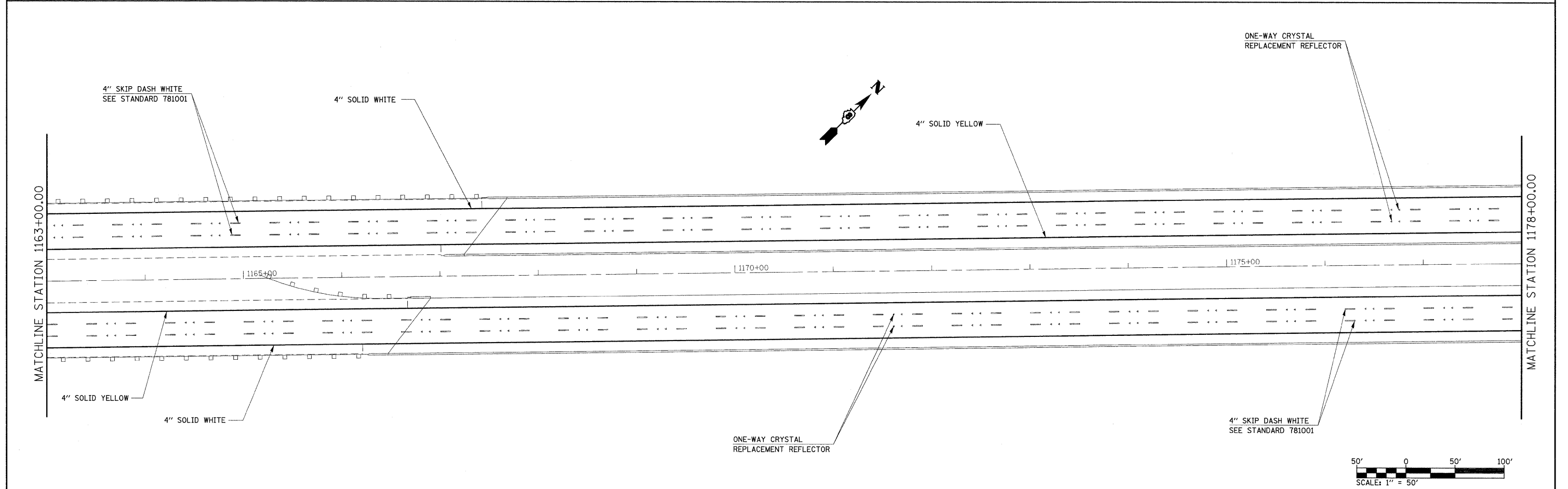
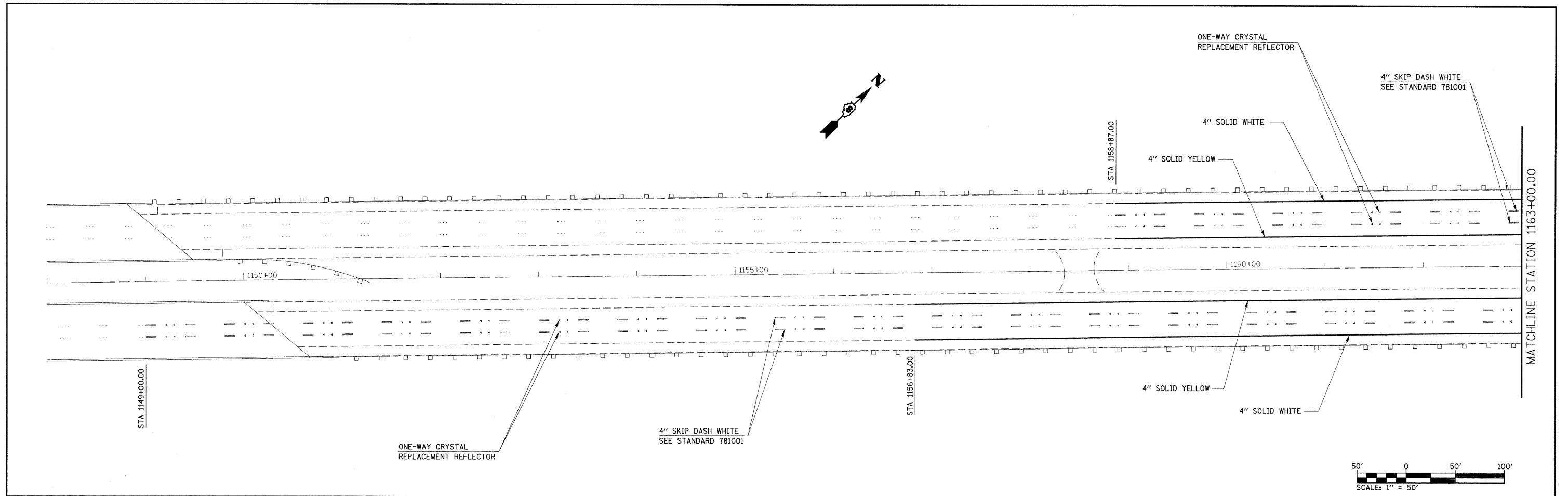
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		CHECKED -	REVISD -
		DATE -	REVISD -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

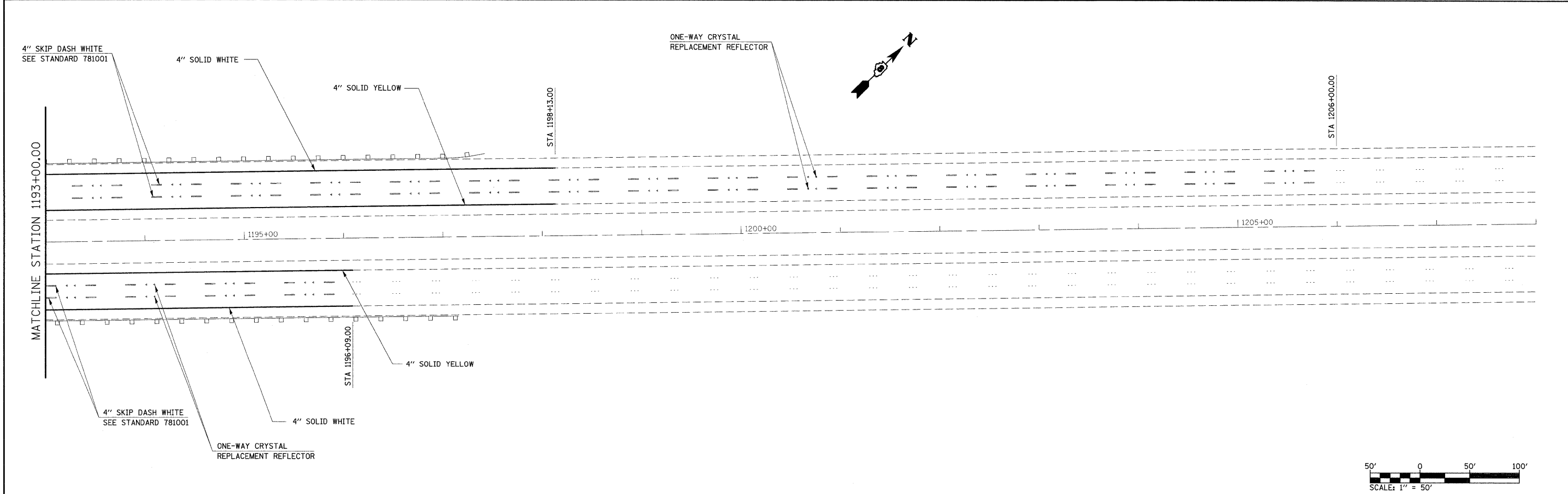
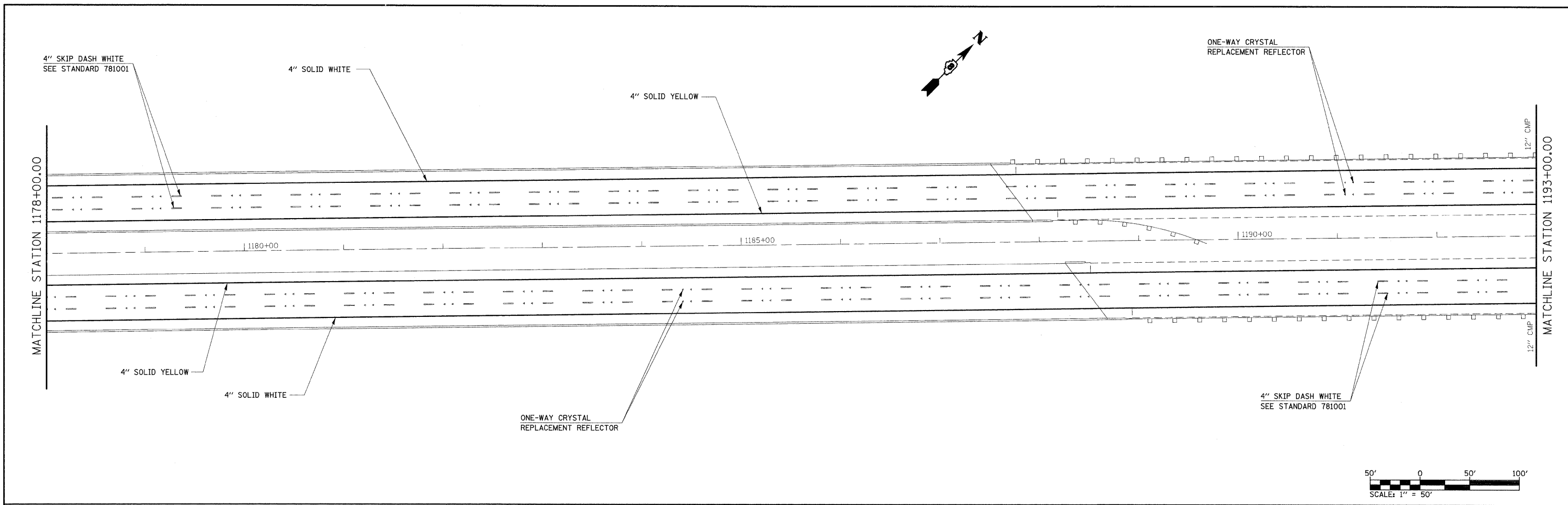
TRAFFIC CONTROL - STAGE II (SB)

SCALE: 1" = 50' SHEET NO. 4 OF 4 SHEETS STA. 1203+00.00 TO STA. 1218+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	82-1HVB-1-1	ST. CLAIR	45	23
CONTRACT NO. 76926				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				



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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -		SCALE: 1" = 50'	SHEET NO. 1 OF 2 SHEETS	STA. 1148+00.00 TO STA. 1178+00.00	CONTRACT NO. 76926				
	PLOT DATE = 12/8/2009	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



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PLOT SCALE = 50,000' / IN.						SCALE: 1" = 50' SHEET NO. 2 OF 2 SHEETS STA. 1178+00.00 TO STA. 1208+00.00					
PLOT DATE = 10/8/2009						CONTRACT NO. 76926					
						ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

All new structural steel shall conform to AASHTO Classification M-270 Gr. 36 unless otherwise noted.
Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts (in painted areas and M164 Type 3 in unpainted areas). Bolts - 3/4 in. ϕ , holes - 13/16 in. ϕ , unless otherwise noted.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

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 construction 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.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

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

Joint openings shall be adjusted according to Article 520.04(c) of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

The contractor shall grease all zerks of all bearings at all piers. Cost included with Furnishing and Erecting Structural Steel.

The contractor shall use extreme care during concrete removal so as not to damage the existing 2 1/2" precast, prestressed stay-in-place deck forms.

The quantity for Joint Or Crack Filling is to seal the open joints between the wingwalls and the approach slabs. The quantity for Structural Repair of Concrete is for the abutment caps and pier caps under joints.

Calculated weight of new structural steel = 5,840 Pounds (M-270 Gr. 36)
= 312,570 Pounds (M-270 Gr. 50)

Reinforcement bars designated (E) shall be epoxy coated.

Finger plate expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.

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.

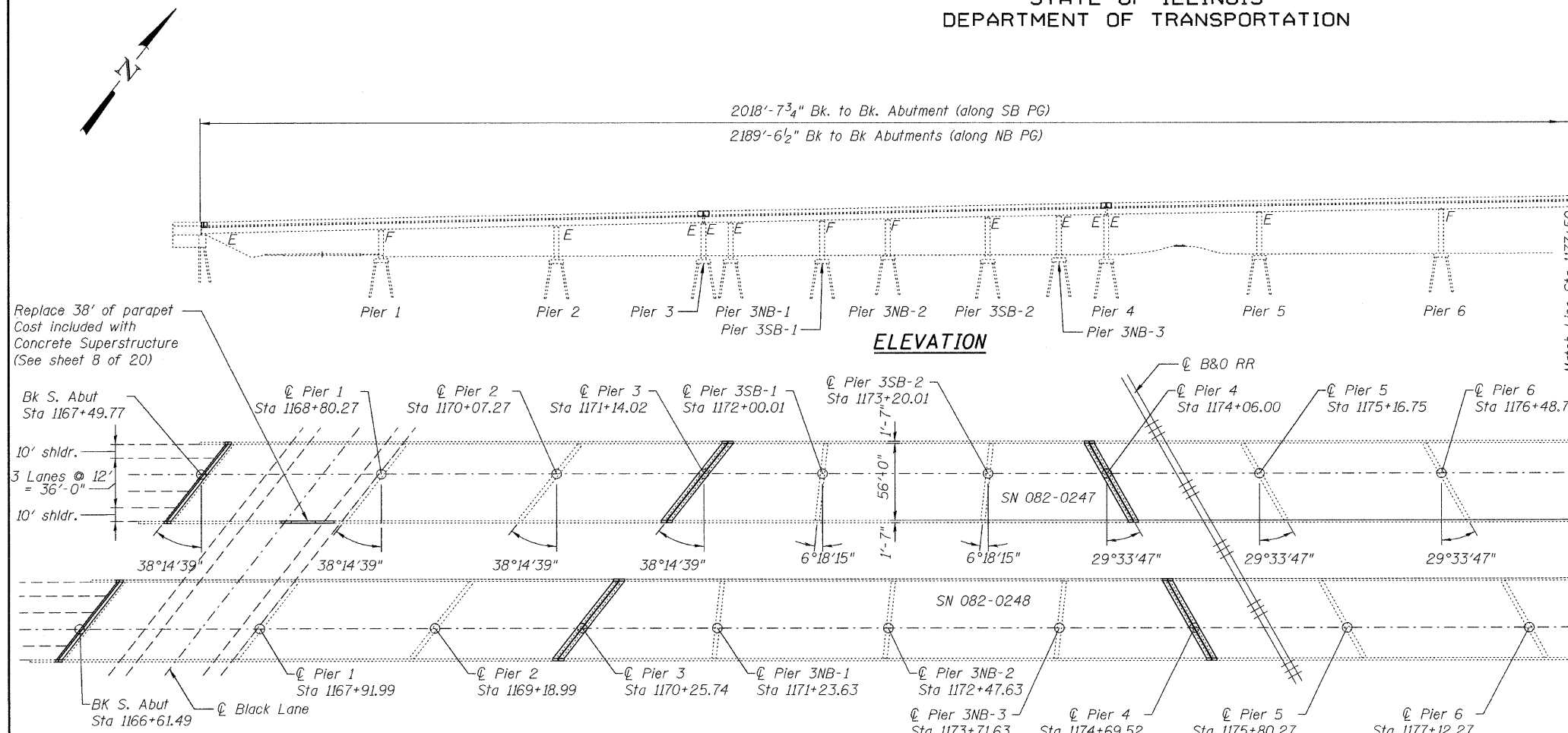
The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

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 Superstructures.

PLAN & ELEVATION
SN 082-0247 & 0248



Replace 38' of parapet
Cost included with
Concrete Superstructure
(See sheet 8 of 20)

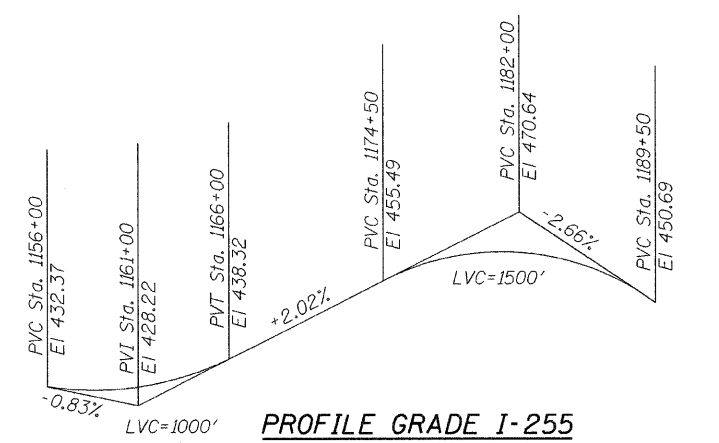
Bk S. Abut
Sta 1167+49.77
10' shldr.
3 Lanes @ 12'
= 36'-0"
10' shldr.
38°14'39"
38°14'39"
38°14'39"
38°14'39"
6°18'15"
1'-7"
6°18'15"
29°33'47"
29°33'47"
29°33'47"
Bk S. Abut
Sta 1166+61.49
Black Lane

INDEX OF SHEETS

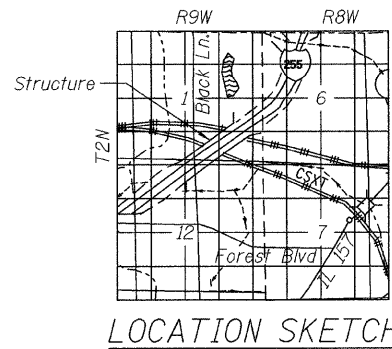
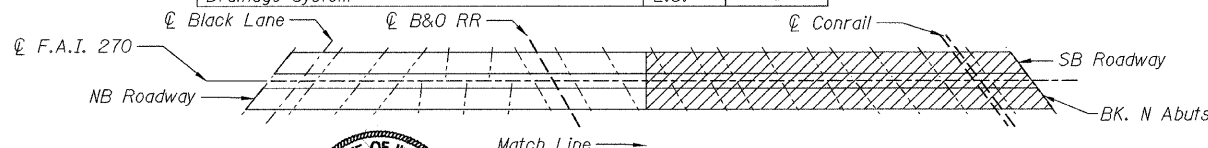
1. Plan & Elevation
2. Plan & Elevation
3. South Abutment Concrete Removal & Replacement
4. North Abutment Concrete Removal & Replacement
5. Strip Seal Details
6. Pier 3 Concrete Removal & Replacement
7. Piers 4 & 8 Concrete Removal & Replacement
8. Pier 12 & Span 1 Concrete Removal & Replacement
9. Pier 3 Finger Plate Details
10. Pier 3 Finger Plate Plan
11. Pier 4 Finger Plate Details
12. Pier 8 Finger Plate Details
13. Pier 4 & 8 Finger Plate Plan
14. Pier 12 Finger Plate Details
15. Piers 12 Finger Plate Plan
16. Piers 3, 4, 8 & 12 Finger Plate Details
17. South Abutment Type I Bearings
18. North Abutment Type II Bearings
19. Temporary Concrete Barrier
20. Bar Splicer Details

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Polymerized HMA Surface Course, Mix "E", N105	Ton	2,167
Joint Or Crack Filling	Pound	330
Concrete Removal	Cu. Yd.	171.7
Concrete Superstructure	Cu. Yd.	164.1
Protective Coat	Sq. Yd.	61
Furnishing and Erecting Structural Steel	Pound	5,840
Jack and Remove Existing Bearings	Each	28
Reinforcement Bars, Epoxy Coated	Pound	14,780
Bar Splicers	Each	144
Preformed Joint Strip Seal	Foot	289.5
Finger Plate Expansion Joint, 5"	Foot	129.0
Finger Plate Expansion Joint, 6"	Foot	410.5
Fabric Reinforced Elastomeric Trough	Foot	550
Elastomeric Bearing Assembly, Type I	Each	14
Elastomeric Bearing Assembly, Type II	Each	14
Anchor Bolts, 1 1/4"	Each	56
Waterproofing Membrane System	Sq. Yd.	25,800
Structural Repair of Concrete (Depth <= 5")	Sq. Ft.	200
Deck Slab Repair-Full Depth Type II	Sq. Yd.	31
Deck Slab Repair (Partial)	Sq. Yd.	60
Drainage System	L.S.	1



KEY PLAN



DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

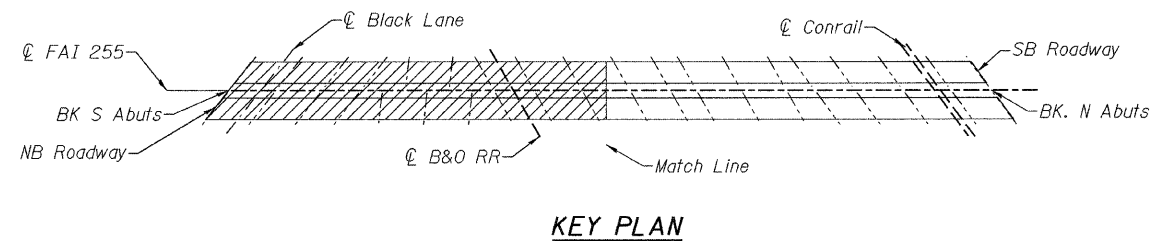
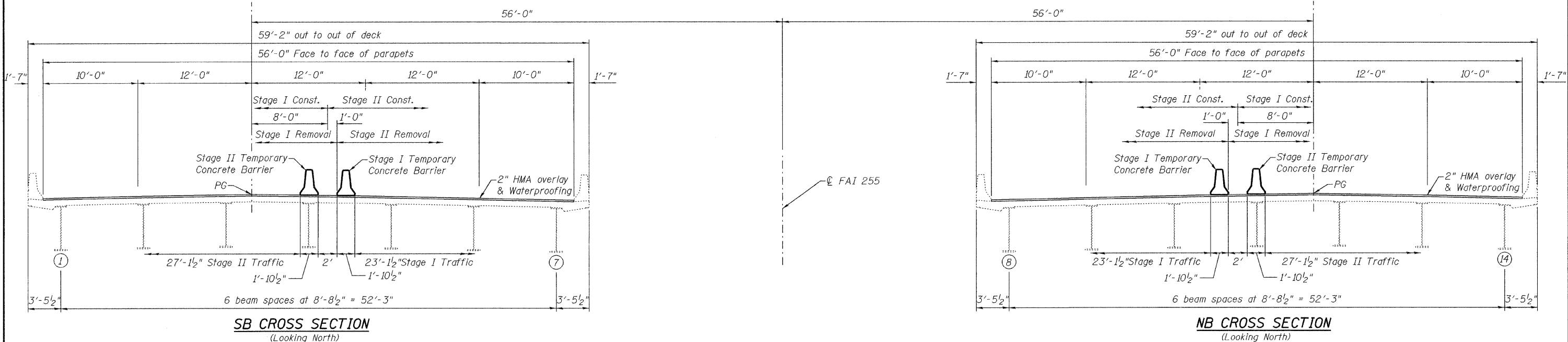
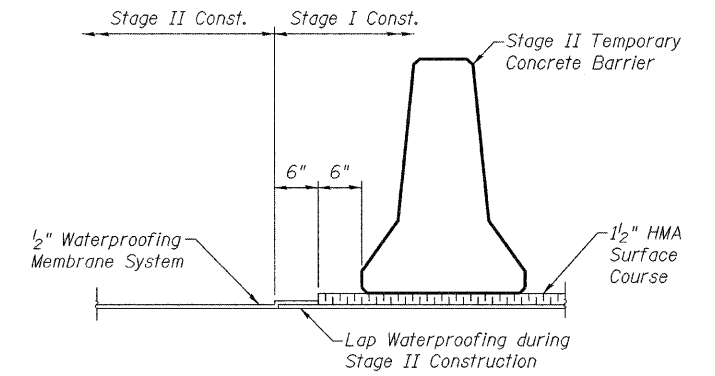
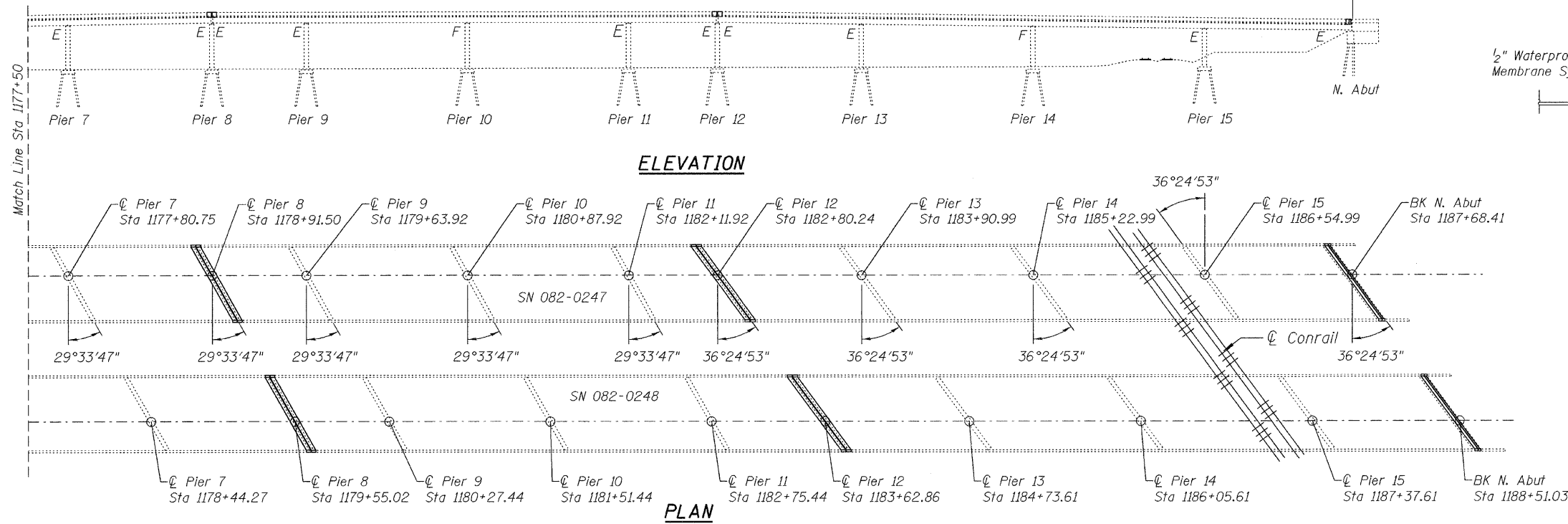
NOVEMBER 5, 2009
EXAMINED
PASSED



SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
20 SHEETS	255	82-1HVB-I-1	ST. CLAIR	45	26
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

2018'-7³/₄" Bk. to Bk. Abutments (along SB PG)
2189'-6¹/₂" Bk to Bk Abutments (along NB PG)



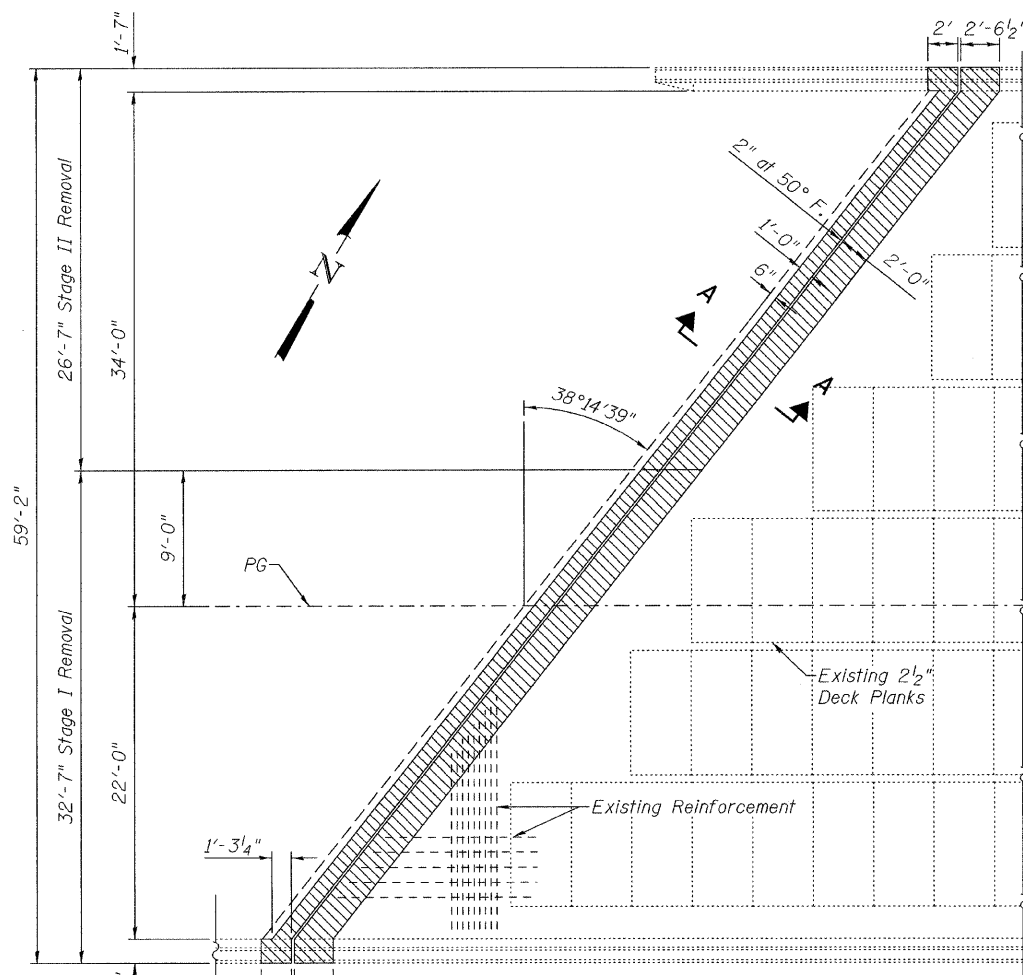
PLAN & ELEVATION
SN 082-0247 & 0248

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009
EXAMINED
Carl Perry
ENGINEER OF STRUCTURAL SERVICES
PASSED
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

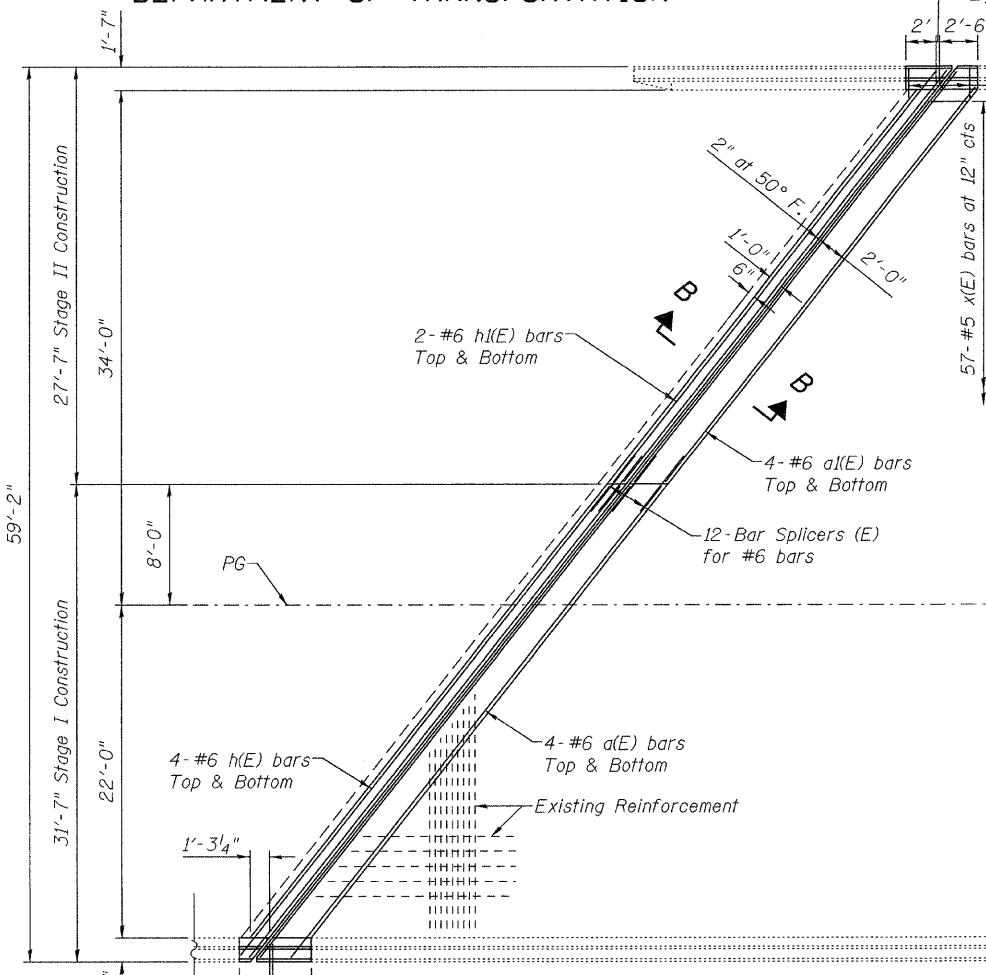
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			CONTRACT NO. 76926		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



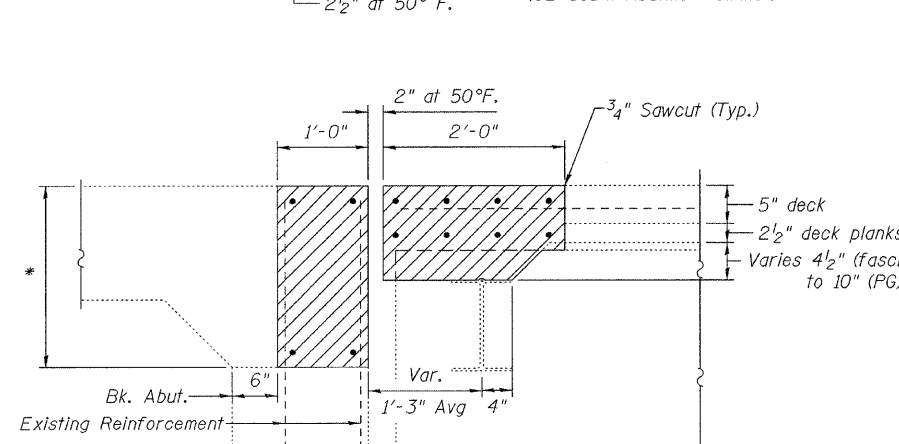
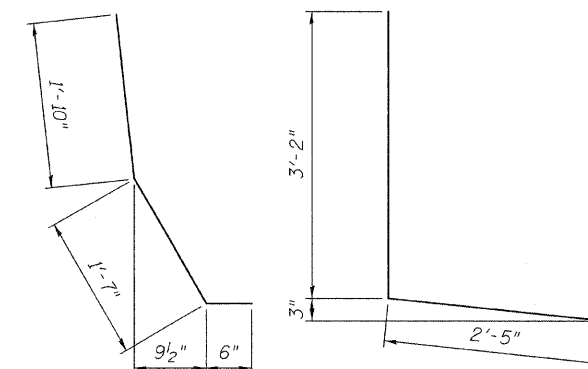
CONCRETE REMOVAL

(NB South Abutment shown)
(SB South Abutment similar)

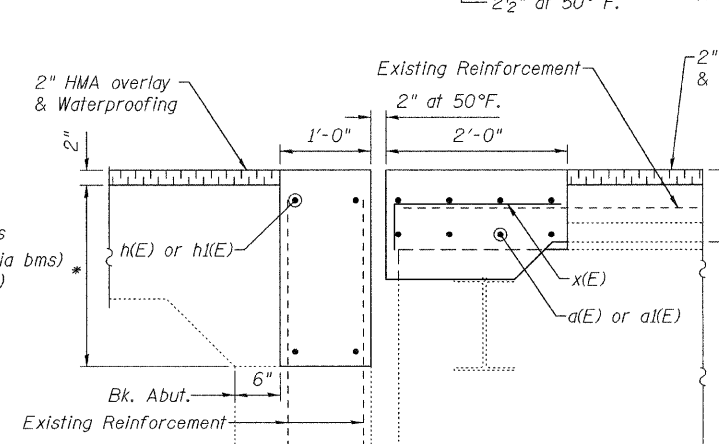


CONCRETE REPLACEMENT

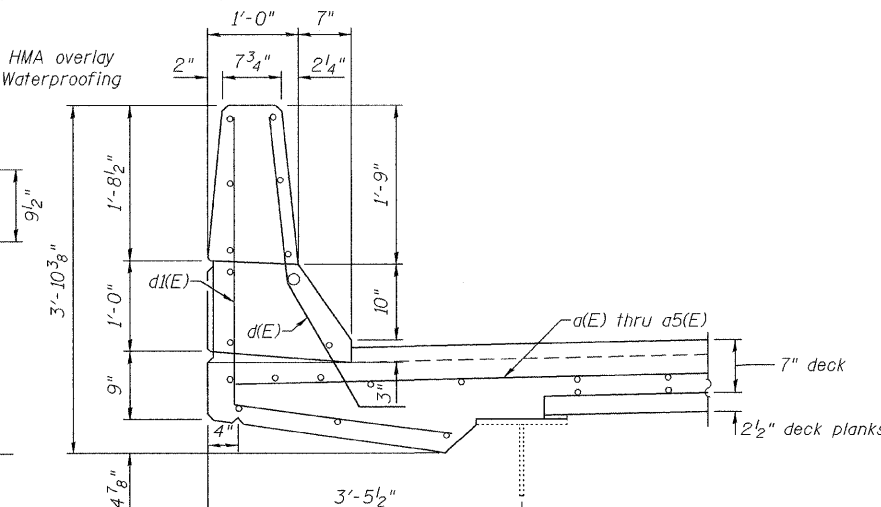
(NB South Abutment shown)
(SB South Abutment similar)



SECTION A-A



SECTION B-B



SECTION THRU PARAPET

(at Abutments)

**BOTH SOUTH ABUTMENTS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	16	#6	39'-8"	—
a1(E)	16	#6	34'-7"	—
d(E)	20	#4	4'-7"	L
d1(E)	20	#5	3'-3"	L
h(E)	8	#6	39'-8"	—
h1(E)	8	#6	34'-8"	—
x(E)	114	#5	2'-10"	U

Reinforcement Bars, Epoxy Coated	Pound	3140
Concrete Superstructure	Cu. Yds.	24.5
Concrete Removal	Cu. Yds.	23.6
Preformed Strip Seal	Foot	146.5

Bars indicated thus 4x2 -#5 etc. indicates 4 line of bars with 2 lengths per line.

**SOUTH ABUTMENT
CONCRETE REMOVAL & REPLACEMENT
082-0247 & 0248**

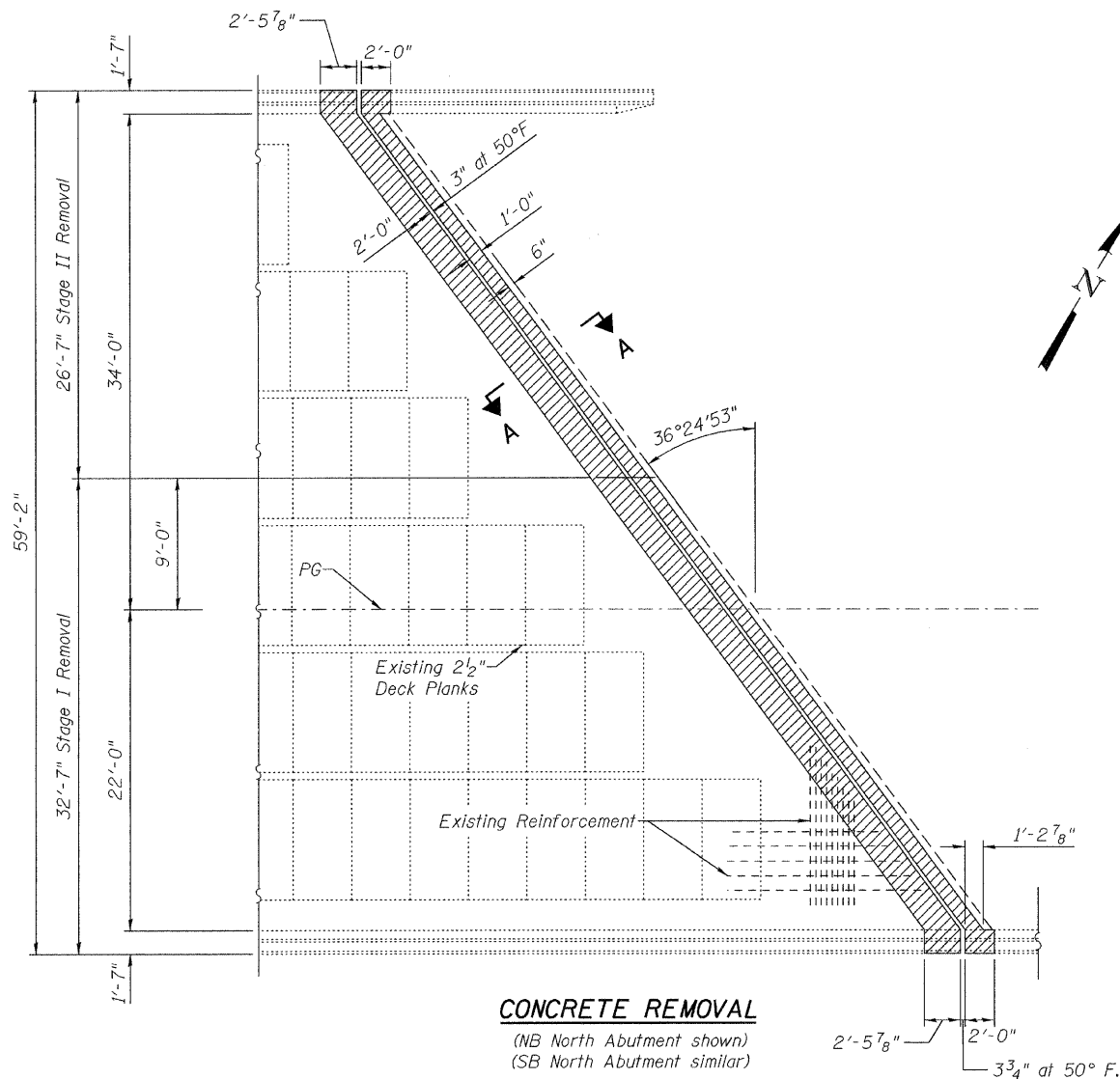
DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009	
EXAMINED	<i>A. Carl Poyser</i>
PASSED	<i>Ralph E. Anderson</i>
ENGINEER OF STRUCTURAL SERVICES	
ENGINEER OF BRIDGES AND STRUCTURES	

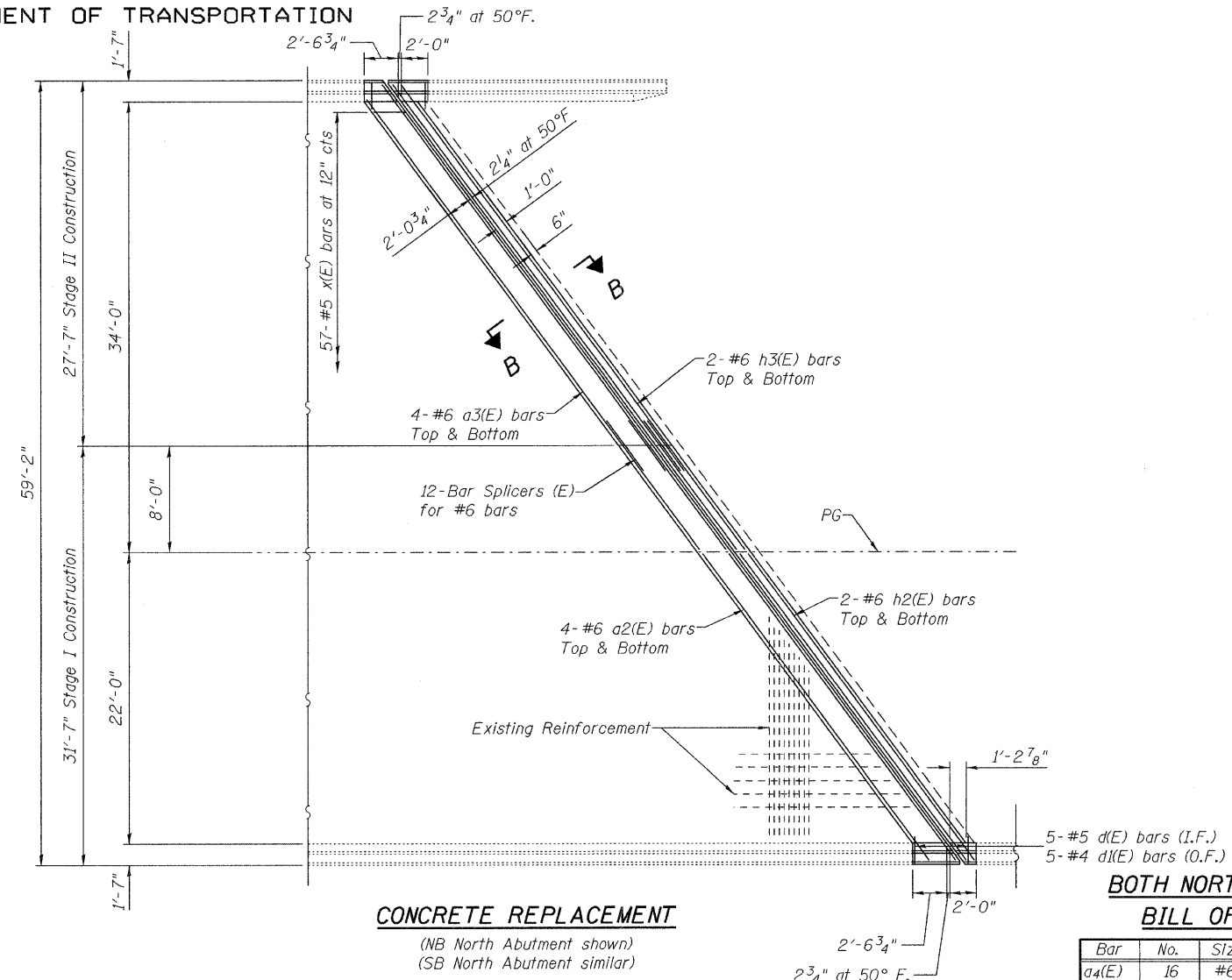
* SB Varies 1'-0 1/8" (median gutter) to 2'-1 7/8" (PG) to 2'-1 3/4" (outside gutter)
NB Varies 1'-5 5/8" (median gutter) to 1'-8 3/8" (PG) to 1 1/8" (outside gutter)

SHEET NO. 3 20 SHEETS	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	28
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 76926		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CONCRETE REMOVAL
(NB North Abutment shown)
(SB North Abutment similar)



CONCRETE REPLACEMENT
(NB North Abutment shown)
(SB North Abutment similar)

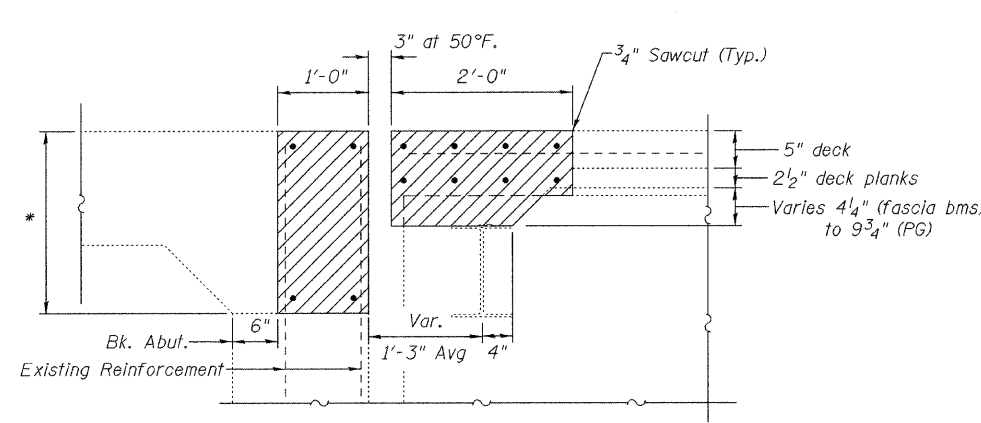
**BOTH NORTH ABUTMENTS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a4(E)	16	#6	38'-8"	—
a5(E)	16	#6	33'-9"	—
d(E)	20	#4	4'-7"	L
d1(E)	20	#5	3'-3"	L
h2(E)	8	#6	39'-0"	—
h3(E)	8	#6	34'-0"	—
x(E)	114	#5	2'-10"	—
Reinforcement Bars, Epoxy Coated			Pound	3080
Concrete Superstructure			Cu. Yds.	24.0
Concrete Removal			Cu. Yds.	22.7
Preformed Strip Seal			Foot	143.0

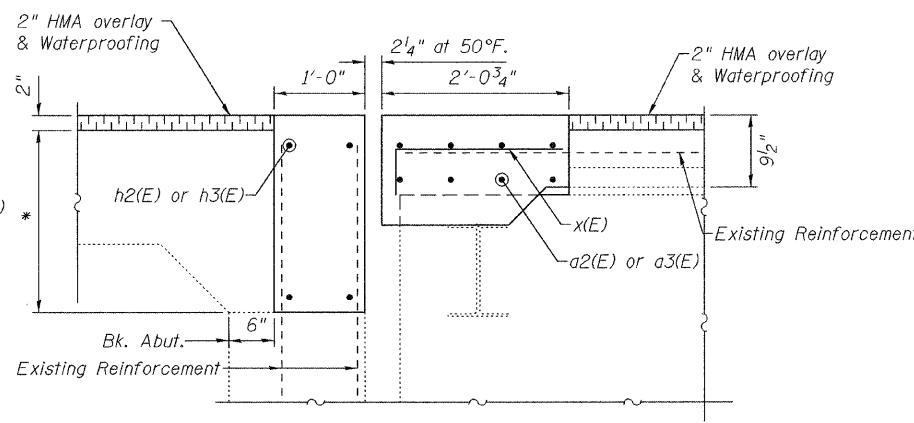
Bars indicated thus 4x2 - #5 etc. indicates 4 line of bars with 2 lengths per line.

See sheet 3 for parapet section and bar details.

**NORTH ABUTMENT
CONCRETE REMOVAL & REPLACEMENT
082-0247 & 0248**



SECTION A-A



SECTION B-B

* SB Varies 1'-0 1/8" (median gutter) to 2'-17 8/8" (PG) to 2'-13 3/4" (outside gutter)
NB Varies 1'-5 5/8" (median gutter) to 1'-8 3/8" (PG) to 11 7/8" (outside gutter)

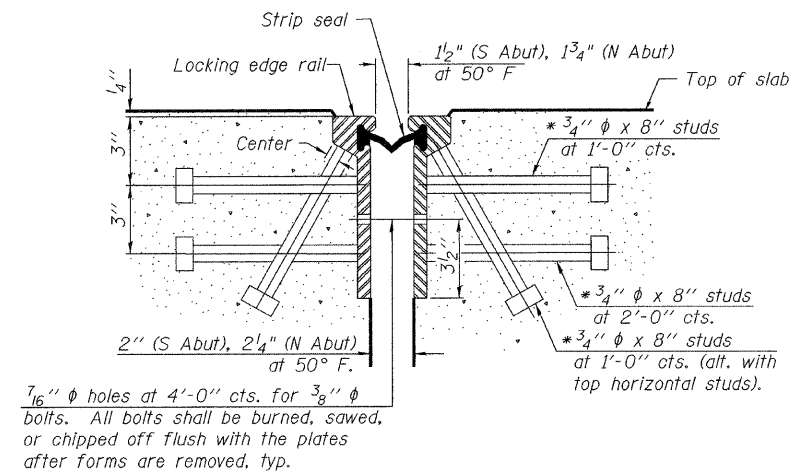
DESIGNED	J. Uehle
CHECKED	A. Halloway
DRAWN	J. Uehle
CHECKED	A. Halloway

NOVEMBER 5, 2009	
EXAMINED	<i>Carl P. ...</i>
PASSED	<i>Ralph E. Anderson</i>
ENGINEER OF BRIDGES AND STRUCTURES	

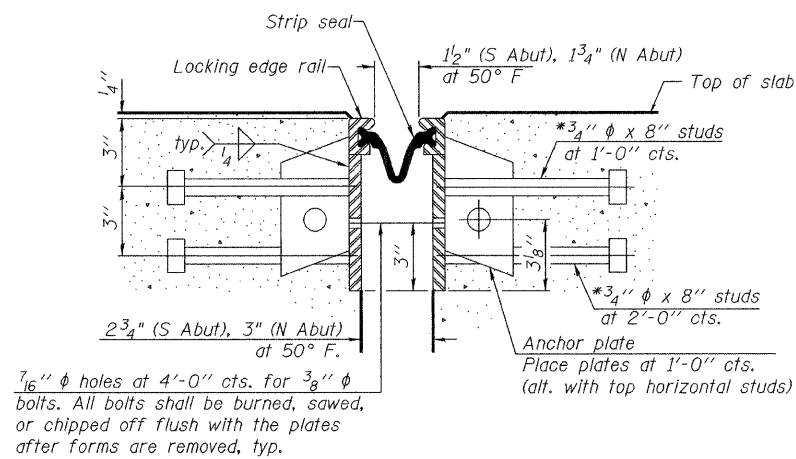
SHEET NO. 4	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	29
20 SHEETS		CONTRACT NO. 76926			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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



SECTION THRU
ROLLED RAIL JOINT



SECTION THRU
WELDED RAIL JOINT

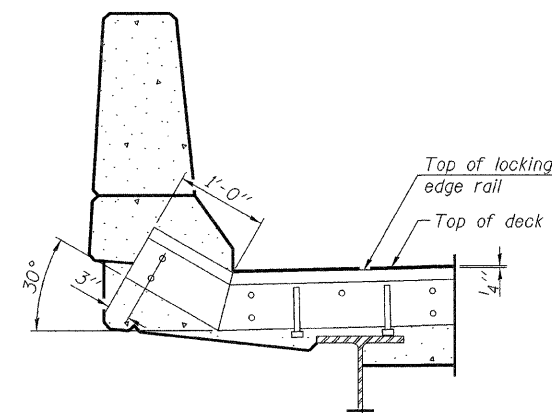
Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

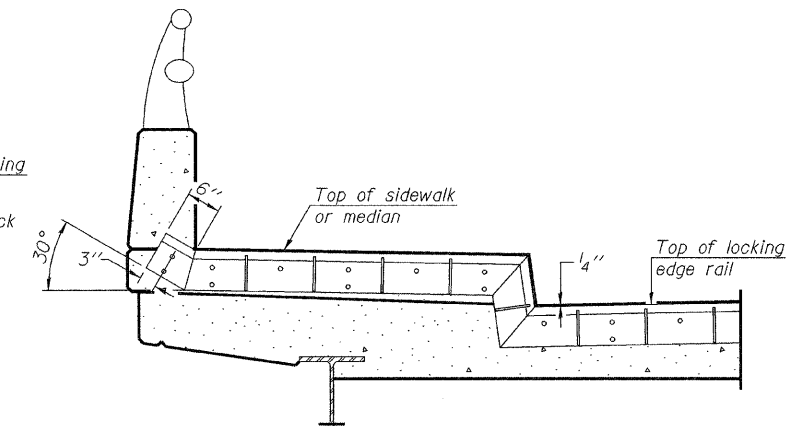
The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

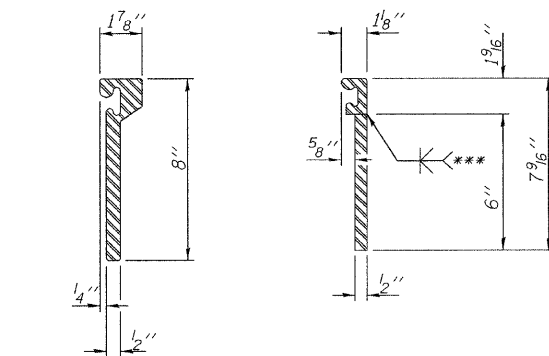


AT PARAPET

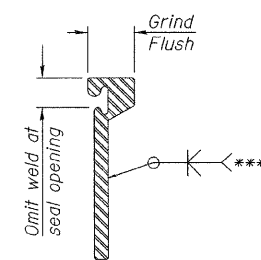


AT SIDEWALK OR MEDIAN

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



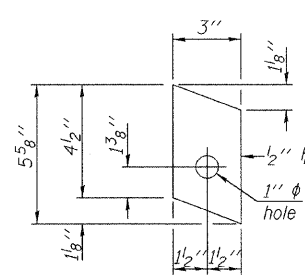
ROLLED
EXTRUDED RAIL WELDED RAIL



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

LOCKING EDGE
RAIL SPLICE

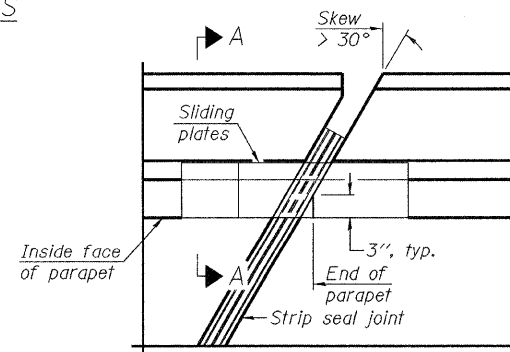
The inside of the locking edge rail groove shall be free of weld residue.



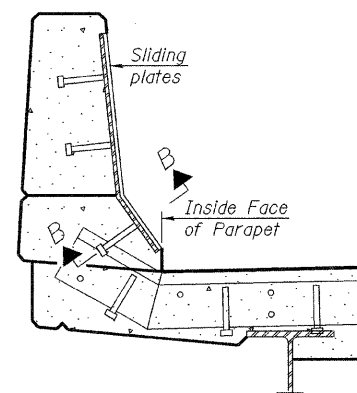
ANCHOR PLATE
(for welded rail)

TYPICAL END TREATMENTS

LOCKING EDGE RAILS

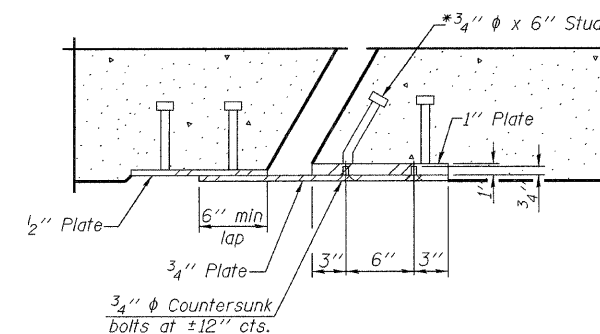


PLAN



SECTION A-A

POINT BLOCK DETAILS
(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	289.5

PREFORMED JOINT STRIP SEAL
SN 082-0247 & 0248

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

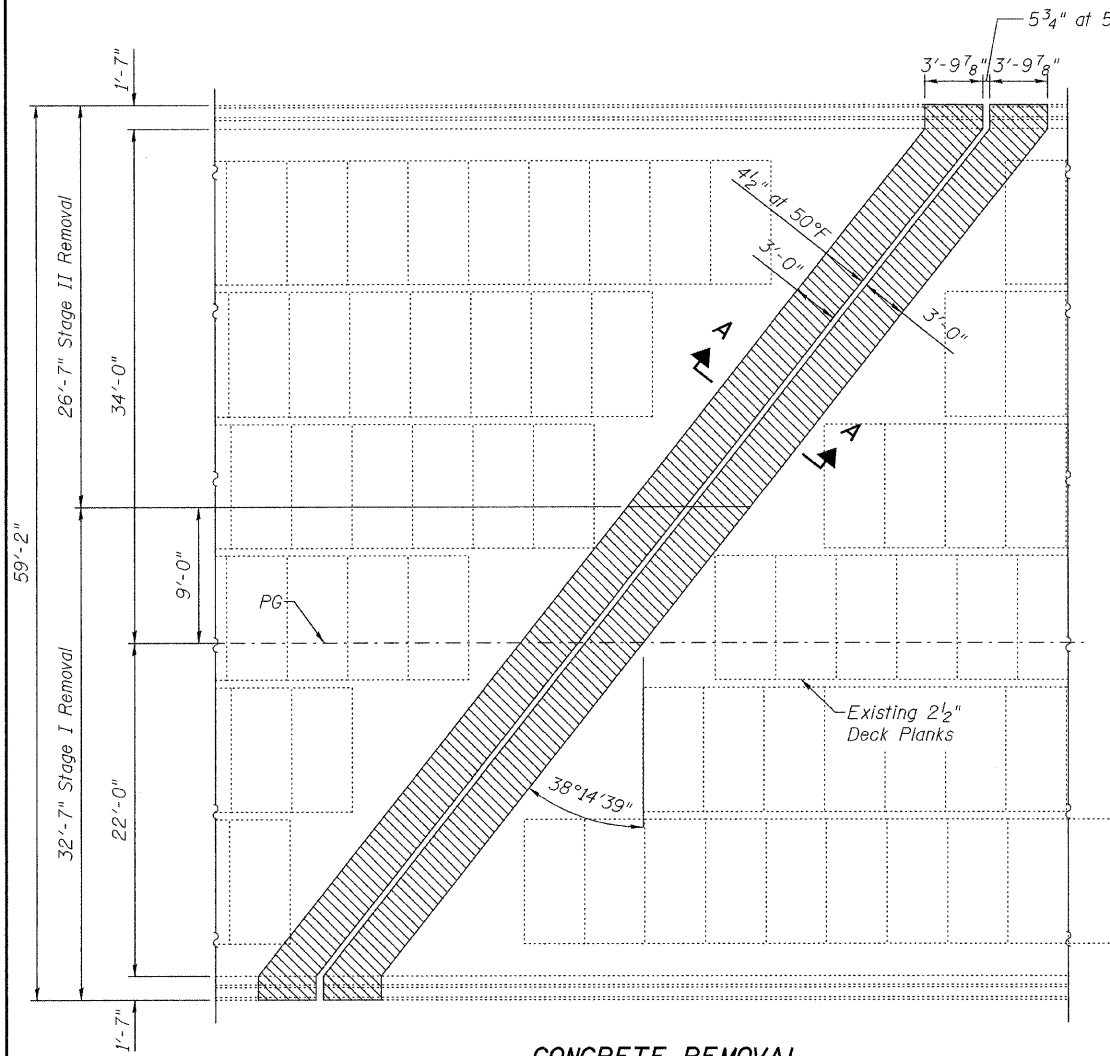
NOVEMBER 5, 2009
EXAMINED <i>A. Carl Hoyer</i> ENGINEER OF STRUCTURAL SERVICES
PASSED <i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES

EJ-SSJ

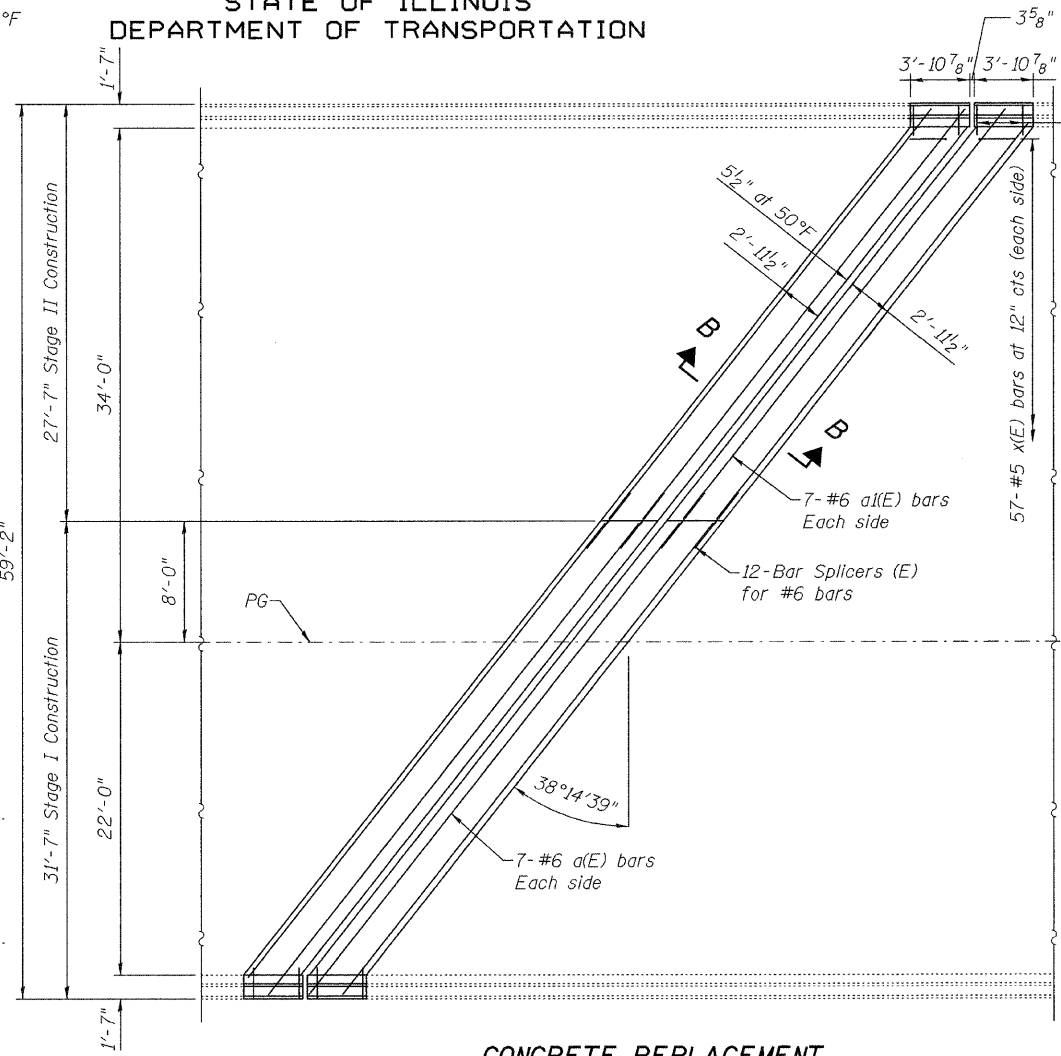
10-1-08

SHEET NO. 5	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
20 SHEETS	255	82-1HVB-I-1	ST. CLAIR	45	30
			CONTRACT NO. 76926		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

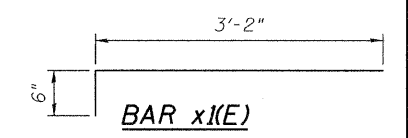
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CONCRETE REMOVAL
(NB Pier 3 shown)
(SB Pier 3 similar)



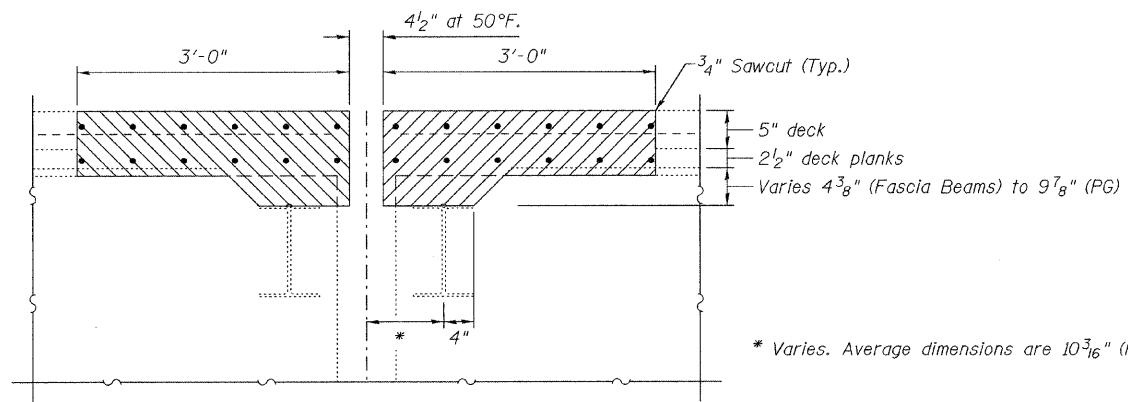
CONCRETE REPLACEMENT
(NB Pier 3 shown)
(SB Pier 3 similar)



**BOTH PIER 3
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	14	#6	39'-8"	—
a ₁ (E)	14	#6	34'-7"	—
d(E)	20	#4	4'-7"	L
d ₁ (E)	20	#5	3'-3"	L
x ₁ (E)	114	#5	3'-8"	—
Reinforcement Bars, Epoxy Coated			Pound	2130
Concrete Superstructure			Cu. Yds.	29.3
Concrete Removal			Cu. Yds.	31.8
Finger Plate Expansion Joint, 6"			Foot	142.5

Bars indicated thus 4x2 - #5 etc. indicates 4 line of bars with 2 lengths per line.
See sheet 9 of 20 for Section B-B.



SECTION A-A

* Varies. Average dimensions are 10 3/16" (P3), 11 5/16" (P4 & P8), 10 7/16" (P12) at Rt L's

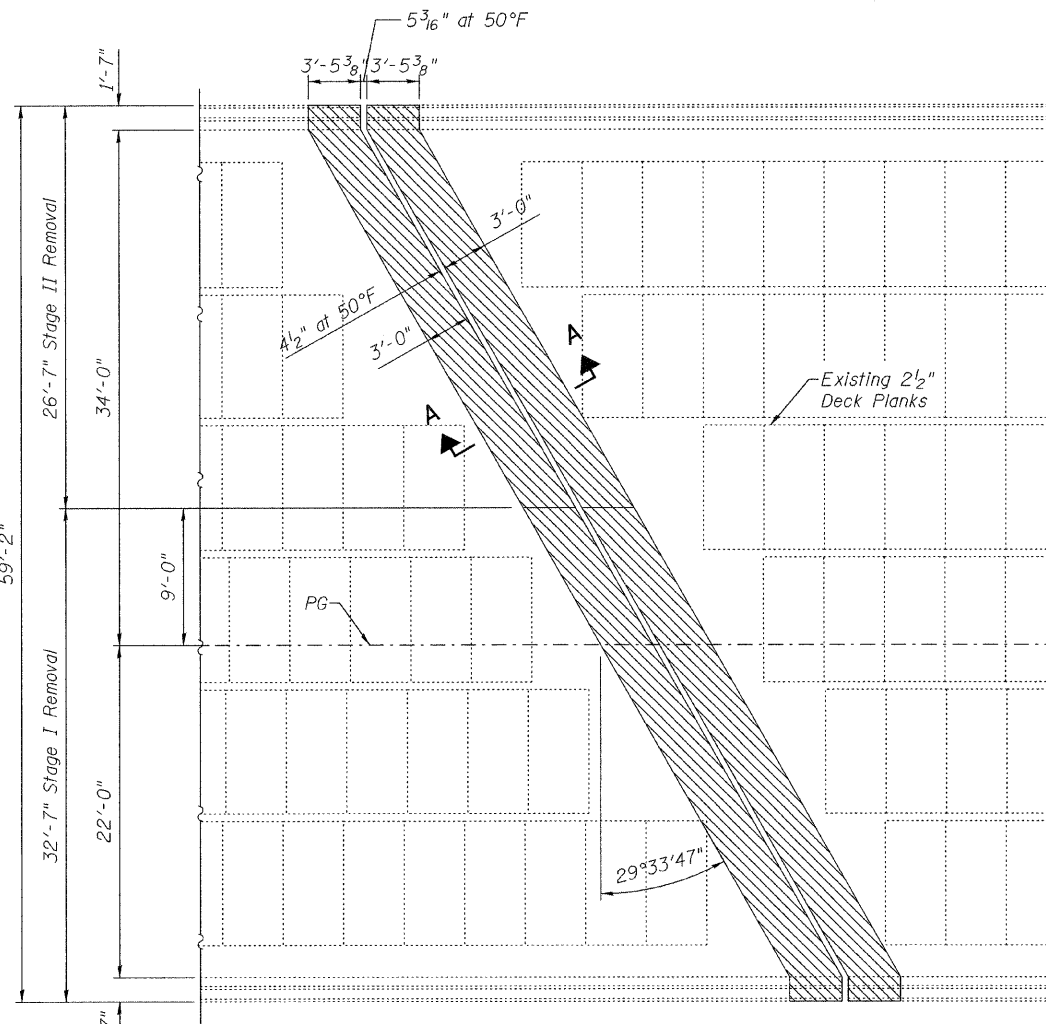
**PIER 3
CONCRETE REMOVAL & REPLACEMENT
082-0247 & 0248**

DESIGNED J. Uehle
CHECKED A. Holloway
DRAWN J. Uehle
CHECKED A. Holloway

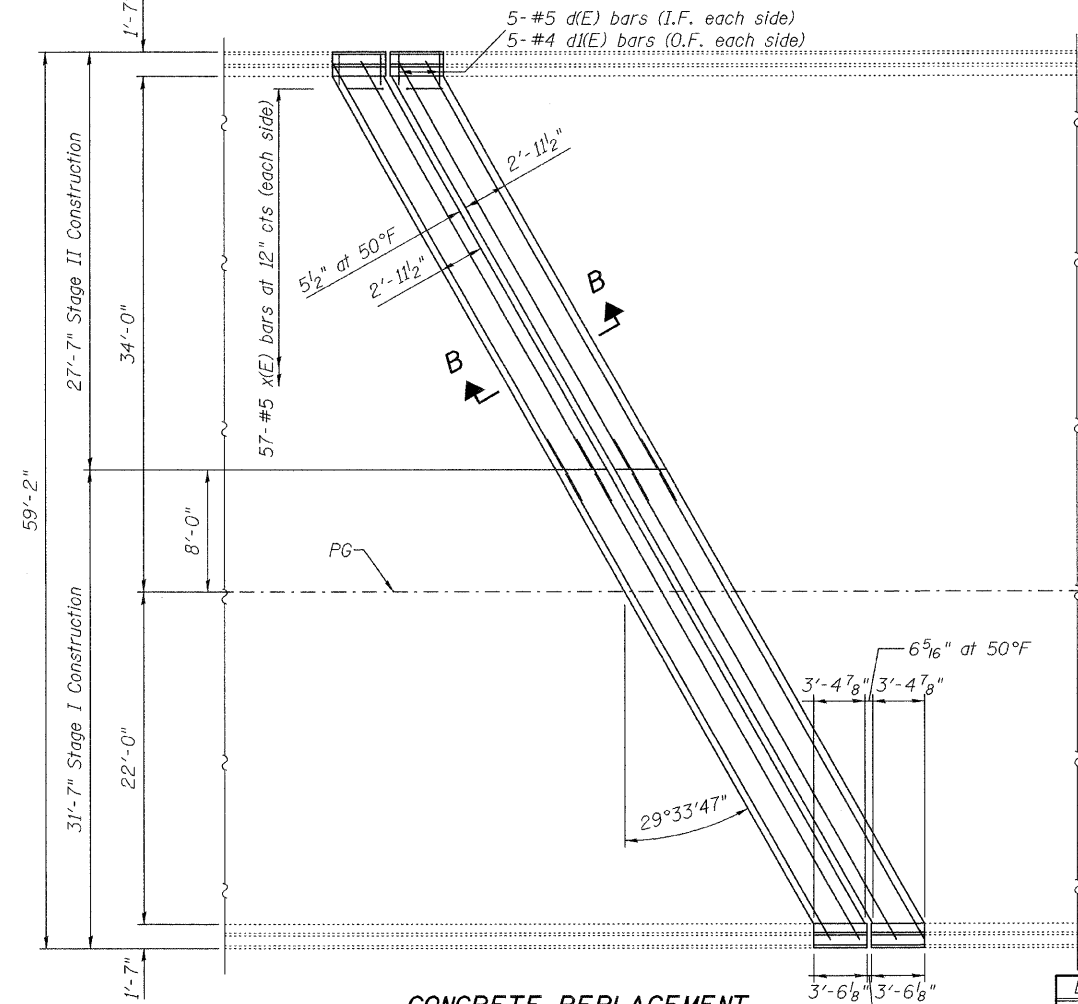
NOVEMBER 5, 2009
EXAMINED *A. Carl Paves*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 6 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	31
			CONTRACT NO. 76926		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CONCRETE REMOVAL
(NB Pier 4 & 8 shown)
(SB Pier 4 & 8 similar)



CONCRETE REPLACEMENT
(NB Pier 4 & 8 shown)
(SB Pier 4 & 8 similar)

**BOTH PIER 4
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a ₂ (E)	14	#6	35'-9"	—
a ₃ (E)	14	#6	31'-2"	—
d(E)	20	#4	4'-7"	L
d ₁ (E)	20	#5	3'-3"	L
x ₁ (E)	114	#5	3'-8"	—
Reinforcement Bars, Epoxy Coated		Pound	1970	
Concrete Superstructure		Cu. Yds.	26.8	
Concrete Removal		Cu. Yds.	29.2	
Finger Plate Expansion Joint, 6"		Foot	129.0	

**BOTH PIER 8
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a ₂ (E)	14	#6	35'-9"	—
a ₃ (E)	14	#6	31'-2"	—
d(E)	20	#4	4'-7"	L
d ₁ (E)	20	#5	3'-3"	L
x ₁ (E)	114	#5	3'-8"	—
Reinforcement Bars, Epoxy Coated		Pound	1970	
Concrete Superstructure		Cu. Yds.	26.8	
Concrete Removal		Cu. Yds.	29.2	
Finger Plate Expansion Joint, 5"		Foot	129.0	

Bars indicated thus 4x2 - #5 etc. indicates 4 line of bars with 2 lengths per line.

See sheet 6 of 20 for Section A-A.

See sheet 11 & 12 of 20 for Section B-B.

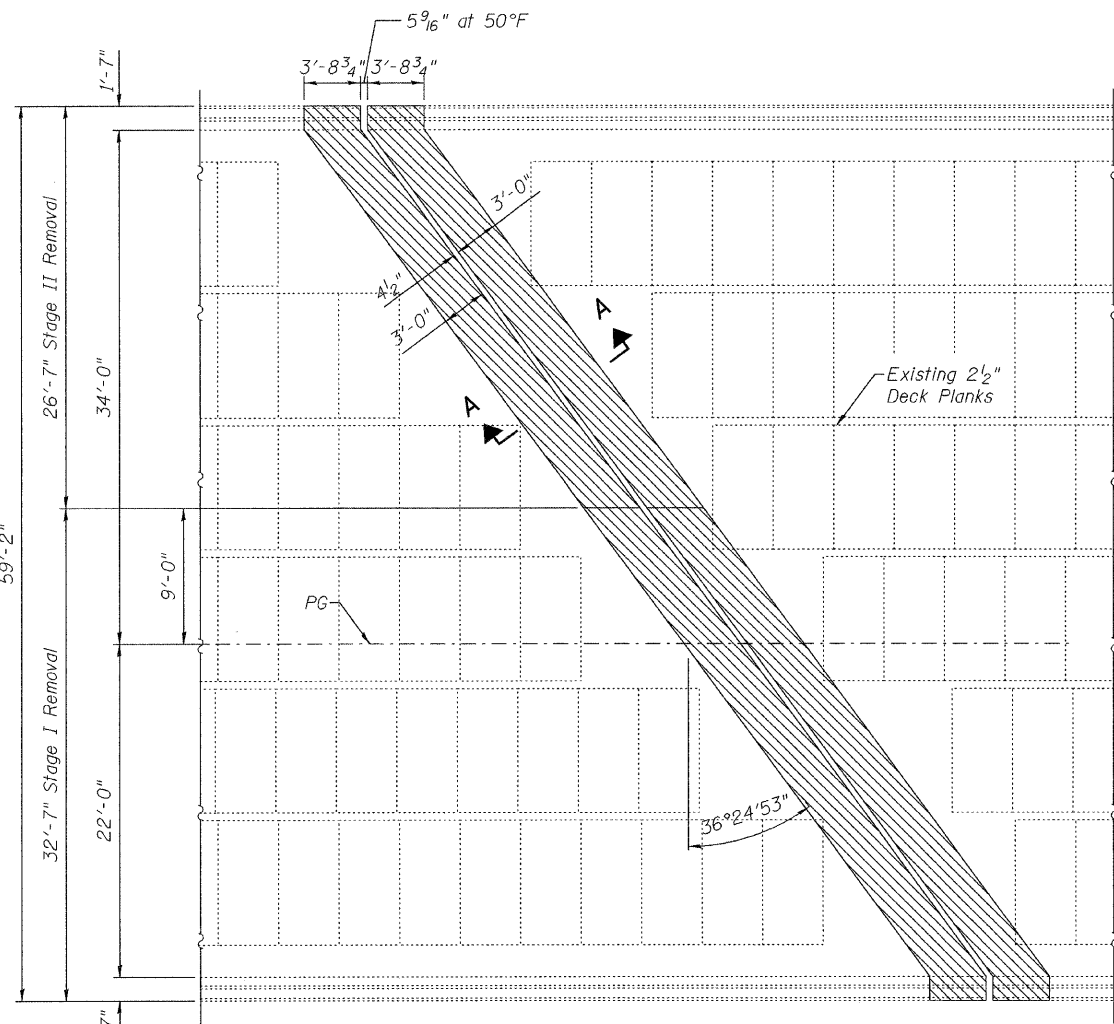
**PIERS 4 & 8
CONCRETE REMOVAL & REPLACEMENT
082-0247 & 0248**

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009
EXAMINED *A. Carl Proyer*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

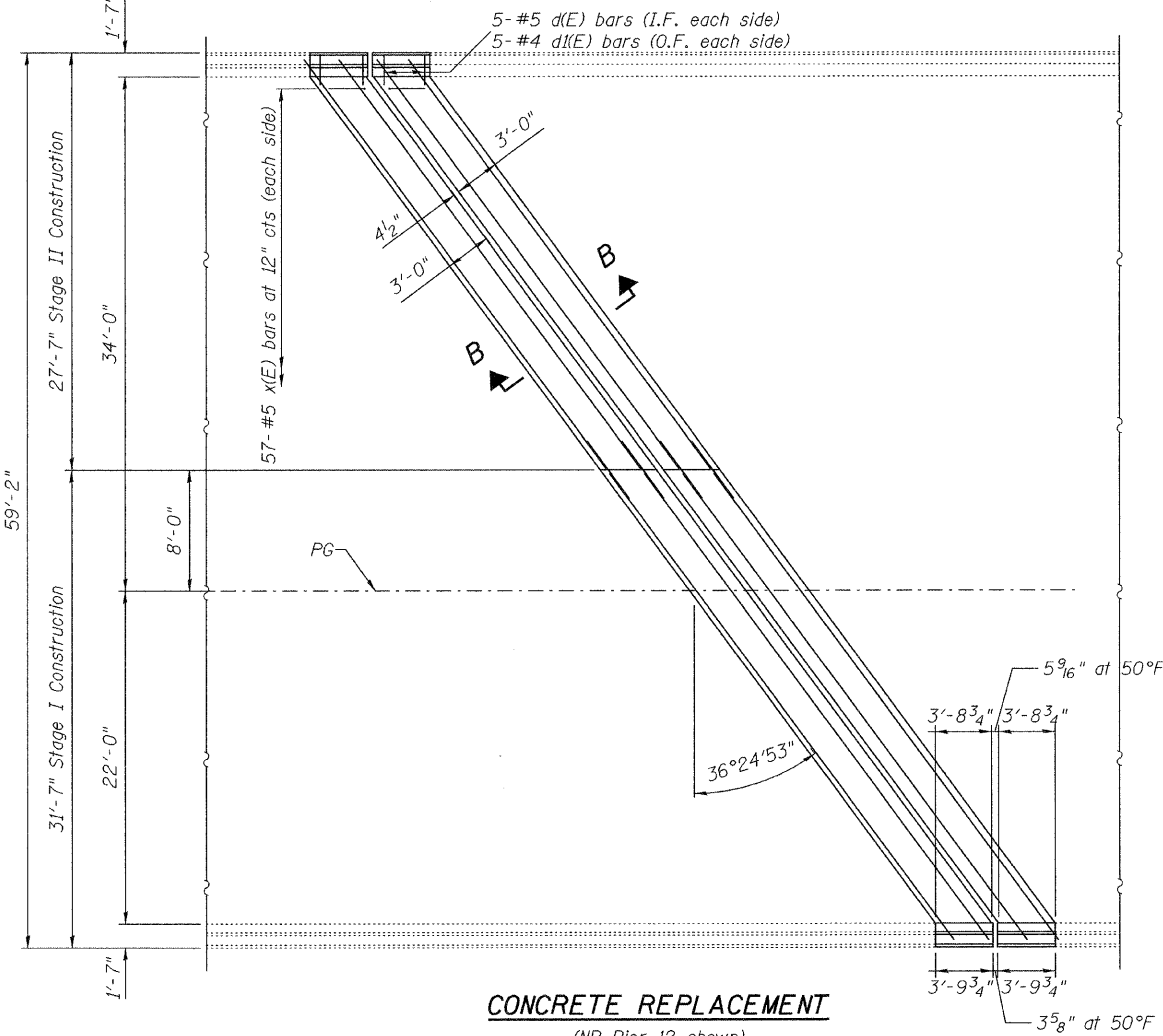
SHEET NO. 7 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	32
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 76926		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



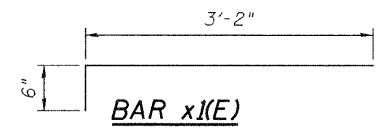
CONCRETE REMOVAL

(NB Pier 12 shown)
(SB Pier 12 similar)



CONCRETE REPLACEMENT

(NB Pier 12 shown)
(SB Pier 12 similar)



**SPAN 1 PARAPET REPAIR
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
e(E)	6	#4	7'-2"	—
e1(E)	6	#4	17'-4"	—
e2(E)	6	#4	13'-2"	—
e3(E)	2	#8	24'-9"	—
e4(E)	2	#5	24'-9"	—
e5(E)	2	#8	13'-3"	—
e6(E)	2	#5	13'-3"	—
Reinforcement Bars, Epoxy Coated		Pound	400	
Concrete Superstructure		Cu. Yds.	4.0	
Concrete Removal		Cu. Yds.	4.0	

**BOTH PIER 12
BILL OF MATERIAL**

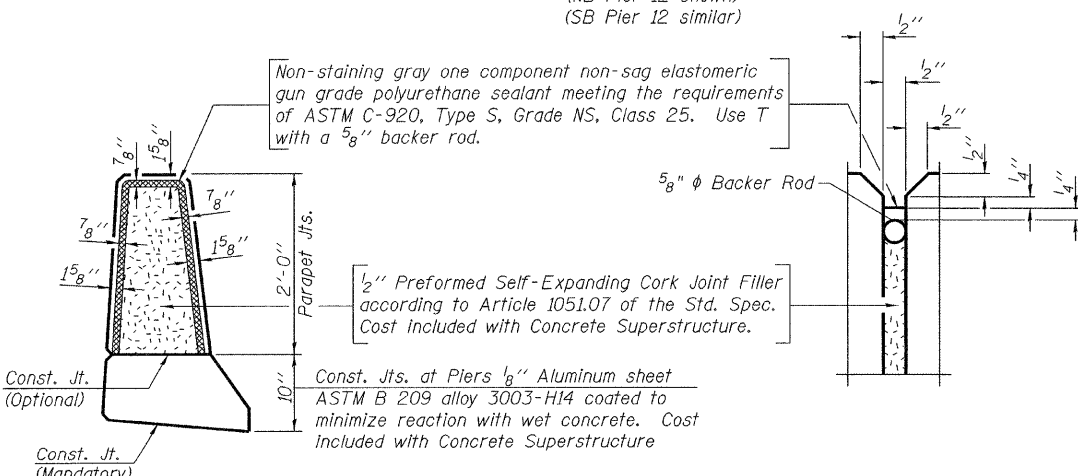
Bar	No.	Size	Length	Shape
a4(E)	14	#6	38'-8"	—
a5(E)	14	#6	33'-9"	—
d(E)	20	#4	4'-7"	L
d1(E)	20	#5	3'-3"	L
x1(E)	114	#5	3'-8"	—
Reinforcement Bars, Epoxy Coated		Pound	2090	
Concrete Superstructure		Cu. Yds.	28.7	
Concrete Removal		Cu. Yds.	31.2	
Finger Plate Expansion Joint, 6"		Foot	139.0	

Bars indicated thus 4x2 -#5 etc. indicates 4 line of bars with 2 lengths per line.

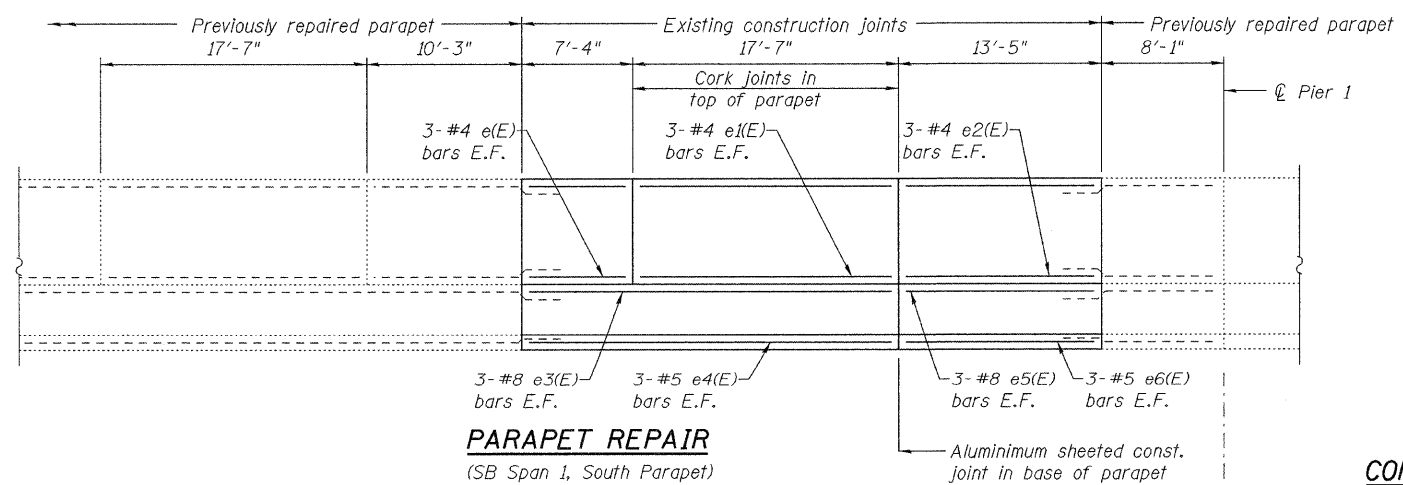
See sheet 6 of 20 for Section A-A.

See sheet 14 of 20 for Section B-B.

**PIER 12 & SPAN 1
CONCRETE REMOVAL & REPLACEMENT
082-0247 & 0248**



PARAPET JOINT DETAILS



PARAPET REPAIR

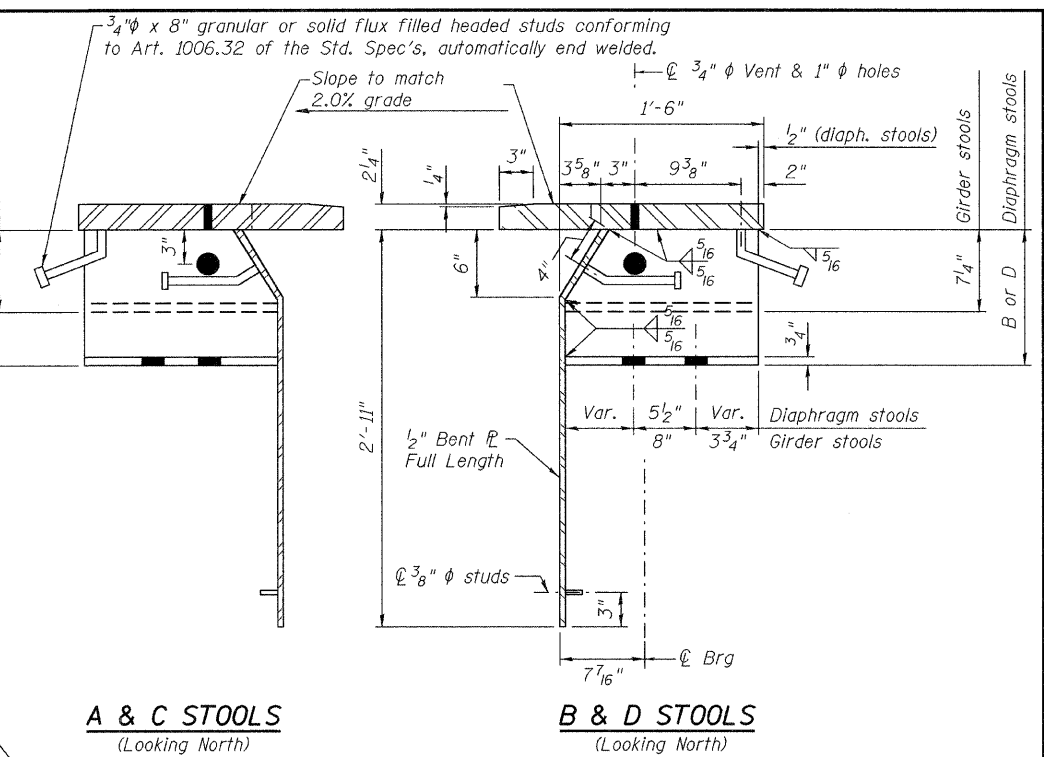
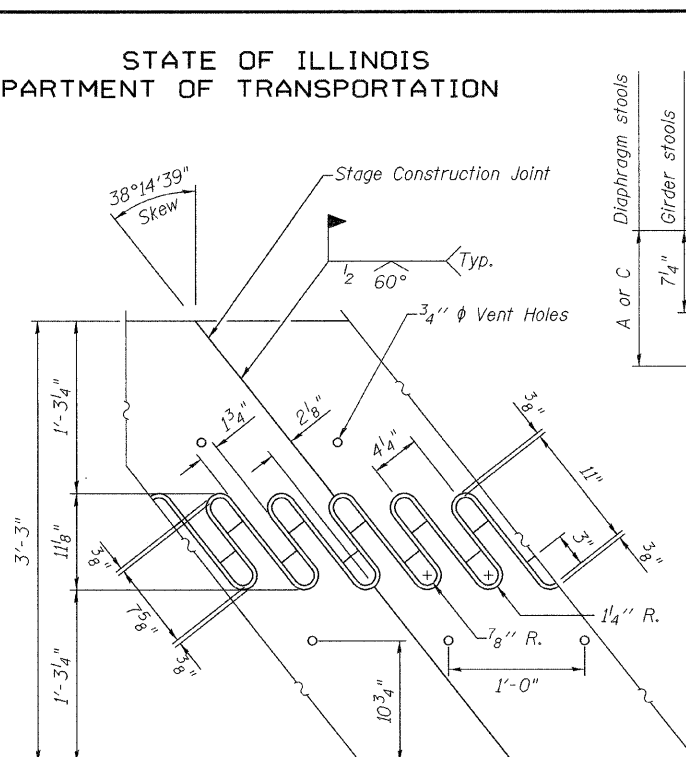
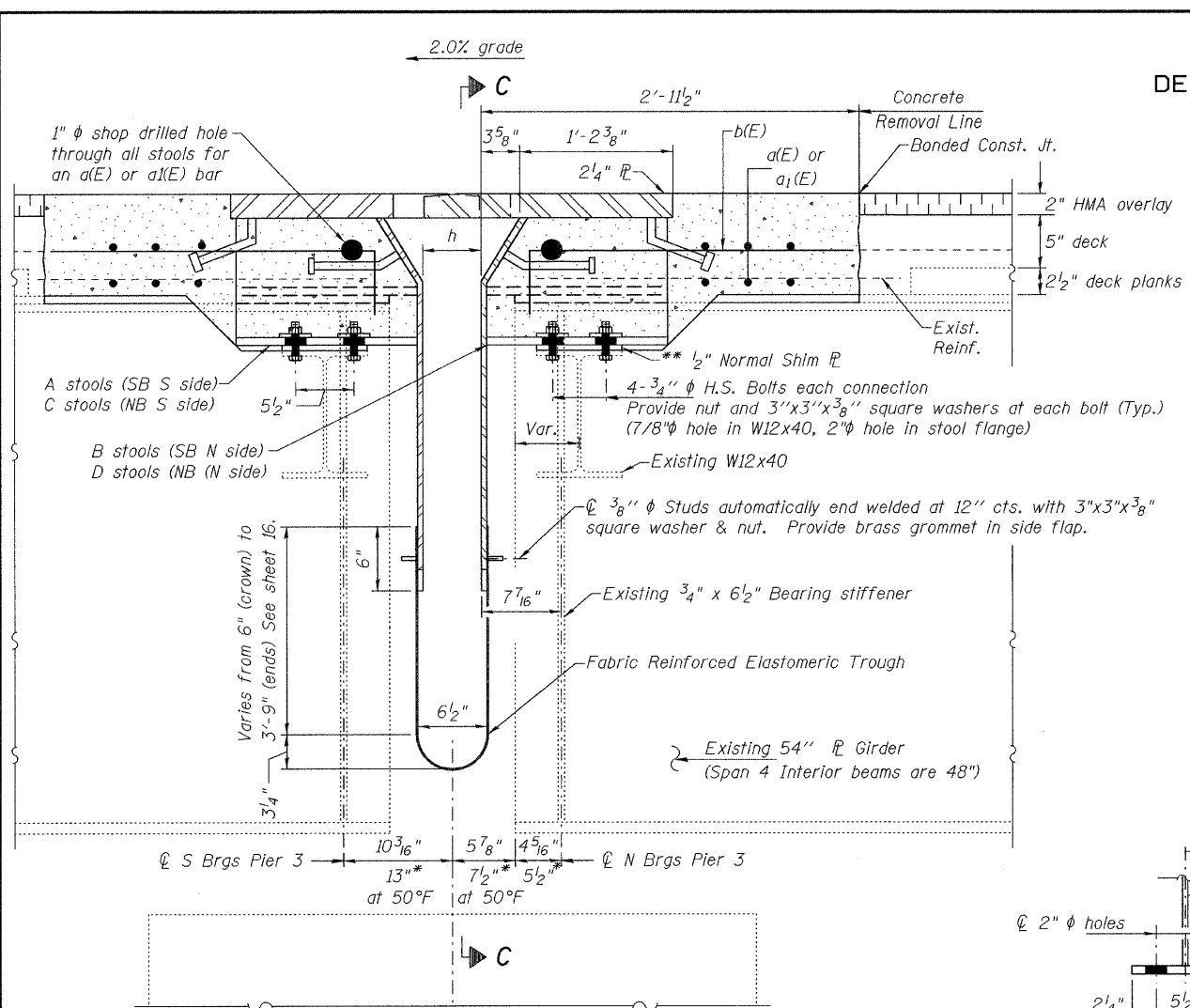
(SB Span 1, South Parapet)
(Looking North)

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009
EXAMINED *Carl Kroy*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 8 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	33
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 76926		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

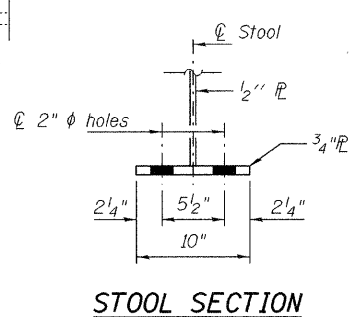


SECTION B-B
(Looking North)

FLAME CUTTING DIAGRAM
(Cut from 2 1/4" x 3'-3" M270 Gr. 50)

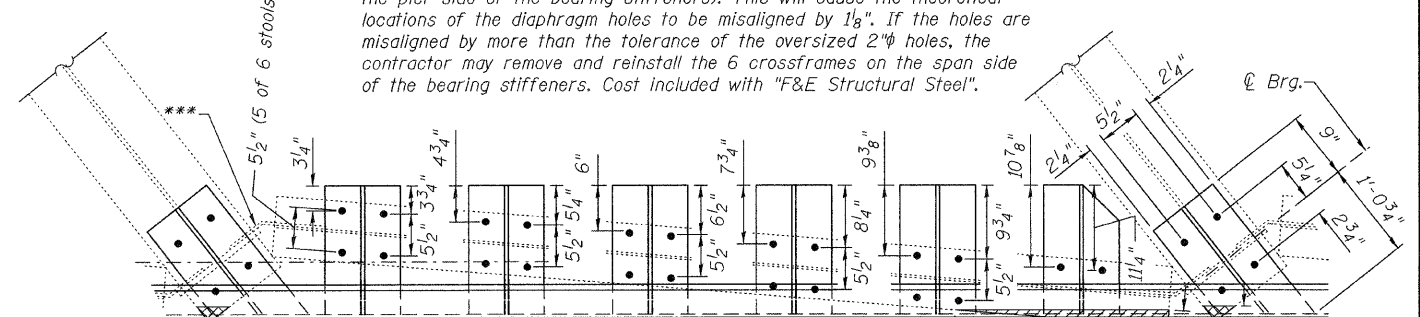
A & C STOOLS
(Looking North)

B & D STOOLS
(Looking North)



STOOL SECTION

*** The crossframes on the east side of NB Pier 3 were installed incorrectly (on the pier side of the bearing stiffeners). This will cause the theoretical locations of the diaphragm holes to be misaligned by 1/8". If the holes are misaligned by more than the tolerance of the oversized 2" holes, the contractor may remove and reinstall the 6 crossframes on the span side of the bearing stiffeners. Cost included with "F&E Structural Steel".



PARTIAL PLAN OF STOOLS

Notes: See sheet 10 of 20 for stool locations.

See sheet 16 of 20 for Section C-C.

Stool heights are measured at center of bearings.

All plates shall be AASHTO M270, Gr. 50.

Existing shear studs that interfere with the finger plate stool 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, 6".

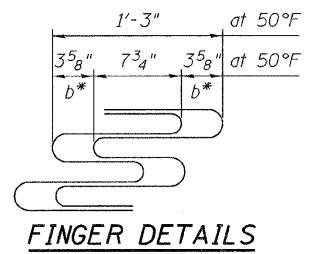
Finger Plate Expansion Joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

DIMENSIONS A & B (SB PIER 3)

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

DIMENSIONS C & D (NB PIER 3)

Stool No.	Height	Stool No.	Height	Stool No.	Height	Stool No.	Height
C2	11 3/8"	C23	16"	D2	11 7/16"	D23	16"
C3	11 5/8"	C24	16 1/8"	D3	11 1/16"	D24	16 3/16"
C4	11 7/8"	C25	16 5/16"	D4	11 5/16"	D25	16 5/16"
C5	12 1/8"	C26	16 7/16"	D5	12 3/16"	D26	16 7/16"
C6	12 3/8"	C27	16 9/16"	D6	12 3/8"	D27	16 9/16"
C7	12 5/8"	C28	16 1/4"	D7	12 5/8"	D28	16 1/4"
C9	13 1/16"	C30	15 5/8"	D9	13 1/8"	D30	15 5/8"
C10	13 5/16"	C31	15 1/4"	D10	13 3/8"	D31	15 5/16"
C11	13 9/16"	C32	15"	D11	13 5/8"	D32	15 1/16"
C12	13 3/4"	C33	14 5/8"	D12	13 13/16"	D33	14 3/4"
C13	14 1/16"	C34	14 1/16"	D13	14 1/16"	D34	14 1/16"
C14	14 1/4"	C35	14 1/16"	D14	14 5/16"	D35	14 1/8"
C16	14 3/4"	C37	13 7/16"	D16	14 13/16"	D37	13 1/2"
C17	15"	C38	13 1/16"	D17	15 1/16"	D38	13 1/8"
C18	15 3/16"	C39	12 4/16"	D18	15 3/16"	D39	12 1/16"
C19	15 5/16"	C40	12 5/16"	D19	15 3/8"	D40	12 5/16"
C20	15 1/2"	C41	11 15/16"	D20	15 1/2"	D41	11 15/16"
C21	15 5/8"	C42	11 1/2"	D21	15 1/16"	D42	11 9/16"



FINGER DETAILS

SB Pier 3 (324' Expansion Length)			NB Pier 3 (452' Expansion Length)		
Temp.	b	h	Temp.	b	h
-30°F	5 5/8"	7 1/8"	-30°F	6 1/2"	7 3/4"
50°F	3 5/8"	5 1/2"	50°F	3 5/8"	5 1/2"
130°F	1 5/8"	3 7/8"	130°F	3 1/4"	3 1/4"

* Measured along center of girder.

** Provide 1/2" normal shim, plus one 1/4" shim, plus one 1/8" shim, and one 1/16" shim for height adjustment. Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint. Theoretical girder stool heights vary from 5 1/4" to 5 5/8". Fabricate all girder stools 5 1/4" tall and shim as needed. Cost shall be included with Finger Plate Expansion Joint, 6".

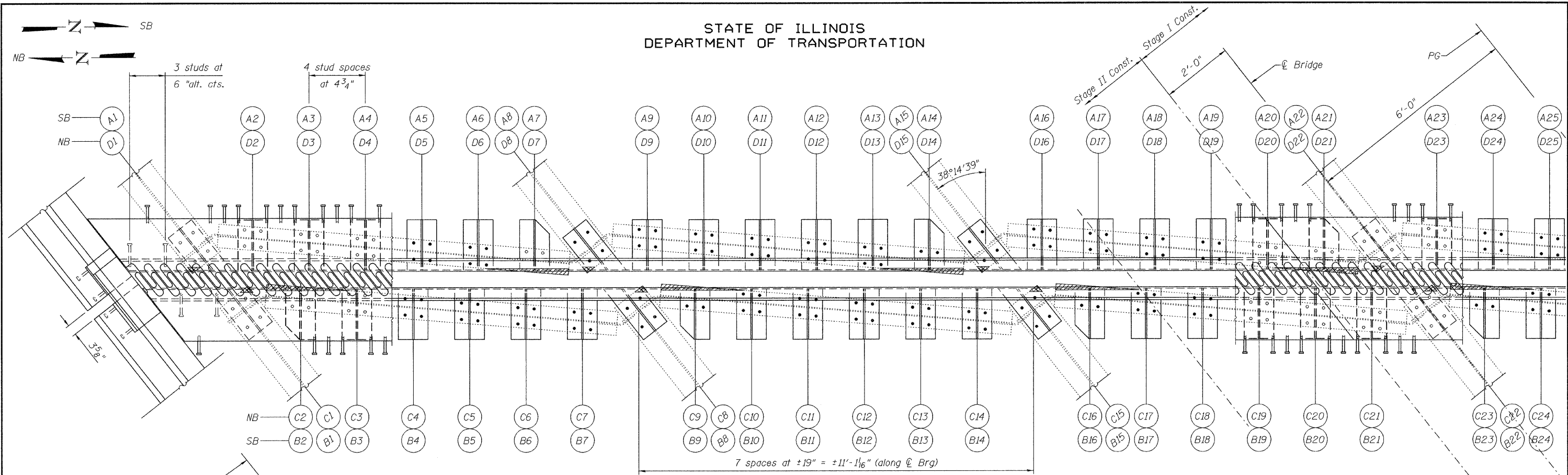
PIER 3 FINGER PLATE DETAILS
SN 082-0247 & 0248

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

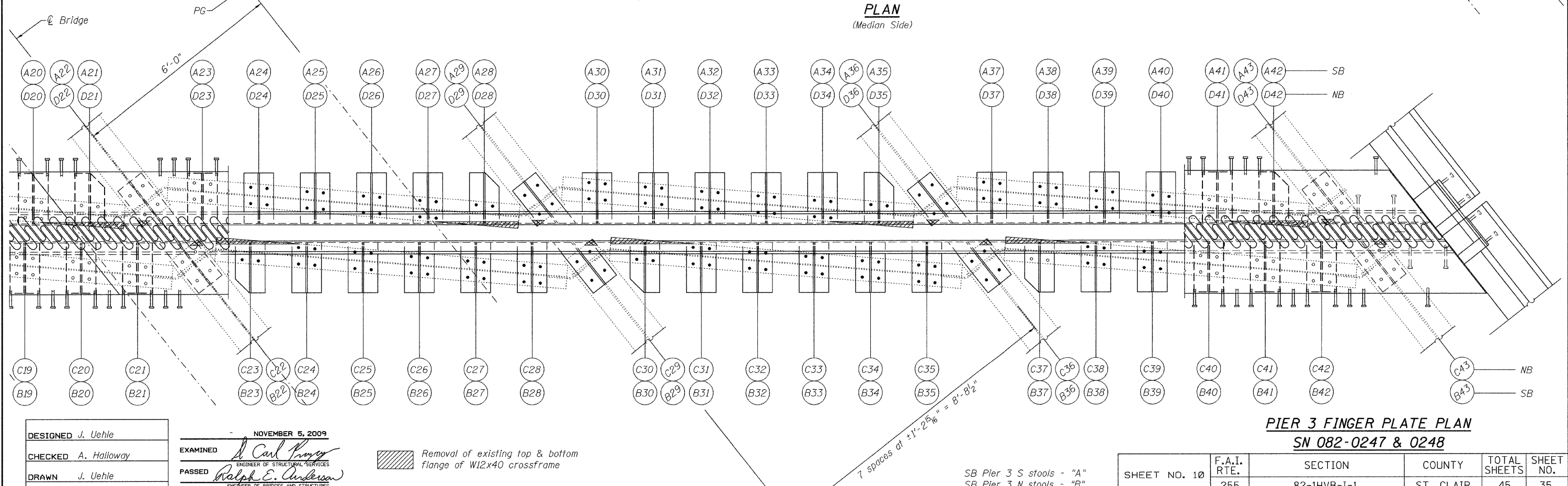
NOVEMBER 5, 2009
EXAMINED *Carl Kroy*
PASSED *Ralph E. Anderson*
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 9 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	34
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 76926 IM-255()		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN
(Median Side)



PLAN
(Outer Side)

PIER 3 FINGER PLATE PLAN
SN 082-0247 & 0248

DESIGNED J. Uehle
CHECKED A. Halloway
DRAWN J. Uehle
CHECKED A. Halloway

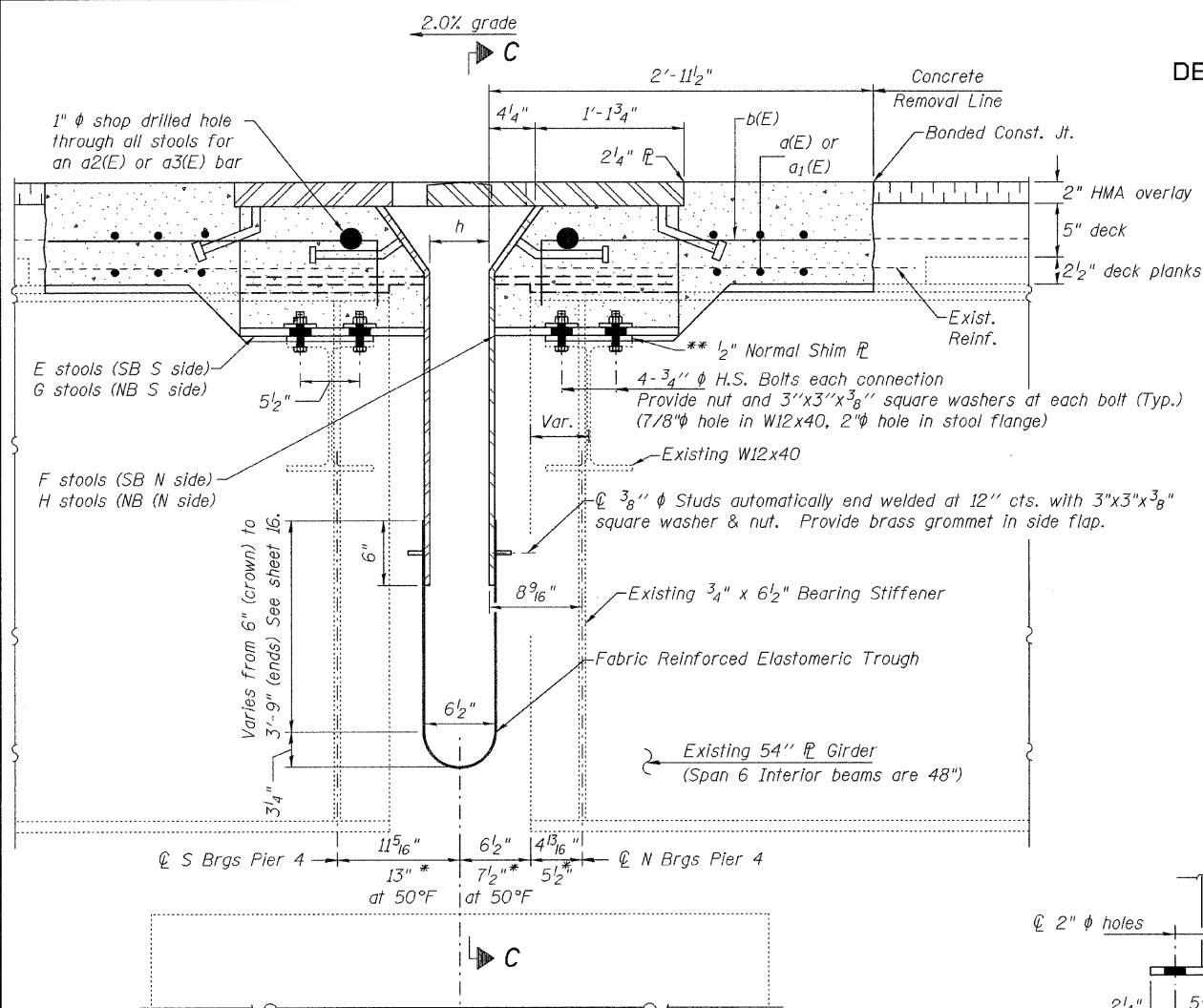
NOVEMBER 5, 2009
EXAMINED *Carl P. ...*
PASSED *Ralph E. Anderson*
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

Removal of existing top & bottom flange of W12x40 crossframe
 Removal of corner of existing top flange of plate girder

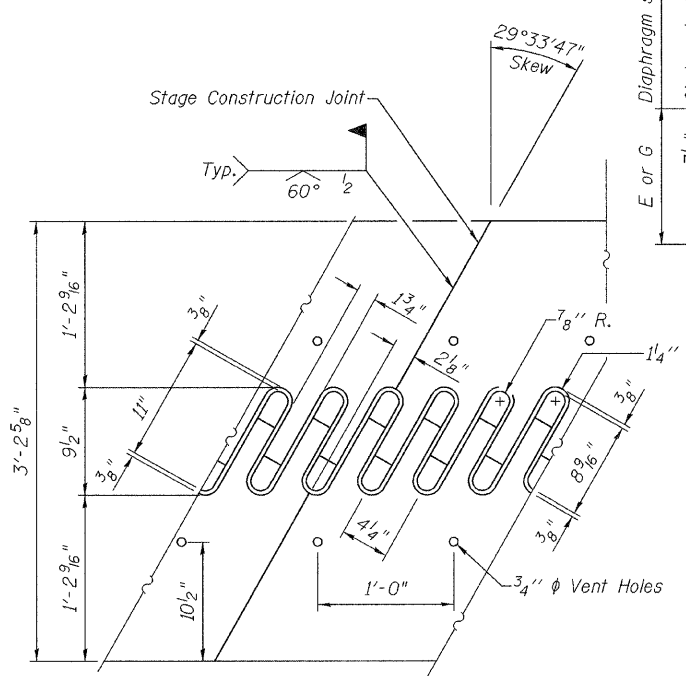
SB Pier 3 S stools - "A"
SB Pier 3 N stools - "B"
NB Pier 3 S stools - "C"
NB Pier 3 N stools - "D"

SHEET NO. 10 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	35
			CONTRACT NO. 76926		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

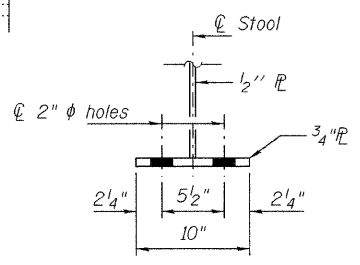
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



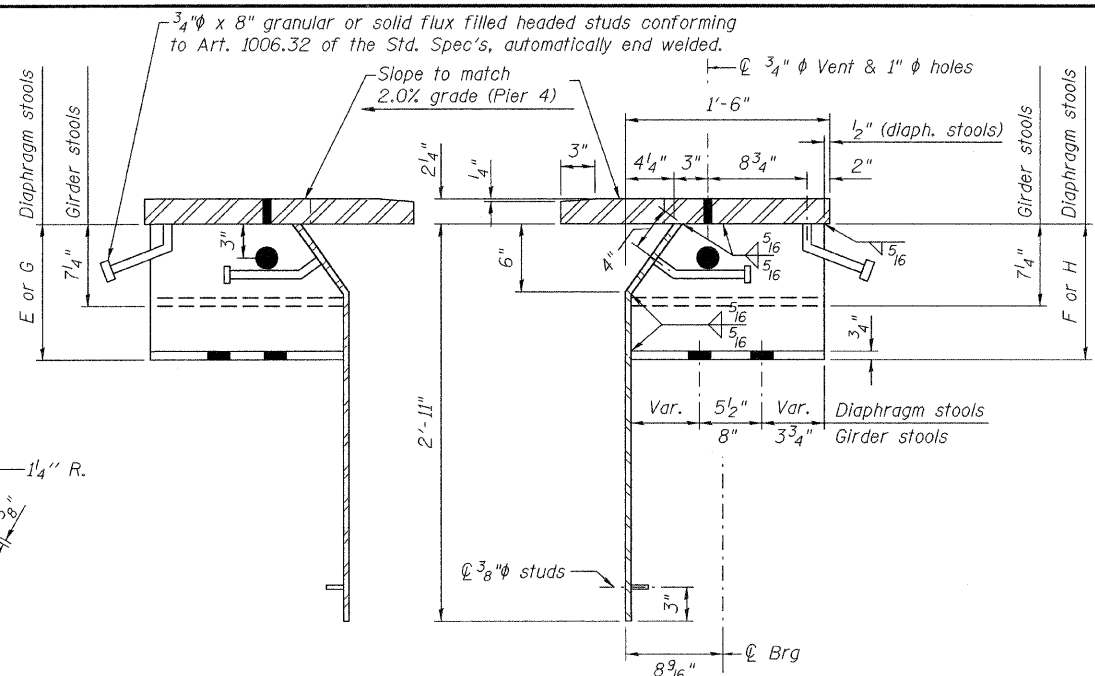
SECTION B-B
(Looking West)



FLAME CUTTING DIAGRAM
(Cut from 2 1/4" x 3'-2 5/8" M270 Gr. 50)

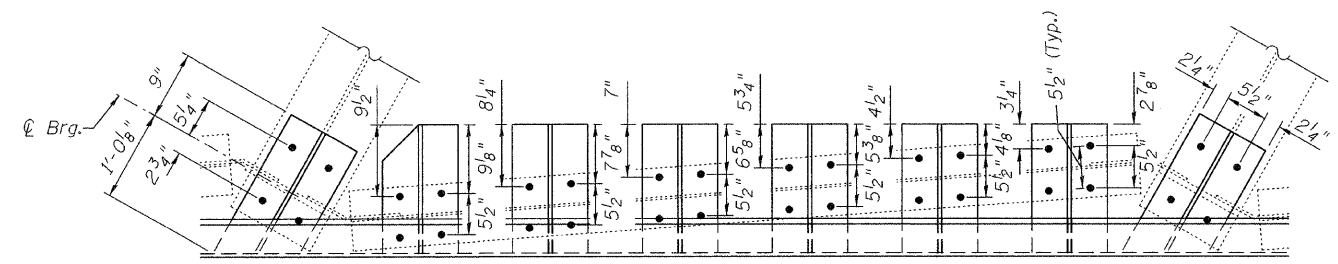


STOOL SECTION



E & G STOOLS
(Looking West)

F & H STOOLS
(Looking West)



PARTIAL PLAN OF STOOLS

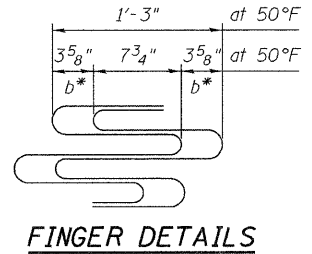
Notes: See sheet 13 of 20 for stool locations.
See sheet 16 of 20 for Section C-C.
Stool heights are measured along ϕ of bearings.

DIMENSIONS E & F (SB PIER 4)

Stool No.	Height	Stool No.	Height	Stool No.	Height	Stool No.	Height
E2	11 3/8"	E23	15 5/16"	F2	11 5/16"	F23	15 7/8"
E3	11 5/8"	E24	16 8/16"	F3	11 9/16"	F24	16 1/16"
E4	11 7/8"	E25	16 5/16"	F4	11 13/16"	F25	16 3/16"
E5	12 1/8"	E26	16 7/16"	F5	12"	F26	16 3/8"
E6	12 5/16"	E27	16 2"	F6	12 1/4"	F27	16 7/16"
E7	12 9/16"	E28	16 1/4"	F7	12 1/2"	F28	16 8/16"
E9	13 1/16"	E30	15 5/8"	F9	13"	F30	15 9/16"
E10	13 5/16"	E31	15 5/16"	F10	13 1/4"	F31	15 1/4"
E11	13 9/16"	E32	15"	F11	13 7/16"	F32	14 5/16"
E12	13 3/4"	E33	14 1/16"	F12	13 1/16"	F33	14 5/8"
E13	14"	E34	14 3/8"	F13	13 5/16"	F34	14 5/16"
E14	14 1/4"	E35	14 1/8"	F14	14 3/16"	F35	14"
E16	14 3/4"	E37	13 7/16"	F16	14 1/16"	F37	13 3/8"
E17	15"	E38	13 1/16"	F17	14 7/8"	F38	13"
E18	15 1/2"	E39	12 1/16"	F18	15 1/8"	F39	12 5/8"
E19	15 5/16"	E40	12 5/16"	F19	15 1/4"	F40	12 1/4"
E20	15 1/2"	E41	11 5/16"	F20	15 3/8"	F41	11 13/16"
E21	15 5/8"	E42	11 9/16"	F21	15 9/16"	F42	11 7/16"

DIMENSIONS G & H (NB PIER 4)

Stool No.	Height	Stool No.	Height	Stool No.	Height	Stool No.	Height
G2	11 3/8"	G23	16"	H2	11 1/4"	H23	15 5/16"
G3	11 9/16"	G24	16 8/16"	H3	11 1/2"	H24	16 1/8"
G4	11 13/16"	G25	16 5/16"	H4	11 3/4"	H25	16 5/16"
G5	12 1/16"	G26	16 1/2"	H5	12"	H26	16 7/16"
G6	12 5/16"	G27	16 9/16"	H6	12 1/4"	H27	16 9/16"
G7	12 9/16"	G28	16 1/4"	H7	12 1/2"	H28	16 1/4"
G9	13 1/16"	G30	15 5/8"	H9	13"	H30	15 5/8"
G10	13 5/16"	G31	15 5/16"	H10	13 1/4"	H31	15 5/16"
G11	13 9/16"	G32	15 1/16"	H11	13 1/2"	H32	15"
G12	13 13/16"	G33	14 3/4"	H12	13 3/4"	H33	14 3/4"
G13	14"	G34	14 7/16"	H13	14"	H34	14 1/16"
G14	14 1/4"	G35	14 8/16"	H14	14 1/4"	H35	14 1/8"
G16	14 3/4"	G37	13 7/16"	H16	14 1/16"	H37	13 1/2"
G17	15"	G38	13 1/16"	H17	14 5/16"	H38	13 1/16"
G18	15 1/2"	G39	12 1/16"	H18	15 1/8"	H39	12 5/8"
G19	15 5/16"	G40	12 5/16"	H19	15 5/16"	H40	12 5/16"
G20	15 1/2"	G41	11 5/16"	H20	15 7/16"	H41	11 5/16"
G21	15 5/8"	G42	11 9/16"	H21	15 5/8"	H42	11 9/16"



FINGER DETAILS

SB & NB Pier 4
461' Expansion Length

Temp.	b	h
-30°F	6 1/2"	8"
50°F	3 5/8"	5 1/2"
130°F	3 1/4"	3"

* Measured along ϕ girder.
** Provide 1/2" normal shim, plus one 1/4" shim, plus one 1/8" shim, and one 1/16" shim for height adjustment. Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint. Theoretical girder stool heights vary from 5 1/4" to 5 5/8". Fabricate all girder stools 5 1/4" tall and shim as needed. Cost shall be included with Finger Plate Expansion Joint, 6".

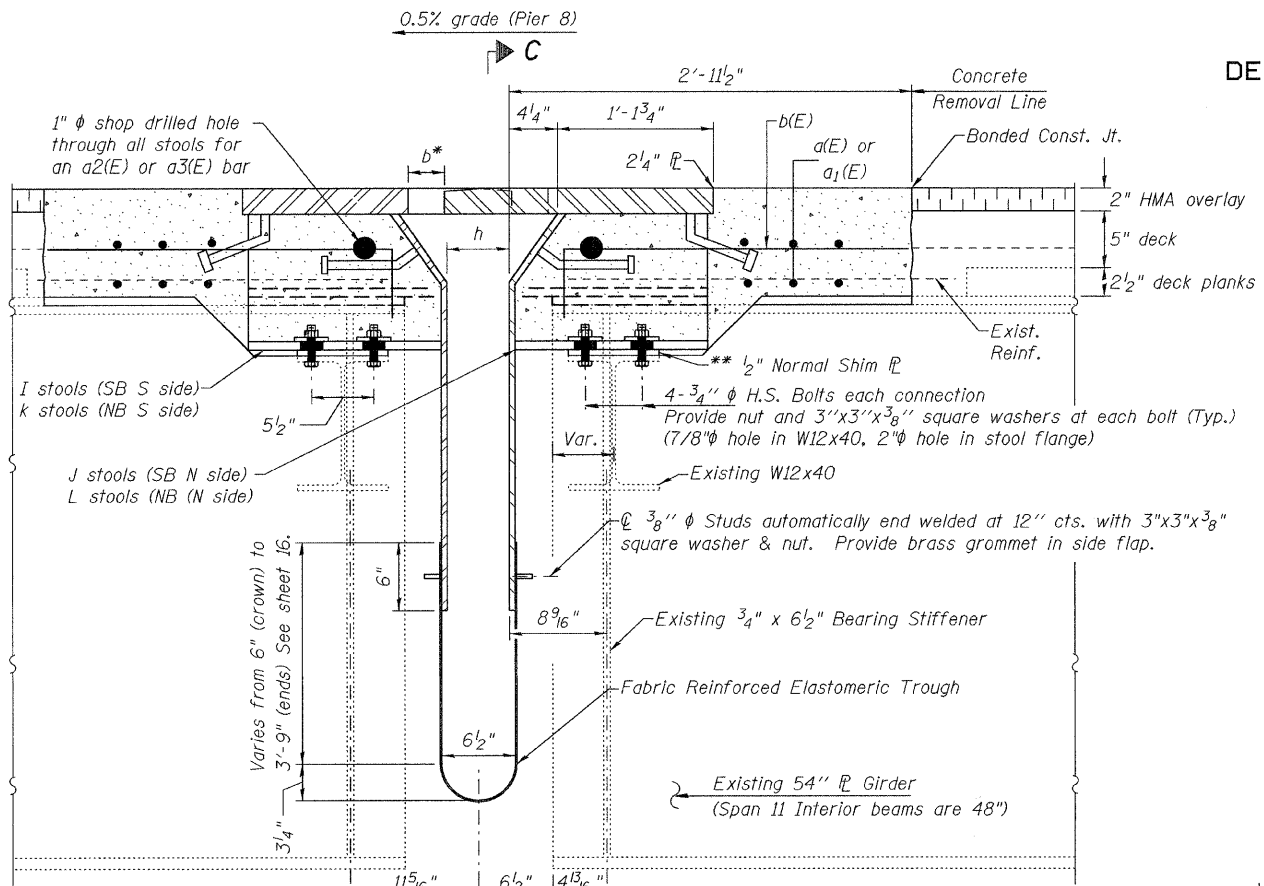
PIER 4 FINGER PLATE DETAILS
SN 082-0247 & 0248

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009
EXAMINED *A. Carl Perry*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 11 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	36
			CONTRACT NO. 76926		
			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT IM-255()		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



SECTION B-B (Looking West)

Notes: See sheet 13 of 20 for stool locations.

See sheet 16 of 20 for Section C-C.

Stool heights are measured along centerline of bearings.

All plates shall be AASHTO M270, Gr. 50.

Existing shear studs that interfere with the finger plate stool 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, 5".

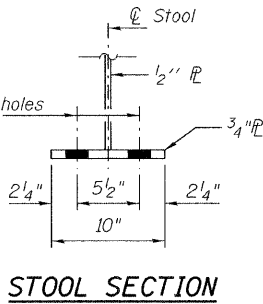
Finger Plate Expansion Joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

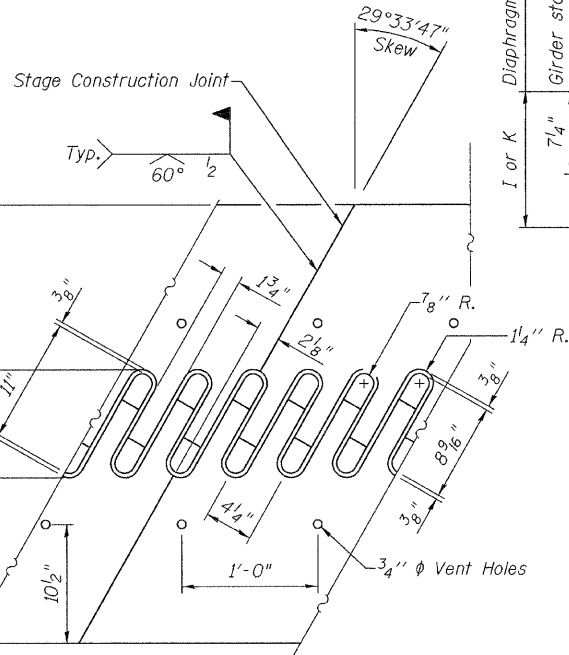
NOVEMBER 5, 2009
EXAMINED *Carl P. ...*
PASSED *Ralph E. ...*
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

DIMENSIONS I & J (SB PIER 8)

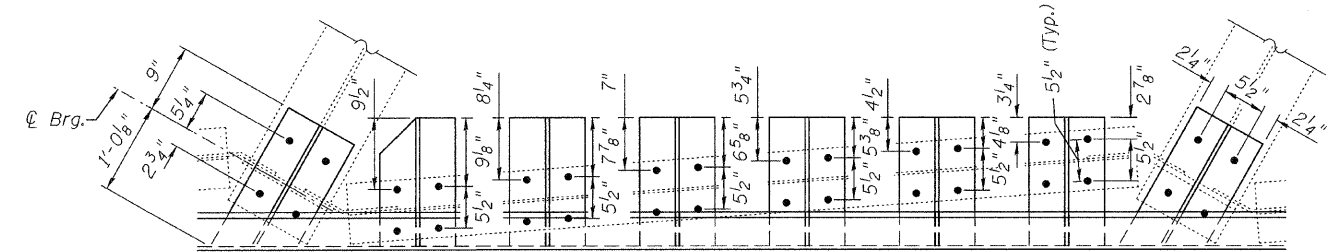
Stool No.	Height	Stool No.	Height	Stool No.	Height	Stool No.	Height
I2	11 3/8"	I23	15 13/16"	J2	11 1/4"	J23	15 7/8"
I3	11 7/8"	I24	16"	J3	11 1/2"	J24	16 1/8"
I4	11 1/2"	I25	16 3/8"	J4	11 3/4"	J25	16 3/8"
I5	11 5/8"	I26	16 5/8"	J5	12"	J26	16 3/8"
I6	12 3/8"	I27	16 3/8"	J6	12 3/8"	J27	16 7/8"
I7	12 7/8"	I28	16 1/8"	J7	12 7/8"	J28	16 1/8"
I9	12 15/16"	I30	15 1/2"	J9	12 15/16"	J30	15 9/16"
I10	13 1/8"	I31	15 3/8"	J10	13 1/8"	J31	15 1/4"
I11	13 3/8"	I32	14 7/8"	J11	13 7/8"	J32	14 15/16"
I12	13 5/8"	I33	14 9/16"	J12	13 1/2"	J33	14 5/8"
I13	13 7/8"	I34	14 1/4"	J13	13 5/8"	J34	14 5/8"
I14	14 1/8"	I35	13 15/16"	J14	14 3/8"	J35	14"
I16	14 5/8"	I37	13 5/16"	J16	14 5/8"	J37	13 3/8"
I17	14 7/8"	I38	12 15/16"	J17	14 7/8"	J38	12 15/16"
I18	15"	I39	12 1/2"	J18	15 1/8"	J39	12 9/16"
I19	15 3/16"	I40	12 1/2"	J19	15 1/4"	J40	12 3/16"
I20	15 3/8"	I41	11 3/4"	J20	15 3/8"	J41	11 13/16"
I21	15 1/2"	I42	11 3/8"	J21	15 9/16"	J42	11 7/16"



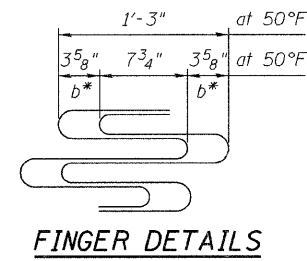
STOOL SECTION



FLAME CUTTING DIAGRAM (Cut from 2 1/4" x 3'-2 5/8" M270 Gr. 50)



PARTIAL PLAN OF STOOLS



FINGER DETAILS

SB & NB Pier 8 (439' Expansion Length)

Temp.	b	h
-30°F	6 3/8"	7 7/8"
50°F	3 5/8"	5 1/2"
130°F	7"	3 3/8"

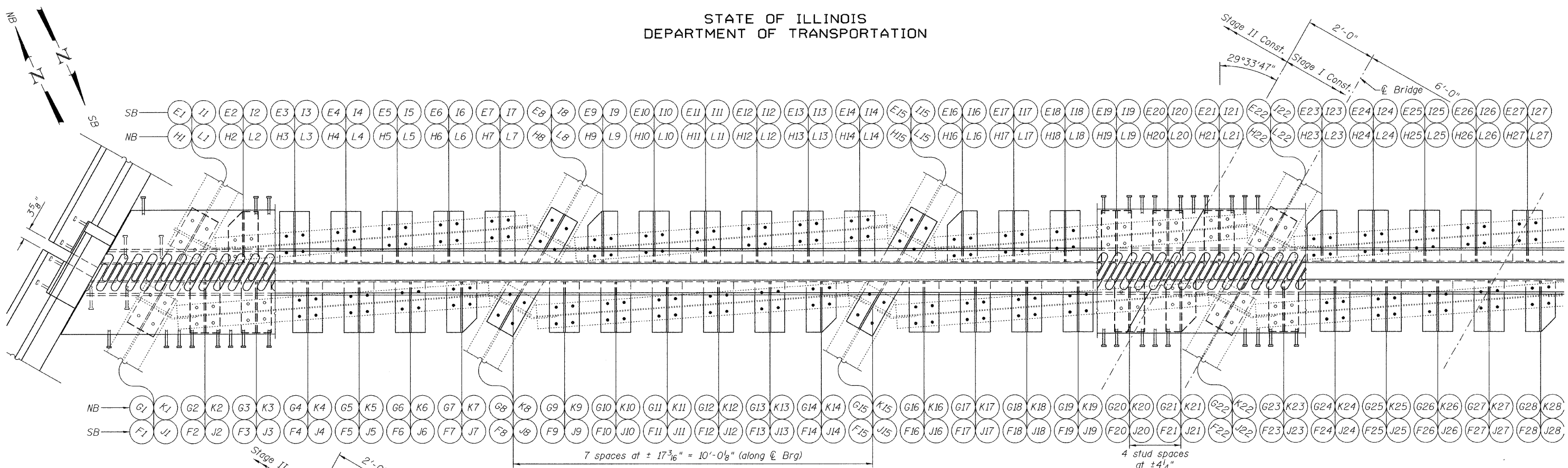
* Measured along centerline of girder.

** Provide 1/2" normal shim, plus one 1/4" shim, plus one 1/8" shim, and one 1/16" shim for height adjustment. Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint. Theoretical girder stool heights vary from 5 1/4" to 5 5/8". Fabricate all girder stools 5 1/4" tall and shim as needed. Cost shall be included with Finger Plate Expansion Joint, 5".

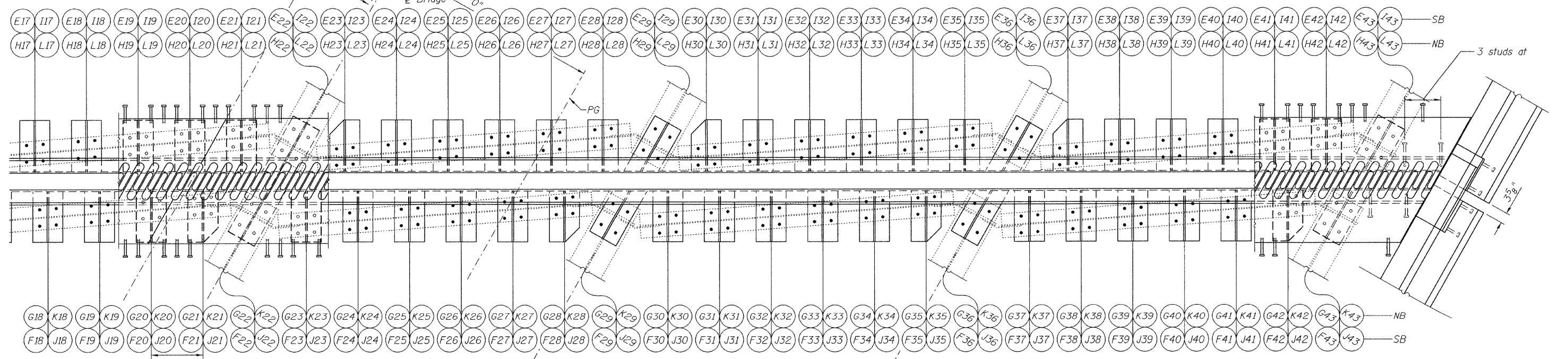
PIER 8 FINGER PLATE DETAILS SN 082-0247 & 0248

SHEET NO. 12 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	37
CONTRACT NO. 76926					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT IM-255()					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN
(Median Side)



PLAN
(Outer Side)

DESIGNED J. Uehle
CHECKED A. Hallway
DRAWN J. Uehle
CHECKED A. Hallway

NOVEMBER 5, 2009
EXAMINED *Carl Perry*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

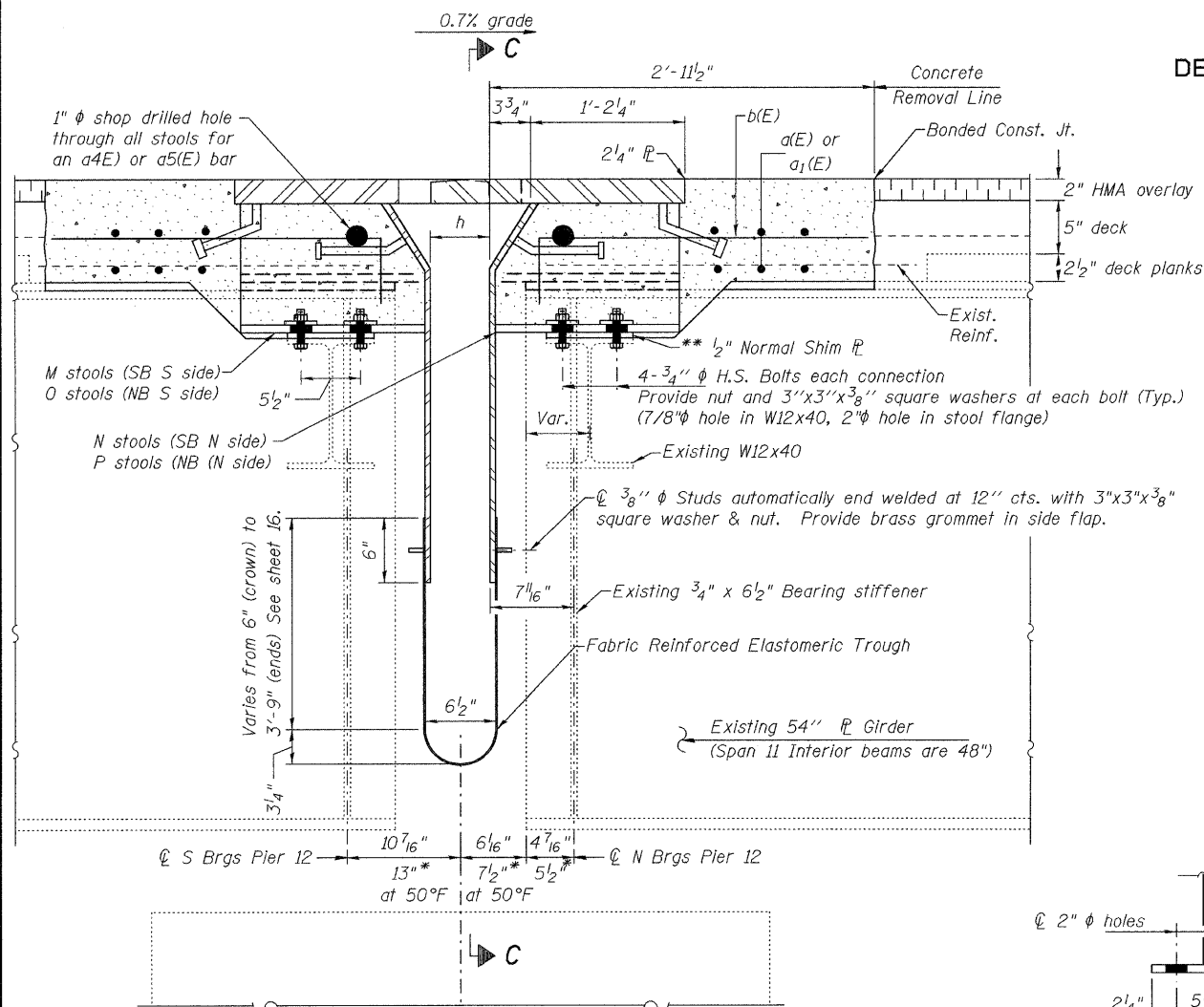
- Removal of existing top & bottom flange of W12x40 crossframe
- Removal of corner of existing top flange of plate girder

- SB Pier 4 S stools - "E"
- SB Pier 4 N stools - "F"
- NB Pier 4 S stools - "G"
- NB Pier 4 N stools - "H"
- SB Pier 8 S stools - "I"
- SB Pier 8 N stools - "J"
- NB Pier 8 S stools - "K"
- NB Pier 8 N stools - "L"

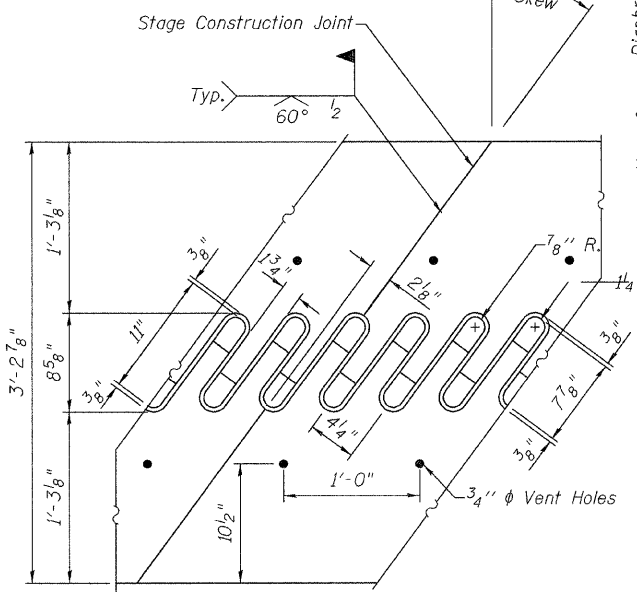
PIER 4 & 8 FINGER PLATE PLAN
SN 082-0247 & 0248

SHEET NO. 13 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	38
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 76926		

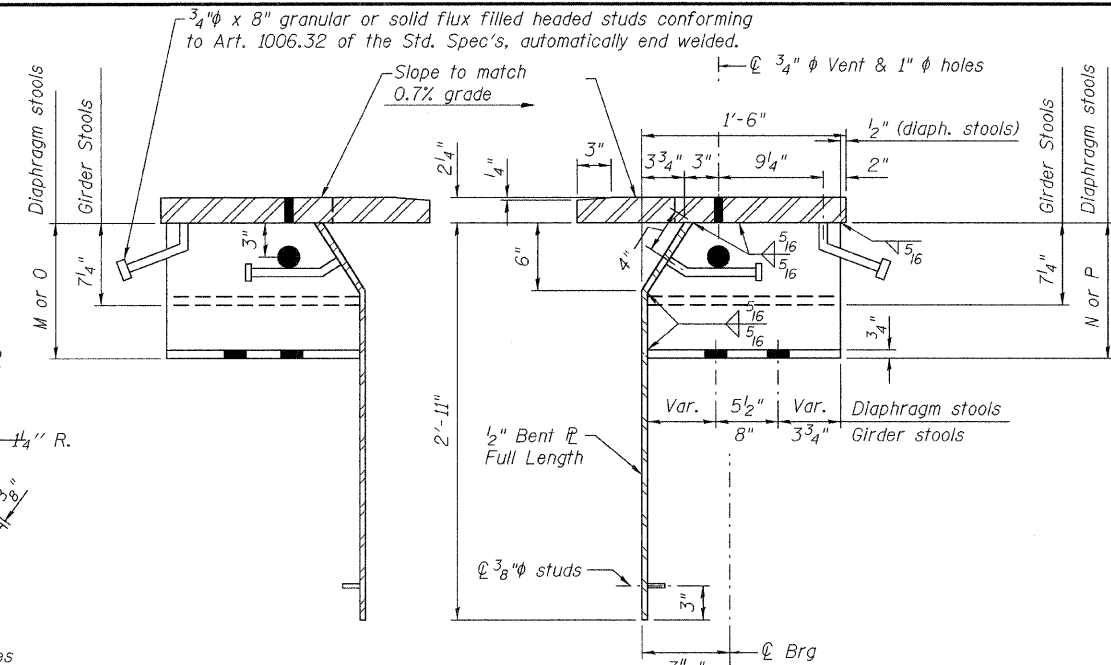
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION B-B
(Looking West)

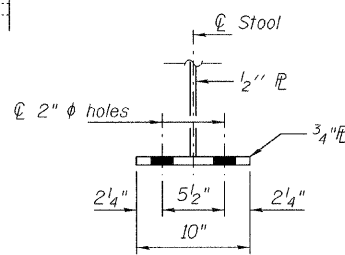


FLAME CUTTING DIAGRAM
(Cut from 2 1/4" x 3'-2 7/8" M270 Gr. 50)

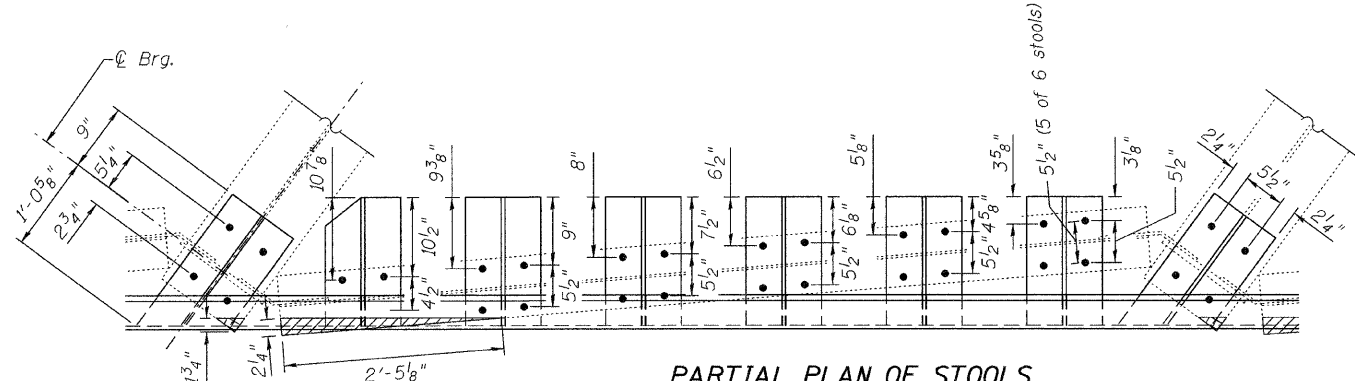


M & O STOOLS
(Looking West)

N & P STOOLS
(Looking West)



STOOL SECTION



PARTIAL PLAN OF STOOLS

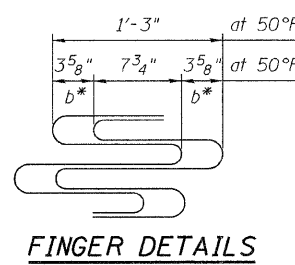
Notes: See sheet 15 of 20 for stool locations.
See sheet 16 of 20 for Section C-C.
Stool heights are measured along ϕ of bearings.

DIMENSIONS M & N (SB PIER 12)

Stool No.	Height	Stool No.	Height	Stool No.	Height	Stool No.	Height
M2	11 7/16"	M23	16"	N2	11 3/8"	N23	16"
M3	11 1/16"	M24	16 3/16"	N3	11 5/8"	N24	16 3/16"
M4	11 5/16"	M25	16 3/8"	N4	11 7/8"	N25	16 5/16"
M5	12 1/8"	M26	16 1/2"	N5	12 1/8"	N26	16 1/2"
M6	12 3/8"	M27	16 9/16"	N6	12 3/8"	N27	16 9/16"
M7	12 5/8"	M28	16 1/4"	N7	12 5/8"	N28	16 1/4"
M9	13 1/8"	M30	15 5/8"	N9	13 1/16"	N30	15 5/8"
M10	13 3/8"	M31	15 3/8"	N10	13 5/16"	N31	15 5/16"
M11	13 5/8"	M32	15 1/16"	N11	13 9/16"	N32	15"
M12	13 7/8"	M33	14 3/4"	N12	13 13/16"	N33	14 1/16"
M13	14 1/16"	M34	14 1/16"	N13	14 1/16"	N34	14 3/8"
M14	14 5/16"	M35	14 1/8"	N14	14 5/16"	N35	14 1/16"
M16	14 13/16"	M37	13 7/16"	N16	14 3/4"	N37	13 7/16"
M17	15 1/16"	M38	13 1/16"	N17	15"	N38	13 1/16"
M18	15 1/4"	M39	12 1/16"	N18	15 3/16"	N39	12 5/8"
M19	15 3/8"	M40	12 1/4"	N19	15 3/8"	N40	12 1/4"
M20	15 9/16"	M41	11 7/8"	N20	15 1/2"	N41	11 9/16"
M21	15 1/16"	M42	11 1/2"	N21	15 1/16"	N42	11 1/2"

DIMENSIONS O & P (NB PIER 12)

Stool No.	Height	Stool No.	Height	Stool No.	Height	Stool No.	Height
O2	11 1/2"	O23	16 1/8"	P2	11 5/16"	P23	15 7/8"
O3	11 3/4"	O24	16 1/4"	P3	11 1/2"	P24	16 1/16"
O4	12"	O25	16 7/16"	P4	11 3/4"	P25	16 3/16"
O5	12 3/16"	O26	16 9/16"	P5	12"	P26	16 5/8"
O6	12 7/16"	O27	16 11/16"	P6	12 1/4"	P27	16 7/16"
O7	12 11/16"	O28	16 3/8"	P7	12 1/2"	P28	16 1/8"
O9	13 3/16"	O30	15 3/4"	P9	13"	P30	15 1/2"
O10	13 7/16"	O31	15 7/16"	P10	13 1/4"	P31	15 3/16"
O11	13 11/16"	O32	15 9/16"	P11	13 1/2"	P32	14 15/16"
O12	13 15/16"	O33	14 13/16"	P12	13 11/16"	P33	14 5/8"
O13	14 1/16"	O34	14 1/2"	P13	13 15/16"	P34	14 5/16"
O14	14 3/8"	O35	14 3/16"	P14	14 3/16"	P35	14"
O16	14 7/8"	O37	13 9/16"	P16	14 1/16"	P37	13 5/16"
O17	15 1/8"	O38	13 1/8"	P17	14 5/16"	P38	12 15/16"
O18	15 5/16"	O39	12 3/4"	P18	15 1/16"	P39	12 9/16"
O19	15 9/16"	O40	12 3/8"	P19	15 1/4"	P40	12 1/8"
O20	15 3/8"	O41	12"	P20	15 7/16"	P41	11 3/4"
O21	15 1/16"	O42	11 5/8"	P21	15 9/16"	P42	11 3/8"



FINGER DETAILS

SB & NB Pier 12
(445' Expansion Length)

Temp.	b	h
-30°F	6 3/8"	7 3/4"
50°F	3 5/8"	5 1/2"
130°F	7 8"	7 3/4"

* Measured along ϕ girder.
** Provide 1/2" normal shim, plus one 1/4" shim, plus one 1/8" shim, and one 1/16" shim for height adjustment. Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint.
Theoretical girder stool heights vary from 5 1/4" to 5 5/8". Fabricate all girder stools 5 1/4" tall and shim as needed. Cost shall be included with Finger Plate Expansion Joint, 6".

PIER 12 FINGER PLATE DETAILS
SN 082-0247 & 0248

DESIGNED	J. Uehle
CHECKED	A. Halloway
DRAWN	J. Uehle
CHECKED	A. Halloway

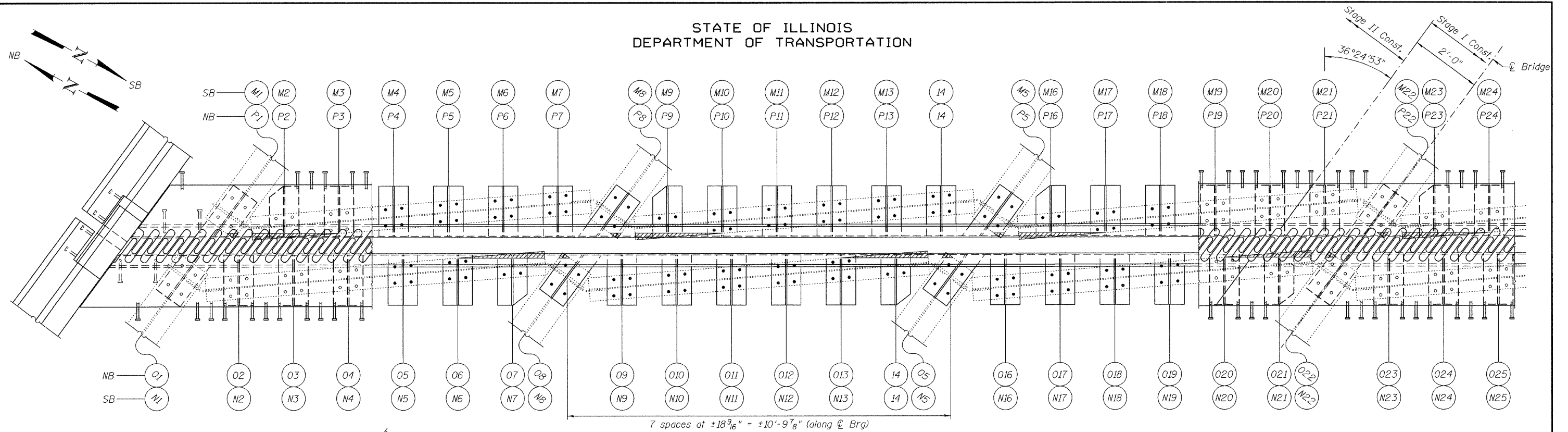
NOVEMBER 5, 2009

EXAMINED	<i>A. Carl Powers</i>
PASSED	<i>Ralph E. Anderson</i>

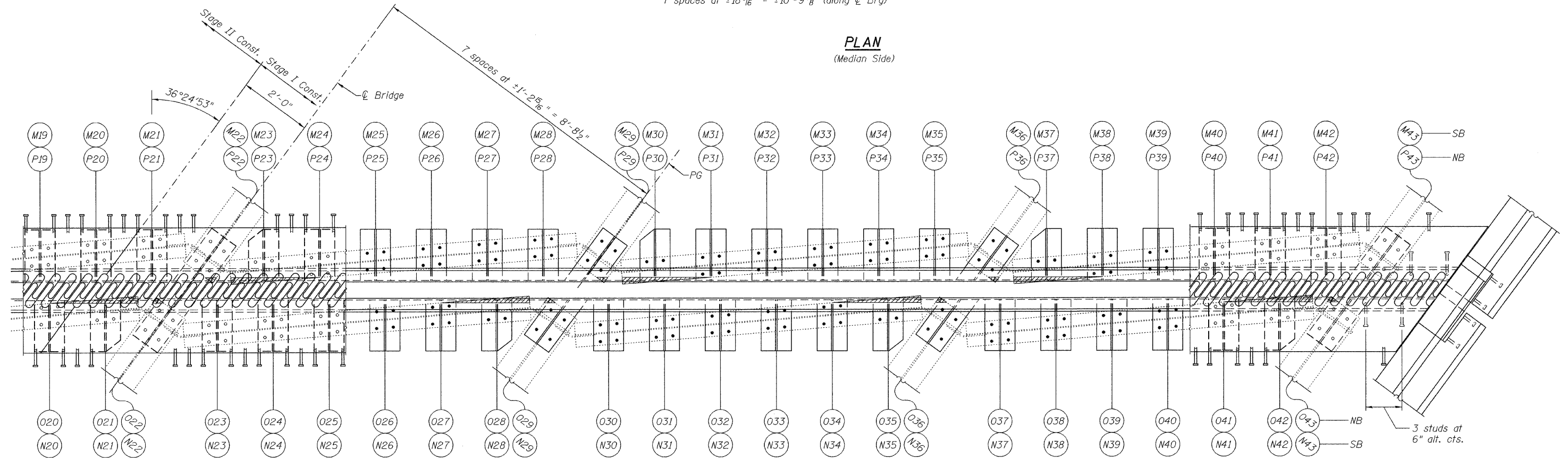
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 14 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	39
	CONTRACT NO. 76926			IM-255()	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN
(Median Side)



PLAN
(Outer Side)

PIER 12 FINGER PLATE PLAN
SN 082-0247 & 0248

DESIGNED	J. Uehle
CHECKED	A. Halloway
DRAWN	J. Uehle
CHECKED	A. Halloway

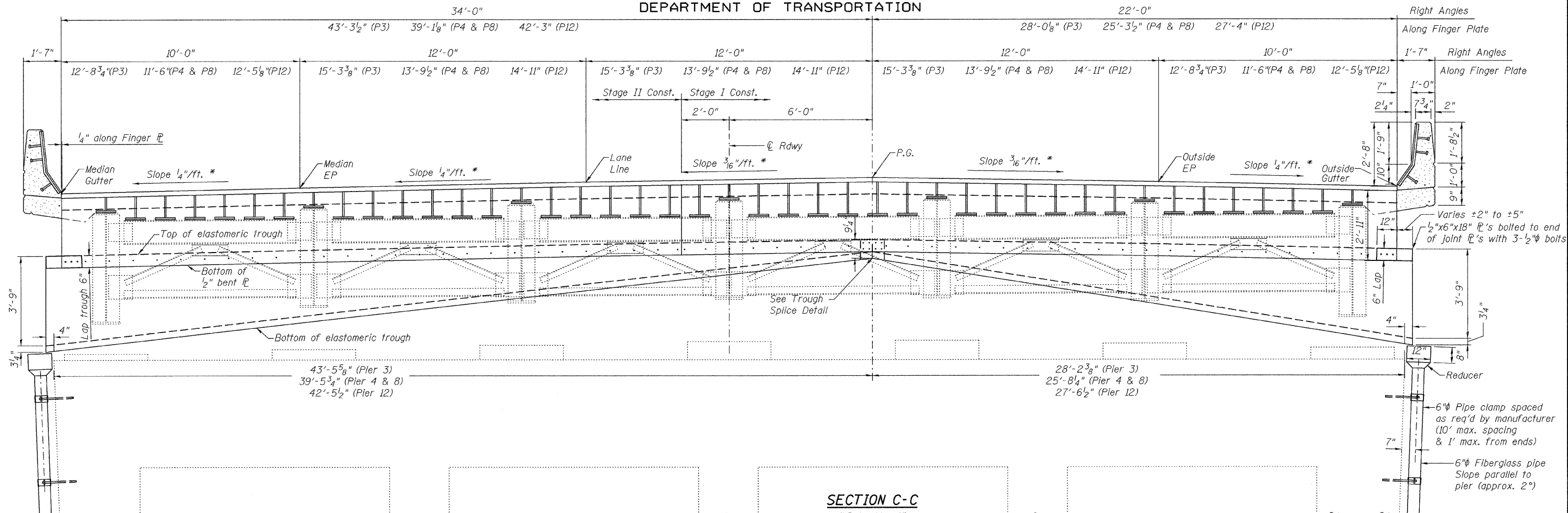
NOVEMBER 5, 2009
EXAMINED *A. Carl Poyner*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

- Removal of existing top & bottom flange of W12x40 crossframe
- Removal of corner of existing top flange of plate girder

SB Pier 12 S stools - "M"
SB Pier 12 N stools - "N"
NB Pier 12 S stools - "O"
NB Pier 12 N stools - "P"

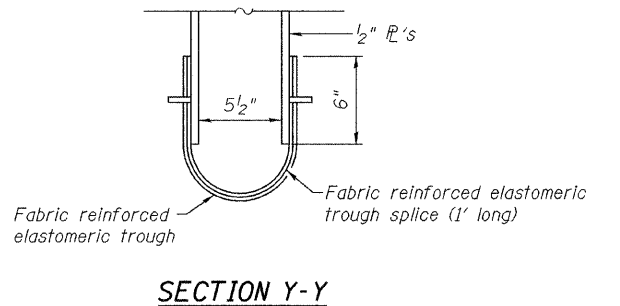
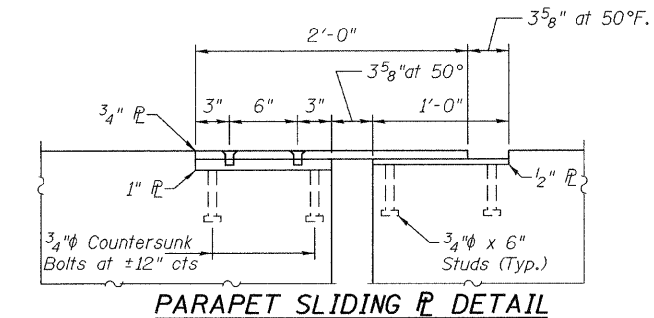
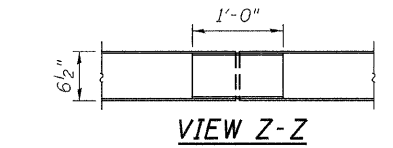
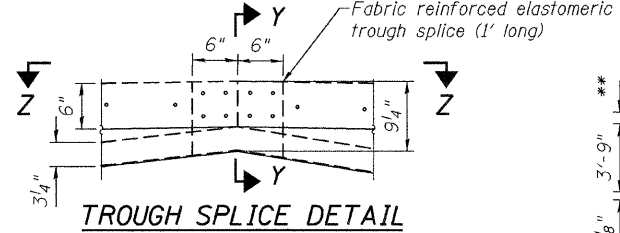
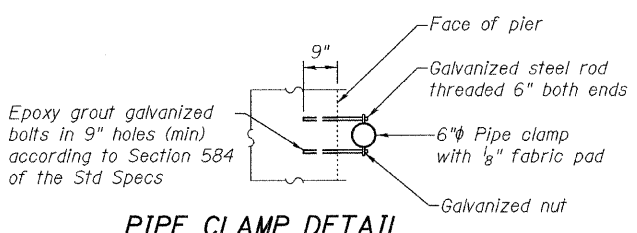
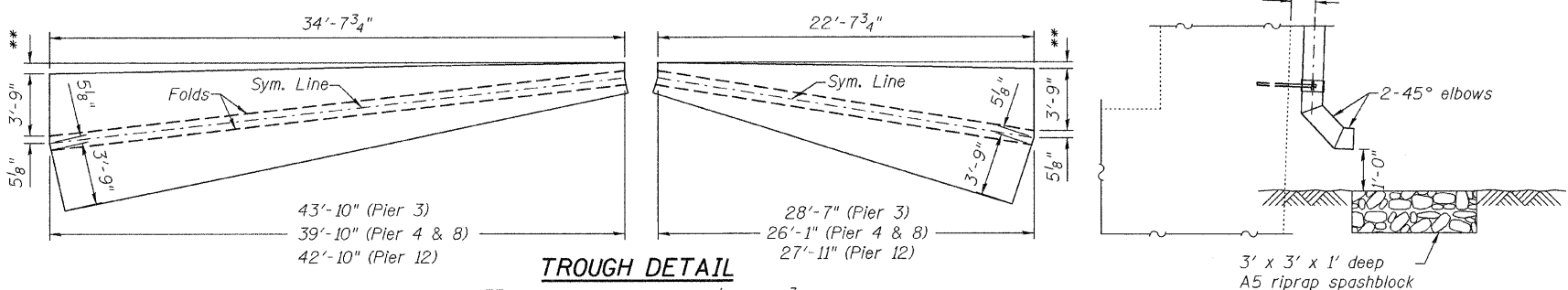
SHEET NO. 15 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	40
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 76926		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION C-C

(NB Looking N)
(SB Looking S)



* Slopes are at right angles. Slopes along finger plate vary. (See elevations below).

** Gutter drop varies from 1/2" to 12 3/8" (See elevations below).

Notes:

- Fiberglass pipe shall conform to ASTM D2996 with short-time rupture strength hoop tensile stress of 29,000 psi minimum. The surface of the fiberglass pipe shall be free of bond inhibiting agents.
- The clamping device and inserts shall be galvanized according to AASHTO M232.
- Space drilled holes in existing concrete to miss existing reinforcement.
- All fiberglass pipe, elbows, connections, pipe clamps, anchor bolts, and reducers are included in the cost of "DRAINAGE SYSTEM".

Top of Finger Plate Elevations (at C.L. Brgs)

	Pier 3		Pier 4		Pier 8		Pier 12	
	S. Brg.	N. Brg.	S. Brg.	N. Brg.	S. Brg.	N. Brg.	S. Brg.	N. Brg.
SB Outside Gutter	448.80	448.85	454.10	454.14	461.05	461.06	461.37	461.36
SB Outside EP	448.85	448.90	454.42	454.46	461.30	461.31	461.54	461.53
SB PG	448.85	448.89	454.75	454.79	461.53	461.54	461.68	461.67
SB Median Lane Line	448.47	448.51	454.70	454.74	461.38	461.40	461.44	461.43
SB Median EP	448.03	448.07	454.58	454.63	461.17	461.19	461.14	461.12
SB Median Gutter	447.66	447.70	454.49	454.53	461.00	461.01	460.88	460.87
NB Median Gutter	446.96	447.00	454.99	455.04	461.14	461.15	460.66	460.64
NB Median EP	447.01	447.05	455.32	455.36	461.37	461.38	460.81	460.79
NB Median Lane Line	447.07	447.11	455.70	455.74	461.66	461.67	460.99	460.97
NB PG	447.06	447.11	456.02	456.07	461.87	461.88	461.11	461.09
NB Outside EP	446.69	446.73	455.97	456.01	461.72	461.73	460.84	460.83
NB Outside Gutter	446.32	446.36	455.87	455.91	461.53	461.54	460.57	460.55

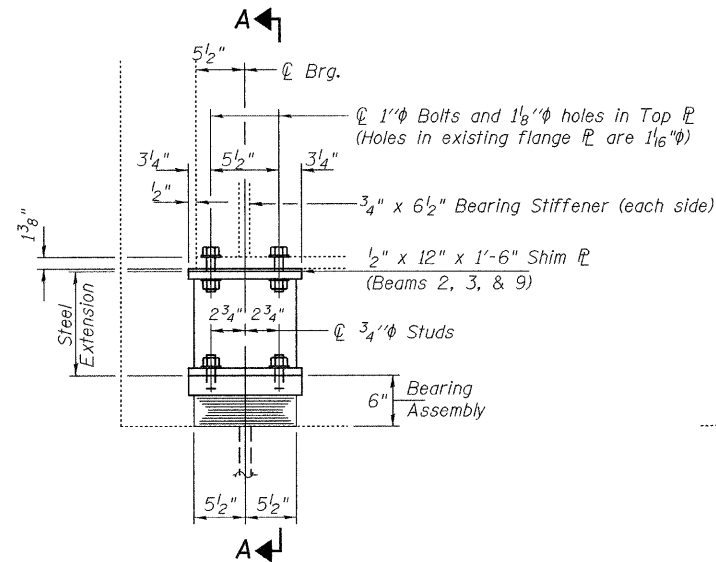
FINGER PLATE DETAILS
SN 082-0247 & 0248

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009
EXAMINED *Carl P. ...*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

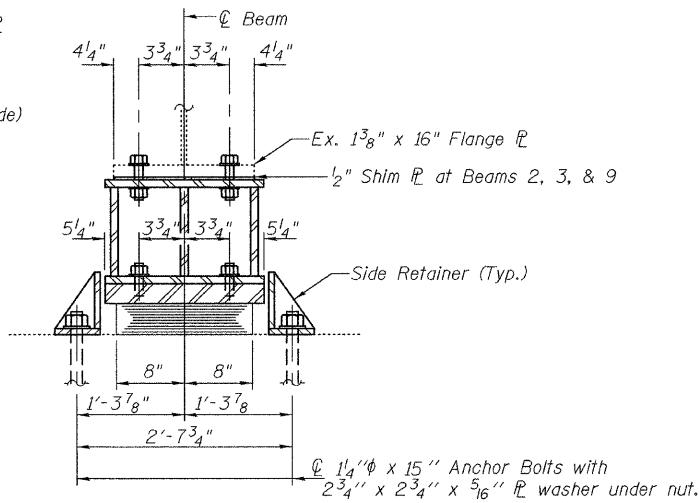
SHEET NO. 16 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	41
CONTRACT NO. 76926					
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION AT ABUTMENT

TYPE I ELASTOMERIC EXP. BRG.

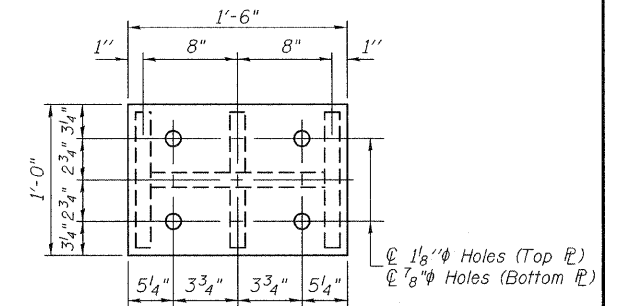


SECTION A-A

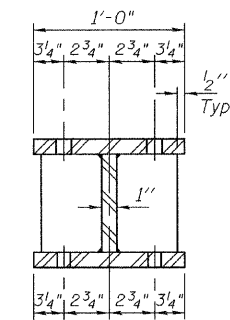
BEAM REACTIONS

R _P	(K)	70.3
R _L	(K)	51.9
Imp.	(K)	15.6
R (Total)	(K)	137.8

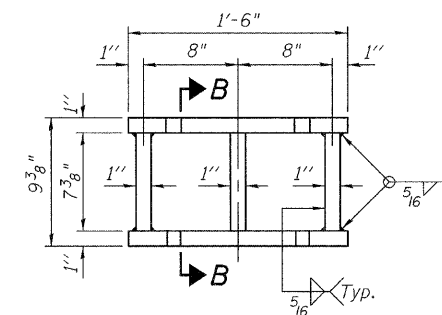
Notes:
Cross-frame removal and installation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 80 Tons.
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 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



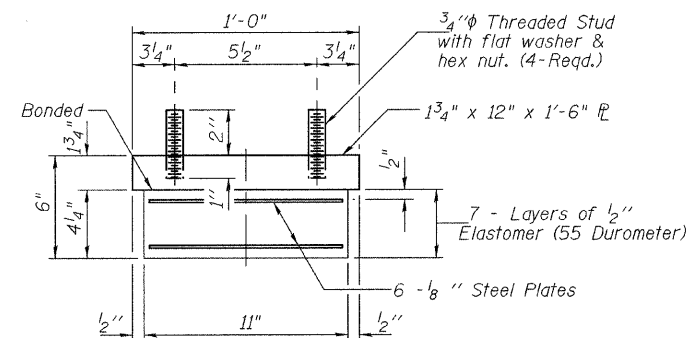
PLAN TOP AND BOTTOM PLATE



SECTION B-B

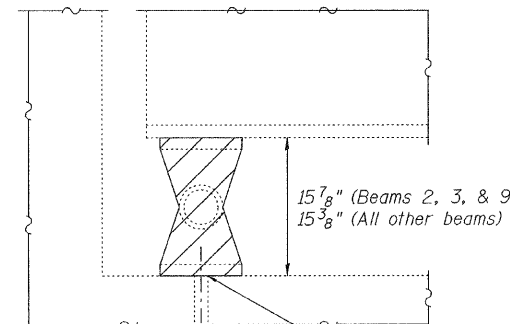


STEEL EXTENSION DETAIL



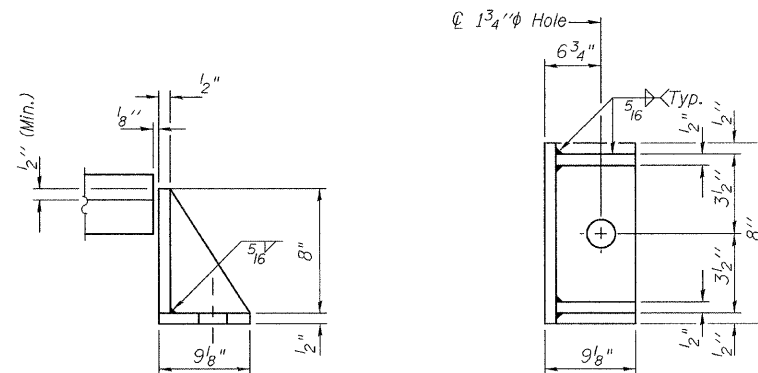
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



JACK AND REMOVE EXISTING BEARING

Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolts smooth and seal with epoxy. Cost is included in "Jack and Remove Existing Bearings".



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	14
Jack and Remove Existing Bearings	Each	14
Furnishing and Erecting Structural Steel	Pound	3,300
Anchor Bolts 1 1/4" phi x 15"	Each	28

BEARING DETAILS - S. ABUTMENT
SN 082-0247 & 0248

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009
EXAMINED <i>A. Carl Powers</i> ENGINEER OF STRUCTURAL SERVICES
PASSED <i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES

TYI/REPS 12-03-2008

SHEET NO. 17 20 SHEETS	F.A.I RTE. 255	SECTION 82-1HVB-I-1	COUNTY ST. CLAIR	TOTAL SHEETS 45	SHEET NO. 42
	CONTRACT NO. 76926				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM REACTIONS

RP	(K)	54.2
R _L	(K)	51.0
Imp.	(K)	16.2
R (Total)	(K)	121.4

Notes:
Cross-frame removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel. Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. Jack capacity = 70 Tons.

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 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

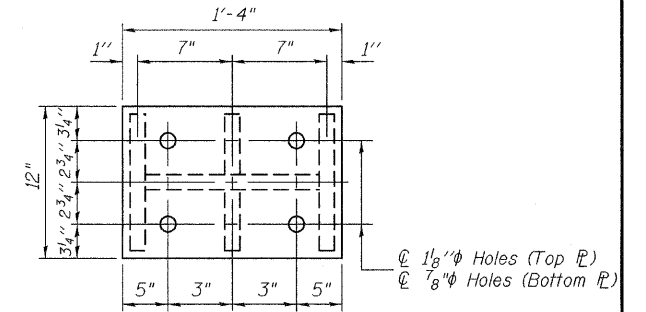
Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

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

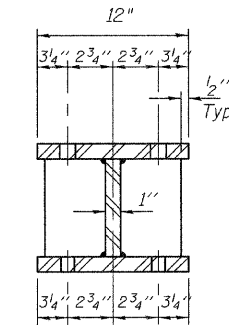
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

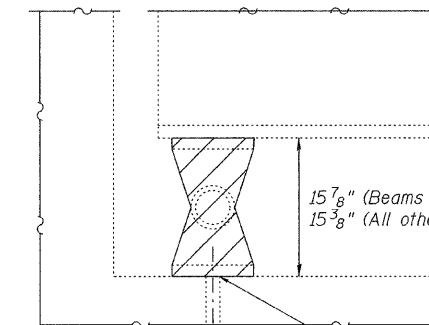


PLAN TOP AND BOTTOM PLATE



SECTION B-B

STEEL EXTENSION DETAIL



JACK AND REMOVE EXISTING BEARING

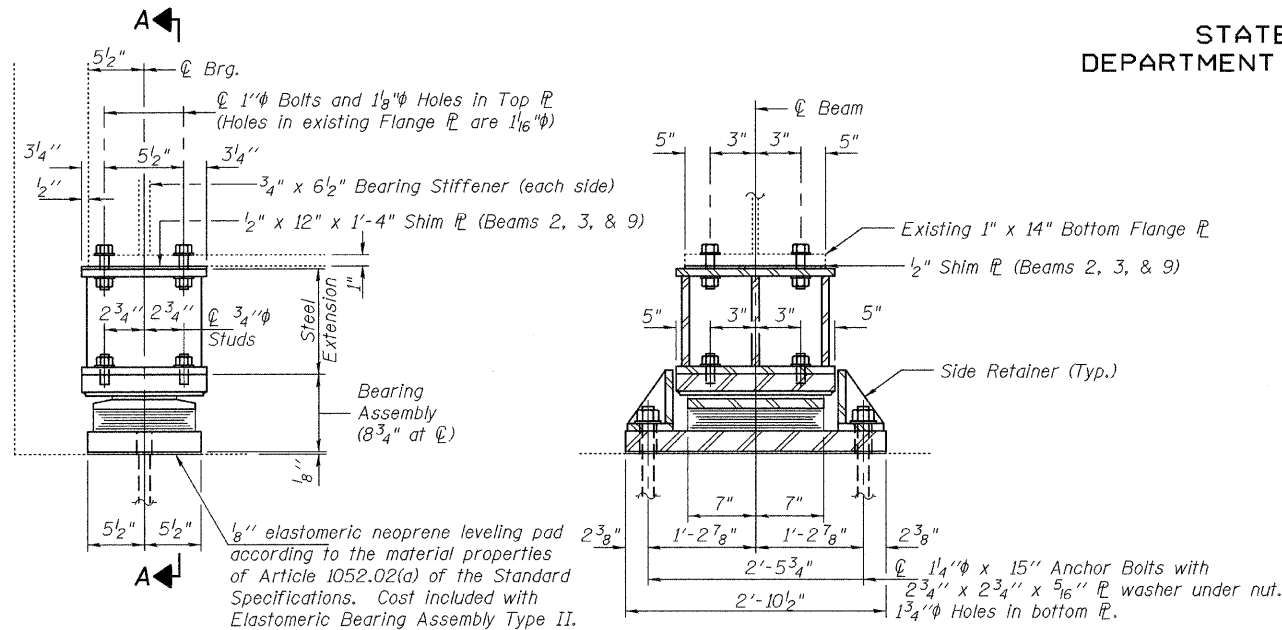
Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolts smooth and seal with epoxy. Cost is included in "Jack and Remove Existing Bearings".

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	14
Jack and Remove Existing Bearings	Each	14
Furnishing and Erecting Structural Steel	Pound	2,540
Anchor Bolts 1 1/4" x 15"	Each	28

BEARING DETAILS - N. ABUTMENT
SN 082-0247 & 0248

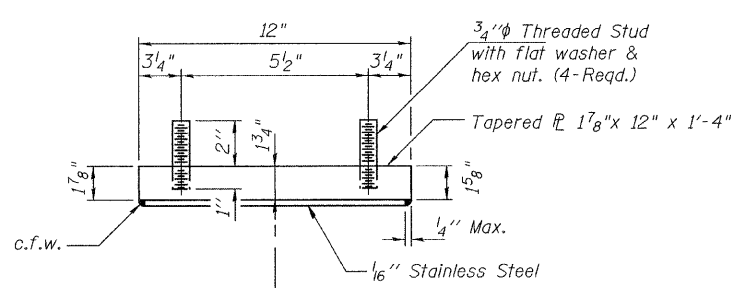
SHEET NO. 18 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	43
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 76926		



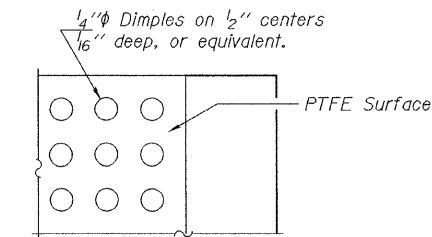
ELEVATION AT ABUTMENT

SECTION A-A

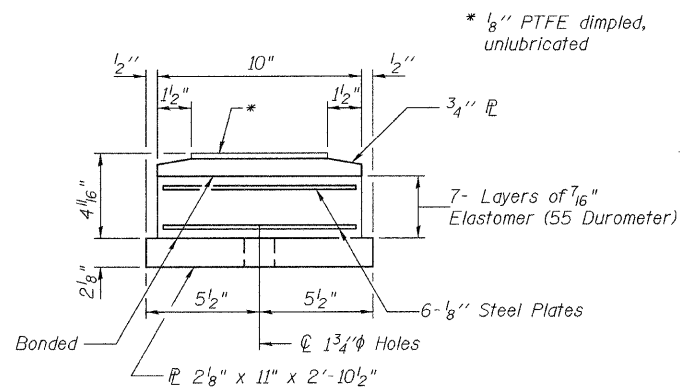
TYPE II TFE ELASTOMERIC EXP. BRG.



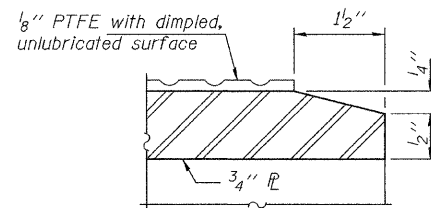
TOP BEARING ASSEMBLY



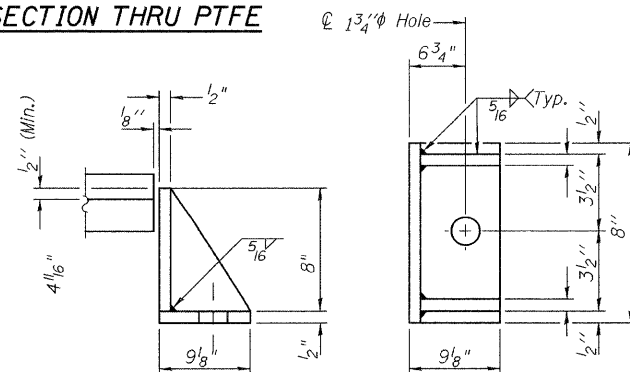
PLAN-PTFE SURFACE



BOTTOM BEARING ASSEMBLY

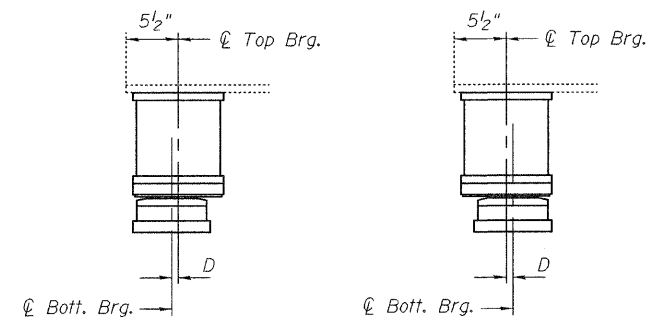


SECTION THRU PTFE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



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.

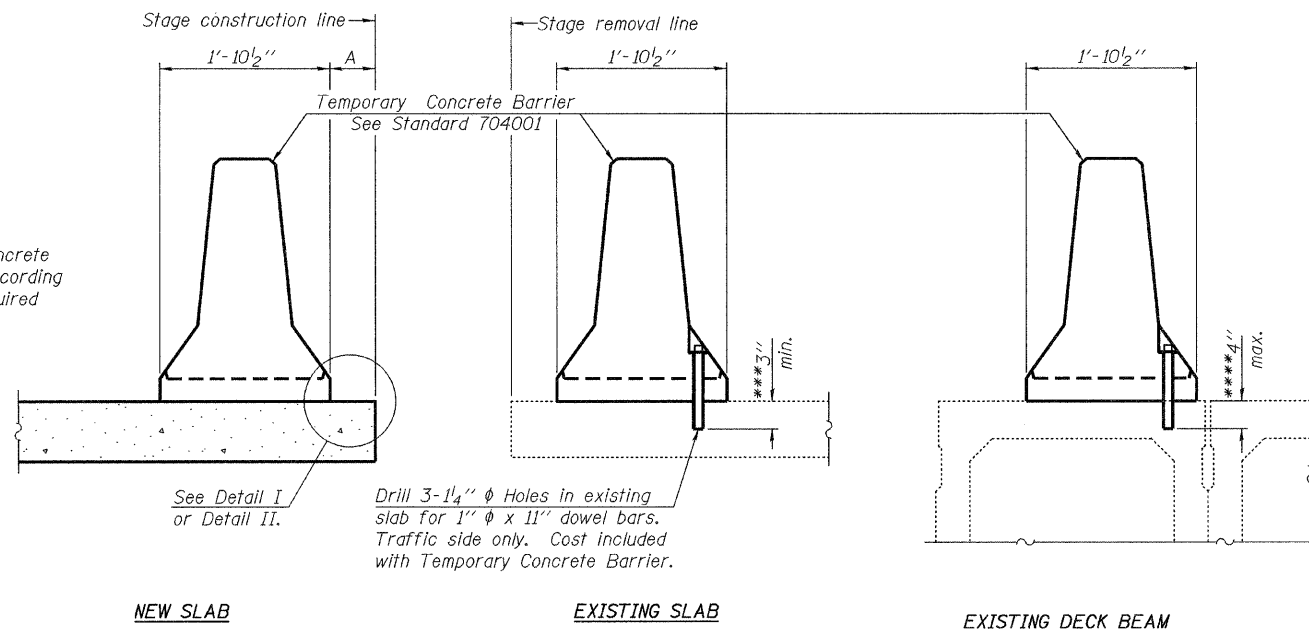
DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009
EXAMINED <i>A. Carl Perry</i> ENGINEER OF STRUCTURAL SERVICES
PASSED <i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES

TYII/REPS 12-03-2008

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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



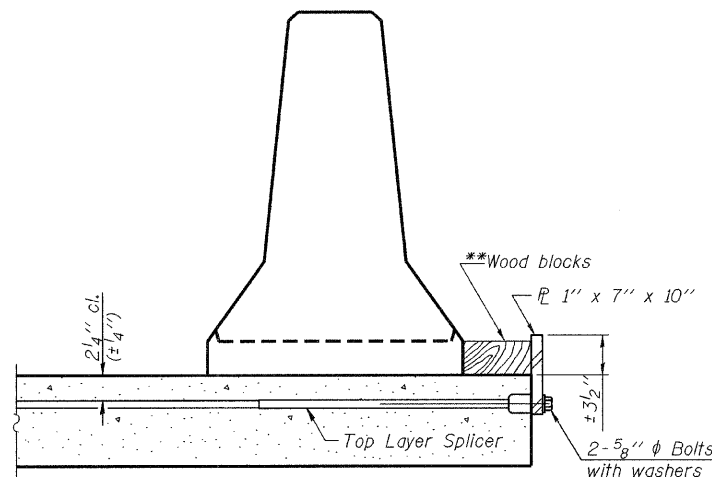
SECTIONS THRU SLAB OR DECK BEAM

NOTES

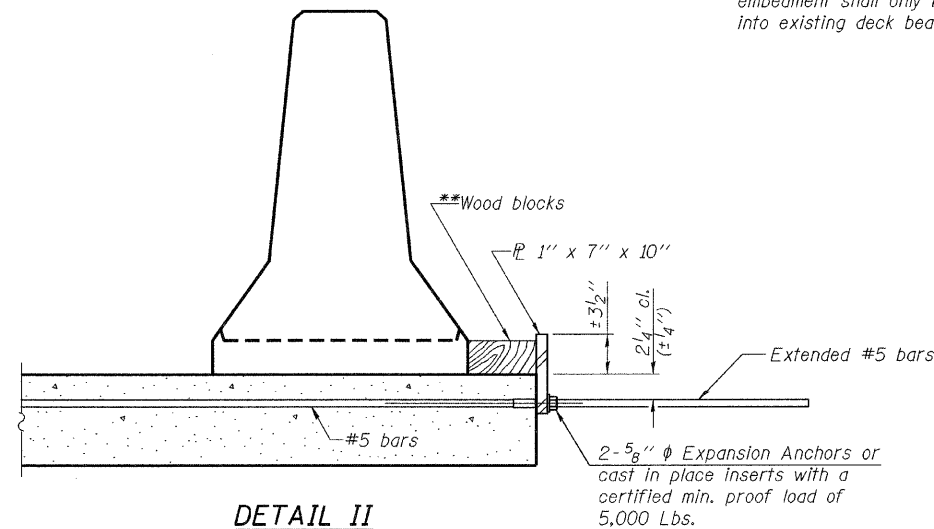
- Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.
- Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{L} to the concrete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

*** 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.

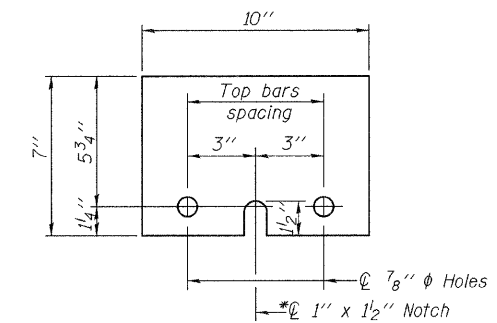
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



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

* Required only with 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.

TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
STRUCTURE NO.

DESIGNED J. Uehle	NOVEMBER 5, 2009
CHECKED A. Hallway	EXAMINED
DRAWN J. Uehle	ENGINEER OF STRUCTURAL SERVICES
CHECKED A. Hallway	PASSED
	ENGINEER OF BRIDGES AND STRUCTURES

R-27

10-1-08

SHEET NO. 19 20 SHEETS	F.A.I. RTE. 255	SECTION 82-1HVB-I-1	COUNTY ST. CLAIR	TOTAL SHEETS 45	SHEET NO. 44
	CONTRACT NO. 76926				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

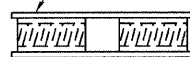
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



** ONE PIECE

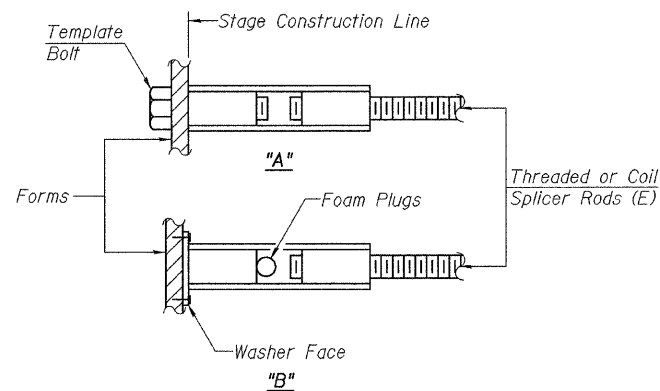
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

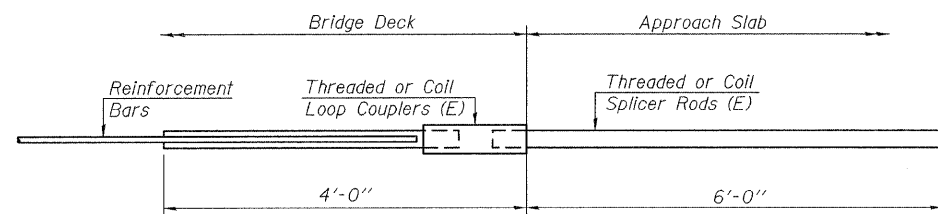
**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



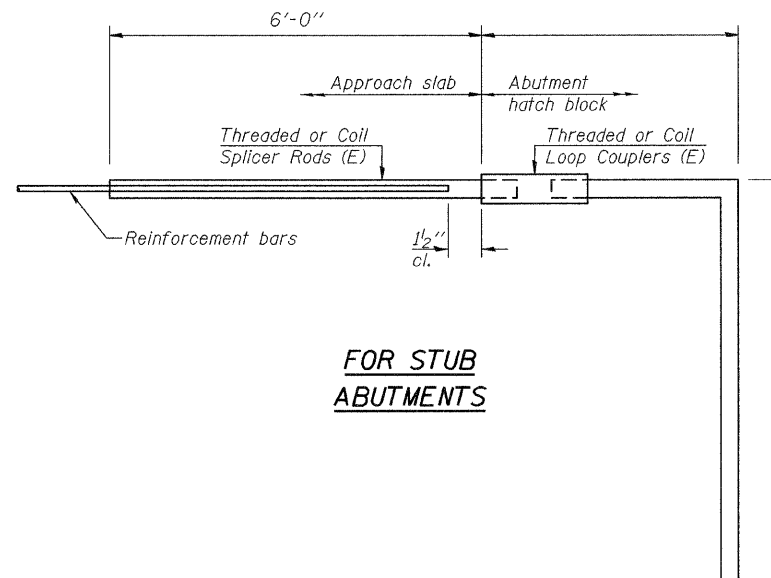
INSTALLATION AND SETTING METHODS

"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.

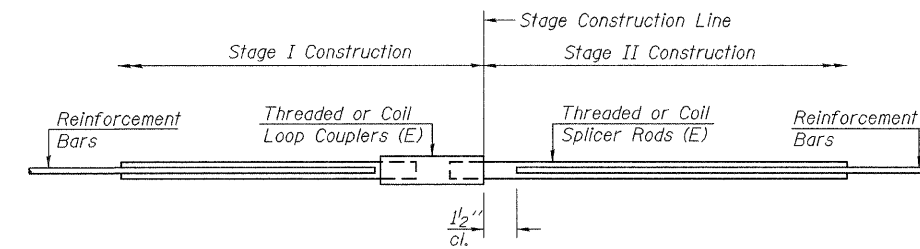
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS



FOR STUB ABUTMENTS



STANDARD

Bar Size	No. Assemblies Required	Location
#6	144	Deck Ends

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

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

**BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NO.**

DESIGNED J. Uehle
CHECKED A. Halloway
DRAWN J. Uehle
CHECKED A. Halloway

NOVEMBER 5, 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. 20 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	45
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		