# 03-07-2025 LETTING ITEM 031

# **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

D-92-065-23

FOR INDEX OF SHEETS, SEE SHEET NO. 2 FOR STATE STANDARDS SEE SHEET NO. 2

# **PROPOSED HIGHWAY PLANS**

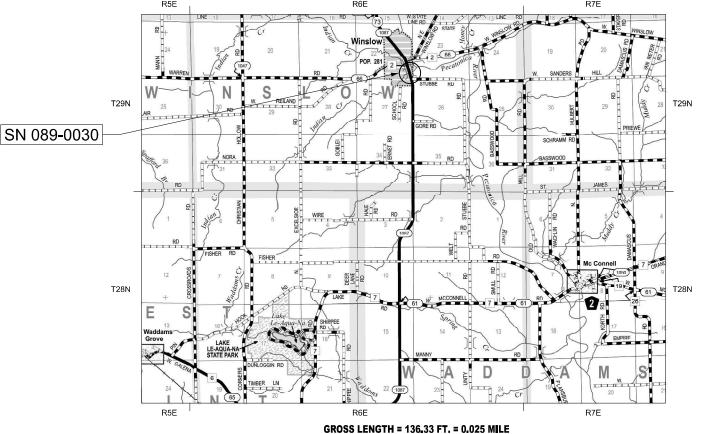
C-92-063-23

**FAS ROUTE 1087 (IL 73)** SECTION (106 BR)BDR
PROJECT HIBP-AG6V(894)
TYPE of IMPROVEMENT: BRIDGE REPAIR / OVERLAY **SN 089-0030 OVER INDIAN CREEK STEPHENSON COUNTY** 

 $\circ$ 

IL. LICENSED PROFESSIONAL LICENSE EXPIRES ON 11/30/2025

APPLIES TO SHEETS 1 - 14; 25



NET LENGTH = 136.33 FT. = 0.025 MILE

PROJECT ENGINEER: JAMES R. PUSH, PE (630) 930-6420 PROJECT MANAGER: DERRICK S. LOPEZ, PE (815) 284-5398

QUIGG ENGINEERING INC

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SUBMITTED December 11 20 24

LOCATION OF SECTION INDICATED THUS: -

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

**CONTRACT NO. 64S33** 

**ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT** CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

REV. 1/3/24

#### **INDEX OF SHEETS**

SHT NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES
3-5	SUMMARY OF QUANTITIES
6-13	TRAFFIC CONTROL PLAN
14	ROADWAY PLAN
15-24	STRUCTURAL PLANS
25	PAVEMENT MARKING PLAN
26 <b>-</b> 29	WORK ZONE SIGN DETAILS (DISTRICT STD 34.1)
30-33	TYPICAL PAVEMENT MARKINGS (DISTRICT STD 41.1)
34	GUARDRAIL REFLECTORS, TYPC C (SPECIAL) (DISTRICT STD 55.1)

#### **HIGHWAY STANDARDS**

STD. NO.	<u>TITLE</u>
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701001 <b>-</b> 02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-19	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-10	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001 <b>-</b> 05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

#### MAINTENANCE OF TRAFFIC GENERAL NOTES

- 1. THE MAINTENANCE OF TRAFFIC CONTROL (MOT) PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY MODIFY THE MOT PLANS TO MEET CONSTRUCTION NEEDS. BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE MOT PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- 2. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE MOT PLANS.
- 3. A FULL DEPTH SAW CUT SHALL BE REQUIRED BETWEEN PAVEMENT, CURB AND/OR GUTTER TO REMAIN AND PAVEMENT, CURB AND/OR GUTTER TO BE REMOVED PRIOR TO THE BEGINNING OF REMOVAL WORK, COST TO BE INCLUDED WITH APPLICABLE REMOVAL ITEMS.
- 4. THE CONTRACTOR SHALL CONTACT THE IDOT DISTRICT 2 ENGINEER AT (815) 284-2271 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

### SUGGESTED MAINTENANCE OF TRAFFIC SEQUENCING

#### PRESTAGE

INSTALL CONSTRUCTION TRAFFIC CONTROL SIGNS AND DEVICES FOR PRESTAGE CONSTRUCTION USING HIGHWAY STANDARD 701326.

#### STAGE 1

INSTALL ALL STAGE 1 CONSTRUCTION TRAFFIC CONTROL SIGNALS, SIGNS, MARKINGS, AND DEVICES AS DETAILED IN THE PLANS AND APPROPRIATE HIGHWAY STANDARD DRAWINGS.

MERGE ALL TRAFFIC IN BOTH DIRECTIONS TO THE EXISTING SOUTHBOUND LANE.

COORDINATE WORK TO BE COMPLETED IN THIS STAGE WITH THE DETAILS IN THE BRIDGE PLANS.

#### STAGE 2

CHANGE STAGE 1 CONSTRUCTION TRAFFIC CONTROL SIGNS, MARKINGS, AND DEVICES AS REQUIRED TO REFLECT STAGE 2 PLANS AND APPROPRIATE STANDARD DRAWINGS.

MERGE ALL TRAFFIC IN BOTH DIRECTIONS TO THE EXISTING NORTHBOUND LANE.

REMOVAL ALL CONFLICTING TRAFFIC CONTROL ITEMS FROM STAGE 1 SETUP.

COORDINATE WORK TO BE COMPLETED IN THIS STAGE WITH DETAILS IN THE BRIDGE PLANS.

#### POST STAGE

REMOVE ALL CONSTRUCTION TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION ITEMS.

REMOVE ANY REMAINING EXISTING OR TEMPORARY PAVEMENT MARKINGS WITHIN THE PERMANENT PAVEMENT MARKING LIMITS. INSTALL FINAL PAVEMENT MARKINGS TO MATCH EXISTING CONDITIONS AND AS DETAILED IN THE APPROPRIATE HIGHWAY STANDARDS.

SCALE: 1"=10'

#### **GENERAL NOTES**

- 1. THE CONTRACTOR SHALL NOTIFY TRAFFIC OPERATIONS A MINIMUM OF 5 WORKING DAYS PRIOR TO PLACING PERMANENT PAVEMENT MARKING OR SIGNING.
- THE EXISTING HOT-MIX ASPHALT ON PRIVATE AND COMMERCIAL ENTRANCES SHALL BE BLADED OFF OR MILLED AND DISPOSED OF OUTSIDE THE PROJECT LIMITS. THIS COULD BE THE ENTIRE ENTRANCE OR TAPERED AT THE END DEPENDING ON IF THE MAINLINE IS RESURFACED OR MILLED AND RESURFACED. THE COST OF THE BLADING, MILLING, ROLLING, AND DISPOSAL IS INCLUDED IN THE CONTRACT UNIT PRICE FOR INCIDENTAL HOT-MIX ASPHALT SURFACING.
- 3. THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE(S):	HMA CONC SURF CSE
PG:	PG 58-28
DESIGN AIR VOIDS:	4.0% @ N DESIGN - 50
MIXTURE COMPOSITION	IL 9.5
FRICTION AGGREGATE:	MIX "D"
MIX WEIGHT	112 lb/sy/in
QUALITY MANAGEMENT PROGRAM:	QC/QA
SUBLOT SIZE:	N/A
MATERIAL TRANSFER DEVICE	N/A

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE PLAN QUANTITIES: BITUMINOUS MATERIALS (TACK COAT) 0.05 LBS / SQ FT (ON PAVEMENT) BITUMINOUS MATERIALS (TACK COAT) 0.025 LBS / SQ FT (FOG) HOT-MIX ASPHALT MATERIAL 0.056 TON / SQ YD PER 1" AGGREGATE MATERIAL 1.60 TONS / CU YD

- 4. THE AREA TO BE TACKED OR PRIMED SHALL BE LIMITED TO THAT WHICH CAN BE COVERED WITH HMA ON THE NEXT DAY'S PRODUCTION, BUT NO MORE THAN FIVE DAYS IN ADVANCE OF THE PLACEMENT OF THE HMA, UNLESS APPROVED BY THE ENGINEER.
- CULVERT & BRIDGE FLOWS MUST BE MAINTAINED THROUGHOUT THE PROJECT. NORMAL FLOW SHALL BE ALLOWED TO PASS AT THE RATE IT ENTERS THE JOBSITE. HIGH FLOWS SHALL BE ALLOWED TO PASS WITHOUT CAUSING DAMAGE TO UPSTREAM PROPERTIES.
- 6. PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:

A. ALL WORDS, SUCH AS ONLY, SHALL BE 8 FEET HIGH.

- B. ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE.
- C. THE DISTANCE BETWEEN YELLOW NO-PASSING LINES SHALL BE 8 INCHES, NOT 7 INCHES, AS SHOWN IN THE DETAIL OF TYPICAL LANE AND EDGE LINES.
- D. CENTERLINE SKIP DASH PAVEMENT MARKING ON MULTI-LANE DIVIDED, MULTI-LANE UNDIVIDED, AND ONE-WAY ROADWAY SHALL BE ACCORDING TO DISTRICT STANDARD 41.1.
- 7. THE FOLLOWING LISTED UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS ARE MEMBERS OF JULIE:

(TYPE NAME & PHONE NUMBER OF JULIE COMPANIES FROM ATTACHED UTILITY FORM.)

IDOT IS NOT A MEMBER OF JULIE. IF YOU ARE NEAR ANY OVERHEAD LIGHTING, INTERSECTION LIGHTING OR TRAFFIC SIGNALS, CONTACT THE IDOT TRAFFIC OFFICE AT 815/284-5469 AT LEAST 48 HOURS PRIOR TO WORK.

- RELOCATE TEMPORARY IMPACT ATTENUATORS SHALL INCLUDE STORAGE AND TRANSPORTATION TO AND FROM STORAGE, WHEN THE DEVICE IS NOT NEEDED FOR A TIME, AS SHOWN ON THE STAGING PLANS. THIS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER EACH FOR IMPACT ATTENUATORS, RELOCATE OF THE TYPE SPECIFIED.
- 9. WHEN RELOCATE TEMPORARY CONCRETE BARRIER IS SPECIFIED, THE WALL SHALL BE REMOVED, STORAGE AND TRANSPORTATION TO AND FROM STORAGE, WHEN THE WALL IS NOT NEEDED FOR A TIME AS SHOWN ON THE STAGING PLANS, RELOCATED AND REINSTATED AT THE NEW LOCATION. THE REINSTALLATION REQUIREMENTS SHALL BE THE SAME AS THOSE FOR A NEW INSTALLATION. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR RELOCATE TEMPORARY CONCRETE BARRIER.
- 10. THE TEMPORARY CONCRETE BARRIER SHALL BE PINNED TO THE PAVEMENT WITH 3 ANCHOR PINS PER SECTION ON THE TRAFFIC SIDE OF THE BARRIER WALL AT THE FOLLOWING LOCATIONS:
  - IL-73 BRIDGE OVER INDIAN CREEK

THE BARRIER UNIT AT EACH END SHALL BE ANCHORED AS SPECIFIED IN ARTICLE 704.04. ALL ANCHORING AND PINNING HOLES SHALL BE CORE DRILLED.

USER NAME = afarooqi	DESIGNED	-	AAF	REVISED	-
	DRAWN	-	AAF	REVISED	-
PLOT SCALE = 0.16666633 '/ in.	CHECKED	-	JA	REVISED	-
PLOT DATE = 12/9/2024	DATE	-	12/09/2024	REVISED	-

INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES						F.A.S RTE.	SECT	TION	COUNTY	TOTAL SHEETS	SHEET NO.
<u></u>						1087	(106 BF	R)BDR	STEPHENSON	34	2
									CONTRACT	NO. 64	533
1"=10'	SHEET 1	OF 1	SHEETS	STA.	TO STA.			ILLINOIS FED	AID PROJECT		

CONSTRUCTION TYPE CODE						
80% FED 20% STATE	80% FED 20% STATE					

				ROADWAY	BRIDGE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0059	0059
				RURAL	S.N. 089-0030
28000510	INLET FILTERS	EACH	10	10	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	149	149	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	332	332	
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	51	51	
42001300	PROTECTIVE COAT	SQ YD	5	5	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	158	158	
44000600	SIDEWALK REMOVAL	SQ FT	158	158	
50102400	CONCRETE REMOVAL	CUYD	5.8		5.8
50300255	CONCRETE SUPERSTRUCTURE	CUYD	5.8		5.8
50300260	BRIDGE DECK GROOVING	SQ YD	175		175
50300300	PROTECTIVE COAT	SQ YD	207		207
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	489		489
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2837		2837
50800515	BAR SPLICERS	EACH	65		65

EL: SOQ - SOQ-1 [Sheet] NAME: S:\2024\24|L002 - PTB 210-17 D2 - Quandel - Various Phil\WO 2-

QUIGG ENGINEERING INC

USER NAME = afarooqi	DESIGNED -	AAF	REVISED -
	DRAWN -	AAF	REVISED -
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PLOT DATE = 12/9/2024	DATE -	12/09/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=50'

	SUMMARY OF QUANTITIES					F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
(SHEET 1 OF 3)					1087	(106 BR)BDR	STEPHENSON	34	3	
	(GILET 1 OF 3)							CONTRACT	NO. 64	S33
	SHEET 1	OF 3	SHEETS	STA.	TO STA.		ILLINOIS   FED	. AID PROJECT		

CONSTRUCTION TYPE CODE						
80% FED 20% STATE	80% FED 20% STATE					

				ROADWAY	BRIDGE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0059	0059
			40	RURAL	S.N. 089-0030
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	544		544
59000200	EPOXY CRACK INJECTION	FOOT	62		62
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3	
67100100	MOBILIZATION	LSUM	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70102621	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	EACH	1	1	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	921	921	
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	2,255	2,255	
70307130	TEMPORARY PAVEMENT MARKING - LINE 6" - TYPE IV TAPE	FOOT	184	184	
70307210	TEMPORARY PAVEMENT MARKING - LINE 24"- TYPE IV TAPE	FOOT	39	39	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	75	75	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	62.5	62.5	
70600241	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2	

.: SOQ - SOQ-2 [Sheet] AME: S:\2024\24IL002 - PTB 210-17 D2 - Quandel - Various Phil\WO 2- (

QUIGG ENGINEERING INC

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	DRAWN	-	AAF	REVISED -
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PLOT DATE = 12/9/2024	DATE	-	12/09/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=50'

SUMMARY OF QUANTITIES							F.A.S RTE.	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
(SHEET 2 OF 3)							1087	(106 B	R)BDR		STEPHENSON	34	4
(SHELI 2 OF 3)											CONTRACT	NO. 649	333
SHEET 2	OF :	3	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT						

					80% FED 20% STATE	80% FED 20% STATE
					ROADWAY	BRIDGE
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0059	0059
-					RURAL	S.N. 089-0030
ļ				_	_	
ļ	70600341	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2	
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2626	2626	
*	78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	394	394	
*	78001180	PAINT PAVEMENT MARKING - LINE 24"	FOOT	68	68	
	78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	605	605	
Ī						
ĺ	Z0004556	HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ YD	188		188
	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	44		44
<u> </u>	Z0017300	DOWEL REPAIR	EACH	9		9
	Z0029300	GROUT REPAIR	FOOT	23		23
	Z0032700	KEYWAY REPAIR	FOOT	191		191
ļ			,			
ļ	X4400503	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT GREATER THAN 10 FEET	FOOT	36	36	
	7-10000	COMBINATION CONTINUE CONTINUE VALARID NEI ENGENIENT CHEATEN THAN 10 FEET	1001	50		
	VE040040	DEMOVAL OF EVICTING DEFOACT DEFCTDECCED COMODETE DEGV DEAMS	60 FT	400		400
	X5010010	REMOVAL OF EXISTING PRECAST PRESTRESSED CONCRETE DECK BEAMS	SQ FT	489		489
	X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	188		188

\*= SPECIALTY ITEM

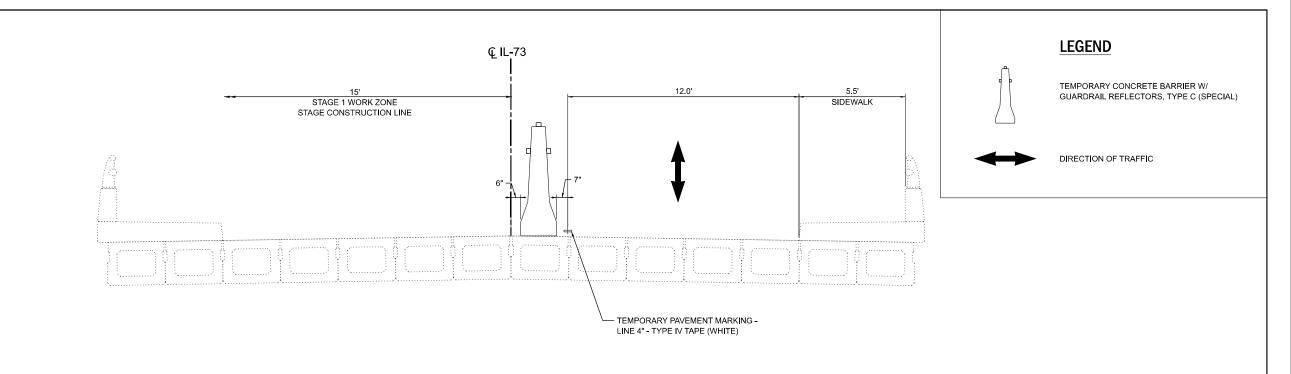


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION TYPE CODE

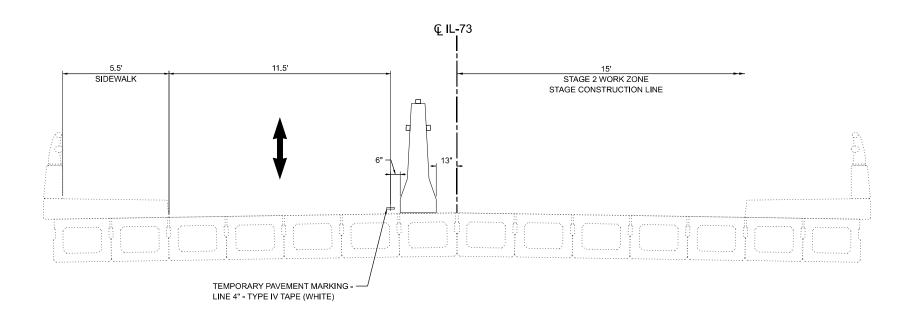
COUNTY TOTAL SHEET NO.

STEPHENSON 34 5



## **STAGE 1 TYPICAL SECTION**

SN 089-0030 (LOOKING SOUTH)



### **STAGE 2 TYPICAL SECTION**

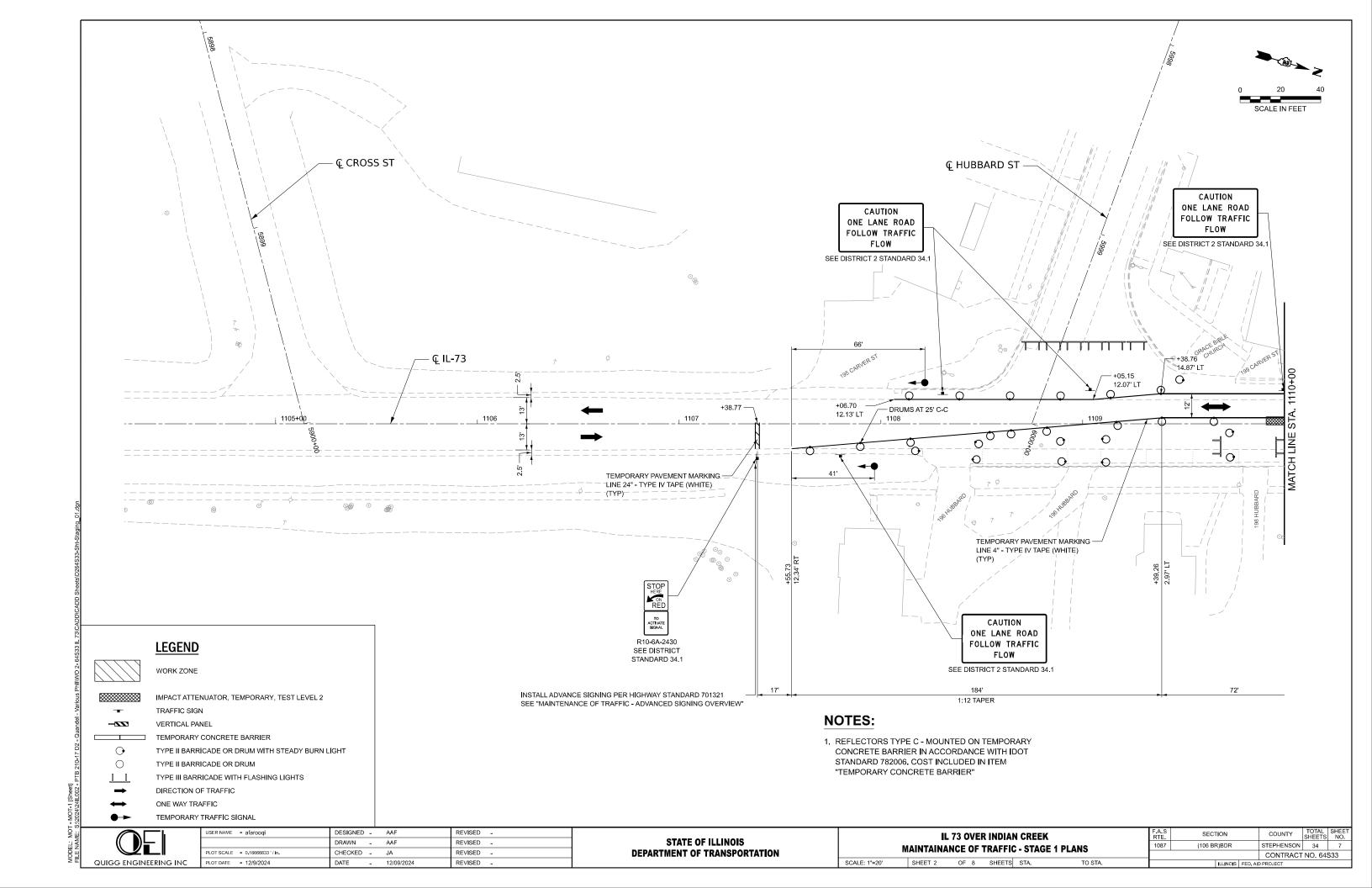
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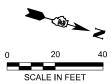
QUIGG ENGINEERING INC

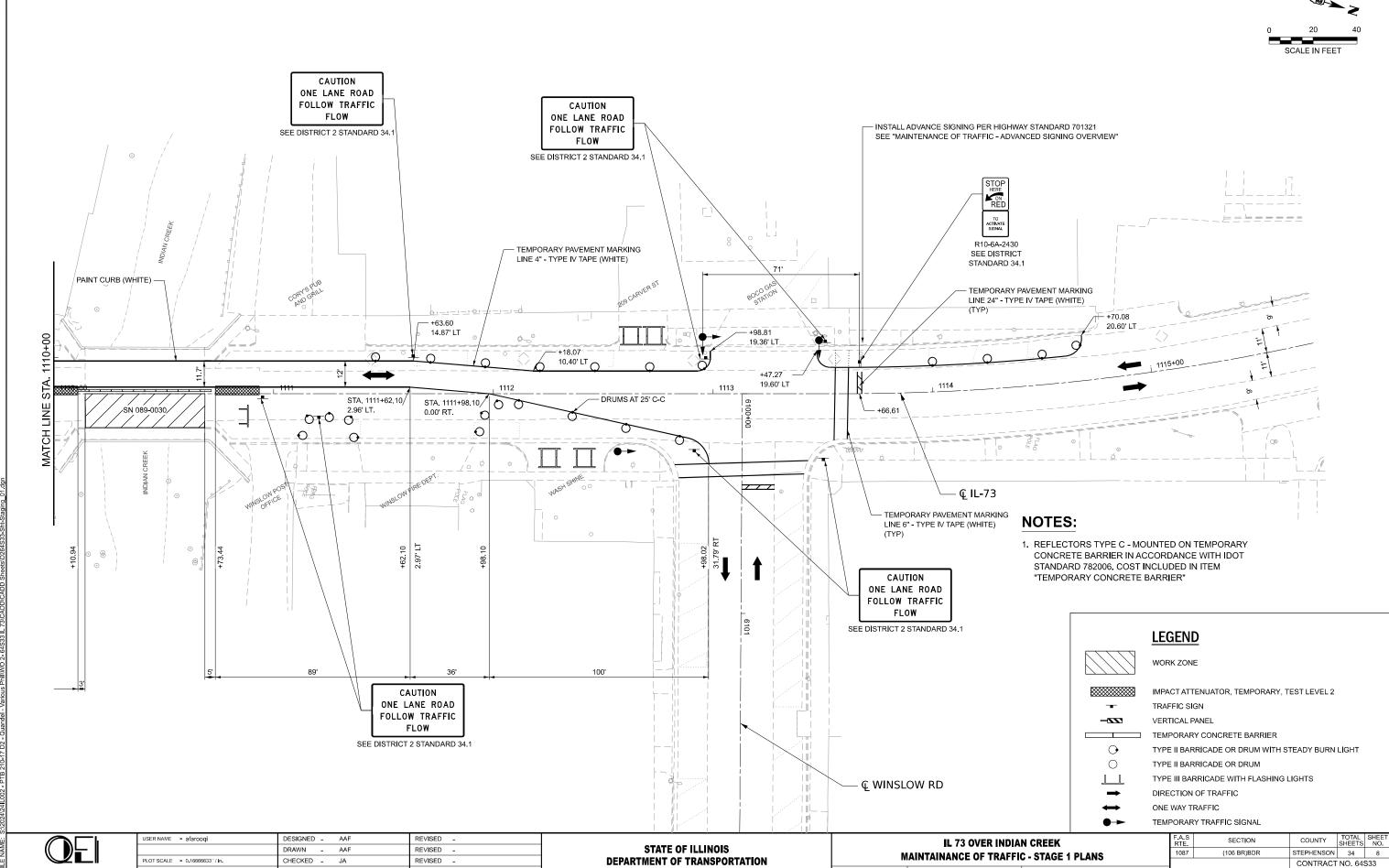
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ENGINEERING INC	PLOT DATE = 12/9/2024	DATE - 12/09/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	IL 73 OVER INDIAN CREEK									COUNTY	TOTAL SHEETS	SHEE NO.
МА	MAINTAINANCE OF TRAFFIC - STAGING TYPICALS								STEPHENSON		34	6
IIIA										CONTRACT	NO. 649	533
SCALE: CUSTOM 1:30	SHEET 1	OF 8	SHEETS	STA.	TO STA.			D PROJECT				







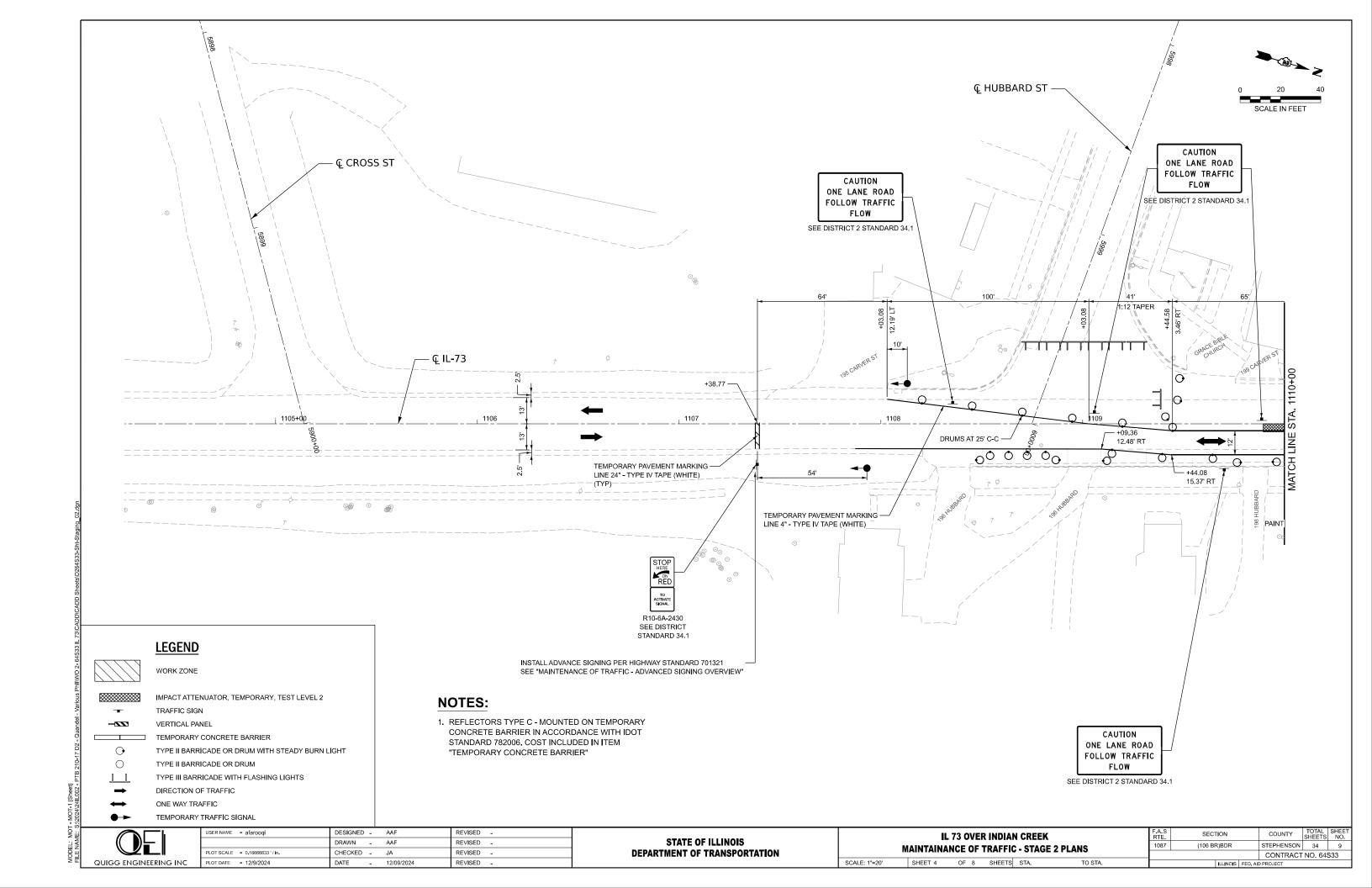
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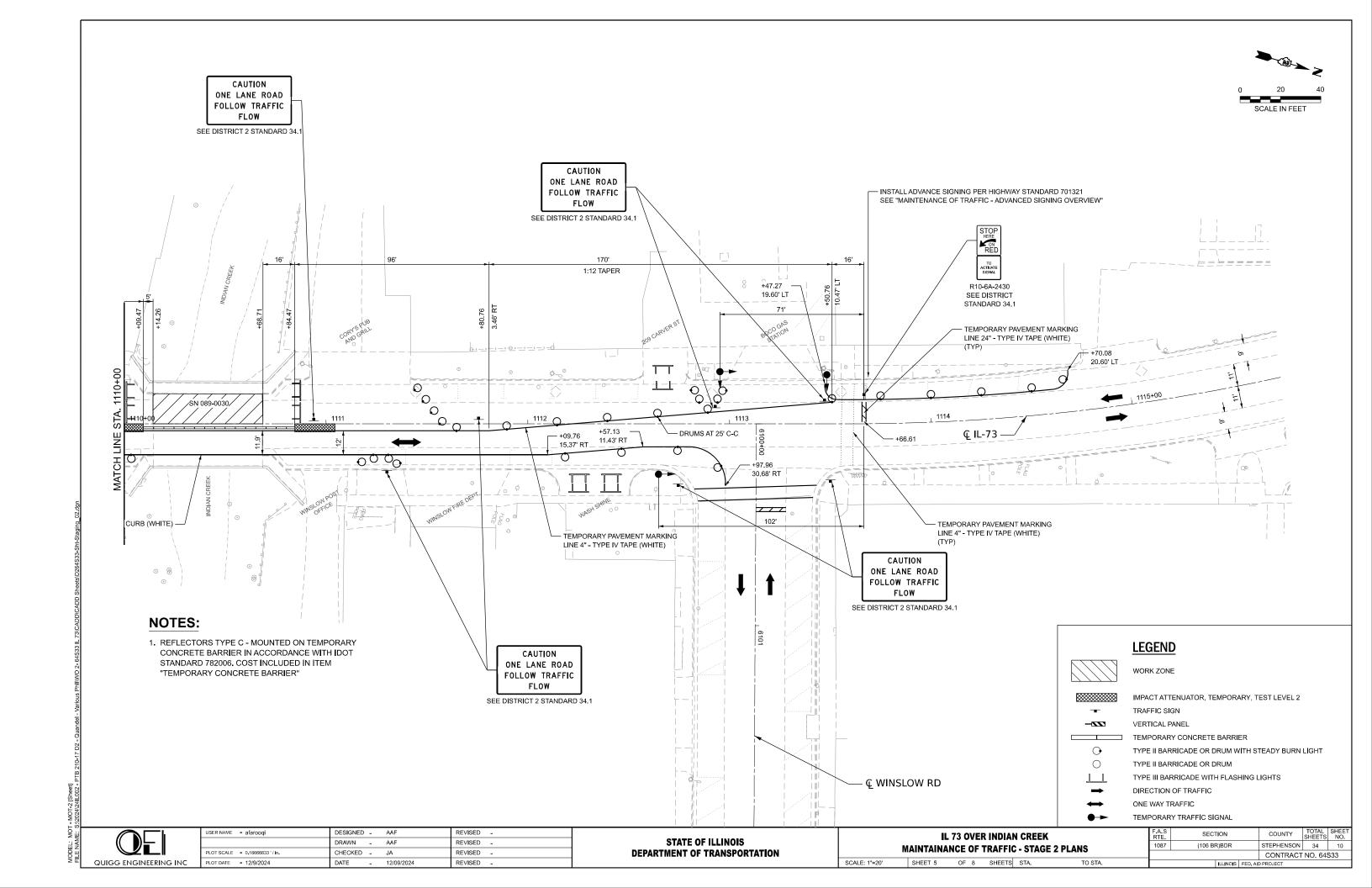
SHEET 3 OF 8 SHEETS STA.

QUIGG ENGINEERING INC

PLOT DATE = 12/9/2024

REVISED -





# SCHEDULE OF TEMPORARY PAVEMENT MARKINGS AND REMOVAL

ITEM	LOCATION	BEGIN		END		TEMP PAVEMENT MARKINGS			PAVEMENT MARKINGS REMOVAL					
	LOGATION	STA	OFFSET	STA	OFFSET	4" TEMP	6" TEMP	24" TEMP	4" EX	4" TEMP	6" EX	6" ТЕМР	24" EX	24" TEM
				STAGE	1		1							1
REMOVE EXISTING PVMT MRKING	SB EDGE	1107+32.16	12.00' LT	1108+48.68	12.00' LT				117					
REMOVE EXISTING PVMT MRKING CENTERLINE (SKIP DASH)		1107+32.16	CL	1110+68.71	CL				85					
REMOVE EXISTING PVMT MRKING	NB EDGE	1107+32.59	12.00' RT	1108+21.76	12.00' RT				90					
REMOVE EXISTING PVMT MRKING	NB PARKING	1108+48.52	19.75' RT	1109+77.31	19.18' RT				148					
REMOVE EXISTING PVMT MRKING	W. LEG STOP BAR AT HUBBARD ST	1108+70.18	37.87' LT	1108+86.45	31.90' LT								18	
REMOVE EXISTING PVMT MRKING	SB EDGE	1109+50.11	12.00' LT	1110+68.68	12.00' LT				119					
REMOVE EXISTING PVMT MRKING	NB PARKING	1109+91.86	12.00' RT	1110+81.57	12.00' RT				90					
REMOVE EXISTING PVMT MRKING	CENTERLINE	1110+68.71	CL	1113+66.61	CL				373					
REMOVE EXISTING PVMT MRKING	NB PARKING	1111+16.77	20.36' RT	1111+38.77	20.34' RT				38					
REMOVE EXISTING PVMT MRKING	SB PARKING	1111+44.34	19.59' LT	1112+54.34	19.62' LT				130					
REMOVE EXISTING PVMT MRKING	NB PARKING	1111+91.57	20.38' RT	1112+11.57	20.47' RT				36					
REMOVE EXISTING PVMT MRKING	NB EDGE	1112+53.95	12.00' RT	1112+65.93	12.00' RT				12					
REMOVE EXISTING PVMT MRKING	SB PARKING	1112+80.87	19.28' LT	1112+98.81	19.36' LT				75					
REMOVE EXISTING PVMT MRKING	E. LEG CROSSWALK AT WINSLOW RD	1112+83.89	32.21' RT	1113+41.64	30.48' RT						115			
REMOVE EXISTING PVMT MRKING	E. LEG STOP BAR AT WINSLOW RD	1113+12.79	40.57' RT	1113+27.88	40.57' RT								16	
REMOVE EXISTING PVMT MRKING	N. LEG CROSSWALK AT WINSLOW RD	1113+55.42	CL	1113+61.42	CL						82			
24" WHITE TEMP TAPE	STOP BAR	1107+38.77	0.58' LT	1107+38.77	12.36' RT			12.94						
4" WHITE TEMP TAPE	LANE EDGE LINES	1107+55.73	12.34' RT	1109+03.76	CL	148.49								
4" WHITE TEMP TAPE	LANE EDGE LINES	1108+06.70	12,13' LT	1112+98.81	19.36' LT	498.80								
4" WHITE TEMP TAPE	LANE EDGE LINES	1109+03.76	CL	1111+98.10	CL	294.53								
4" WHITE TEMP TAPE	LANE EDGE LINES	1111+98.10	CL	1112+98.02	31.96' RT	109.07								
6" WHITE TEMP TAPE	CROSSWALK	1112+82.49	32.25' RT	1113+43.25	30.43' RT		117.85							
24" WHITE TEMP TAPE	STOP BAR	1113+13.04	42.51' RT	1113+27.95	42.51' RT			14.91						
4" WHITE TEMP TAPE	SB PARKING LANE	1113+47.27	19.60' LT	1114+70.08	20.60' LT	131.59								
24" WHITE TEMP TAPE	STOP BAR	1113+66.61	CL	1113+66.69	10.82' LT			10.87						
6" WHITE TEMP TAPE	CROSSWALK	1113+55.63	12.01' LT	1113+55.04	21.10' RT		65.72							

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용분	QUIGO

	USER NAME = afarooqi	DESIGNED - AAF	REVISED -
		DRAWN - AAF	REVISED -
	PLOT SCALE = 0.16666633 ' / in.	CHECKED - JA	REVISED -
G ENGINEERING INC	PLOT DATE = 12/9/2024	DATE - 12/09/2024	REVISED -

SCALE: 1"=50'

IL	IL 73 OVER INDIAN CREEK							ION		COUNTY	TOTAL SHEETS	SHEET NO.	
MOT - PAVEMENT MARKING SCHEDULE						1087 (106 BR)BDR				STEPHENSON	34	11	
MOI - PAVEMENT MARRING SCHEDULE										CONTRACT	NO. 648	333	
SHEET 6	OF	8	SHEETS	STA.	TO STA.	ILLINOIS FED. AID			PROJECT				

# SCHEDULE OF TEMPORARY PAVEMENT MARKINGS AND REMOVAL (CTD.)

ITEM	LOCATION	BE	GIN	E	ND	TEMP PA	VEMENT M	ARKINGS		PAVE	MENT MAR	KINGS REM	OVAL	
		STA	OFFSET	STA	OFFSET	4" TEMP	6" TEMP	24" TEMP	4" EX	4" TEMP	6" EX	6" TEMP	24" EX	24" TEMP
		'		STAGE	2	-								
REMOVE 4" WHITE TEMP TAPE	LANE EDGE LINES (FROM STAGE 1)	1107+55.73	12.34' RT	1109+03.76	CL					148.49				
REMOVE 4" WHITE TEMP TAPE	LANE EDGE LINES (FROM STAGE 1)	1108+06.70	12.13' LT	1112+98.81	19.36' LT					498.80				
REMOVE 4" WHITE TEMP TAPE	LANE EDGE LINES (FROM STAGE 1)	1109+03.76	CL	1111+98.10	CL					294.53				
REMOVE 4" WHITE TEMP TAPE	LANE EDGE LINES (FROM STAGE 1)	1111+98.10	CL	1112+98.02	31.96' RT					109.07				
4" WHITE TEMP TAPE	EDGE LINES	1107+87.30	12.32' RT	1112+97.96	30.68' RT	522.50								
4" WHITE TEMP TAPE	EDGE LINES	1108+03.08	12.19' LT	1109+03.08	CL	100.74								
4" WHITE TEMP TAPE	EDGE LINES	1109+03.08	CL	1112+22.17	CL	319.38								
4" WHITE TEMP TAPE	EDGE LINES	1112+22.17	CL	1113+50.76	10.74' LT	129.04								
				POST STA	GE									
REMOVE 24" WHITE TEMP TAPE	STOP BAR	1107+38.77	0.58' LT	1107+38.77	12,36' RT									12.94
REMOVE 4" WHITE TEMP TAPE	LANE EDGE LINES (FROM STAGE 2)	1107+87.30	12.32' RT	1112+97.96	30.68' RT					522.50				
REMOVE 4" WHITE TEMP TAPE	LANE EDGE LINES (FROM STAGE 2)	1108+03.08	12.19' LT	1109+03.08	CL					100.74				
REMOVE 4" WHITE TEMP TAPE	LANE EDGE LINES (FROM STAGE 2)	1109+03.08	CL	1112+22.17	CL					319.38				
REMOVE 4" WHITE TEMP TAPE	LANE EDGE LINES (FROM STAGE 2)	1112+22.17	CL	1113+50.76	10.74' LT					129.04				
REMOVE 6" WHITE TEMP TAPE	CROSSWALK	1112+82.49	32.25' RT	1113+43.25	30.43' RT							117.85		
REMOVE 24" WHITE TEMP TAPE	STOP BAR	1113+13.04	42.51' RT	1113+27.95	42.51' RT									14.91
REMOVE 4" WHITE TEMP TAPE	SB PARKING LANE	1113+47.27	19.60' LT	1114+70.08	20.60' LT					131.59				
REMOVE 24" WHITE TEMP TAPE	STOP BAR	1113+66.61	CL	1113+66.69	10.82' LT									10.87
REMOVE 6" WHITE TEMP TAPE	CROSSWALK	1113+66,69	10.82' LT	1113+55.04	21,10' RT							65.72		
														_
TOTAL						2254.14	183.57	38.72	1313.00	2254.14	197.00	183.57	34.00	38.72
USE						2255	184	39	1313	2255	197	184	34	39

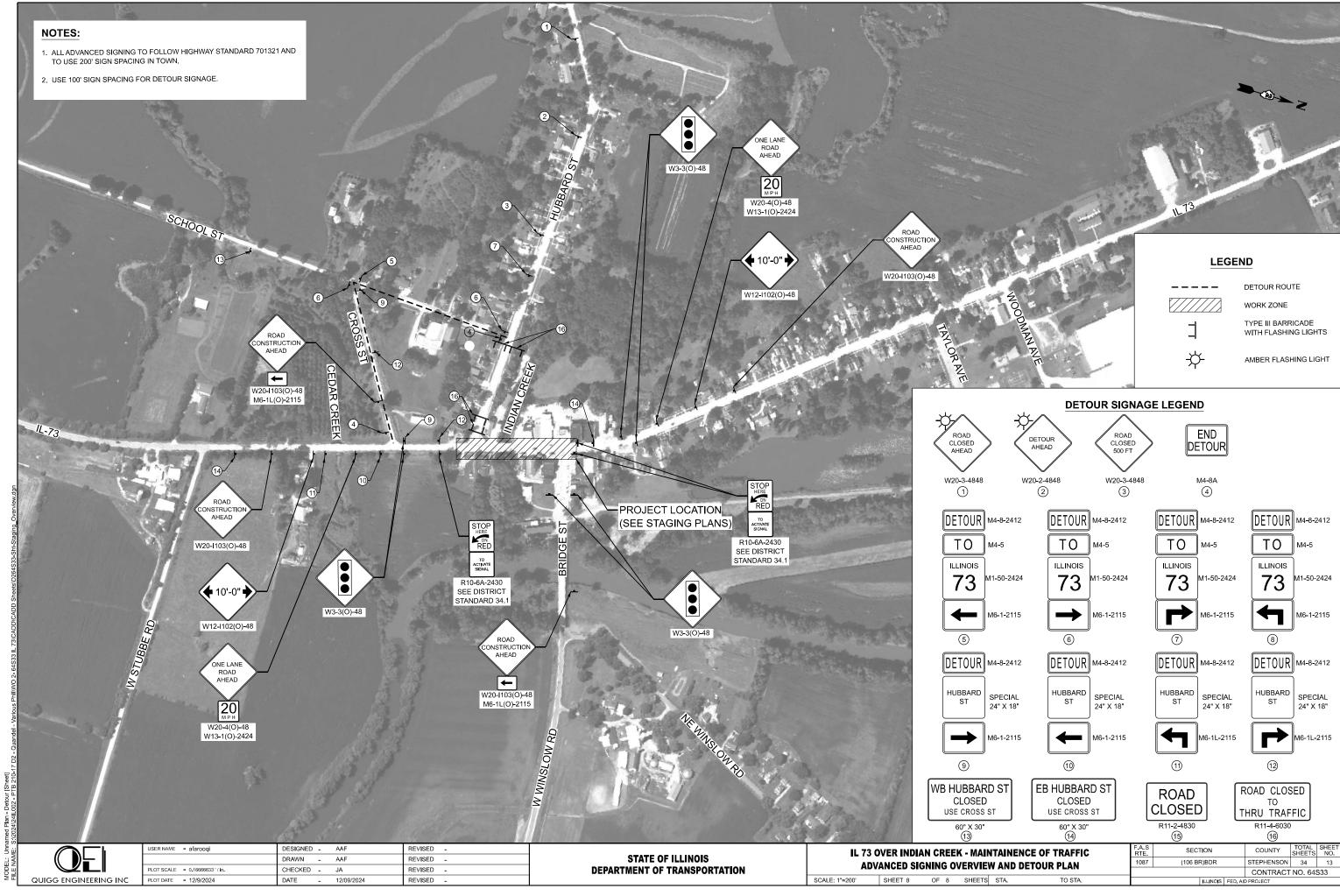
L: Unnamed Plan - Schedules 2 [Sheet] AME: S/3024/34|| 002 - PTB 340-47 D3 - Ousedel - Verious PhillM/O 3- 6

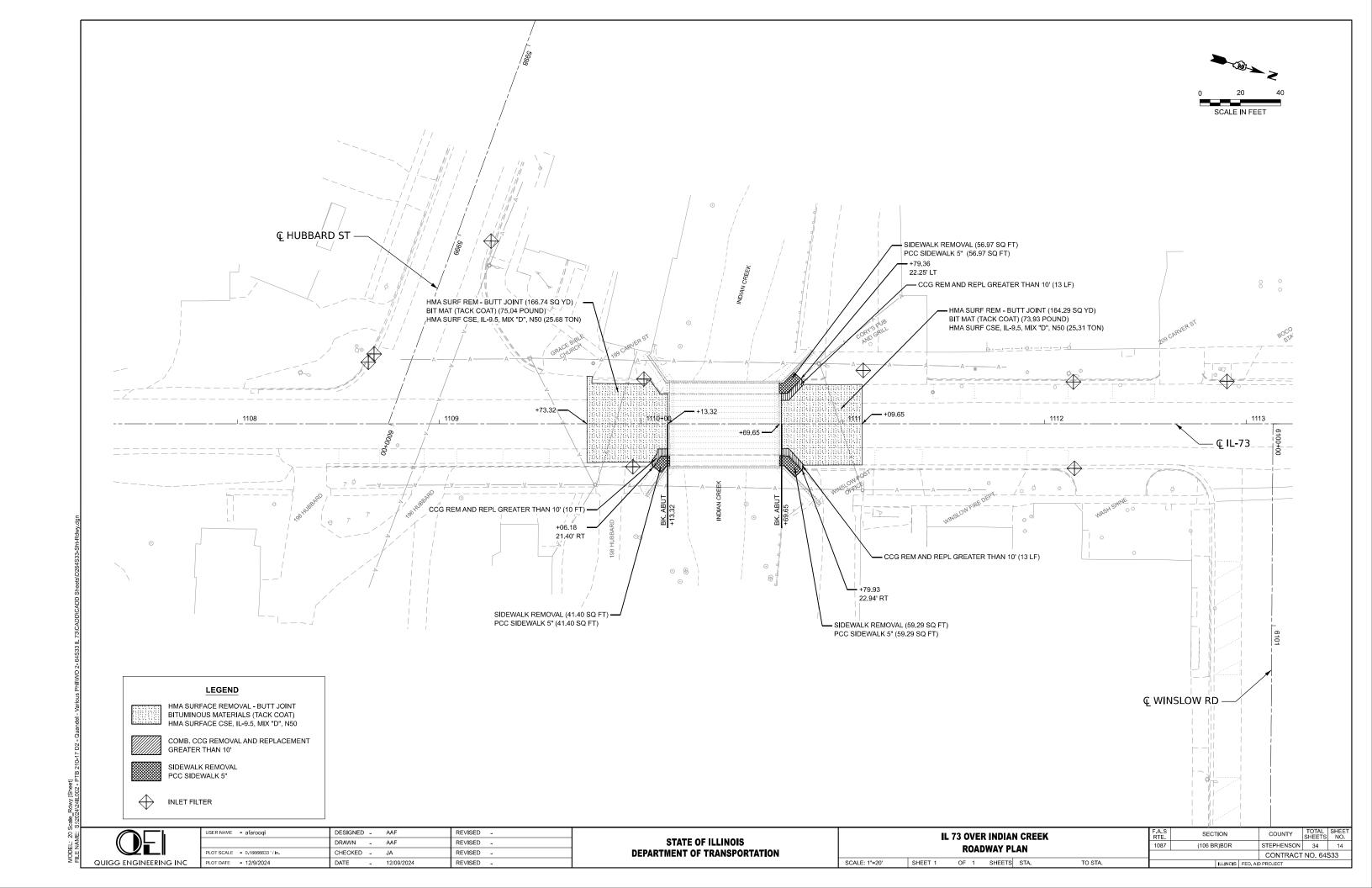


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SCALE: 1"=50'

IL 73 OVER INDIAN CREEK						
MOT - PAVEMENT MARKING SCHEDULE						
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SHEET 7	OF 8	SHEETS	STA.	TO STA.		

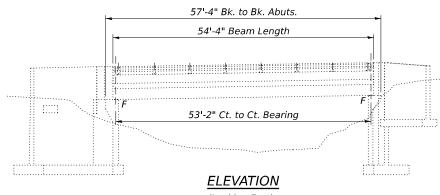




#### INDEX OF STRUCTURE SHEETS 57'-4" Bk. to Bk. Abuts. Sheet 1 General Plan & Elevation 54'-4" Beam Length Superstructure Details I Superstructure Details II Temporary Concrete Barrier 27" x 36" PPC Deck Beam 27" x 36" PPC Deck Beam Details 27" x 35" PPC Deck Beam (Beam 8) 53'-2" Ct. to Ct. Bearing 27" x 35" PPC Deck Beam Details and Shear Key Clamp Details Abutment Repairs 10 Bar Spicer Assemblies

#### SCOPE OF WORK

- 1. Remove existing HMA overlay from bridge superstructure.
- 2. Partially remove concrete from abutment hatchblocks and curbs.
- 3. Replace existing PPC Deck Beams where shown in the plans.
- 4. Repair dowels and keyways, and regrout at existing beams.
- 5. Replace concrete at abutment hatchblocks and curbs.
- 6. Place rebar and pour new 5" concrete overlay over bridge superstructure.
- 7. Perform repairs to substructure.
- 8. Install HMA Butt Joint at approaches.



(Looking East)

Location	Station	Offset	Theoretical Grade Elevations		
End of Deck Beam - South Abut.	1110+14.32	00.00	778.427	<b>(</b>	
Midspan	1110+41.49	00.00	778.041	(B)(C)	
End of Deck Beam - North Abut.	1110+68.65	00.00	777.508	©	
End of Deck Beam - South Abut.	1110+14.32	15.00	778.152	(D) (E)	
Midspan	1110+41.49	15.00	778.814	(E)	
End of Deck Beam - North Abut.	1110+68.65	15.00	777.329	Ē	
End of Deck Beam - South Abut.	1110+14.32	-15.00	778.152	<u>©</u>	
Midspan	1110+41.49	-15.00	778.814	$\Theta$	
End of Deck Beam - North Abut.	1110+68.65	-15.00	777.329	(1)	
	1				

\*\* ANTICIPATED WEARING SURFACE ELEVATIONS

\*\* Elevations are based off of existing survey and are for information only. The new concrete overlay is to maintain a constant 5" thickness along the bridge centerline and 4¾" along the bridge curb, following the existing superstructure camber. The contractor shall determine the final elevations based on the existing top of beam elevations following removal of the existing HMA overlay.

### **GENERAL NOTES**

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

The quantity for "Keyway Repair" has been estimated at 50% of all of the keyways between the original deck beams that are in the HMA wearing surface/curb concrete removal area and not adjacent to the beams being replaced. The Engineer shall determine the actual quantities after the removal of the HMA wearing surface/curb concrete.

The quantity for "Grout Repair" has been estimated at 50% of North and South Abutments, excluding the three beams being replaced. The Engineer shall determine the actual quantities after the removal of the HMA wearing surface/curb

The quantity for "Dowel Repair" has been estimated at 25% of all the dowels, exluding the three beams being replaced. The Engineer shall determine the actual quantities after the removal of the HMA wearing surface/curb concrete.

The contractor is advised that the three PPC Deck Beams to be removed are in a deteriorated condition. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures.

If the contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. the procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the new or existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used under the crane mat to ensure uniform contact with the underlying beams. If heavy equipment will be placed on new PPC deck beams, the following shall be done prior to placement of the timber mats: placement and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum and grouting and curing the shear keys.

Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of Removal of Existing PPC Deck Beams.

#### TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
HMA Surface Removal (Deck)	Sq. Yd.	188
Removal of Existing PPC Deck Beam	Sq. Ft.	489
Concrete Removal	Cu. Yd.	5.8
Keyway Repair	Foot	191
Grout Repair	Foot	23
Dowel Repair	Each	9
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	489
Portland Cement Mortar Fairing Course	Foot	544
Reinforcement Bars, Epoxy Coated	Pound	2,837
Bar Splicers	Each	65
Concrete Wearing Surface 5"	Sq. Yd.	188
Concrete Superstructure	Cu. Yd.	5.8
Protective Coat	Sq. Yd.	207
Structural Repair of Concrete Depth Equal To or Less Than 5"	Sq. Ft.	44
Epoxy Crack Injection	Foot	62
Bridge Deck Grooving	Sq. Yd.	175

# **DESIGN SPECIFICATIONS**

AASHTO (1989), 1990 Interims

#### **DESIGN STRESSES**

#### FIELD UNITS

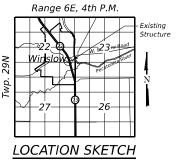
 $f'c = 3,500 \, psi$ 

f'c = 5,000 psi (Concrete Wearing Surface) fy = 60,000 psi (Reinforcement)

#### PRECAST PRESTRESSED UNITS

 $f'c = 6,000 \, psi$ f 'ci = 5,000 psi

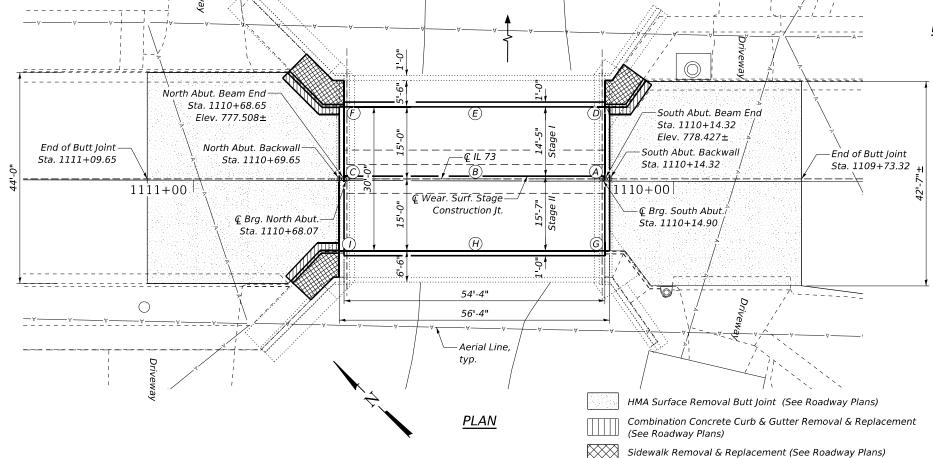
 $f's = 270,000 \ psi \ (\frac{1}{2}" \ \emptyset \ low \ lax. \ strands)$ f'si = 201,960 psi (½"  $\varnothing$  low lax. strands)





Date: 12/09/2024 Expires 11/30/2026 GENERAL PLAN AND ELEVATION F.A.S. 1087 (IL 73) OVER INDIAN CREEK SECTION (106 BR)BDR STEPHENSON COUNTY STATION 1110+41.49

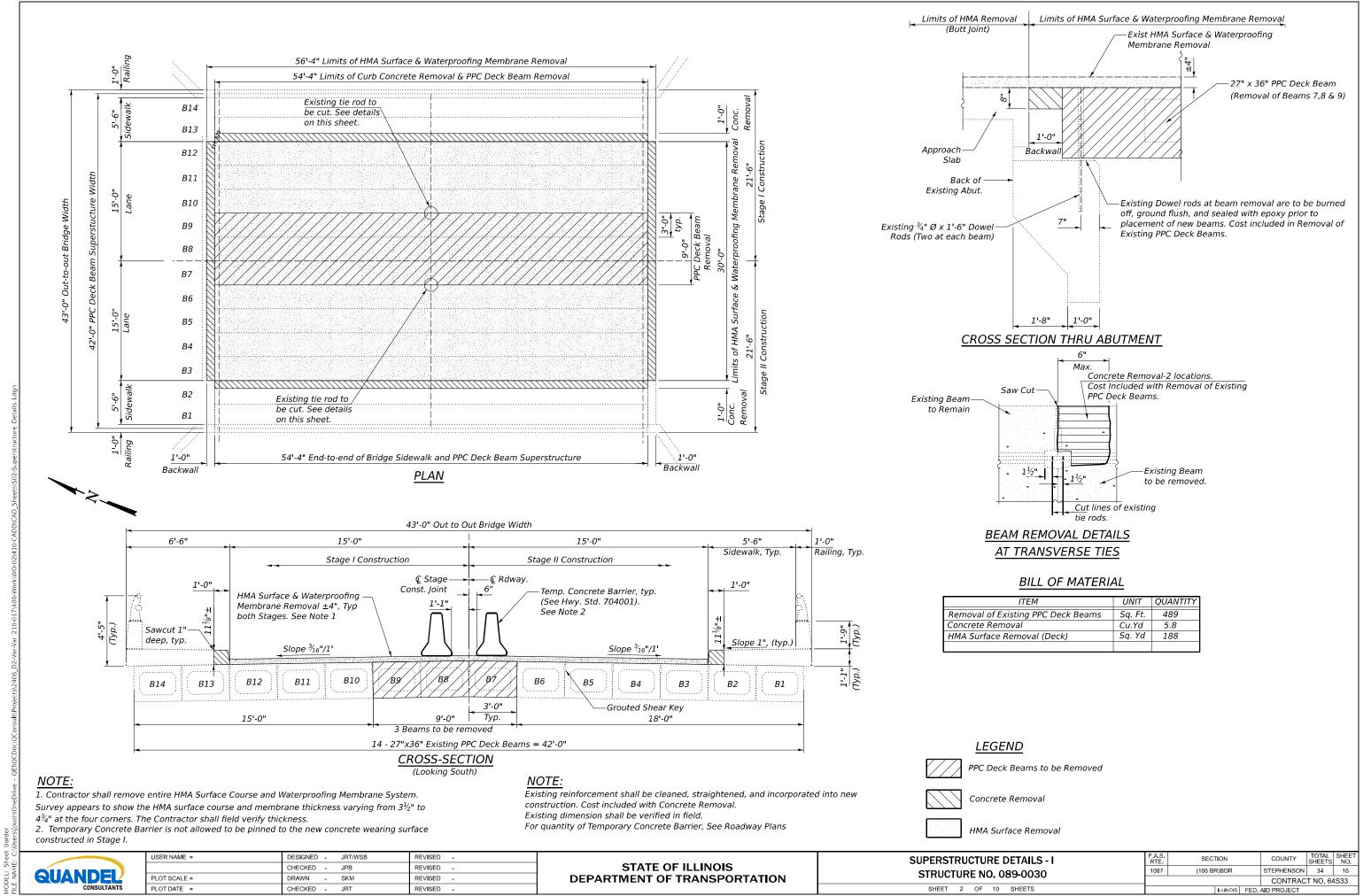
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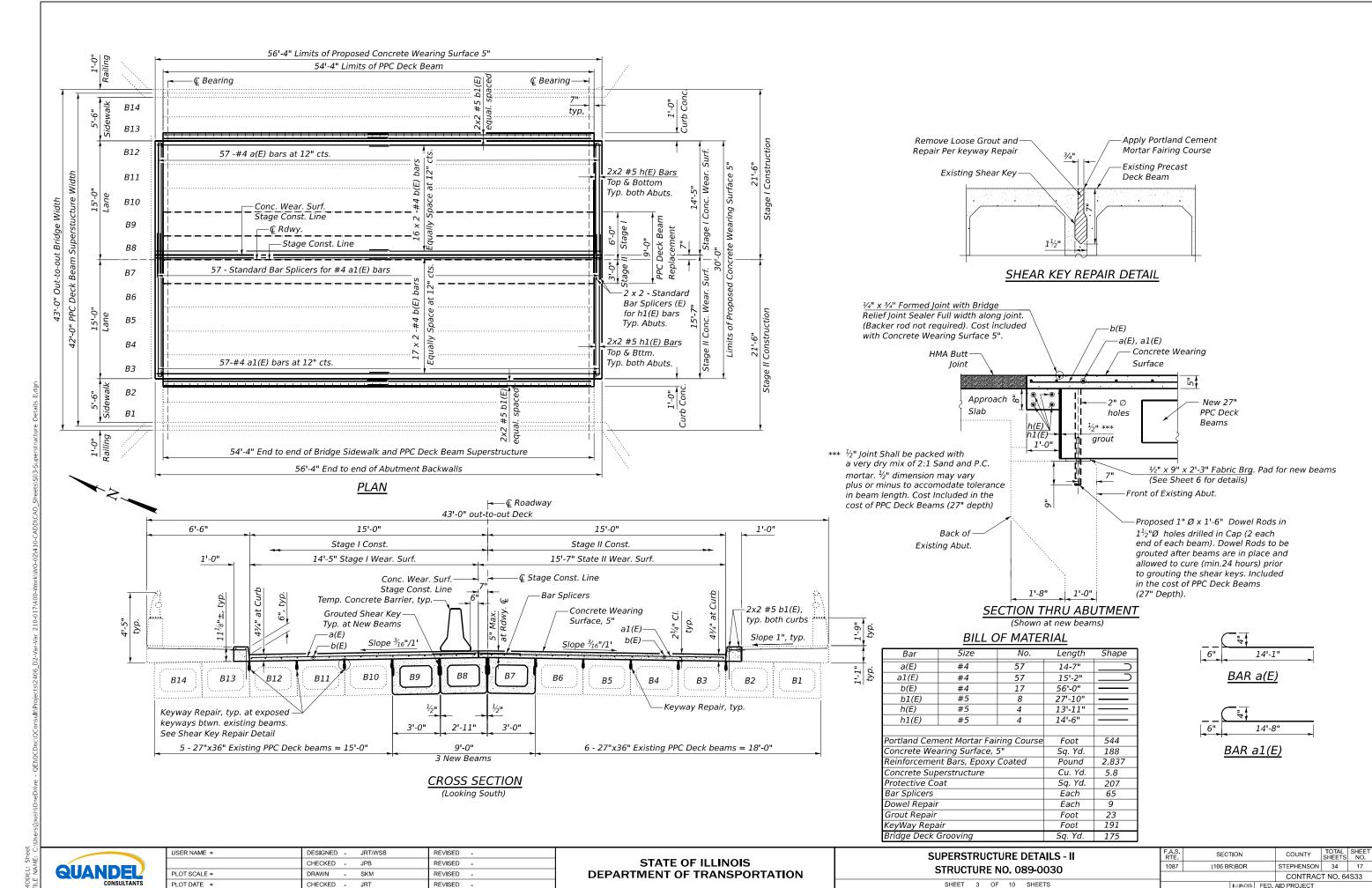
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**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**  **GENERAL PLAN AND ELEVATION STRUCTURE NO. 089-0030** SHEET 1 OF 10 SHEETS

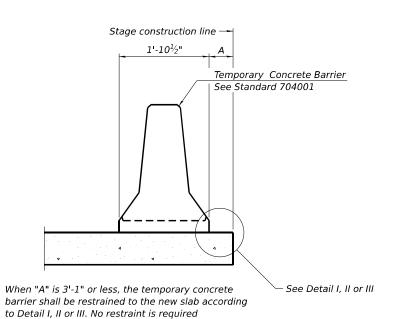
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				CONTRAC	T NO. 64	1833
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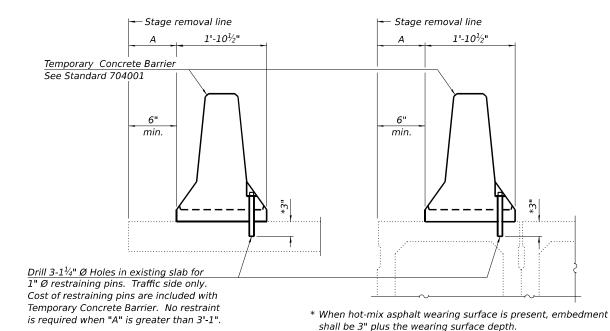


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 $\frac{7}{16}$ " Ø hole US Std.  $1\frac{1}{16}$ " I.D.  $\times 2\frac{1}{2}$ " O.D. x approx. 8 gauge thick washer 1" Ø pin

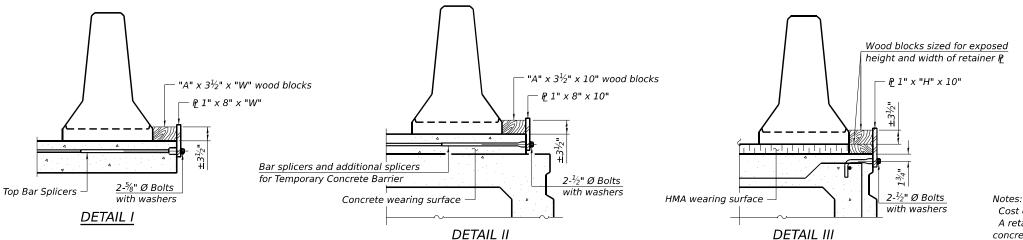
RESTRAINING PIN

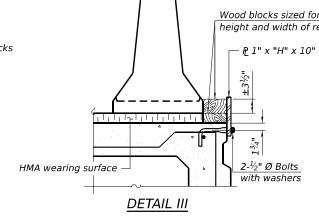
#### NEW SLAB OR NEW DECK BEAM

when "A" is greater than 3'-1".

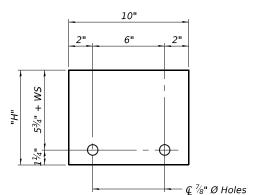
**EXISTING SLAB** 

#### SECTIONS THROUGH SLAB OR DECK BEAM





EXISTING DECK BEAM



# STEEL RETAINER IP 1" x "H" x 10"

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate **©** of each temporary concrete barrier.

BAR SPLICER FOR #4 BAR - DETAIL III

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than  $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

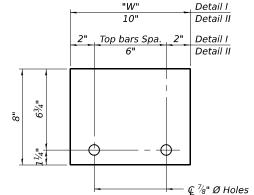
Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

COUNTY

CONTRACT NO. 64S33



#### RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

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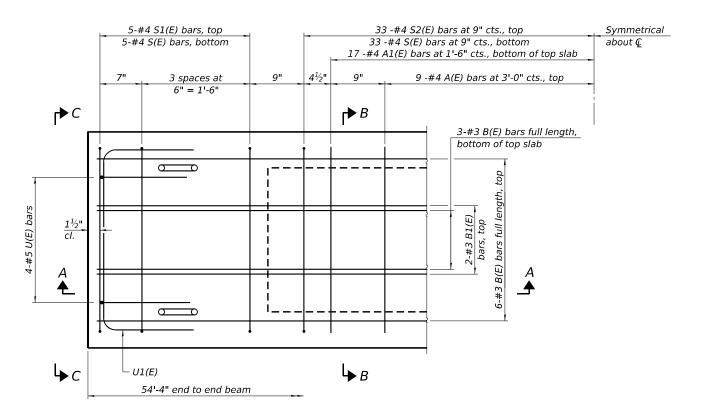
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CONSULTANTS

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STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)

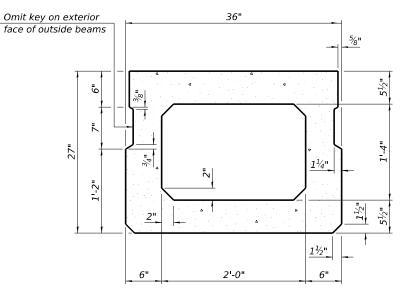
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**  TEMPORARY CONCRETE BARRIER SECTION STEPHENSON 34 18 1087 (106 BR)BDR **STRUCTURE NO. 089-0030** SHEET 4 OF 10 SHEETS



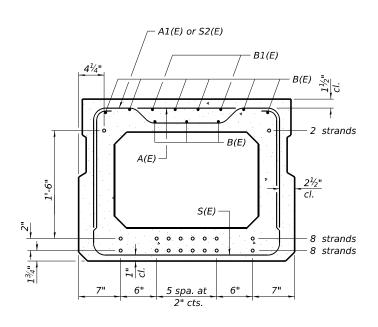
# PLAN VIEW - BEAM 7 & 9 (For Beam 8 Plan, see Sheet 7)

Note:

Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.





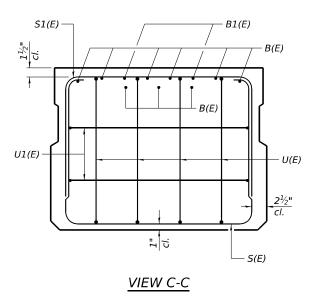


#### SECTION B-B

(Showing reinforcement and permissible strand locations)

Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

 $\frac{MINIMUM BAR LAP}{#3 bar = 1'-6"}$ 



## BAR LIST ONE BEAM ONLY

(For information only)

Bar	No.	Size	Length	Shape
4 <i>(E)</i>	18	#4	2'-7"	
41 <i>(E)</i>	33	#4	2'-10"	{
B <i>(E)</i>	6	#3	54'-0"	
B1 <i>(E)</i>	4	#3	10'-0"	
S(E)	74	#4	7'-5"	C
S1(E)	8	#4	5'-11"	]
S2(E)	66	#4	6'-2"	3
U(E)	8	#5	4'-6"	
U1(E)	4	#4	5'-0"	]

Note:

See Sheet 6 for additional details and Bill of Material.

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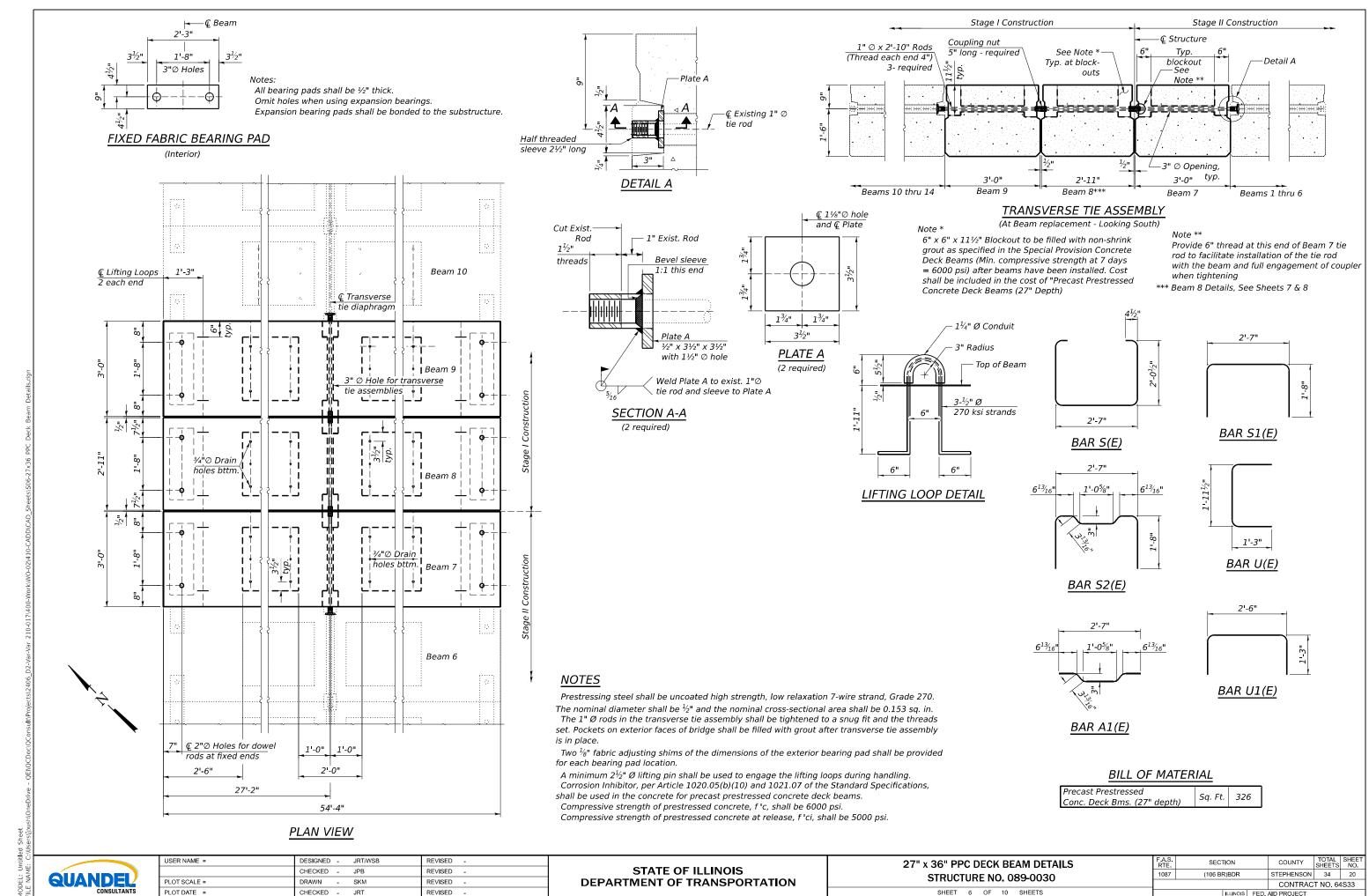
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DEPARTMENT OF TRANSPORTATION

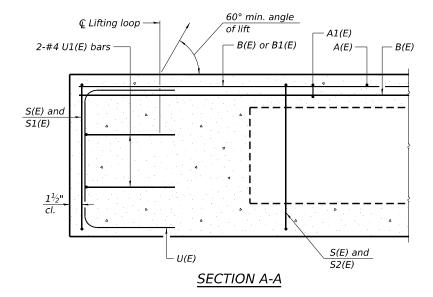
27" x 36" PPC DECK BEAM - BEAMS 7 & 9 STRUCTURE NO. 089-0030  
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 COUNTY
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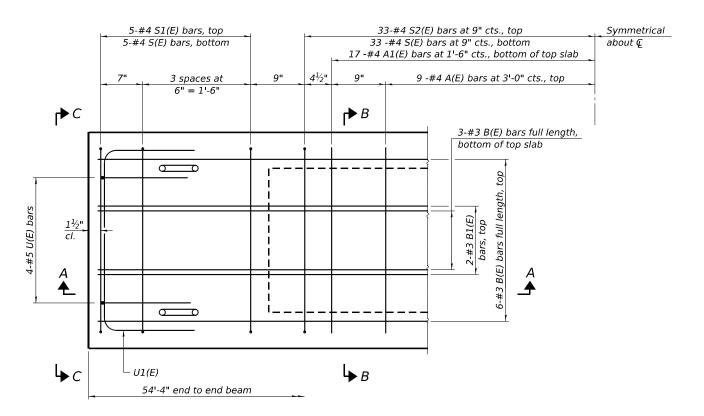
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 STEPHENSON
 34
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 CONTRACT NO. 64S33



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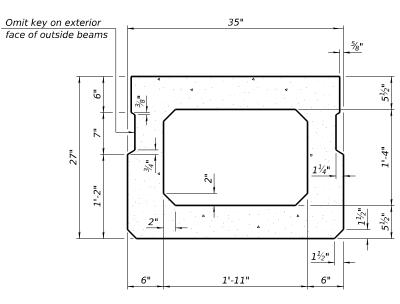




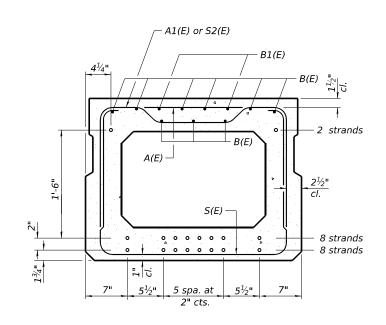
#### PLAN VIEW - BEAM 8

Note:

Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

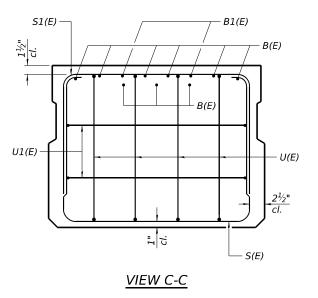


SECTION B-B (Showing dimensions)



<u>SECTION B-B</u> (Showing reinforcement and permissible strand locations)

> MINIMUM BAR LAP #3 bar = 1'-6"



BAR LIST
ONE BEAM ONLY - BEAM 8
(For information only)

No. Size Length Shape 18 #4 2'-6" #4 2'-9" A1(E) 33 #3 54'-0" B1(E) 4 #3 10'-0" 7'-4" #4 S1(E) 8 #4 5'-10" S2(E) #4 6'-1" 66 \_\_1 #5 4'-6" U1(E) 4 #4 5'-0"

Note:

See Sheet 8 for additional bar details and Bill of Material.

See Sheet 6 for Plan View, Fabric Bearing Pad, and Section with tie Detail

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5-15-2023



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

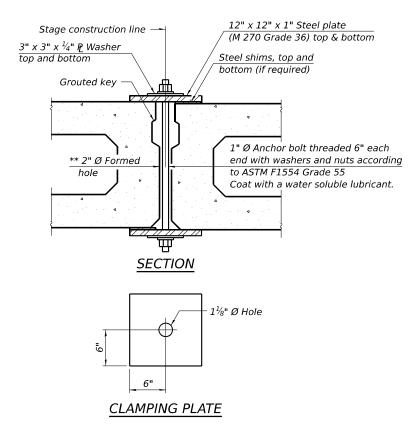
27" x 35" PPC DECK BEAM (BEAM 8) STRUCTURE NO. 089-0030

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#### PLAN

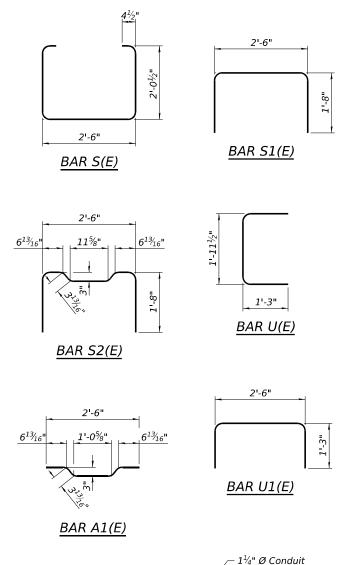
\*Space plates to miss temporary bridge rail posts.



#### SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

See stage construction details for traffic lanes.

\*\* Cast semicircular recesses in the sides of each beam adjacent to the stage construction line. These recesses should align to form a hole at the appropriate locations for the clamping device bolts.



### NOTES FOR 27" x 35" PPC DECK BEAM (BEAM 8)

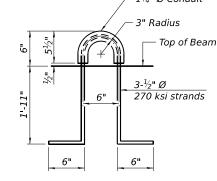
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be  ${}^{1}\!\!\!/_{2}$ " and the nominal cross-sectional area shall be 0.153 sq. in. The 1" Ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Two  $\frac{1}{8}$ " fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum  $2^{\frac{1}{2}}$ " Ø lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f 'c, shall be 6000 psi.

For Plan View, Fabric Bearing Pad Detail, and cross-section with tie, See Sheet 6.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



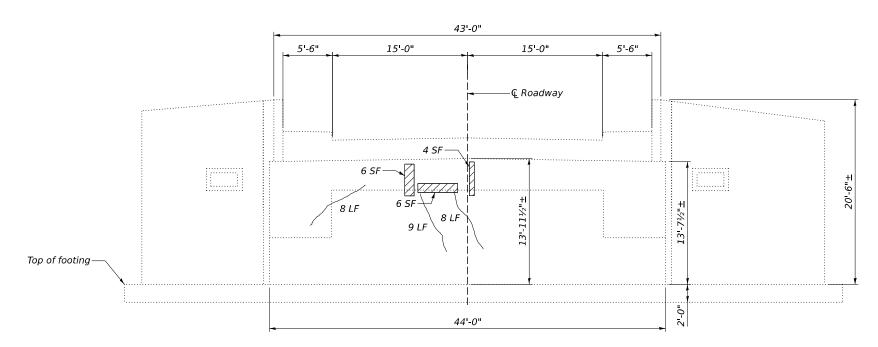
LIFTING LOOP DETAIL

#### BILL OF MATERIAL - BEAM 8

Precast Prestressed	Sa. Ft.	163
Conc. Deck Bms. (27" depth)	3q. Ft.	103

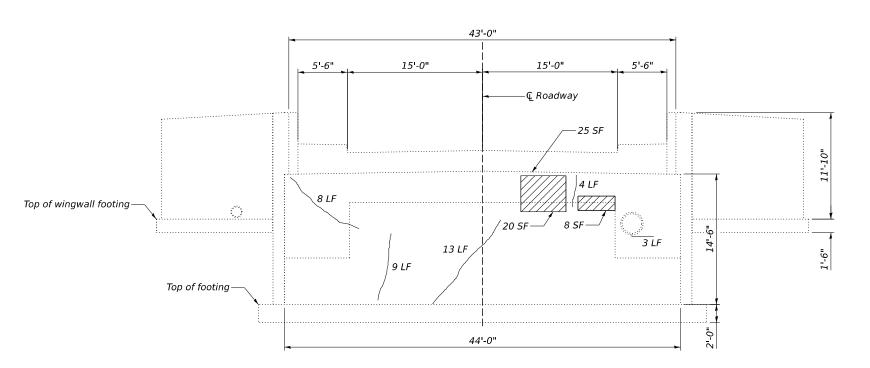


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#### **ELEVATION - NORTH ABUTMENT**

(Looking North)



# ELEVATION - SOUTH ABUTMENT

(Looking South)

### <u>NOTE:</u>

 Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired, and the type(s) of repairs to be used will be determined by the Engineer in the field at the time of construction.

### **BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structure Repair of Concrete (Depth equal to or less than 5 Inches)	Sq. Ft.	44
Epoxy Crack Injection	Foot	62

### <u>LEGEND</u>

Structure Repair of Concrete (Depth ≤ 5")

Epoxy Crack Sealing

SF - Square Foot

LF - Linerar Foot

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT REPAIRS
STRUCTURE NO. 089-0030
SHEET 9 OF 10 SHEETS

 
 FA.S. RTE.
 SECTION
 COUNTY SHEETS
 TOTAL NO.
 SHEETS NO.

 1087
 (106 BR)BDR
 STEPHENSON
 34
 23

 CONTRACT NO. 64\$33

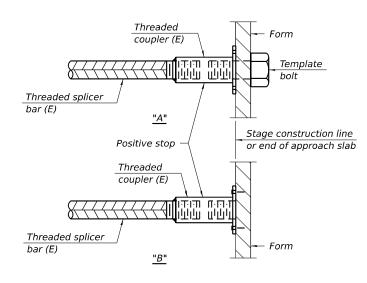
#### STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

Threaded splicer bar length = min. lap length +  $1\frac{1}{2}$ " + thread length

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

Location	Bar size	No. assemblies required	Minimum lap length
Concrete Wearing Surface a(E) to a1(E)	#4	57	2'-5"
Concrete Abut. Hatch Block h(E) to h1(E)	#5	8	3'-4"

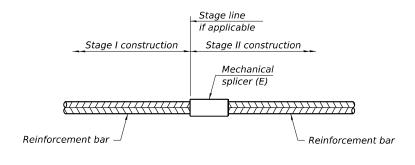


#### INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.

"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



#### STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:

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

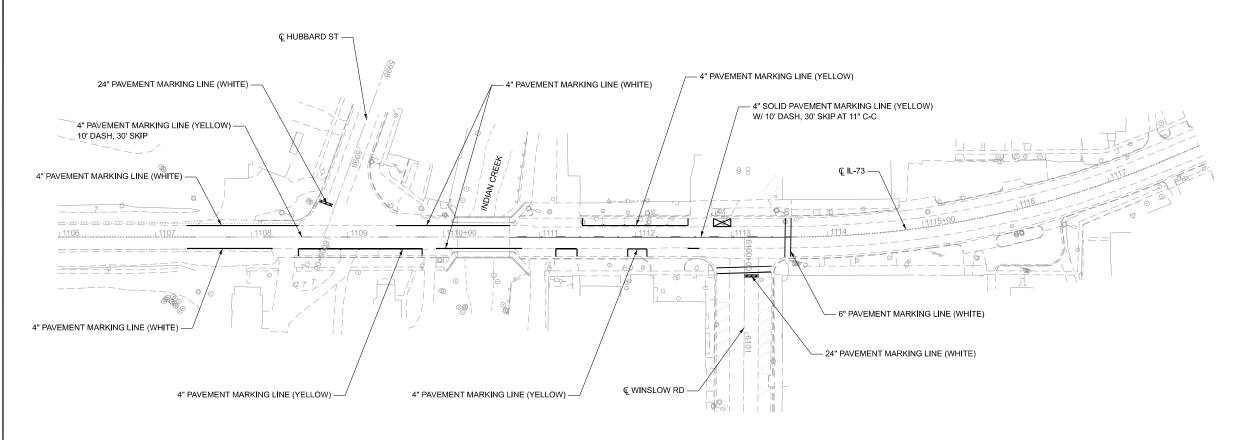
All reinforcement shall be lapped and tied to the splicer bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

5-15-2023



USER NAME =	DESIGNED	-	JRT/WSB	REVISED	-
	CHECKED	-	JPB	REVISED	-
PLOT SCALE =	DRAWN	-	SKM	REVISED	-
PLOT DATE =	CHECKED	-	JRT	REVISED	-



#### SCHEDULE OF PERMANENT PAVEMENT MARKING

LOCATION	CATION BEGIN			END			PERMANENT PAVT. MARKINGS				
	STA	OFFSET	STA	OFFSET	4"	6"	24"	COLOR			
SB EDGE	1107+32.16	12.00' LT	1108+48.68	12.00' LT	117			w			
SB EDGE	1109+50.11	12.00' LT	1110+68.68	12.00' LT	119			w			
SB PARKING	1111+44.34	19.59' LT	1112+54.34	19.62' LT	130			Y			
SB PARKING	1112+80.87	19.28' LT	1112+98.81	19.36' LT	75			Y			
NB EDGE	1107+32.59	12.00' RT	1108+21.76	12.00' RT	90			W			
NB PARKING	1108+48.52	19.75' RT	1109+77.31	19.18' RT	148			Y			
NB EDGE	1109+91.86	12.00' RT	1110+81.57	12.00' RT	90			Y			
NB PARKING	1111+16.77	20.36' RT	1111+38.77	20.34' RT	38			Y			
NB PARKING	1111+91.57	20.38' RT	1112+11.57	20.47' RT	36			Y			
NB EDGE 1112+53.95		12.00' RT	1112+65.93	12.00' RT	12			W			
N. LEG CROSSWALK AT WINSLOW RD			1113+61.42	CL		82		w			
W. LEG STOP BAR AT HUBBARD ST	1108+70,18	37,87' LT	1108+86,45	31,90' LT			18	w			
E. LEG CROSSWALK AT WINSLOW RD					1113+41.64	30.48' RT		115		w	
E. LEG STOP BAR AT WINSLOW RD	1113+12.79	40.57' RT	1113+27.88	40.57' RT			16	w			
CENTERLINE (SKIP DASH)	1107+32.16	CL	1110+68.71	CL	85			Y			
CENTERLINE	1110+68.71	CL	1113+66.61	CL	373			Y			
TOTAL					1313	197	34				
2 COATS PAINT					2626	394	68				
USE					2626	394	68				

	_
QUIGG ENGINEERING IN	c

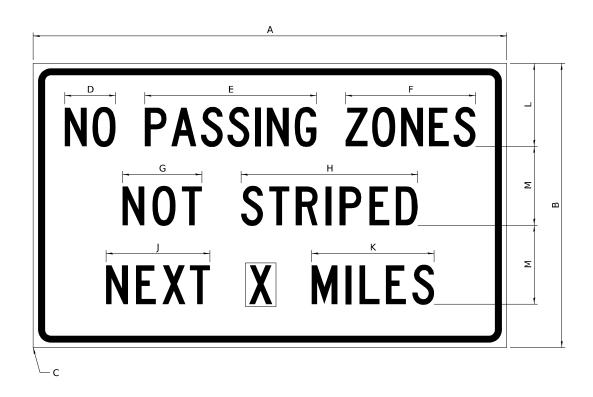
	USER NAME = afarooqi	DESIGNED -	AAF	REVISED -
		DRAWN -	AAF	REVISED -
	PLOT SCALE = 0.16666633 ' / in.	CHECKED -	JA	REVISED -
INC	PLOT DATE = 12/9/2024	DATE -	12/09/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 73 OVER INDIAN CREEK						F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DA	VEMENT	MARKI	NG PLAI	N	1087	(106 BR)BDR	STEPHENSON	34	25
		A FINEIA I	MAINN	ITO I EAI	<u> </u>			CONTRACT	NO. 649	S33
SCALE: 1"=50'	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT			

# **WORK ZONE SIGN DETAILS**

# **ILLINOIS STANDARD G20–I100**



COLOR LEGEND AND BORDER BACKGROUND

BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	А	В	С	D	Е	F	G	Н	J	K	L	М
60 x 36	60.00	36.00	2.25	6.4	21.80	16.40	10.00	22.40	13.20	15.50	10.50	10.00

SIGN SIZE	SER	IES BY L	INE	MARGIN	BORDER
	1	2	3	MARGIN	DURDER
60 x 36	5C	5C	5C	0.625	0.875

Sign not to scale

#### **GENERAL NOTES**

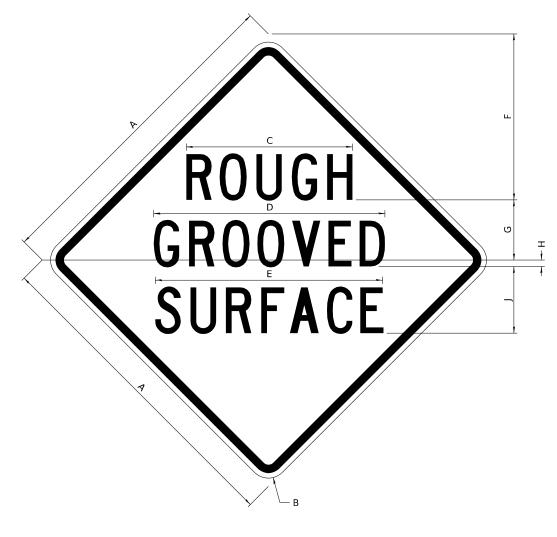
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

# **ILLINOIS STANDARD W8–I107**



COLOR RACKG

LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE		DIMENSIONS							
	Α	В	С	D	Е	F	Ð	Н	J
48 x 48	48.00	3.00	25.00	34.80	34.20	24.94	9.00	1.00	10.00

SIGN SIZE	SER	IES BY L	INE	MARGIN	PODDED	
SIGN SIZE	1	2	3	MARGIN	BORDER	
48 x 48	7C	7C	7C	1.250	0.750	

Sign not to scale



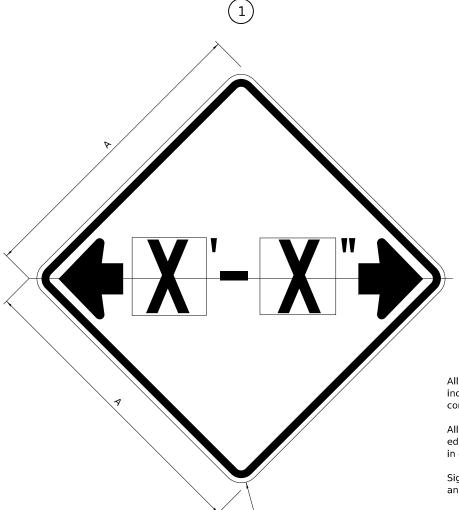
USER NAME = afarooqi	DESIGNED -	REVISED - 3-02-16
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 '/in.	CHECKED -	REVISED -
PLOT DATE = 12/9/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

						F.A.S RTE	SECTION		COUNTY	TOT SHE
						1087	(106 BR)BDI	₹	STEPHENSON	34
									CONTRACT	NO.
SCALE: N.T.S.	SHEET 1	OF 9	SHEETS	STA.	TO STA.		ILLIN	OIS FED. A	D PROJECT	

# **WORK ZONE SIGN DETAILS**

# **ILLINOIS STANDARD W12–I102**



#### **GENERAL NOTES**

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

COLOR LEGEND AND BORDER BACKGROUND

BLACK FL ORANGE NON-REFLECTORIZED REFLECTORIZED

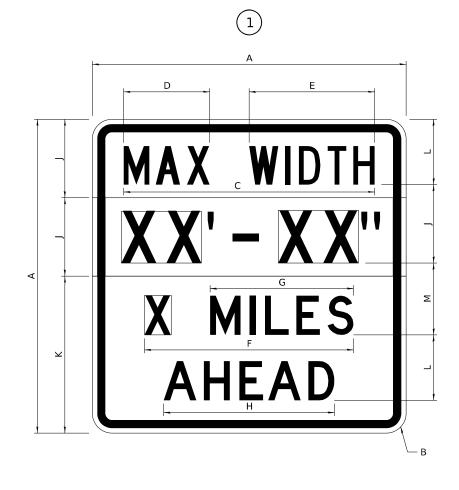
SIGN SIZE	DIMENSIONS				
SIGN SIZE	Α	В			
48 x 48	48.00	3.00			

 $\underbrace{1} \ \ \, \text{Illinois Standard signs W12-I102 and W12-I103 shall be} \\ \text{used as described in the special provisions.}$ 

SIGN SIZE	SERIES BY LINE	MARGIN	BORDER	
SIGN SIZE	1	MARGIN	BURDER	
48 x 48	12C	0.750	1.250	

Sign not to scale

## **ILLINOIS STANDARD W12–I103**



COLOR

LEGEND AND BORDER BACKGROUND BACKGROUND (WIDTH) BLACK WHITE FL ORANGE NON-REFLECTORIZED REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS											
SIGN SIZE	A B C D E F G H J K					L	М					
48 x 48	48.00	3.00	38.40	13.20	19.20	32.00	22.00	26.20	12.00	24.00	10.00	11.00

SIGN SIZE		SERIES BY LINE MARGIN BO			BORDER	
SIGN SIZE	1	2	3	4	MARGIN	BONDER
48 x 48	6C	8D	6D	6D	0.750	1,250

Sign not to scale

XX'-XX" WIDTH AND X MILES ARE VARIABLE TOP AND BOTTOM OF BACKGROUND WHITE



USER NAME = afarooqi	DESIGNED -	REVISED - 3-02-16
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/9/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: N.T.S. SHEET 2 OF 9 SHEETS STA.

 S.
 SECTION
 COUNTY
 TOTAL SHEETS NO.
 SHEETS NO.

 7
 (106 BR)BDR
 STEPHENSON
 34
 27

 CONTRACT NO. 64\$33

TO STA.

# **WORK ZONE SIGN DETAILS**

## ROAD CLOSED TO OVERSIZED LOADS



COLOR

LEGEND AND BORDER BACKGROUND

**BLACK** ORANGE

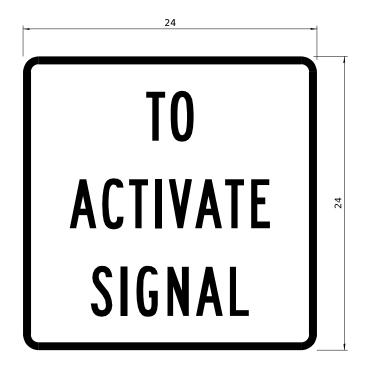
NON-REFLECTORIZED REFLECTORIZED

Permit Loads - Loads Over 13 Feet, 3.0" Radius, 1.3" Border, [NO OVERSIZE -] D; [OVERWEIGHT LOADS] D 85% spacing; [XX MILES AHEAD] D; Table of letter and object lefts.

N 11.7	O 18.1	O 30.0	V 36.2	E 42.8	R 48.4	<b>S</b> 54.4	<b>I</b> 60.7	Z 63.5	E 69.5	- 80.8				
O 2.6	V 8.6	E 15.0	R 20.4	W 26.2	E 33.4	<b>I</b> 38.8	<b>G</b> 41.3	H 47.4	<b>T</b> 53.2	L 64.5	O 69.9	<b>A</b> 75.9	D 82.9	S 88.7
X 7.6	X 13.6	M 25.3	   32.3	L 35.1	E 40.6	S 46.2	<b>A</b> 57.9	H 65.1	E 71.4	A 76.6	D 83.7			

Sign not to scale

# STOP LINE SIGN FOR TEMPORARY SIGNALS



LEGEND AND BORDER BACKGROUND

BLACK WHITE

NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	SERIES BY LINE				
SIGN SIZE	1	2	3		
24 x 24	4C	4C	4C		

Sign not to scale

#### **GENERAL NOTES**

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.



USER NAME = afarooqi	DESIGNED -	REVISED - 3-02-16
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/9/2024	DATE -	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

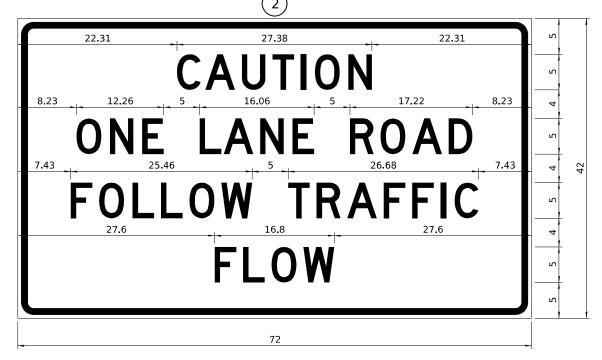
REGI	ON 2 /	D	ISTRICT	2 STA	NDARD
SHEET 3	OF	9	SHEETS	STA.	

F.A.S RTE	SECTION	COUNTY	TOTAL SHEETS	SH N	
1087	(106 BR)BDR	STEPHENSON	34	2	
		CONTRACT NO. 64S33			
	ILLINOIS	D PROJECT			

**WORK ZONE SIGN DETAILS** 

# **ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS**

# **WORK ZONE SIGN DETAILS**



COLOR LE

LEGEND AND BORDER BACKGROUND

BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

2.25" Radius, 0.88" Border, 0.50" IndenT; [CAUTION] D; [ONE LANE ROAD] D; [FOLLOW TRAFFIC] D; [FLOW] D

This sign shall be installed at entrances located between the temporary signals as shown in the staging plans.

### **Table Of Widths And Spaces**

22.31	C 3.36	0.62	<b>A</b> 4.18	0.94	U 3.36	0.94	T 3.04	0.94	<b> </b> 0.78	1.17	O 3.52	1.17	N 3.36	22.31
-------	-----------	------	------------------	------	-----------	------	-----------	------	------------------	------	-----------	------	-----------	-------

	0		N		Е
8.23	3.51	1.17	3.36	1.18	3.04

	L		Α		N		Е
5.00	3.05	0.31	4.18	0.94	3.36	1.17	3.05

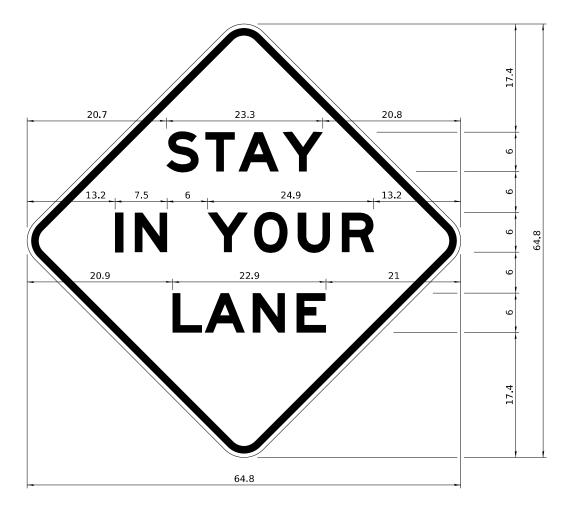
	R		0		Α		D	
5.00	3.36	0.93	3.52	0.94	4.18	0.93	3.36	8.23

5.00	T 3.05	0.94	R 3.36	0.94	<b>A</b> 4.18	0.93	F 3.05	0.94	F 3.04	0.94	<b> </b> 0.78	1.18	C 3.35	7.43	
------	-----------	------	-----------	------	------------------	------	-----------	------	-----------	------	------------------	------	-----------	------	--

	F		L		0		W	
27.60	3.05	0.94	3.04	0.94	3.52	0.93	4.38	27.60

Sign not to scale

# STAY IN YOUR LANE



COLOR

SCALE: N.T.S.

LEGEND AND BORDER BACKGROUND

BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

48.0" across sides 3.8" Radius, 1.0" Border, 0.6" Indent; "STAY" E Mod; "IN YOUR" E Mod; "LANE" E Mod;

## Table of Letter and Object Lefts

S	Т	Α	Υ
20.7	26.8	31.6	38.0

I N Y	O	U	R
13.2 15.9 26.7	33.9	40.5	46.8

L	Α	N	Е
20.9	25.8	33.1	39.4

Sign not to scale



USER NAME = afarooqi	DESIGNED -	REVISED - 3-02-16
	DRAWN -	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/9/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES** 

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book"

Signs shall meet the applicable portions of Sections 701

All dimensions are in inches unless otherwise noted.

in effect on the date of invitation for bids.

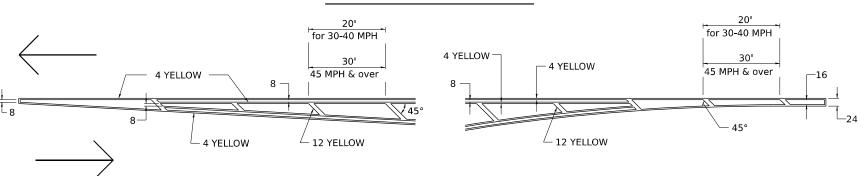
and 720 of the Standard Specifications.

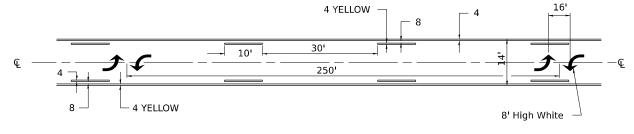
	REGIO	N 2 /	DIS	STRICT	2 STANDA	\RD		F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	REGION 2 / DISTRICT 2 STANDARD			1087	(106 BR)BDR	STEPHENSON	34	29				
										CONTRACT	NO. 64	S33
SHEET 4 OF 9 SHEETS STA TO STA							ILLINOIS EED	AID DRO JECT				

# **TYPICAL PAVEMENT MARKINGS**

## **MEDIAN PAVEMENT MARKING**

# TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE





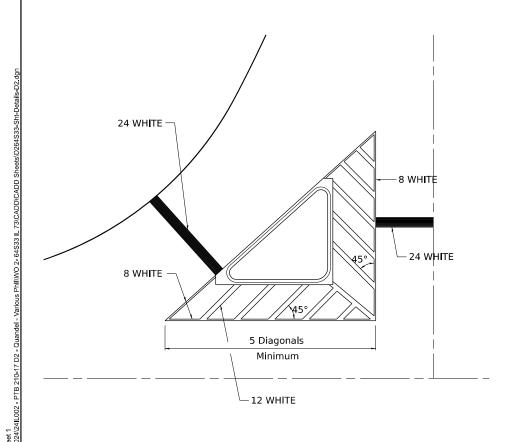
\*\* ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

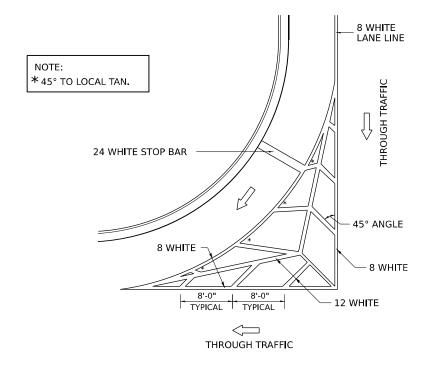
# TYPICAL ISLAND OFFSET SHOULDER WIDTH

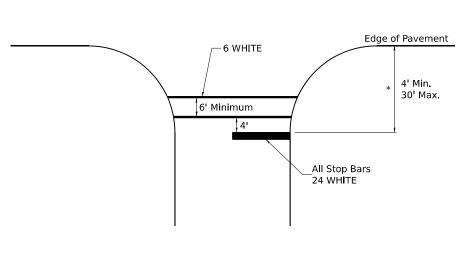
# TYPICAL MARKING FOR PAINTED ISLANDS

# STANDARD CROSSWALK MARKING

See Schedules for Locations







 Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

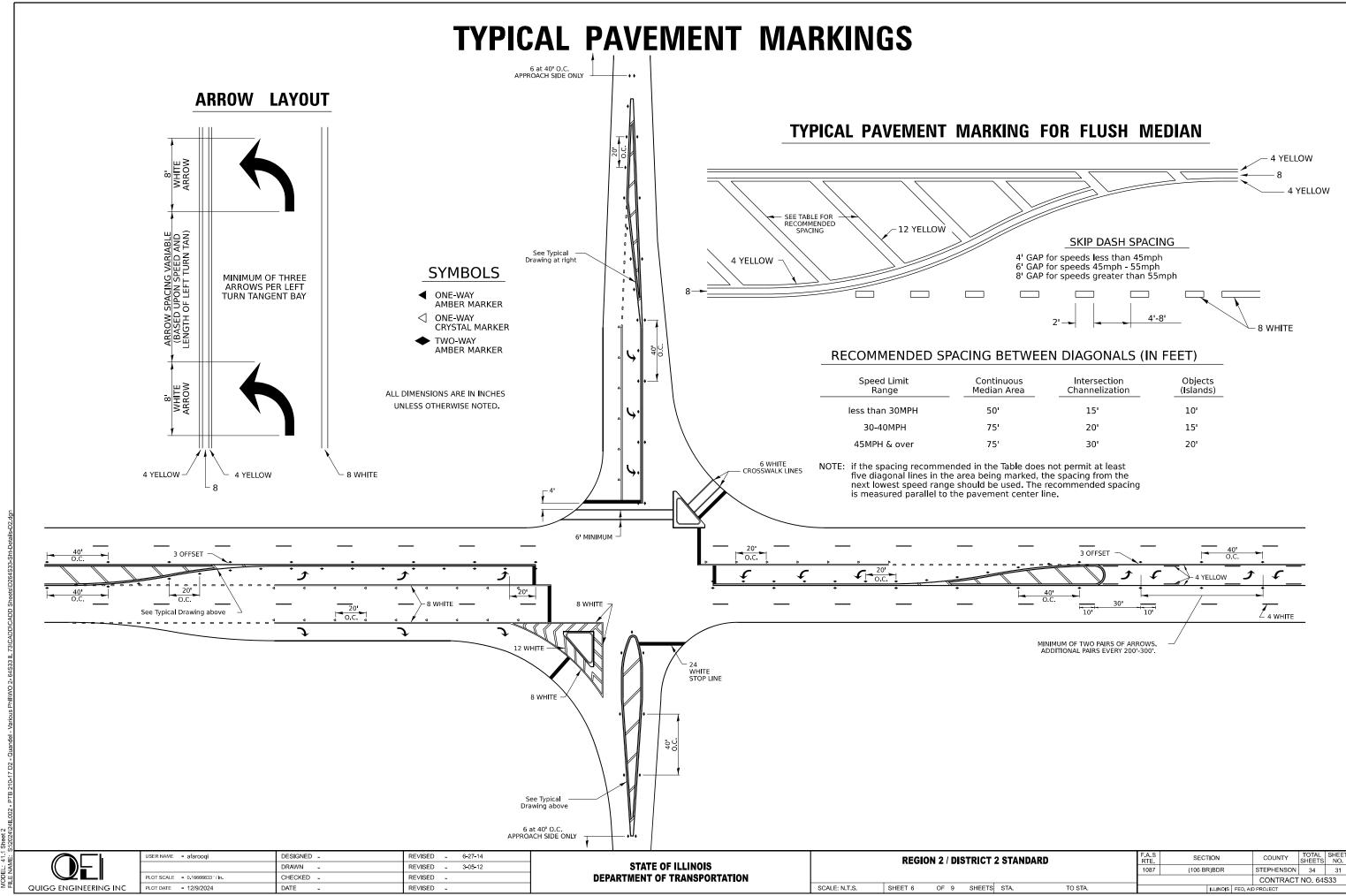
QUIGG ENGINEERII	NG IN

USER NAME = atarooqi	DESIGNED -	REVISED - 6-27-14
	DRAWN -	REVISED - 3-05-12
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/9/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

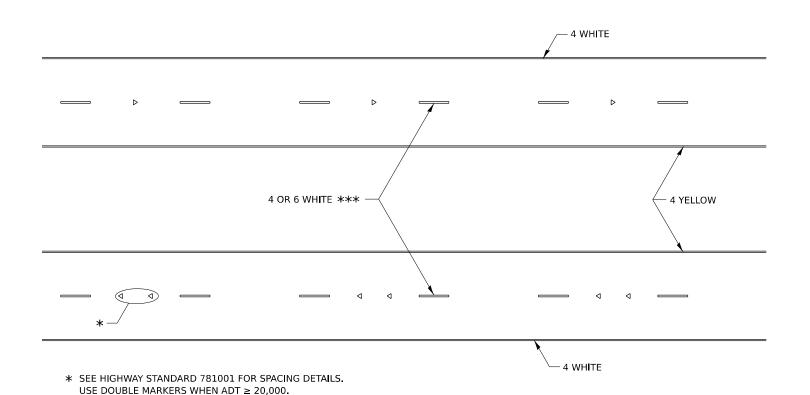
REGION 2 / DISTRICT 2 STANDARD											
		~=	_	0115570							

F.A.S RTE	SECTION	COUNTY	TOTAL SHEETS	SHEE.	
1087	(106 BR)BDR		STEPHENSON	34	30
			CONTRACT	NO. 64	533
	ILLINOIS	FED. AII	D PROJECT		



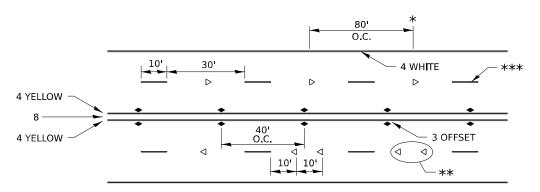
# **TYPICAL PAVEMENT MARKINGS**

# TYPICAL PARKING SPACING



22'-25' – 4 WHITE Face of Curb 20' Min. — No Parking Zone 22'-25' -4 WHITE Face of Curb 30' Min. — Approach to Signal No Parking Zone 20' Min. Face of Curb 20' Min. No Parking Zone

# MULTI-LANE / DIVIDED



- \* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.
- \*\* USE DOUBLE MARKERS WHEN ADT ≥ 20,000
- \*\*\* CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

# MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

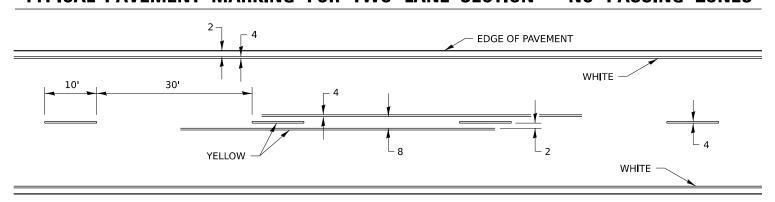


USER NAME = afarooqi	DESIGNED -	REVISED - 6-27-14
	DRAWN -	REVISED - 8-27-13
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED - 11-28-12
PLOT DATE = 12/9/2024	DATE -	REVISED -

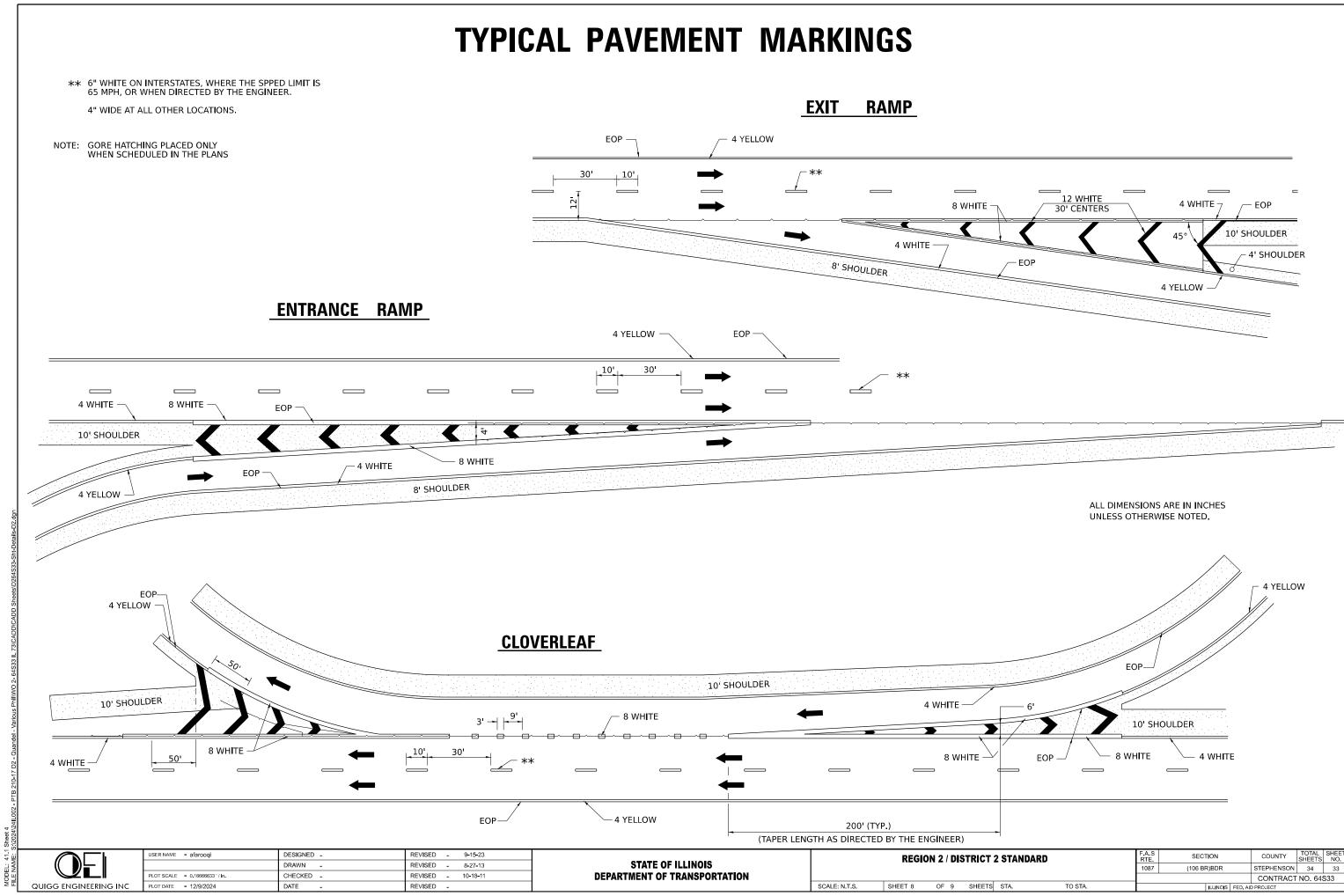
#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	REGIO	ON 2	/ DIS	STRICT	2 STANE	DARD			F.A.S RTE.	SEC	TION	COUNTY	TOTAL SHEETS	SHEET NO.
							1087	(106 E	R)BDR	STEPHENSON	34	32		
												CONTRACT	NO. 649	S33
SCALE: N.T.S.	SHEET 7	OF	9	SHEETS	STA.		TO STA.		ILLINOIS FED, AID PROJECT					

# TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



41.1



# **GUARDRAIL REFLECTORS, TYPE C (SPECIAL)**

**BLOCK OUT** 

MOUNTED ON A GUARDRAIL BLOCK OUT

WITH WASHERS.

REFLECTORS SHALL BE MOUNTED DIRECTLY TO

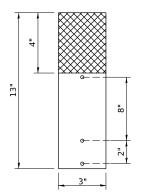
REFLECTORS MOUNTED ON WOODEN OR PLASTIC OR METAL BLOCK OUT SHALL BE MOUNTED USING TWO 2 1/2" GALVANIZED SCREWS WITH WASHERS OR TWO SELF TAPPING GALVANIZED SCREWS

TWO 2 1/3" GALVANIZED SCREWS

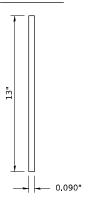
- P OR TWO GALVANIZED SELF TAPPING

### REFLECTORS FOR GUARDRAIL BLOCK OUT OR DELINEATOR POST

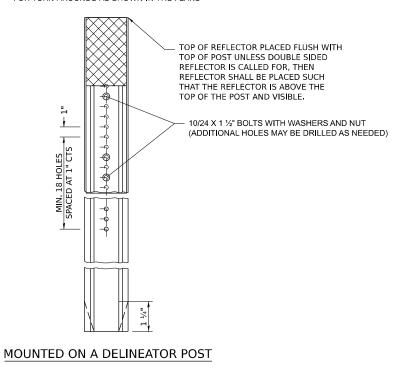
#### STRAIGHT REFLECTOR / DELINEATOR



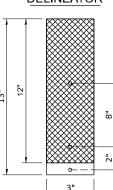
#### SIDE VIEW



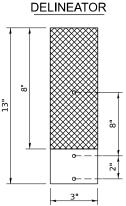
ADDITIONAL SHEETING MAY BE ADDED AS NEEDED



**REPLACING** 



REPLACING 2 BUTTON



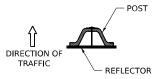
3 BUTTON **DELINEATOR** 

AND BOTH SIDES SHALL BE CRYSTAL.

REFLECTORS INSTALLED ON CENTER BARRIER OR IN THE MEDIAN SHALL BE DOUBLE SIDED AND BOTH SIDES SHALL BE AMBER.

OF THE ROADWAY SHALL BE DOUBLE SIDED CRYSTAL.

ADDITIONAL HOLES SHALL BE DRILLED IN THE



DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED  $180^{\circ}$  . THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE REFLECTOR ATTACHECD AS SHOWN ABOVE.

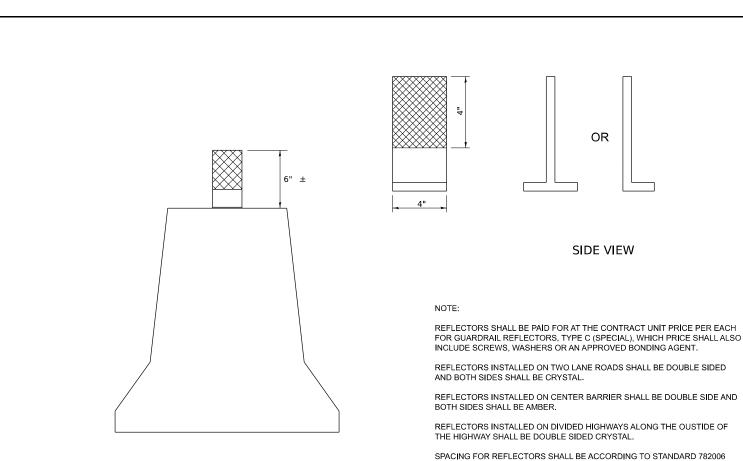
#### NOTE:

REFLECTORS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR GUARDRAIL REFLECTORS, TYPE C (SPECIAL), WHICH PRICE SHALL ALSO INCLUDE SCREWS, WASHERS OR AN APPROVED BONDING AGENT.

REFLECTORS INSTALLED ON TWO LANE ROADS SHALL BE DOUBLE SIDED

REFLECTORS INSTALLED ON DIVIDED HIGHWAYS ON THE OUTSIDE

SPACING FOR REFLECTORS SHALL BE ACCORDING TO STANDARD 782006 UNLESS OTHERWISE NOTED IN THE PLANS.



REFLECTORS MOUNTED ON BARRIER WALL

QUIGG ENGINEERING INC

DESIGNED -REVISED - 3-07-24 SER NAME = afaroogi REVISED -DRAWN 4-27-23 CHECKED REVISED -PLOT DATE = 12/9/2024 DATE REVISED .

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

**REGION 2 / DISTRICT 2 STANDARD** SHEET 9 OF 9 SHEETS STA.

SECTION (106 BR)BDR STEPHENSON 34 CONTRACT NO. 64S33

UNLESS OTHERWISE NOTED IN THE PLANS.