11-8-2022 LETTING ITEM 012

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

ILLINOIS CONTRACT NO. 64R51

D-92-018-22

LOCATION OF SECTION INDICATED THUS: -

INDEX OF SHEETS COVER SHEET

- GENERAL NOTES SUMMARY OF QUANTITIES
- SCHEDULE OF QUANTITIES ALIGNMENT LAYOUT PLAN
- REMOVAL PLANS
- IMPROVEMENT PLANS
- 10-11 MAINTENANCE OF TRAFFIC PLANS
- STRUCTURAL PLANS 12-28 GENERAL DETAILS
- DISTRICT 2 DETAILS
- WORK ZONE SIGN DETAILS (34.1)
- TYPICAL PAVEMENT MARKINGS (41.1)

PROPOSED HIGHWAY PLANS

FAP ROUTE 308 (IL 84) SECTION (104 BY-R)BDR **PROJECT** NHPP-X35X(505) **BRIDGE REPAIR OF STRUCTURE CARRYING IL 84 OVER RUSH CREEK** CARROLL COUNTY

C-92-075-22

RANGE 3 EAST

HIGHWAY STANDARDS

000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERS

001001-02 AREAS OF REINFORCEMENT BARS 001006 DECIMAL OF AN INCH AND OF A FOOT

701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY

701006-05 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15 AWAY
701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-05 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH

701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY

701321-18 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER

701901-08 TRAFFIC CONTROL DEVICES 704001-08 TEMPORARY CONCRETE BARRIER

720011-01 METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS

TELESCOPING STEEL SIGN SUPPORT 728001-01

APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS) TYPICAL PAVEMENT MARKINGS

GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

IMPROVEMENTS BEGIN Sta. 466 + 87.72 **SECTION BEGINS** Sta. 470 + 14.28



GROSS LENGTH = 997,02 FT. = 0,188 MILE

NET LENGTH = 331.45 FT. = 0.063 MILE

ERIC J. LINDEMANN

SHEETS 1-12, 32-39

EXPIRATION DATE 11-30-2023

ILLINOIS REG. PROFESSIONAL ENGINEER NO. 062-051170

IMPROVEMENTS END Sta. 476 + 84.74 SECTION ENDS Sta. 473 + 45.73

EXIST SN 008-0015

JIA WANG LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS LIC. No. 081-006586 EXPIRES: 11-30-22

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.

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JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS 1-800-892-0123

PROJECT ENGINEER ERIC J. LINDEMANN, P.E. PROJECT MANAGER MAHMOUD ETEMADI, P.E.

CONTRACT NO. 64R51

SUBMITTED August 16, 20 22 Formal Alimed REGIONAL ENGINEER October 14, 204 DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

- 1. TO HELP AVOID EXCESS DROP OFFS AT THE EDGE OF PAVEMENT, AGGREGATE SHOULDER MATERIAL OF THE TYPE SPECIFIED IN HE PLANS SHALL BE PLACED PRIOR TO ANY BITUMINOUS MATERIAL. THE AGGREGATE MATERIAL SHALL BE PLACED FLUSH WITH THE EXISTING PAVEMENT OR AT THE ELEVATION OF ANY PROPOSED MILLING. AT NO TIME SHALL THE EDGE OF THE AGGREGATE MATERIAL BE HIGHER THAN THE EXISTING EDGE OF PAVEMENT. THIS WORK SHALL BE PAID FOR BY THE TON FOR AGGREGATE SHOULDERS OF THE TYPE SPECIFIED.
- 2. THE STRUCTURE WILL RETAIN THE SAME NUMBER, SN 008-0015.
- 3. PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:
 - 1) ALL WORDS, SUCH AS ONLY, SHALL BE 8 FEET HIGH.
 - 2) ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE.
 - 3) 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.
 - 4) CENTERLINE SKIP DASH PAVEMENT MARKING ON MULTI-LANE DIVIDED, MULTI-LANE UNDIVIDED, AND ONE-WAY ROADWAY SHALL BE ACCORDING TO DISTRICT STANDARD 41.1.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.39 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123.
- 5. 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.
- 6. ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING.
- 7. THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD.
- 8. REGARDLESS OF UNDERLYING LAND OWNERSHIP, ALL SHORING SYSTEMS WITHIN RAILROAD RIGHT-OF-WAY OR THAT MAY IMPACT THE RAILROAD'S OPERATIONS AND/OR SUPPORTS THE RAILROAD'S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.
- THE CONTRACTOR SUBMIT AND PROVIDE SUFFICIENT SAFETY MEASURES TO PROTECT UNATTENDED EXCAVATIONS TO THE RAILROAD FOR APPROVAL.
- 10. ALL DEMOLITIONS/REMOVALS WITHIN THE RAILROAD'S RIGHT-OF-WAY AND/OR THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATIONS SHALL BE IN COMLIANCE WITH THE CURRENT RAILROAD'S DEMOLITION GUIDELINES.

- 11. RAILROAD REQUIREMENTS DO NOT ALLOW WORK WITHIN 50 FEET OF TRACK CENTERLINE WHEN A TRAIN PASSES THE WORK SITE AND ALL PERSONNEL MUST CLEAR THE AREA WITHIN 25 FEET OF THE TRACK CENTERLINE AND SECURE ALL EQUIPMENT.
- 12. CALL BEFORE YOU DIG. PRIOR TO EXCAVATION, DISTRUPTING, OR WORKING ON THE RAILROAD PROPERTY THE CONTRACTOR SHALL LOCATE AND PROTECT UPRR FACILITIES BY CALLING THE UPRR "CALL BEFORE YOU DIG" (CBYD) PHONE NUMBER: 1-800-336-9193.
- 13. CONSTRUCTION ACTIVITIES, INCLUDING FALSEWORK/FORMWORK, ARE NOT ALLOWED WITHIN THE "MINIMUM CONSTRUCTION CLEARANCE ENVELOPE" AS THEY WOULD OTHERWISE DISRUPT RAILROAD OPERATIONS.
- 14. A TOPOGRAPHIC SURVEY WAS NOT CONDUCTED FOR EXISTING FACILITIES AND PROPOSED DESIGN WORK SHOWN IN THE PLANS. ALIGNMENTS, DIMENSIONS, AND ELEVATIONS SHOWN ARE BASED ON EXISTING RECORD DRAWINGS. THE CONTRACTOR WILL VERIFY EXISTING DIMENSIONS IN THE FIELD PRIOR TO THE REMOVAL OF EXISTING BRIDGE AND ROAD ITEMS.

GENERAL NOTES - MAINTENANCE OF TRAFFIC

- 1. MAINTENANCE OF TRAFFIC SHALL UTILIZE STANDARDS AS NOTED IN THE INDEX OF HIGHWAY STANDARDS ON THE COVER SHEET AND AS DETAILED IN THESE PLANS.
- 2. A WIDTH RESTRICTION OF 10'-6" SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS AND THE DISTANCE FROM THE CROSSROADS AS NOTED; NORTHBOUND IL 84: ALL LEGS OF THE US 52 IL 78 INTERSECTION (15 MILES AHEAD), AT THE US 52 SAVANA-SABULA BRIDGE (4 MILES AHEAD), AT THE ENTRANCE TO THE MISSISSIPPI PALISADES STATE PARK CAMPGROUND (1 MILE AHEAD). SOUTHBOUND IL 84: AT THE INTERSECTION OF US 20 AND IL 84 (14 MILES AHEAD), AT THE JO DAVIES COUNTY HIGHWAY DEPARTMENT IN HANOVER, ILLINOIS (8 MILES AHEAD), AND AT THE US ARMY DEPOT ROAD (2.5 MILES AHEAD).
- 3. TEMPORARY PAVEMENT MARKINGS SHALL BE TAPE, TYPE I EXCEPT ON FINAL SURFACES. ON FINAL WEARING SURFACES TEMPORARY PAVEMENT MARKINGS SHALL BE TAPE. TYPE IV.
- 4. EXISTING INLETS SHALL BE COVERED WITH A SUITABLE THICKNESS STEEL PLATE IN A MANNER APPROVED BY THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED TRAFFIC CONTROL ITEMS.

GN-406H HMA MIXTURE REQUIREMENT TABLE

LOCATION(S):	SURFACE	SHOULDER	TEMPORARY RAMP
MIXTURE USE(S):	SURFACE	BINDER	BASE COURSE OPTION (HMA SHOULDER)
BINDER GRADE (AC/PG):	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0% @ Ndes=70	4.0% @ Ndes=70	4.0% @ Ndes=50
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL-9.5	IL-19.0	IL-19.0
FRICTION AGGREGATE:	MIXTURE "D"	N/A	N/A
MIXTURE WEIGHT:	112 LB/SQ YD/IN	112 LB/SQ YD/IN	112 LB/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA	QC/QA	QC/QA
SUBLOT SIZE:	N/A	N/A	N/A

USER NAME = jheimer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 1.6667 / in.	CHECKED -	REVISED -
PLOT DATE = 10/5/2022	DATE -	REVISED -

SCALE:

						·							
				F.A. RTE.				COUNTY	TOTAL SHEETS	SHEE NO.			
- 11	Ω/I	ΩV	ED	BIICH	CREE	/	308	(104-BY	′-R)BDR		CARROLL	36	2
	. 04	UV	LN	nosii	UNLLI	`					CONTRACT	NO. 64	R51
SHEET	1	OF	1	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		

				CONSTRUC	TION CODE
				80% Federal	20% State
CODE			TOTAL	BR I DGE	ROADWAY
NO.	ITEM	UNIT	QUANTITY	0047	0004
			`	SN 008-0015	RURAL
					>
31101100	SUBBASE GRANULAR MATERIAL, TYPE B	CU YD	49	0	49
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	144	0	144
40000200	BITOWINGOS WATERIALS (TACK COAT)			Ů	177
					<u> </u>
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	160	0	160
40600990	TEMPORARY RAMP	SQ YD	36	0	36
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	27	0	27
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	133	0	133
		,			
		00.1/D			
48203021	HOT-MIX ASHPALT SHOULDERS, 6"	SQ YD	886	0	886
50102400	CONCRETE REMOVAL	CU YD	13.2	13.2	0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	15.4	15.4	0
50300300	PROTECTIVE COAT	SQ YD	1,144	1,144	0
50500405	FURNIQUING AND EDECTING CTDUCTDUAL CTEFU	POUND	1,200	1,200	0
50500405	FURNISHING AND ERECTING STRUCTRUAL STEEL	1 OOND	1,200	1,200	0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,450	2,450	0
50800515	BAR SPLICERS	EACH	40	40	0
52000110	PREFORMED JOINT STRIP SEAL	FOOT	69	69	0

Kaskaskia
Engineering Group, LLC
Programming American Company
Engineering Group, LLC
Programming American Company
Engineering Group, School Company
Engineering Group Company
Engineering Group Company
Engineering Group Company
Engineering Company

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 84 OVER RUSH CREEK

SHEET 1 OF 4 SHEETS STA. TO STA.

			8	CONSTRUC	I TON CODE
				80% Federal	20% State
CODE			TOTAL	BR I DGE	ROADWAY
CODE NO.	ITEM	UNIT	TOTAL QUANT I TY	0047	0004
NO.			QUANTITE	SN 008-0015	RURAL
52100520	ANCHOR BOLTS, 1"	FOOT	20	20	0
<u>-</u>					
59000200	EPOXY CRACK INJECTION	FOOT	48	48	0
	EL OXT GRAGICINOLOTION				
				_	2
63302700	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 6	EACH	4	0	4
			,		
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	3	0	3
-					
67100100	MADULIZATION.	L SUM	1	0	1
87 100 100	MOBILIZATION	L CON	'	ŭ	'
-			-		
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	0	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0	1
		+			
70106500	TEMPODARY PRINCE TRAFFIC CIONALO	EACH	1	1	0
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	LACIT	<u>'</u>	'	0
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6	0
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	30	0	30
					ı
70200450	GUODE TERM DAVENENT MARKUNG REMOVAL	SQ FT	1 254		4.054
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SUFI	1,354		1,354
-					2
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	3,991	0	3,991
70307210	TEMPORARY PAVEMENT MARKING - LINE 24" - TYPE IV TAPE	FOOT	24	0	24
	The state of the s	-			
		F065			
70400100	TEMPORARY CONCRETE BARRIER	FOOT	633	0	633

Kaskaskia
Engineering Group, LLC

DESIGNED REVISED = USER NAME = jheimer DRAWN REVISED PLOT SCALE = 1.9999 ' / in. CHECKED -REVISED -PLOT DATE = 8/16/2022 DATE REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES IL 84 OVER RUSH CREEK SHEET 2 OF 4 SHEETS STA. TO STA.

SCALE:

F.A. RTE. 308 SECTION (104-BY-R)BDR

CONSTRUCTION CODE

				CONSTRUC	
				80% Federal	20% State
CODE			TOTAL	BRIDGE	ROADWAY
CODE NO.	I TEM	UNIT	TOTAL QUANTITY	0047	0004
NO.			QUANTITI	SN 008-0015	RURAL
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	608	0	608
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	0	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	0	2
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	7,973	0	7,973
X0326649	LINEAR DELINEATOR PANELS, 6 INCH	EACH	36	0	36
		00 VD	00.4	004	_
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	884	884	0
70000707		SQ FT	4.000	0	4 000
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQFI	1,063	0	1,063
X4820110	HOT-MIX ASHPALT SHOULDER REMOVAL AND REPLACEMENT (SPECIAL)	SQ YD	54	0	54
X4810200	AGGREGATE SHOULDER REMOVAL	CU YD	119	0	119
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	1,200	1,200	0
Z0001905	STRUCTURAL STEEL REPAIR	POUND	1,160	1,160	
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1,101	1,101	0
Z0012164	BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/2"	SQ YD	1,101	1,101	0
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	230	230	0
25012704	STRUCTURE THE CONTROLL (DET THE ENDRE TO ON LEGO HIMA O HADILED)				, v
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	1,012	1,012	0

^{*=} SPECIALTY ITEM



× 100	USER NAME = jheimer	DESIGNED ==	REVISED =
		DRAWN -	REVISED -
_	PLOT SCALE = 1.9999 ' / in.	CHECKED	REVISED -
	PLOT DATE = 8/16/2022	DATE	REVISED =

SUMMARY OF QUANTITIES						
	IL	84 O\	/ER	RUSH	CREEK	
	SHEET 3	OF	4	SHEETS	STA.	TO STA.

SCALE:

CONSTRUCTION CODE

MAINTENANCE OF TRAFFIC SCHEDULE

		70307120	70307210	70400100	70400200	70600250	70600350	70300150	70106700
		TEMPORARY	TEMPORARY	TEMPORARY	RELOCATE	IMPACT	IMPACT	TEMPORARY	TEMPORARY
		PAVEMENT	PAVEMENT	CONCRETE	TEMPORARY	ATTENUATORS,	ATTENUATORS,	PAVEMENT	RUMBLE STRIPS
		MARKING-LINE 4"	MARKING-LINE	BARRIER	CONCRETE	TEMPORARY	RELOCATE (NON-	MARKING	
LC	CATION		24"		BARRIER	(NON-	REDIRECTIVE),	REMOVAL	
						REDIRECTIVE), TEST LEVEL 3	TEST LEVEL 3		
		(FOOT)	(FOOT)	(FOOT)	(FOOT)		(EACH)	(SO FT)	(FACU)
11 94	- STAGE 1	(FOOT)	(FOOT)	(FOOT)	(FOOT)	(EACH)	(EACH)	(SQ FT)	(EACH)
STATION	TO STATION								
466+00	467+00	25	12					8.3	3
467+00	468+00	200	12					66.6	I -
468+00	469+00	200						66.6	1
469+00	470+00	200		71		1		66.6	
470+00	471+00	200		100				66.6	
471+00	472+00	200		100				66.6	
472+00	473+00	200		100				66.6	
473+00	474+00	200		100				66.6	
474+00	475+00	200		21		1		66.6	
475+00	476+00	200						66.6	
476+00	477+00	169	12					56.3	3
IL 84	- STAGE 2								
STATION	TO STATION								
466+00	467+00	25						8.3	
467+00	468+00	200						66.6	
468+00	469+00	200						66.6	
469+00	470+00	200			71		1	66.6	1
470+00	471+00	200			100			66.6	
471+00	472+00	200			100			66.6	
472+00	473+00	200			100			66.6	
473+00	474+00	200			100			66.6	
474+00	475+00	200			21		1	66.6	
475+00	476+00	200						66.6	
476+00	477+00	169						56.3	
TOTAL		3988	24	492	492	2	2	1328	6
ADJUSTED TO	DTAL	3988	24	492	492				6

PAVEMENT MARKING SCHEDULE

		78001110	X0327980
LOCATION	ı	PAINT PAVEMENT MARKING - LINE 4"	PAVEMENT MARKING REMOVAL - WATER BLASTING
		(FOOT)	(SQ FT)
IL 84			
STATION TO	STATION		
466+00	467+00	96	16.0
467+00	468+00	800	133.4
468+00	469+00	800	133.4
469+00	470+00	800	133.4
470+00	471+00	800	133.4
471+00	472+00	800	133.4
472+00	473+00	800	133.4
473+00	474+00	800	133.4
474+00	475+00	800	133.4
475+00	476+00	800	133.4
476+00	477+00	672	112.0
TOTAL		7968	1328.3
ADJUSTED TOTAL		7968	1329

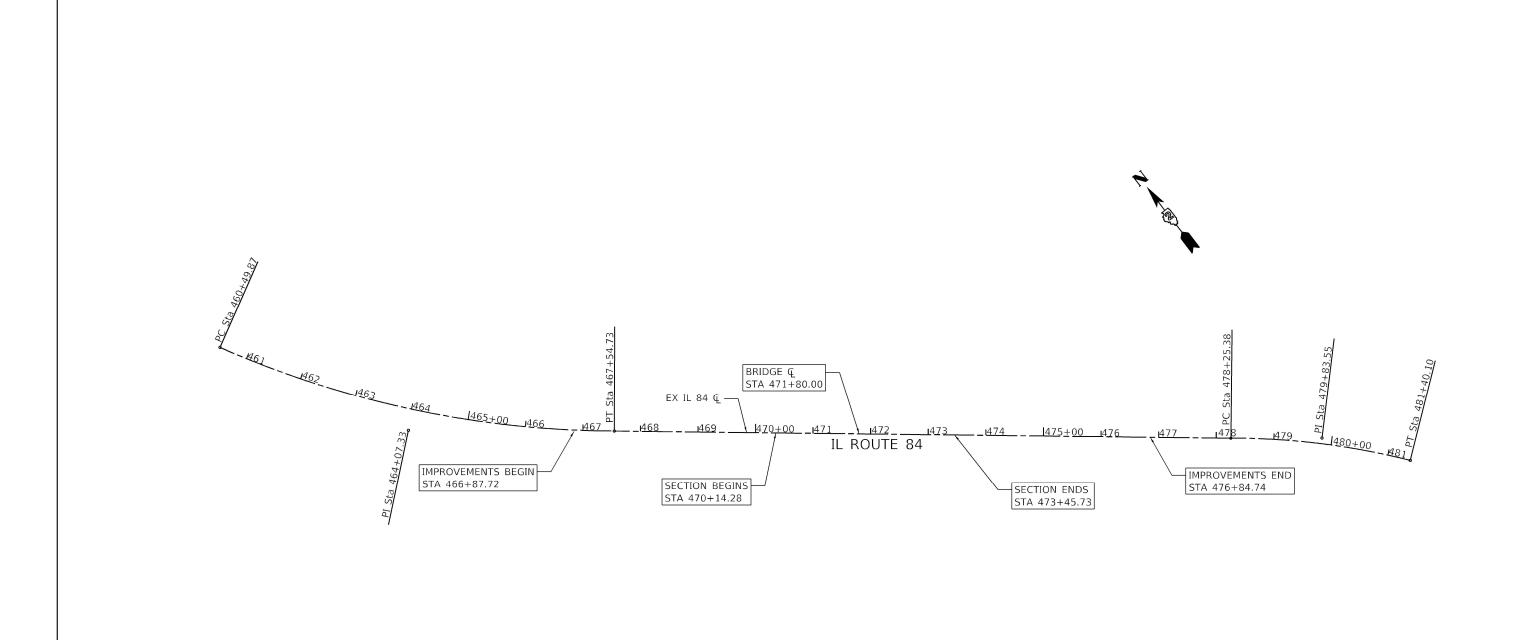
NOTE: PAINT PAVEMENT MARKING - LINE 4" QUANTITY IS FOR TWO APPLICATION

Kaskaskia Pengineering Group, LLC Pengineering Group, LLC Pengineering Group, LLC Pengineering Group Pengineering Group Group

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 84 OVER RUSH CREEK

SHEET 1 OF 1 SHEETS STA.



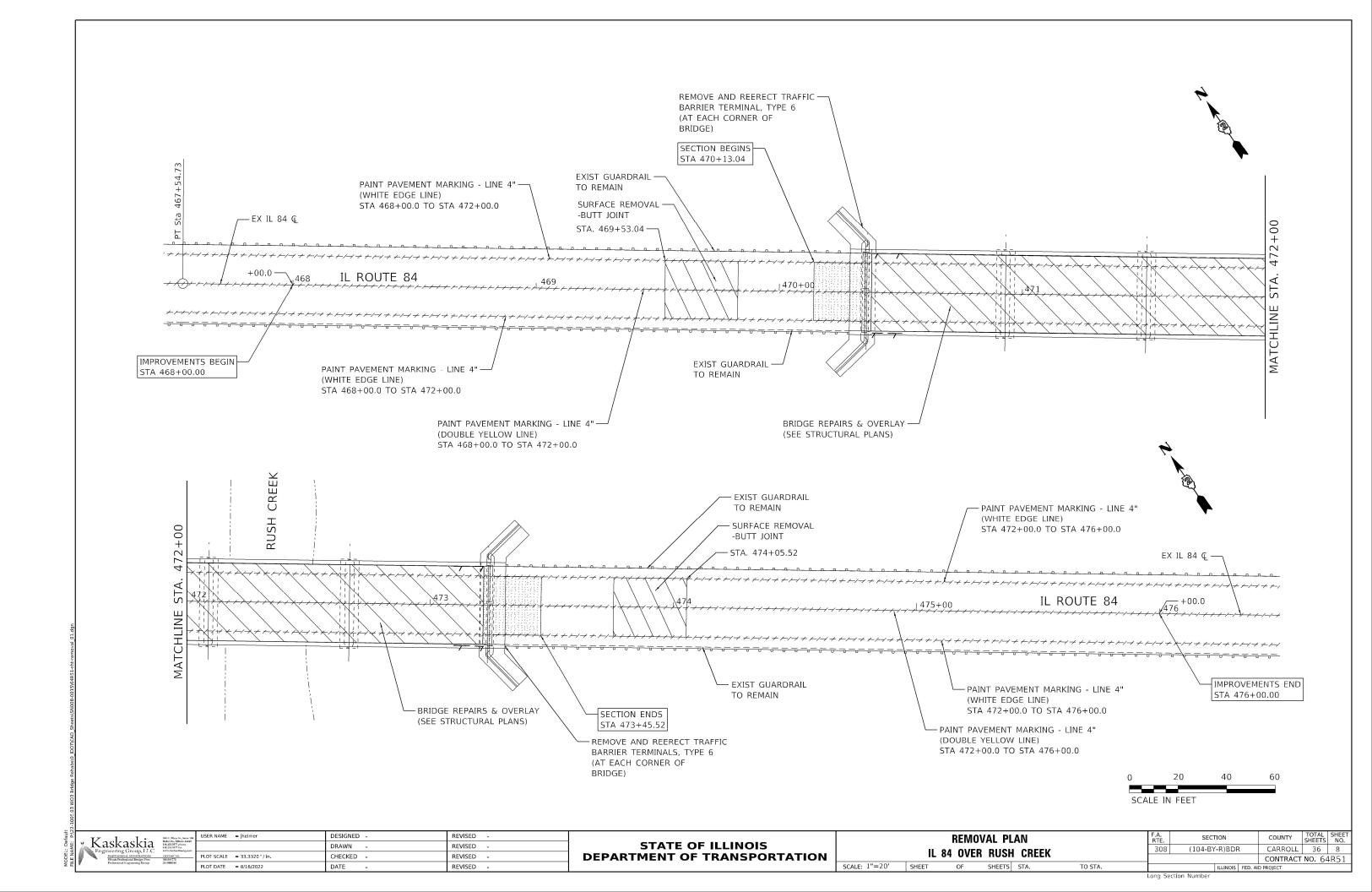
SCALE IN FEET

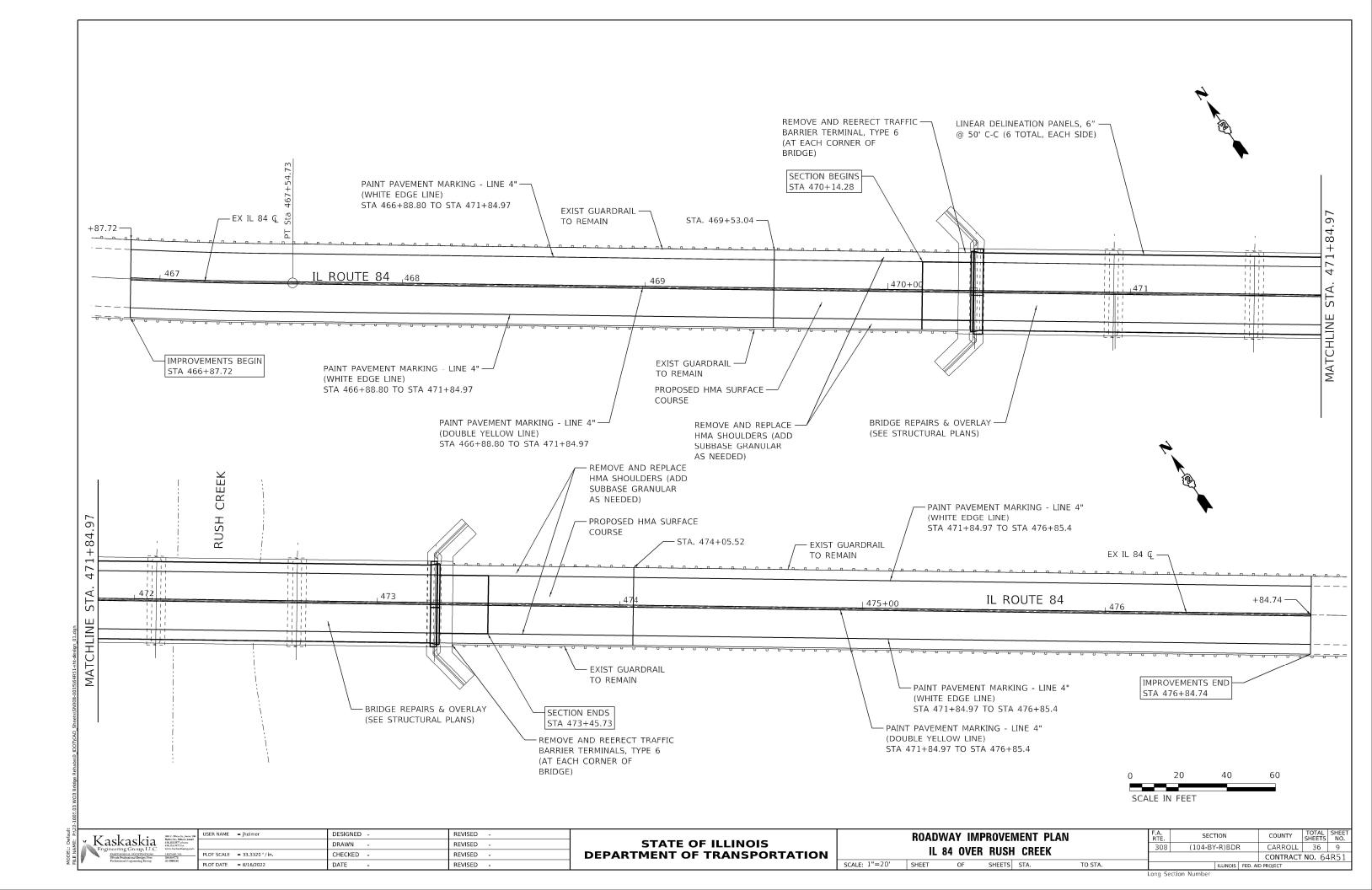
COUNTY TOTAL SHEETS NO.

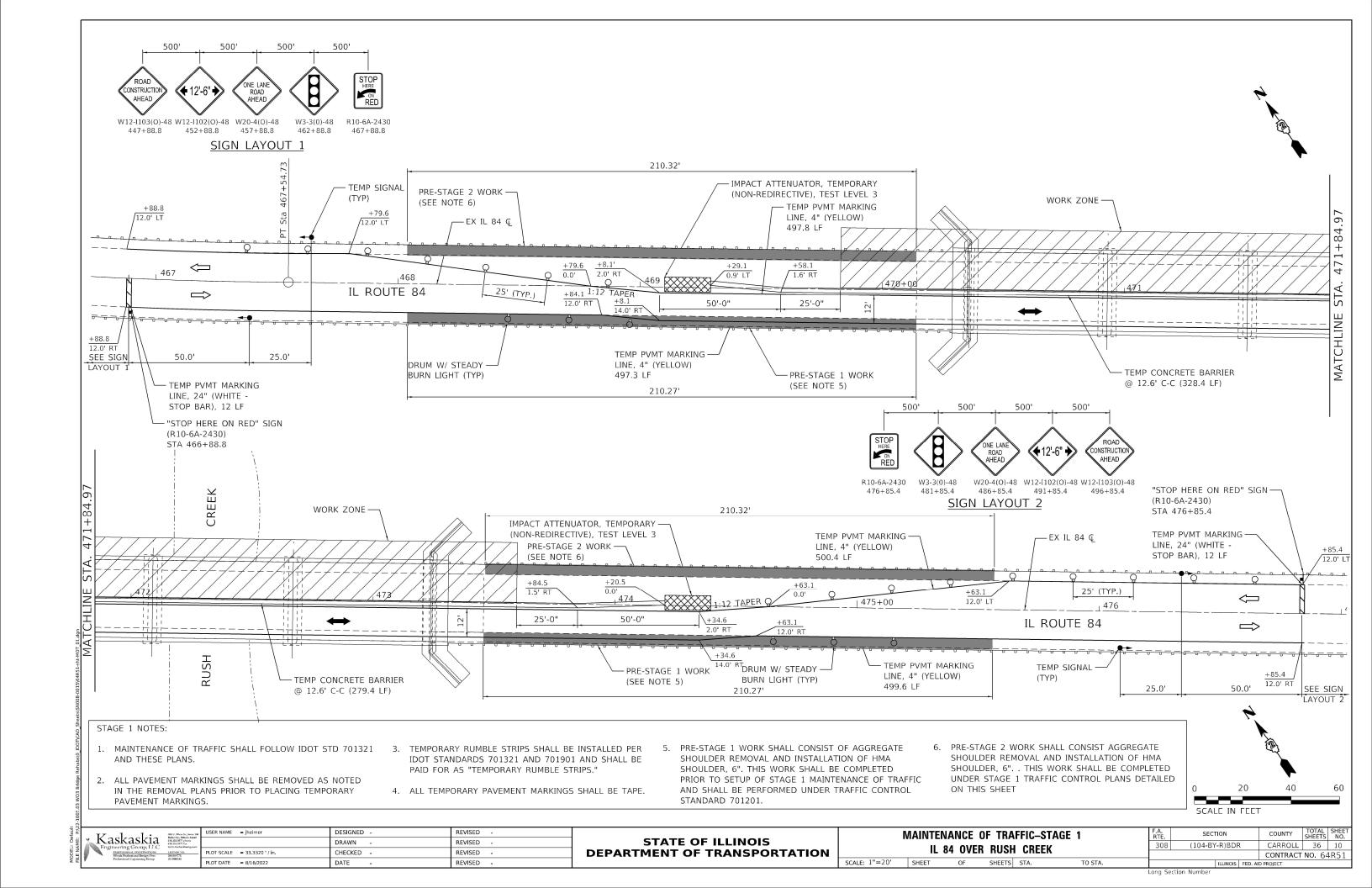
CARROLL 36 7

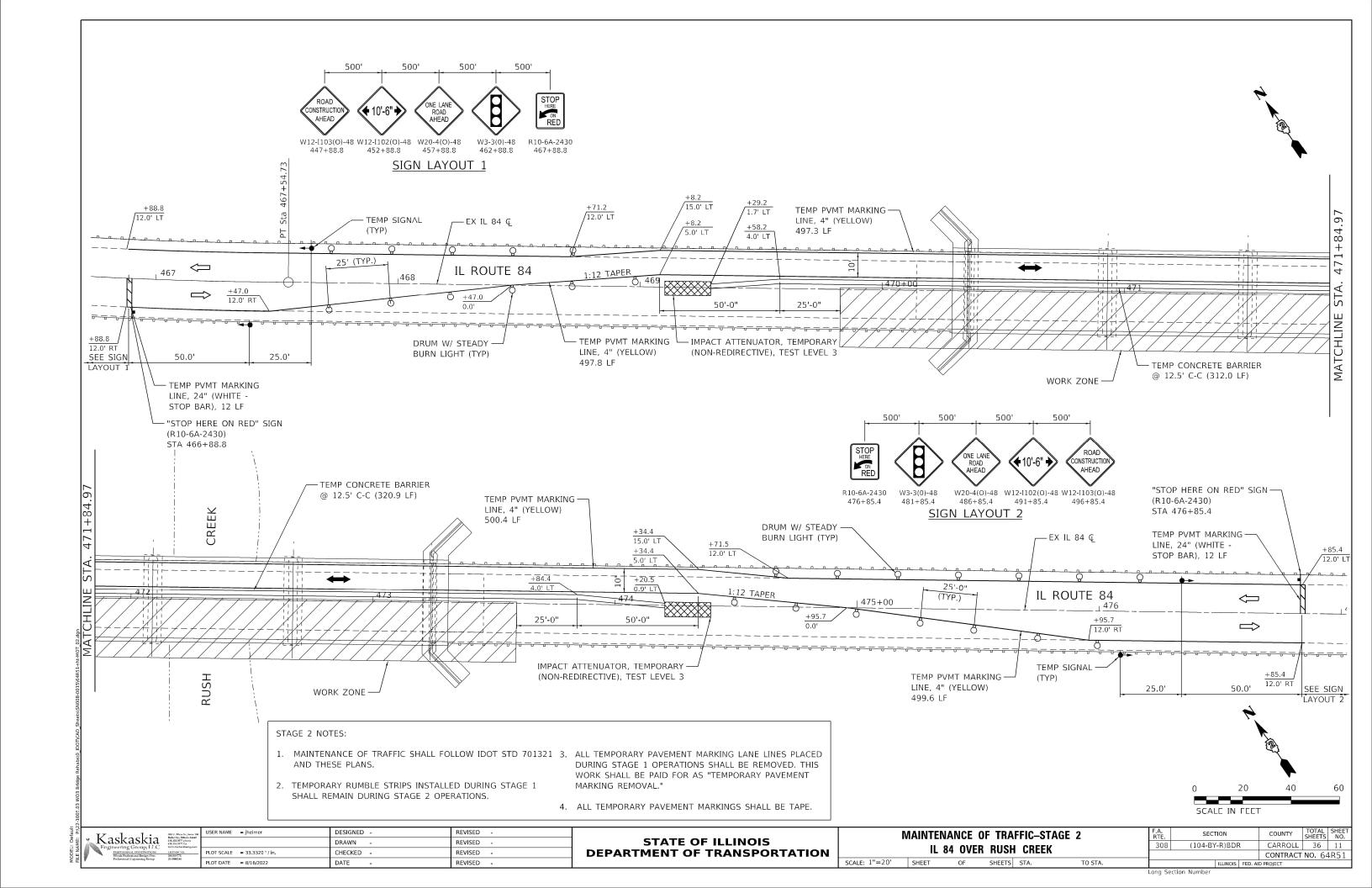
CONTRACT NO. 64R51

DESIGNED -REVISED -ALIGNMENT LAYOUT PLAN SECTION Kaskaskia
Engineering Group, LLC
FEOURISSO VIEW STORM TO STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION REVISED -DRAWN -(104-BY-R)BDR IL 84 OVER RUSH CREEK PLOT SCALE = 166.6600 ' / in. CHECKED -REVISED -PLOT DATE = 8/16/2022 DATE REVISED -OF SHEETS STA. TO STA.









Bench Mark: Cut "¬" on top of southeast wingwall of bridge. Elev. 603.39.

Existing Structure: SN 008-0015 was originally constructed in 1927 as a 5-span cast-in-place deck-girder bridge, 290'-0" back-to-back of abutment, concrete t-beam bridge with PPC deck beams on each side and a $\pm 35'-8''$ out-to-out reinforced concrete deck. The superstructure was removed and reconstructed in 1991 with continuous steel beams and a 35'-2" out-to-out reinforced concrete deck. The bridge is supported by cast-in-place full-height abutments on spread footings and solid-wall piers on pile-supported footings.

Salvage: None.

DESIGN STRESSES

Existing Structure (1991 Construction)

 $f'c = 3,500 \ psi$

fy = 60,000 psi (Reinforcement)fy = 36,000 psi (M-183)

New Construction

f'c = 4,000 psi

fy = 60,000 psi (Reinforcement) fy = 36,000 psi (M270 Grade 36)

DESIGN SPECIFICATIONS

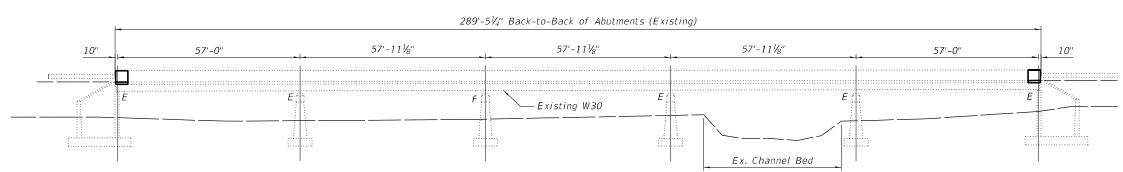
2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS20-44

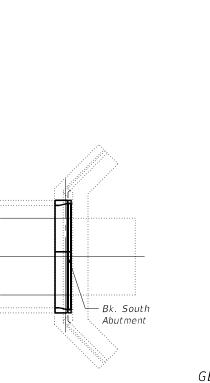
No additional wearing surface allowed

INDEX OF SHEETS

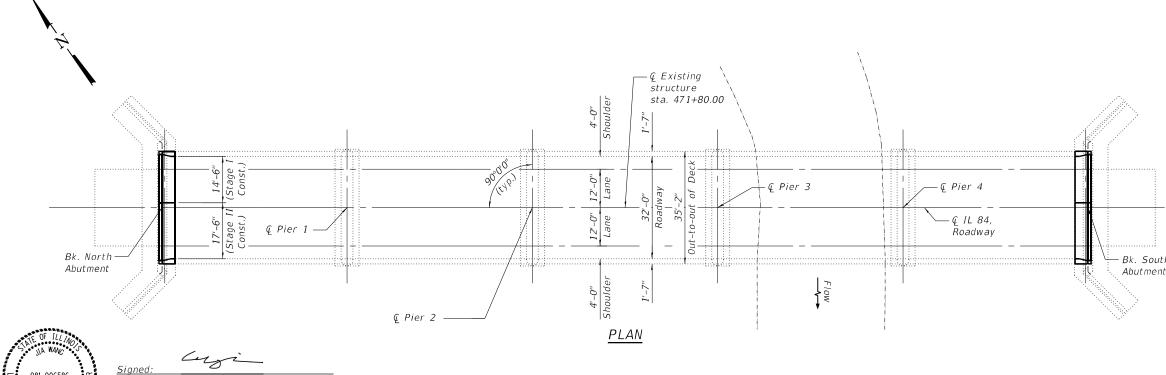
- 1 General Plan & Elevation
- 2 General Data
- 3 Temporary Concrete Barrier
- 4 Concrete Removal Details
- 5 Superstructure
- 6 Superstructure Details
- 7 Superstructure Typical Section
- 8 Preformed Joint Strip Seal
- 9 Steel Repair Plan
- 10 Steel Repair Details
- 11 North Abutment Concrete Removal
- 12 North Abutment Plan & Elevation 13 - South Abutment Concrete Removal
- 14 South Abutment Plan & Elevation
- 15 Abutment Repairs
- 16 Pier Repairs
- 17 Bar Splicer Assembly and Mechanical Splicer Details



ELEVATION



Range 3E, 4th P.M. Location LOCATION SKETCH



GENERAL PLAN & ELEVATION IL ROUTE 84 OVER RUSH CREEK F.A.P. 308 - SEC. (104 BY-R)BDR CARROLL COUNTY STATION 471+80.00 *STRUCTURE NO. 008-0015*

DESIGNED - MLC REVISED SECTION COUNTY Kaskaskia **STATE OF ILLINOIS** CHECKED - JW REVISED -(104 BY-R)BDR CARROLL 36 12 308 DRAWN REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 64R51 PLOT DATE = SHEET 1 OF 1 SHEETS CHECKED - JW REVISED -

081-006586

10/14/2022

Illinois Structural Engineer

License Expires: 11-30-2022

No. 081-006586

GENERAL NOTES

- 1. Reinforcement bars designated (E) shall be epoxy coated.
- 2. 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.
- 3. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 4. Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications at ambient temperature other than 50°F.
- 5. All exposed concrete edges shall have a standard 3/4" chamfer unless noted otherwise.

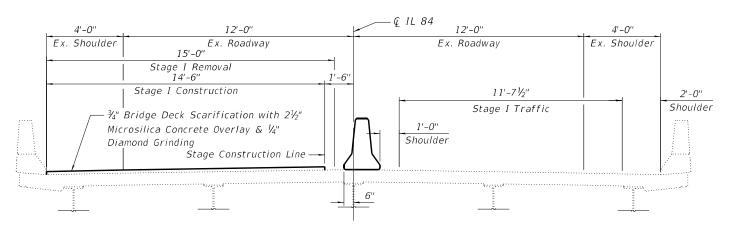
SCOPE OF WORK

To be completed under stage construction.

- 1. Remove existing expansion joints.
- 2. Scarify bridge deck.
- 3. Remove and reconstruct abutment backwalls.
- 4. Replace diaphragms.
- 5. Replace all bearing side retainers at both North and South Abutments.
- 6. Repair steel.
- 7. Reconstruct deck joints at each abutment with preformed joint strip seal.
- 8. Install Microsilica Concrete Overlay and perform diamond grinding and longitudinal bridge deck grooving.
- 9. Repair abutments and piers at designated locations or as directed by the Engineer.
- 10. Re-erect guardrail transitions (See Roadway Plans).

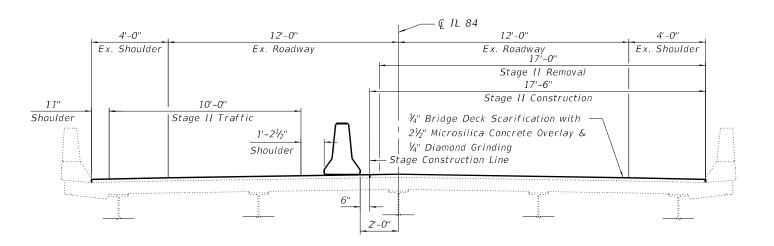
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	13.2		13.2
Concrete Superstructure	Sq. Yd.	15.4		15.4
Protective Coat	Pound	1,144		1,144
Furnishing and Erecting Structural Steel	Pound	1,200		1,200
Reinforcement Bars, Epoxy Coated	Each	2,450		2,450
Bar Splicers	Foot	40		40
Preformed Joint Strip Seal	Foot	69		69
Anchor Bolts, 1"	Foot	20		20
Epoxy Crack Injection	Sq. Yd.		48	48
Bridge Deck Grooving (Longitudinal)	Pound	884		884
Structural Steel Removal	Pound	1,200		1,200
Structural Steel Repair	Sq. Yd.	1,160		1,160
Bridge Deck Scarification 3/4"	Sq. Yd.	1,101		1,101
Bridge Deck Microsilica Concrete Overlay 2 1/2"	Sq. Ft.	1,101		1,101
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Yd.		230	230
Diamond Grinding (Bridge Section)		1,012		1,012



STAGE 1 - TYPICAL SECTION

(Looking Upstation)

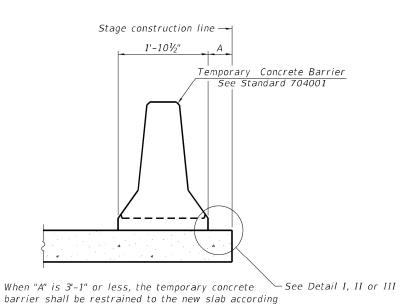


STAGE 2 - TYPICAL SECTION

(Looking Upstation)

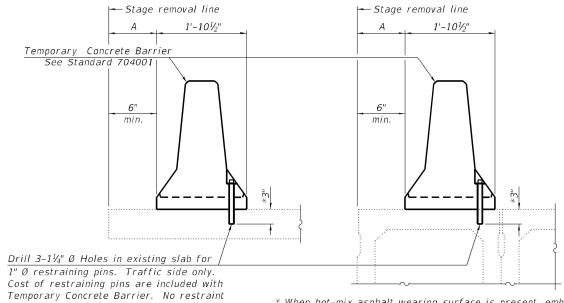
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Kaskaskia Engineering Group, LLC		CHECKED - JW	REVISED -
PROPESSIONAL REGISTRATIONS LICENSE NO. Illinois Professional Design Firm 184,054773	PLOT SCALE =	DRAWN - MLC	REVISED -
Professional Engineering Group 20-5080586	PLOT DATE =	CHECKED - JW	REVISED -

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DEPARTMENT OF TRANSPORTATION



to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

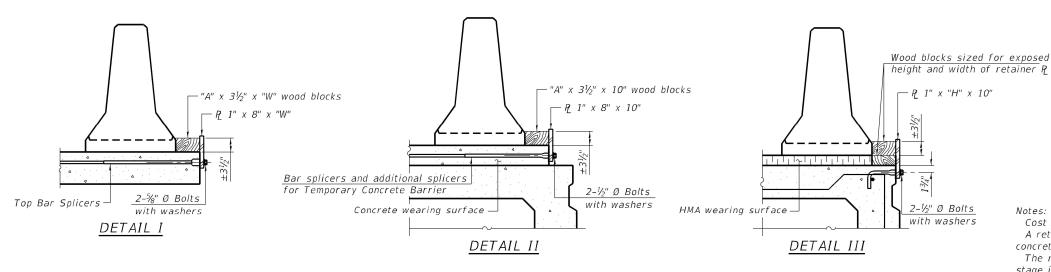
1x8 UNG US Std. 1½6" I.D. x 2½" O.D. x approx. 8 gauge thick washer RESTRAINING PIN

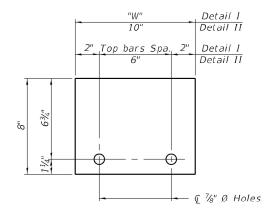
EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

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

EXISTING SLAB





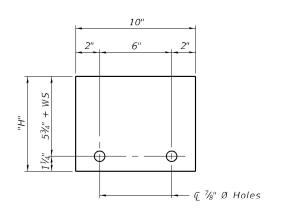
STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)

RAILING CRITERIA

NCHRP 350 Test Level Railing Weight (plf)

R-27 10-12-2021



STEEL RETAINER P 1" x "H" x 10" (Detail III)

BAR SPLICER FOR #4 BAR - DETAIL III

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

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 1½", 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.

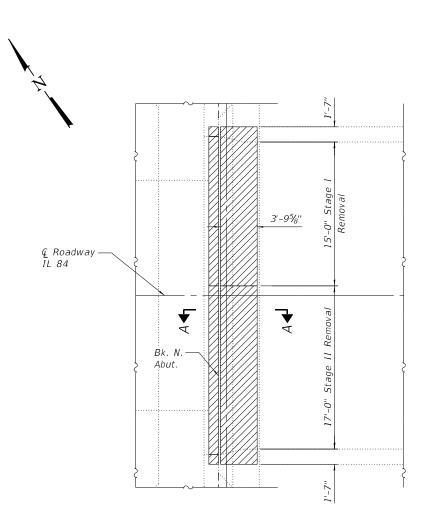
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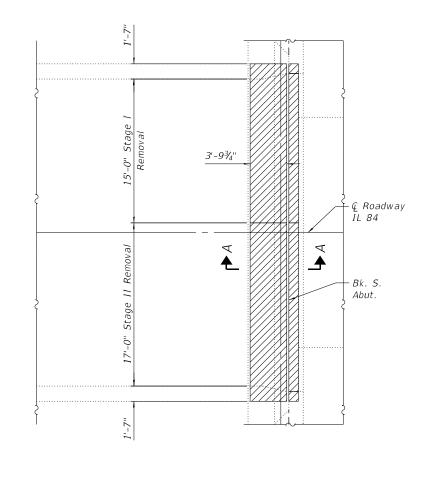
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

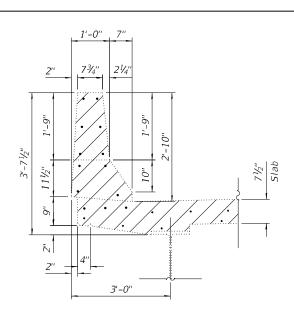
SECTION TEMPORARY CONCRETE BARRIER (104 BY-R)BDR 308 **STRUCTURE NO. 008-0015** SHEET 3 OF 17 SHEETS

COUNTY CARROLL 36 14 CONTRACT NO. 64R51

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SECTION THRU PARAPET

PLAN (North Abutment - Showing Concrete Removal)

<u>PLAN</u> (South Abutment - Showing Concrete Removal)

Notes

The Contractor shall use extreme care during concrete removal so as not to damage the existing steel beams. Any steel damaged during concrete removal operations shall be repaired at the Contractor's

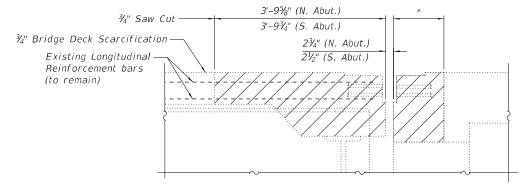
Removal of existing expansion joint and associated material shall not be paid for separately, but shall be included in the cost of Concrete Removal.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into new construction.

Any reinforcement bars that are damaged during concrete removal operations shall be replaced at the Contractor's expense.

Stud shear connectors damaged during concrete removal operations shall be removed and replaced per Section 505 of the Standard Specifications at the Contractor's expense.

* See sheets 11 thru 14 of 17 for abutment concrete removal and reconstruction details.



Indicates Concrete Removal

SECTION A-A

BILL OF MATERIAL

Item	Unit	Total	
Concrete Removal	Cu. Yd.	9.0	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

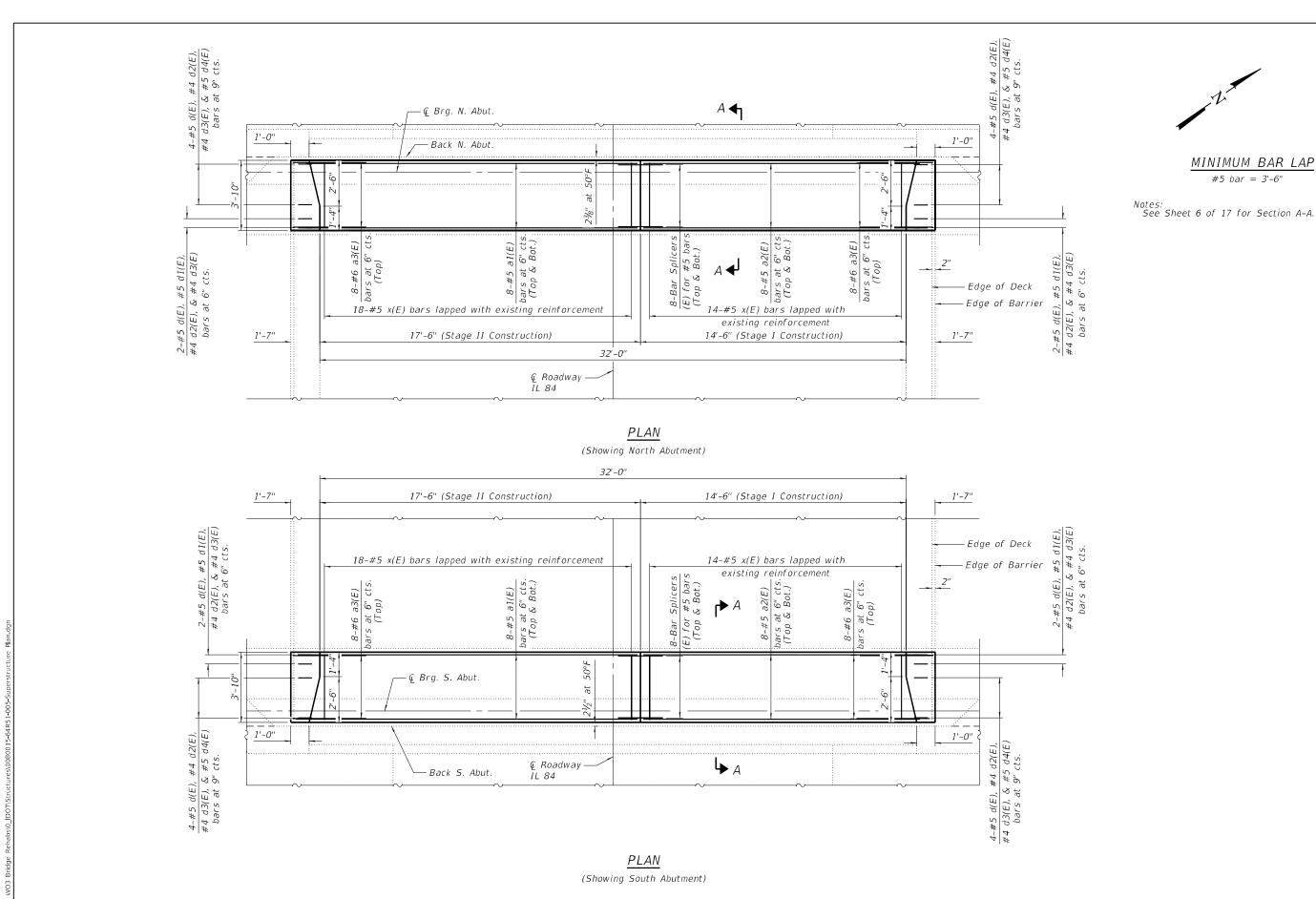
CONCRETE REMOVAL DETAILS
STRUCTURE NO. 008-0015
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 SECTION
 COUNTY
 TOTAL SHEETS
 SHEET NO.

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 (104 BY-R)BDR
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 36
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 CONTRACT NO. 64R51

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COUNTY TOTAL SHEETS NO.

CARROLL 36 16 F.A.P. RTE. SECTION SUPERSTRUCTURE (104 BY-R)BDR CONTRACT NO. 64R51

MINIMUM BAR LAP $#5 \ bar = 3'-6''$

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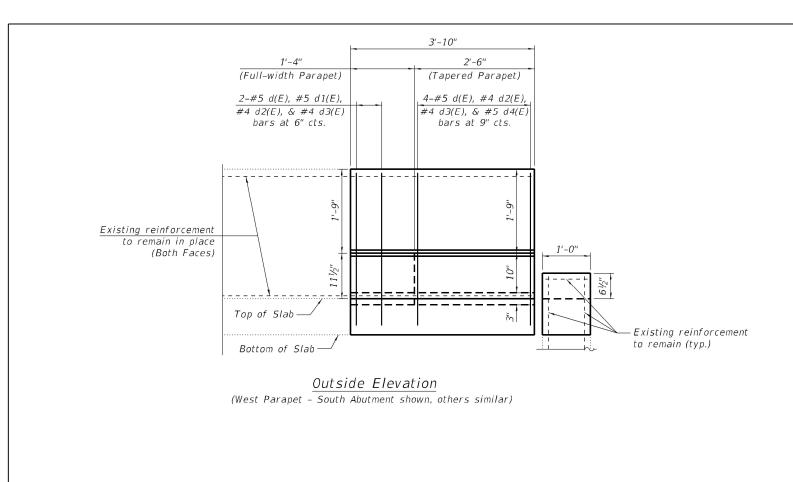
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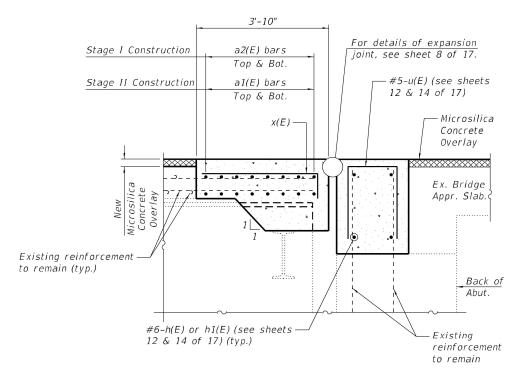
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SECTION A-A (at right angle)

COUNTY TOTAL SHEET NO.

CARROLL 36 17

CONTRACT NO. 64R51

SECTION

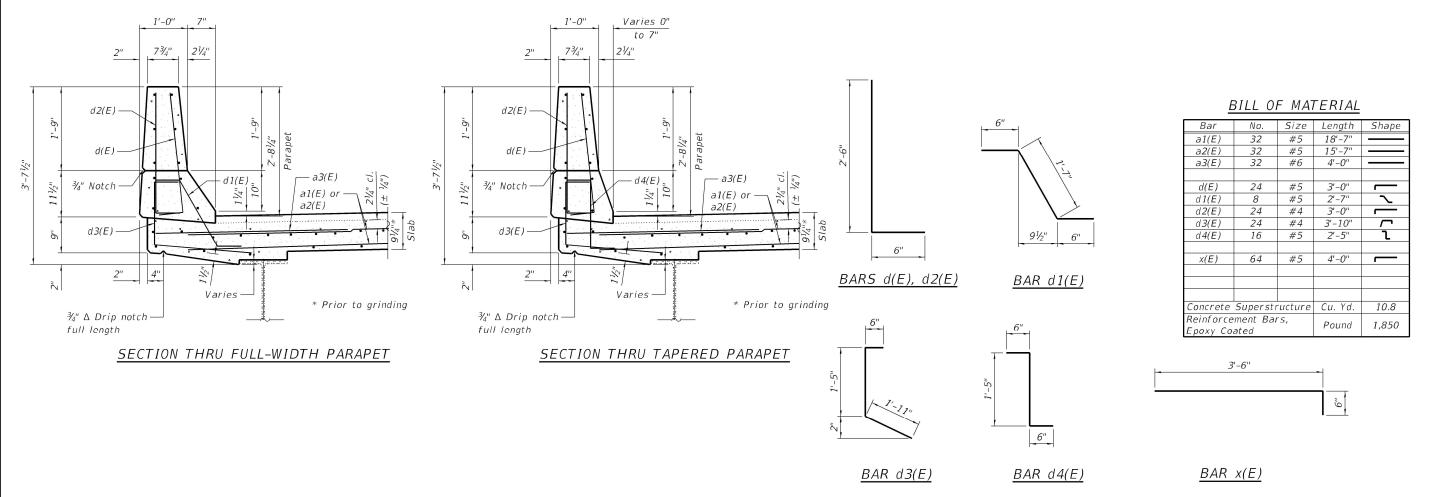
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308

SUPERSTRUCTURE DETAILS

STRUCTURE NO. 008-0015

SHEET \$SHT\$ OF \$TOT\$ SHEETS



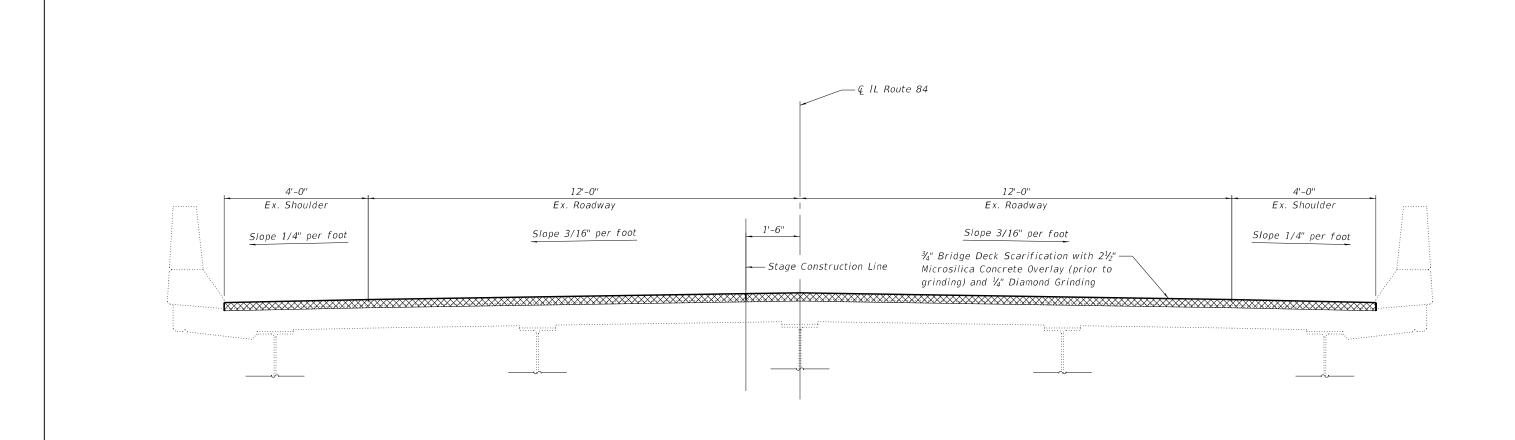
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DEPARTMENT OF TRANSPORTATION

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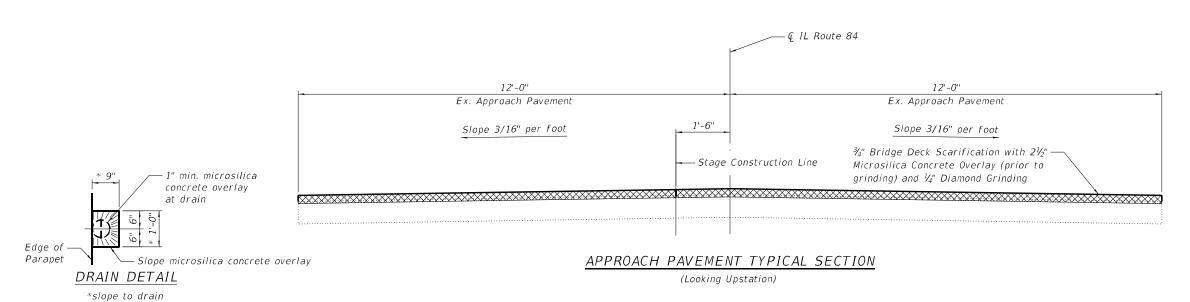
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PLOT DATE =



SUPERSTRUCTURE TYPICAL SECTION

(Looking Upstation)



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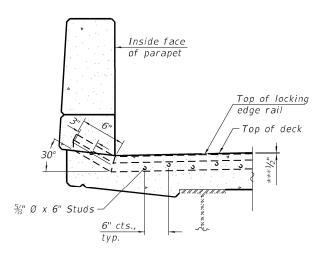
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

 SUPERSTRUCTURE TYPICAL SECTION
 F.A.P. RTE.

 STRUCTURE NO. 008-0015
 308

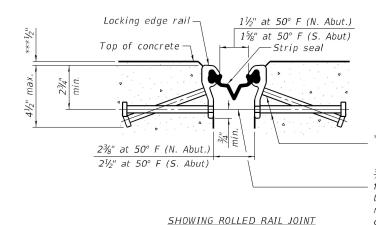
A.P. SECTION COUNTY TOTAL SHEETS NO.
308 (104 BY-R)BDR CARROLL 36 18

CONTRACT NO. 64R51



SECTION AT PARAPET

*** Prior to 1/4" Diamond Grinding



Locking edge rail-1½" at 50° F (N. Abut.) 15%" at 50° F (S. Abut) Top of concrete Strip seal * 5%" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs) 3" at 50° F (N. Abut) $3\frac{1}{8}$ " at 50° F (S. Abut) $\frac{3}{8}$ " ϕ threaded rods in $\frac{7}{16}$ " ϕ holes at ± 4 '-0" cts.

for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SHOWING WELDED RAIL JOINT

SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded. *** Prior to $\frac{1}{4}$ " Diamond Grinding

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of $\frac{1}{4}$ ". 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.

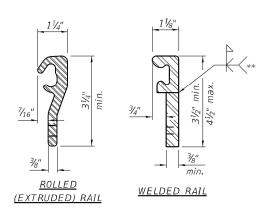
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. Required modifications shall be made at no additional cost to the

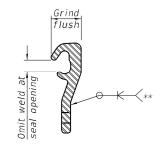
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.



LOCKING EDGE RAILS

** 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. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

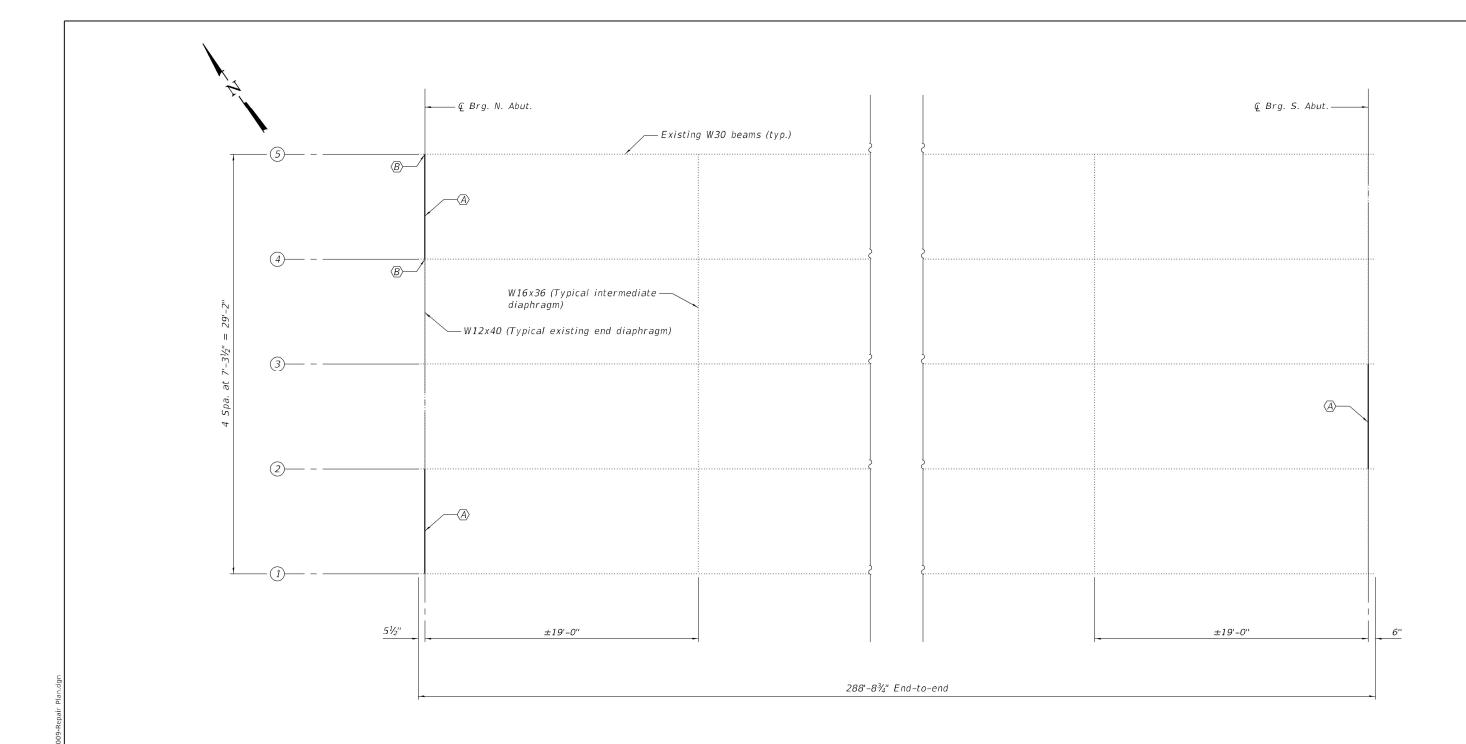
Item	Unit	Total
Preformed Joint Strip Seal	Foot	69

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PREFORMED JOINT STRIP SEAL **STRUCTURE NO. 008-0015**

SHEET 8 OF 17 SHEETS

SECTION COUNTY (104 BY-R)BDR 308 CARROLL 36 19 CONTRACT NO. 64R51



REPAIR LEGEND

(A) Existing W12x40 end diaphragm to be removed and replaced

B Beam end repair

lote:

For repair details, see sheet 10 of 17.

Kaskaskia
Engineering Group, LLC
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

STEEL REPAIR PLAN
STRUCTURE NO. 008-0015

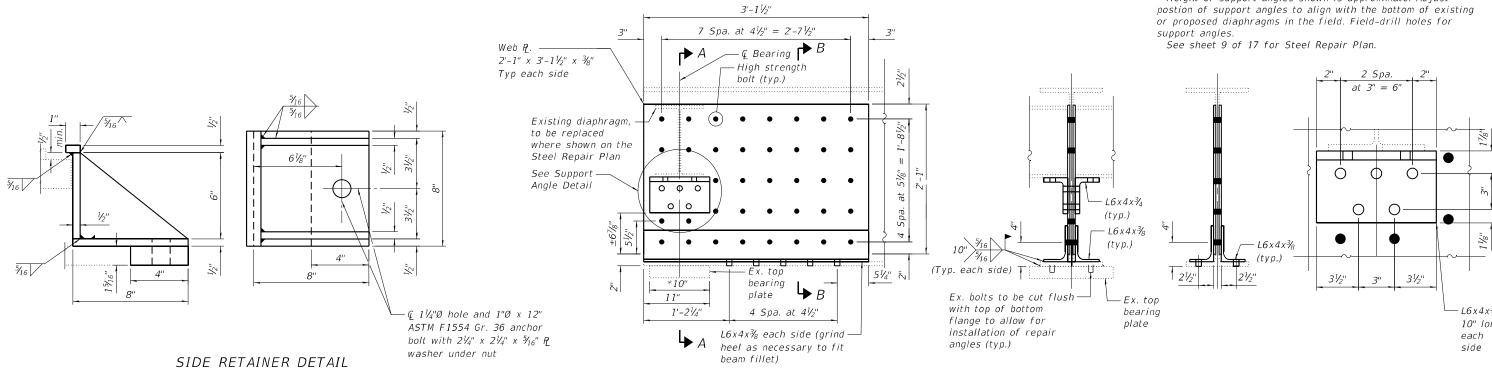
SHEET 9 OF 17 SHEETS

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Existing diaphragms shall be shortened to accommodate beam repairs.

DIAPHRAGM REPLACEMENT DETAIL

Beam repairs not shown for clarity



ELEVATION

Notes:

Equivalent rolled angles with stiffeners will be allowed in lieu of welded plates. Dimensions of side retainers to be verified in the field prior to ordering or fabrication of replacement side retainers.

Burn existing anchor bolts flush with top of existing bottom bearing plate. Grind existing anchor bolts smooth and seal with epoxy. Cost is incidental to Structural Steel Removal.

Provide two $\frac{1}{6}$ " adjusting shims for each side retainer. Adjustments to the required side retainer height shall be made with these shims as necessary.

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

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

*Field weld angle to bottom flange and bottom flange to top bearing plate as shown in Section A-A.

STEEL REPAIR NOTES

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

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

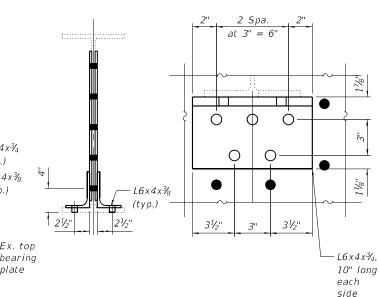
All new structural steel shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel."

Fasteners shall be high strength bolts. Bolts \%", open holes 15/16", unless otherwise noted.

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, including cost of drilling holes in existing steel members, shall be included in 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." All welds shall be ground smooth.

Height of support angles shown is approximate. Adjust



SECTION A-A SECTION B-B

BEAM END REPAIR

Beam End Repair with reinstallation of existing diaphragms shown, replacement of diaphragms

BOLT HOLE LEGEND

SUPPORT ANGLE DETAIL

- Shop-drilled hole in web R
- O Field-drilled hole

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	1,200
Structural Steel Removal	Pound	1,200
Structural Steel Repair	Pound	1,160

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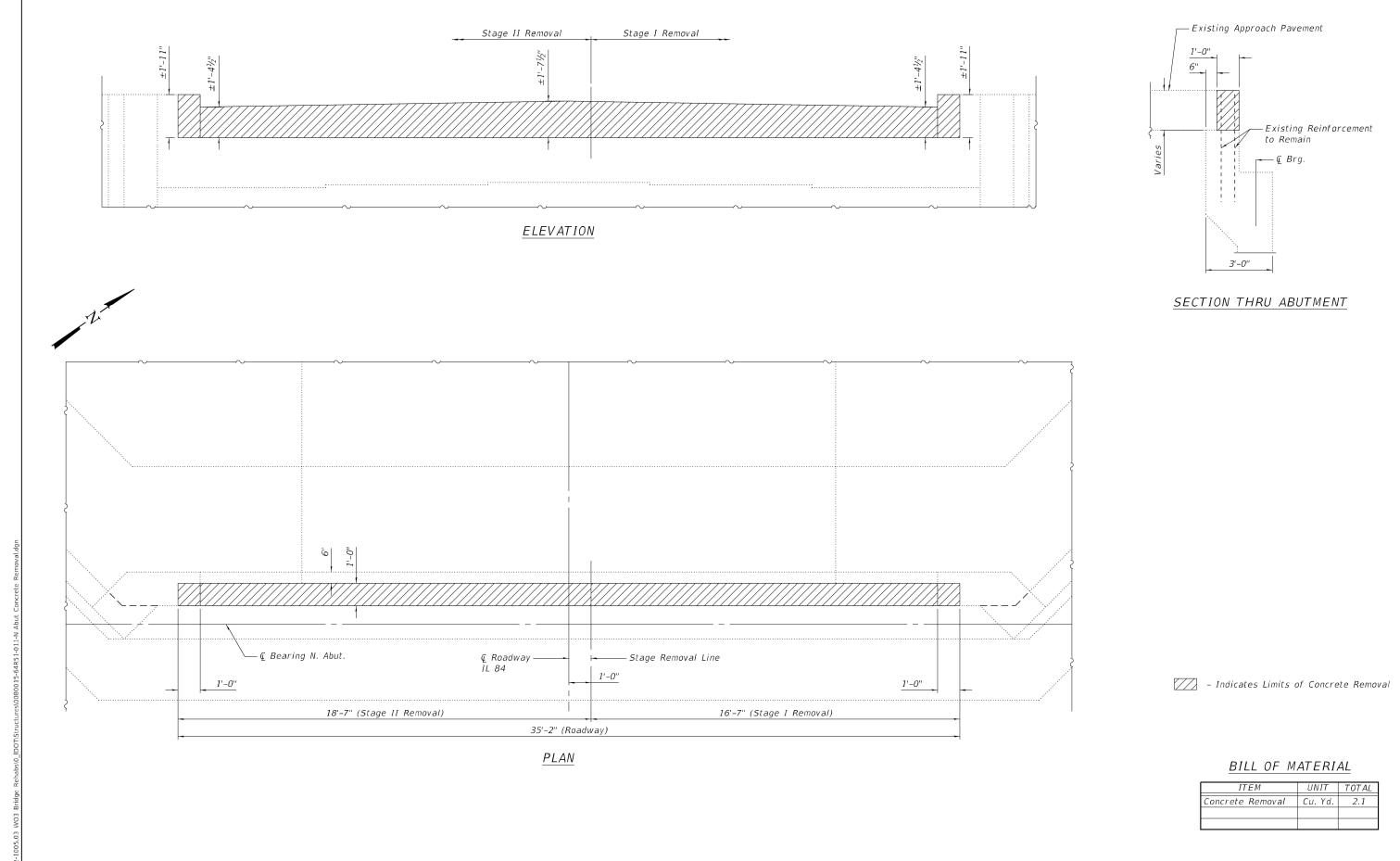
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

STEEL REPAIR DETAILS **STRUCTURE NO. 008-0015**

SECTION COUNTY (104 BY-R)BDR CARROLL 36 21 308 CONTRACT NO. 64R51

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SHEET 10 OF 17 SHEETS



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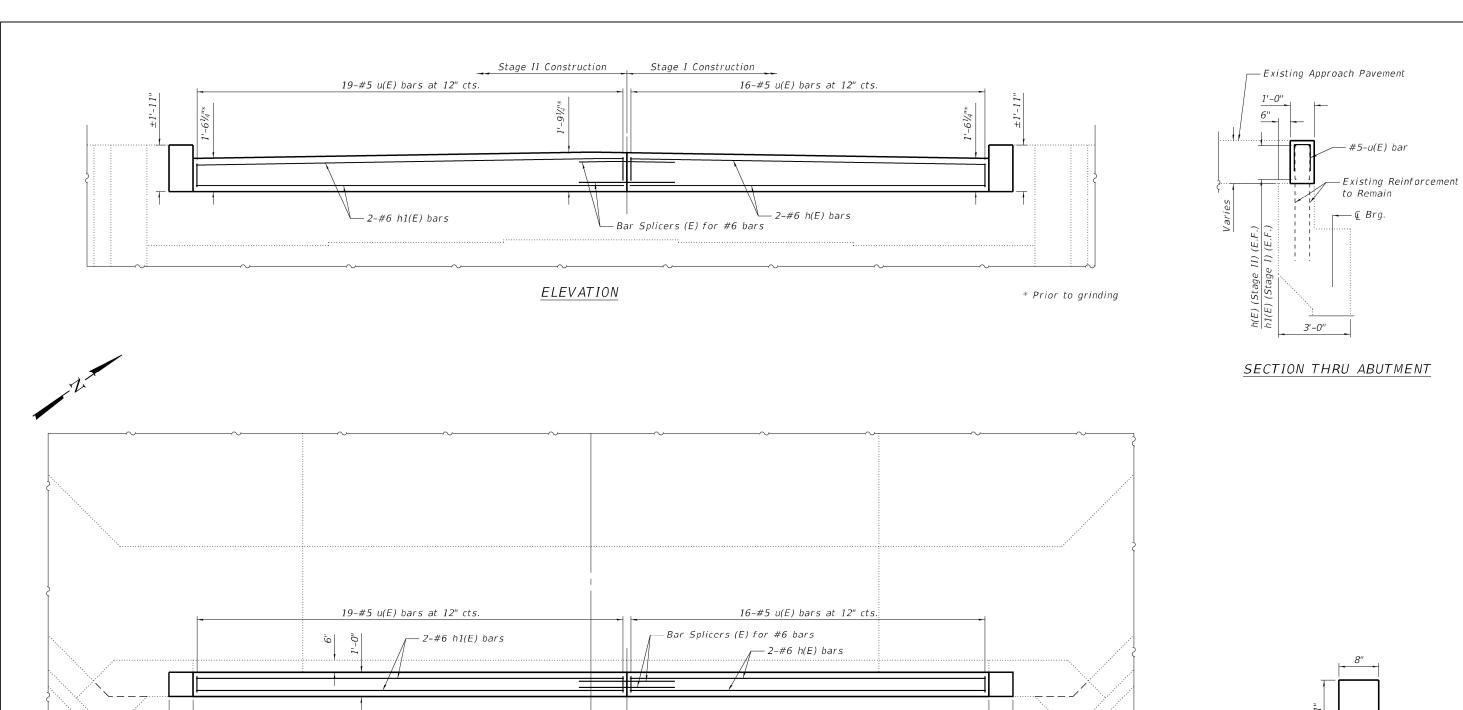
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

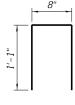
NORTH ABUTMENT CONCRETE REMOVAL **STRUCTURE NO. 008-0015** SHEET \$SHT\$ OF \$TOT\$ SHEETS

F.A.P. RTE. COUNTY TOTAL SHEET NO.

CARROLL 36 22 SECTION (104 BY-R)BDR

CONTRACT NO. 64R51





BAR u(E)

NORTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape		
h(E)	4 #6		14'-10"			
h1(E)	4 #6		17'-10"			
u(E)	35	#5	2'-10"			
Concrete	Superstr	Cu. Yd.	2.3			
Reinforce Epoxy Co		Pound	300			

COUNTY TOTAL SHEET NO.

CARROLL 36 23 DESIGNED - MLC REVISED -F.A.P. RTE. SECTION NORTH ABUTMENT PLAN & ELEVATION Kaskaskia 600 Main St., Still STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION REVISED -(104 BY-R)BDR CHECKED - JW **STRUCTURE NO. 008-0015** REVISED -CONTRACT NO. 64R51 CHECKED - JW REVISED -SHEET \$SHT\$ OF \$TOT\$ SHEETS

—— Stage Construction Line

16'-1" (Stage I Construction)

1'-0"

- & Bearing N. Abut.

19'-1" (Stage II Construction)

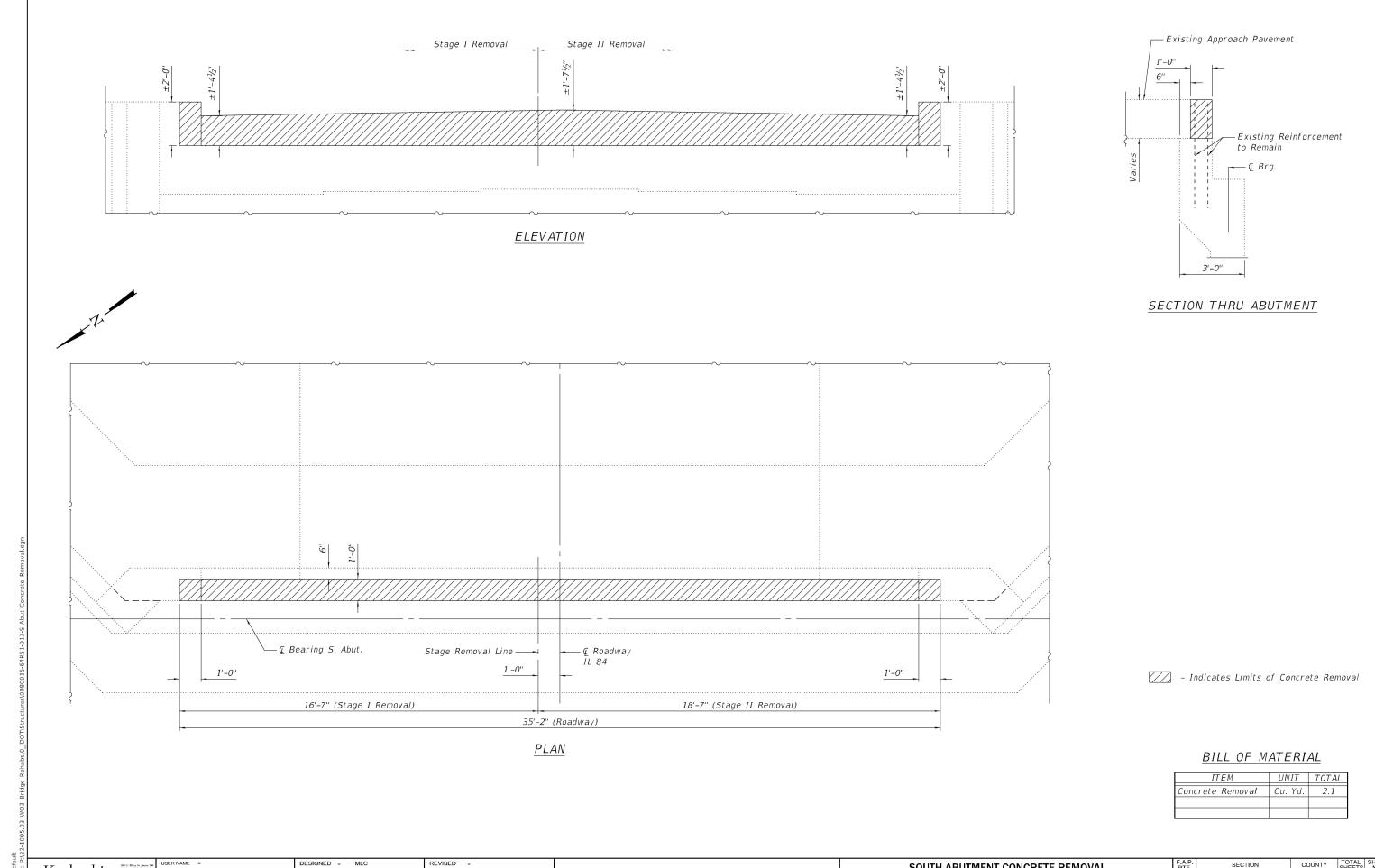
1'-0"

€ Roadway — IL 84

1'-6"

35'-2" (Roadway)

PLAN



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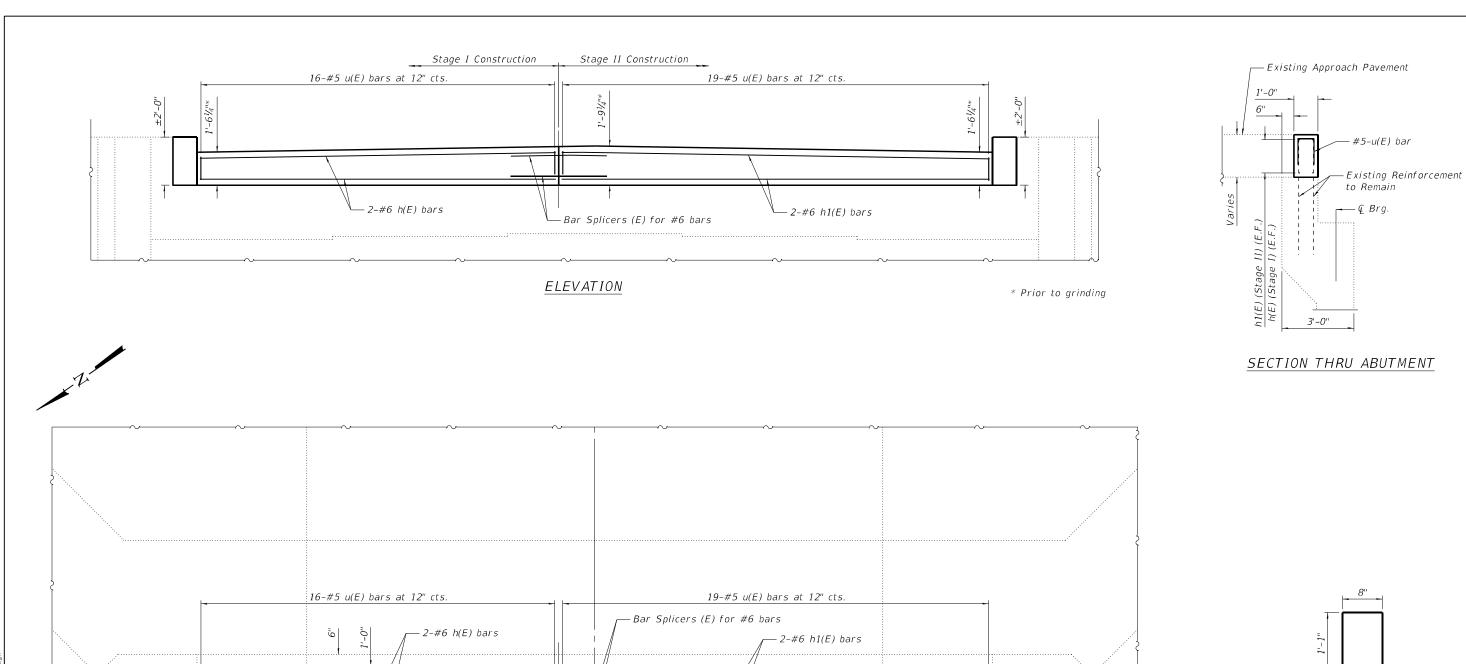
SOUTH ABUTMENT CONCRETE REMOVAL **STRUCTURE NO. 008-0015**

F.A.P. RTE. COUNTY TOTAL SHEET NO.

CARROLL 36 24 SECTION (104 BY-R)BDR

SHEET \$SHT\$ OF \$TOT\$ SHEETS

CONTRACT NO. 64R51

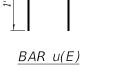


— Q Roadway IL 84

1'-6"

35'-2" (Roadway)

<u>PLAN</u>



SOUTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
h(E)	4	#6	14'-10"		
h1(E)	4	#6	17'-10"		
u(E)	35	#5	2'-10"		
Concrete	Superstr	Cu. Yd.	2.3		
Reinforce Epoxy Co		Pound	300		

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1'-0"

- € Bearing S. Abut.

16'-1" (Stage I Construction)

Stage Construction Line — 🗕

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

19'-1" (Stage II Construction)

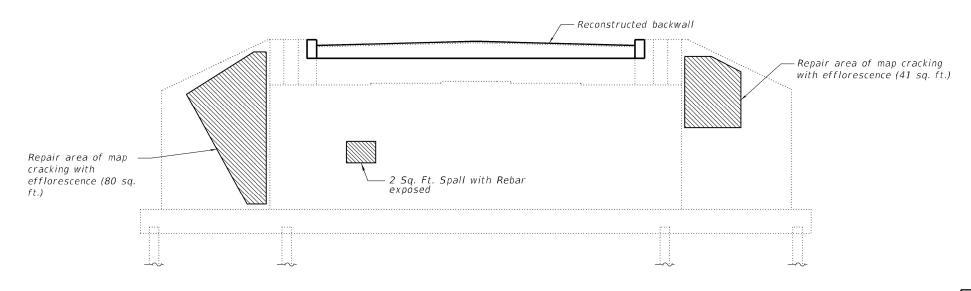
SOUTH ABUTMENT PLAN & ELEVATION STRUCTURE NO. 008-0015

SHEET \$SHT\$ OF \$TOT\$ SHEETS

1'-0"

NORTH ABUTMENT ELEVATION

(Looking North)



SOUTH ABUTMENT ELEVATION

(Looking South)

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	228
Epoxy Crack Injection	Foot	21

LEGEND

— Epoxy Crack Injection

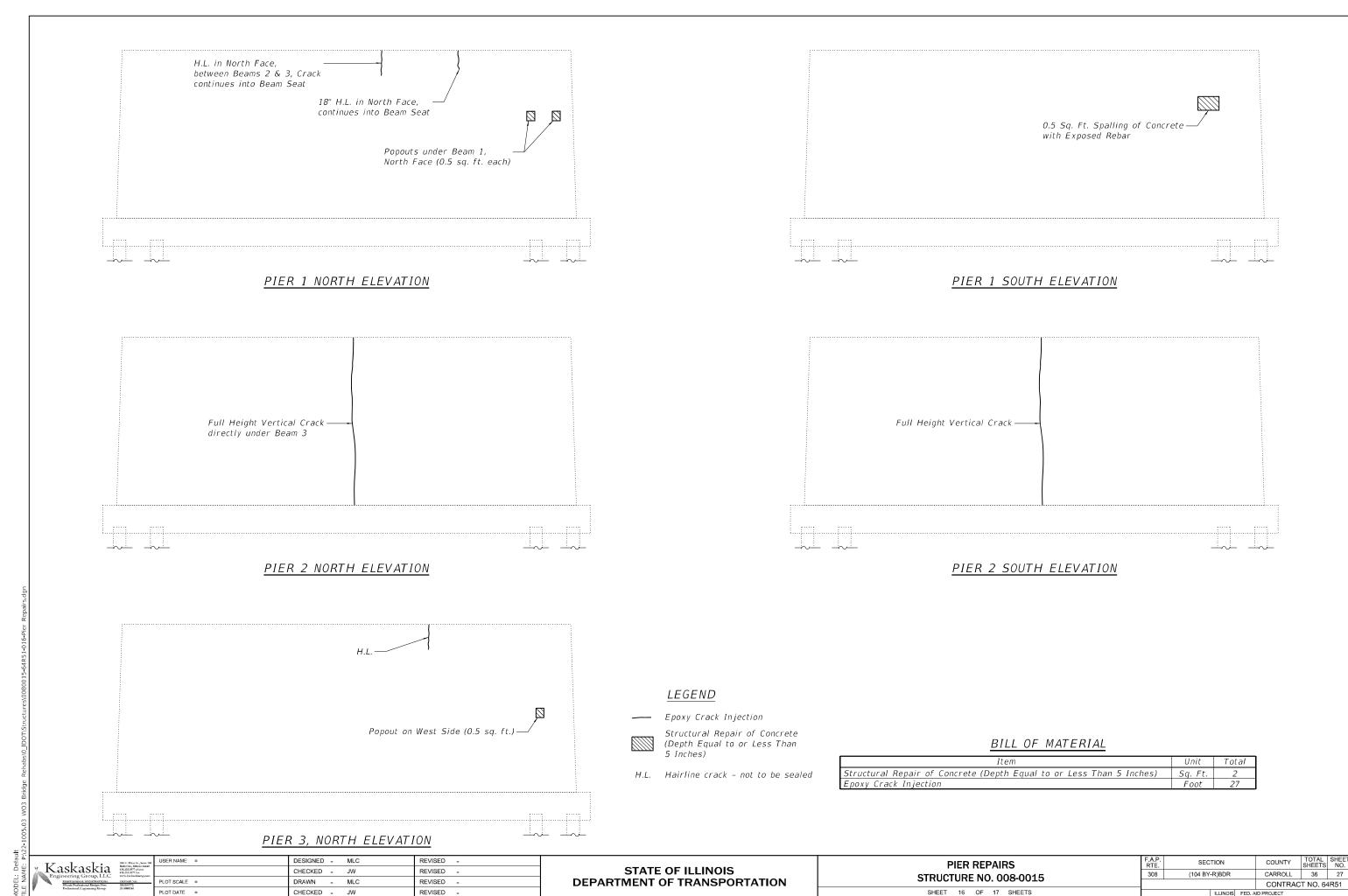
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)

H.L. Hairline crack - not to be sealed

Kaskaskia Engineering Group, LLC	USER NAME =	DESIGNED - MLC	REVISED
		CHECKED - JW	REVISED
PROFESSIONAL REGISTRATIONS LICENSE NO. Illinois Professional Design Firm 184,04773	PLOT SCALE =	DRAWN - MLC	REVISED
Professional Engineering Group 20-5080586	PLOT DATE =	CHECKED - JW	REVISED

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

ABUTEMENT REPAIRS STRUCTURE NO. 008-0015	F.A.P. RTE.	SEC.	TION		COUNTY	TOTAL SHEETS	SHEET NO.
	308	(104 BY-R)BDR			CARROLL	36	26
					CONTRAC	T NO. 64	1R51
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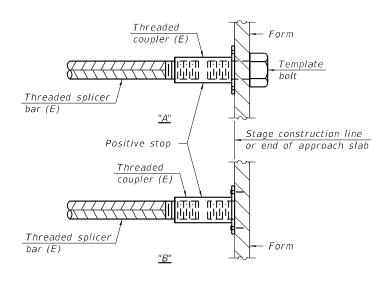
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

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.

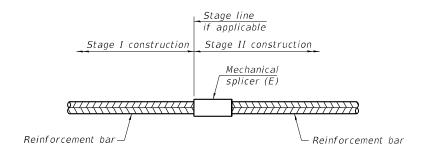
Location	Bar	No. assemblies	Minimum
Location	size	required	lap length
North Abutment	#6	4	4'-0"
South Abutment	#6	4	4'-0"
Deck	#5	32	3'-6"



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.

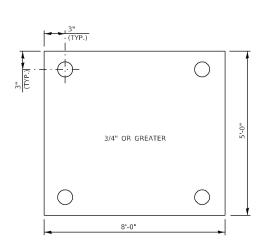
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-1-2020

		208 E. Main St., Suite 100 Belleville, Ellinois 6222)	USER NAME	=	DESIGNED -	MLC	REVISED	-	Γ
	Kaskaskia	618.233.5877 phone 618.233.5877 fex providualisationers.com			CHECKED -	JW	REVISED	-	ĺ
Ž	PROPERSIONAL REGISTRATIONS Illinois Professional Design Firm	LICENSE NO. 184,954773	PLOT SCALE	=	DRAWN -	MLC	REVISED	-	ı
Ë	Professional Engineering Group	20-5080586	PLOT DATE	=	CHECKED -	JW	REVISED	-	Ĺ

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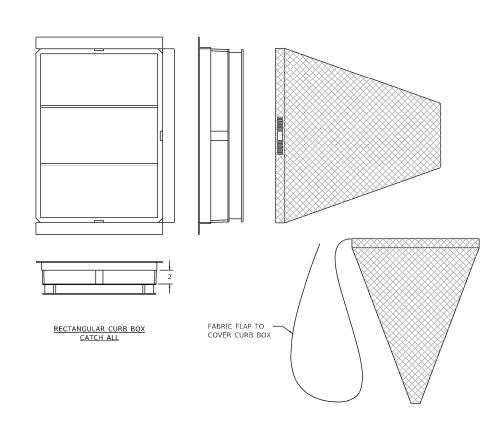


STEEL PLATE DETAIL N.T.S.

- STEEL PLATE NOTES:

 1. DURING MOT STAGE 1, THE APPROACH DRAIN AT THE CORNERS OF THE BRIDGES NEED TO BE PROTECTED WITH ¾" (MIN.) STEEL PLATE ANCHORED WITH 4 ANCHOR BOLTS INTO THE PAVEMENT.

 2. THE EDGES OF THE STEEL PLATE SHALL BE TAPERED WITH HMA TO AVOID BUMP FOR TRAFFIC.



INLET FILTER NOTES:

FRAME: TOP FLANGE FABRICATED FROM 1½"x1½"x½" ANGLE. BASE RIM FABRICATED FROM $1\frac{1}{2}$ " $x\frac{1}{2}$ " $x\frac{1}{8}$ " CHANNEL. HANDELS AND SUSPENSION BRACKETS FABRICATED FROM 1¼"x¼" FLAT STOCK. ALL STEEL CONFORMING TO ASTM-A36.

SEDIMENT BAG: BAG FABRICATED FROM 4 OZ./SQ.YD. NON-WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. BAG SECURED TO BASE RIM WITH A STAINLESS STEEL BAND AND LOCK.

INLET FILTER DETAIL N.T.S.

	askaskia gineering Group, LLC	208 E. Main St., Suite 100 Belleville, Illinois 62220 638,233,877 fear 638,233,577 fear www.kuskuskilaeng.com LICENSE NO.	F
7	Illinois Professional Design Firm Professional Europering Group	184.004773 20-5080586	L
*	Treatment Inguistrag Group	20-044034	ı

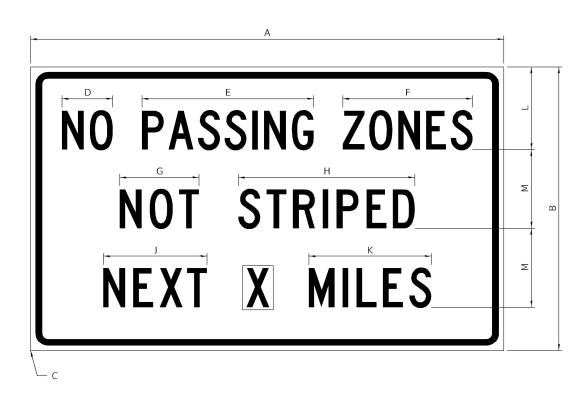
≈ 100 122)	USER NAME = jheimer	DESIGNED -	REVISED -
oum		DRAWN -	REVISED -
_	PLOT SCALE = 1.9999 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/16/2022	DATE -	REVISED -
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SCALE:

	GENERA	AL DET	AILS		F.A. RTE.	SEC	TION		COUNTY	TOTAL SHEETS	SHEE NO.
п	84 OVEF			v	308	(104-BY	/-R)BDF	1	CARROLL	36	29
	04 UVLI	า กบอเ	GNLL	N.					CONTRACT	NO. 64	1R51
SHEET	OF	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		

WORK ZONE SIGN DETAILS

ILLINOIS STANDARD G20-I100



COLOR LEGEND AND BORDER BACKGROUND

BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE					[DIMEN	ISIONS	5				
SIGN SIZE	A B C D E F G H J K					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	LINE	MARGIN	BORDER	
SIGN SIZE	1	2	3	MARGIN	BURDER	
60 x 36	5C	5C	5C	0.625	0.875	

Sign not to scale

GENERAL NOTES

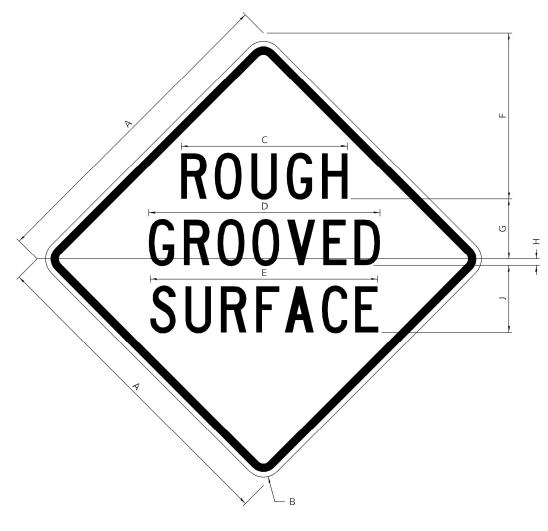
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

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 LEGEND AND BORDER BACKGROUND

BLACK

NON-REFLECTORIZED REFLECTORIZED

CION CIZE	DIMENSIONS								
SIGN SIZE A B				D	Е	F	G	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	SERIES BY LINE MARGIN B				BORDER	
SIGN SIZE	1	2	3	MARGIN	BURDER	
48 x 48	7C	7C	7C	1.250	0.750	

Sign not to scale

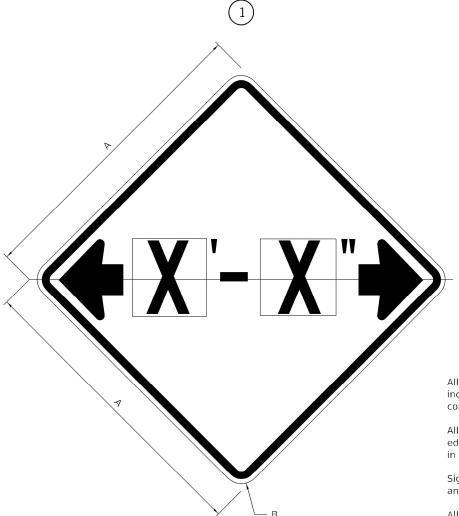
We il. Main St., Saire 100 Befordte, Blinds 6229	USER NAME = jheimer	DESIGNED -	REVISED -	
Raskaskia (88.233.897) phuma		DRAWN -	REVISED -	ı
PROFESSIONAL REGISTRATIONS LICENSE NO. Illinois Professional Design Firm 184,034773	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -	
Professional Engineering Group 20-5000366	PLOT DATE = 8/16/2022	DATE -	REVISED -	Ш

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ı		2 / DIST 84 OVER		2 STANDARD CREEK	
	CHEET	OΓ	CHEETE	CTA	TO

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

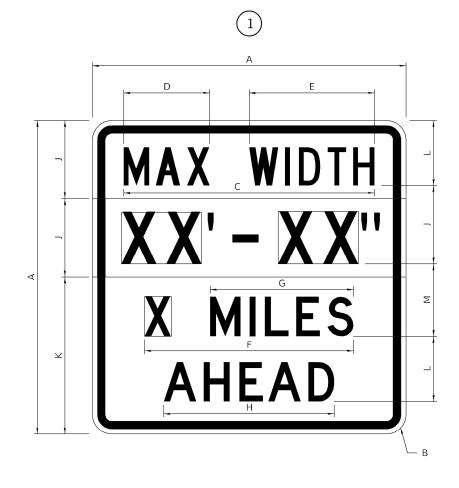
SIGN SIZE	DIMENSIONS				
SIGN SIZE	А	В			
48 × 48	48.00	3.00			

	Illinois Standard signs W12-I102 and W12-I103 shall be used as described in the special provisions.	
\Box	used as described in the special provisions.	

SIGN SIZE	SERIES BY LINE	MARGIN	BORDER
SIGN SIZE	1	MARGIN	BORDER
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	А	В	С	D	Е	F	G	I	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	PODDED	
SIGN SIZE	1	2	3	4	MARGIN	BORDER	
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

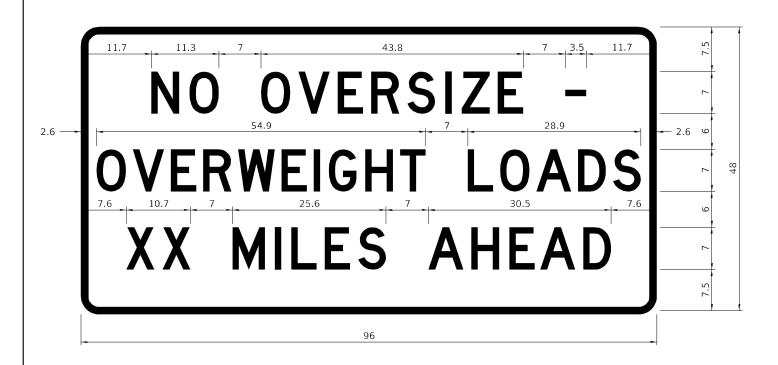
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD
IL 84 OVER RUSH CREEK
SHEET OF SHEETS STA.

g Section Number

WORK ZONE SIGN DETAILS

ROAD CLOSED TO OVERSIZED LOADS



COLOR

LEGEND AND BORDER BACKGROUND

BLACK ORANGE

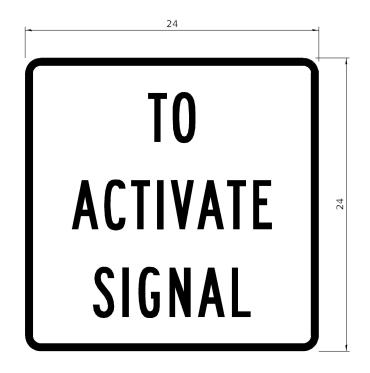
NON-REFLECTORIZED REFLECTORIZED

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	S 54.4	I 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	I 38.8	G 41.3	H 47.4	T 53.2	L 64.5	O 69.9	A 75.9	D 82.9	S 88.7
X 7.6	X 13.6	M 25.3	I 32.3	L 35.1	E 40.6	S 46.2	A 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

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

All dimensions are in inches unless otherwise noted.

SCALE:

	08 E. Main St., Suite 100 leffeyile, Ellinois 6222)	USER NAME	= jheimer	DESIGNED	-	REVISED	-
Naskaskia a	18,233,5877 phone 18,233,5877 phone 18,233,5977 fax mrv.kashashlaeno.com			DRAWN		REVISED	-
PROFESSIONAL REGISTRATIONS LI Illinois Professional Design Firm 18	LICENSE NO. 184.004773	PLOT SCALE	= 20.0000 ' / in.	CHECKED	-	REVISED	-
Professional Engineering Group 20	0-9000386	PLOT DATE	= 8/16/2022	DATE	-	REVISED	-

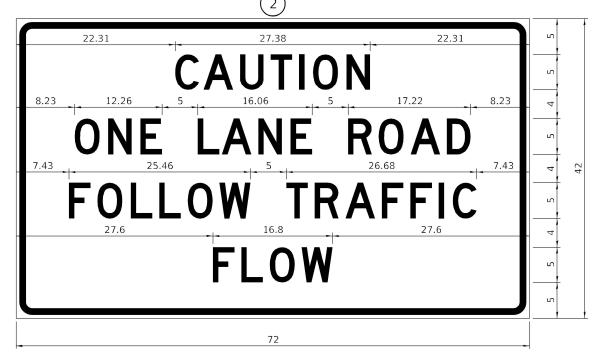
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

R					STANDARD CREEK	
		07	OVEIL	110011	OHLLK	
	CHEET		0.5	CHEETE	CTA	TOG

(104-BY-R)BDR CARROLL 36 32 308 CONTRACT NO. 64R51

ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS

WORK ZONE SIGN DETAILS



COLOR 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.

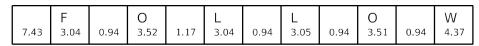
Table Of Widths And Spaces

22.31	C 3.36	0.62	A 4.18	0.94	U 3.36	0.94	T 3.04	0.94	I 0.78	1.17	O 3.52	1.17	N 3.36	22.31
-------	-----------	------	-----------	------	-----------	------	-----------	------	-----------	------	-----------	------	-----------	-------

	0		Ν		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



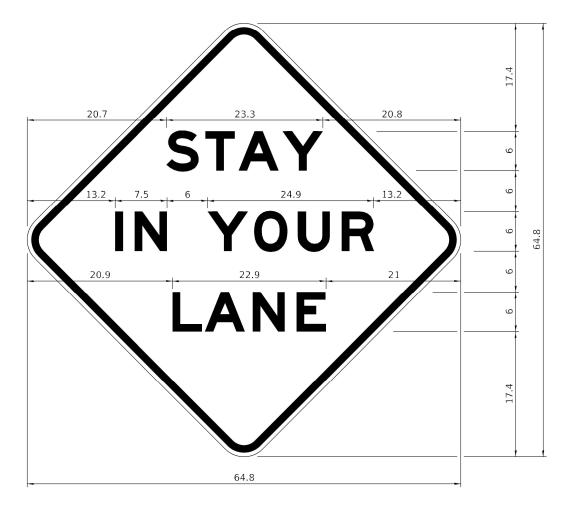


5.00 3.05 0.94 3.36 0.94 4.18 0.93 3.05 0.94 3.04 0.94 0.78 1.18 3.35 7.43		Т		R		Α		F		F		I		С	
	5.00	3.05	0.94	3.36	0.94	4.18	0.93	3.05	0.94	3.04	0.94	0.78	1.18	3 35	7.43

	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

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

]		Ν	Υ	0	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

Kaskaskia Engineering Group, LLC PROPESSIONAL INCESTS TOOSS Illinois Professional Deliga Frien Professional Inguistring Group	266 H. Main Sr., Suise 100 Bellevells, Illinois 62720 634-233-877 planne 638-253-977 fee vorm-lacksteareg.com LICENSE NO. 884-094773 20-9080386		USER NAME	= jheimer	DESIGNED	-	REVISED	-	
				DRAWN		REVISED	-		
		PLOT SCALE	= 20.0000 ' / in.	CHECKED	-	REVISED	-	DEPART	
		PLOT DATE	= 8/16/2022	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.

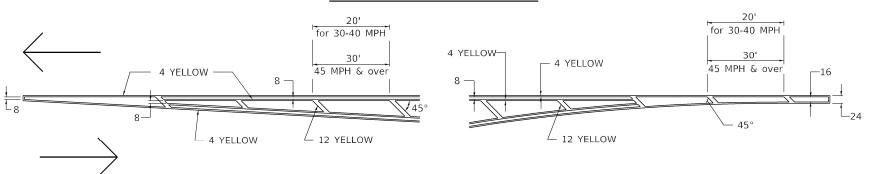
	REGION 2 / DISTRICT 2 STANDARD			F.A. RTE.	SEC.	TION		COUNTY	TOTAL SHEETS				
IL 84 OVER RUSH CREEK				308	(104-B)	(-R)BDF	₹	CARROLL	36	33			
	IL 04	UVLN	nusi	UNLL	-N						CONTRACT	NO. 64	4R51
	SHEET	OF	SHEETS	STA.		TO STA.			ILLINOIS	FED. AI	D PROIECT		

TYPICAL PAVEMENT MARKINGS

MEDIAN PAVEMENT MARKING

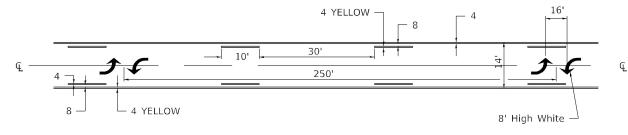
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN

AT LEFT TURN LANE



REVISED

REVISED -



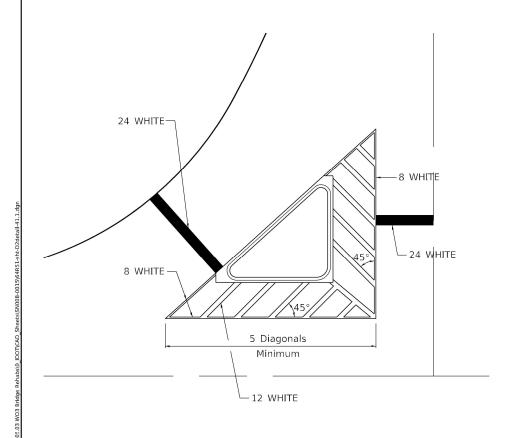
** ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

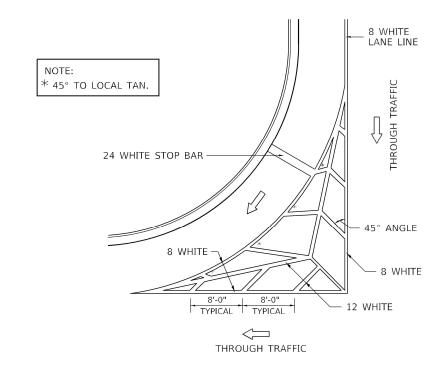
TYPICAL ISLAND OFFSET SHOULDER WIDTH

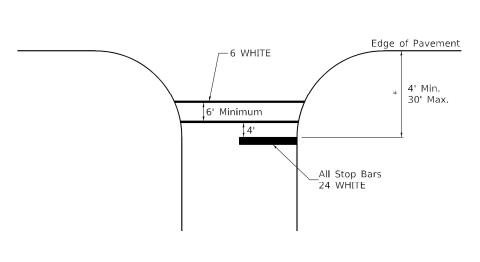
TYPICAL MARKING FOR PAINTED ISLANDS

STANDARD CROSSWALK MARKING

See Schedules for Locations







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

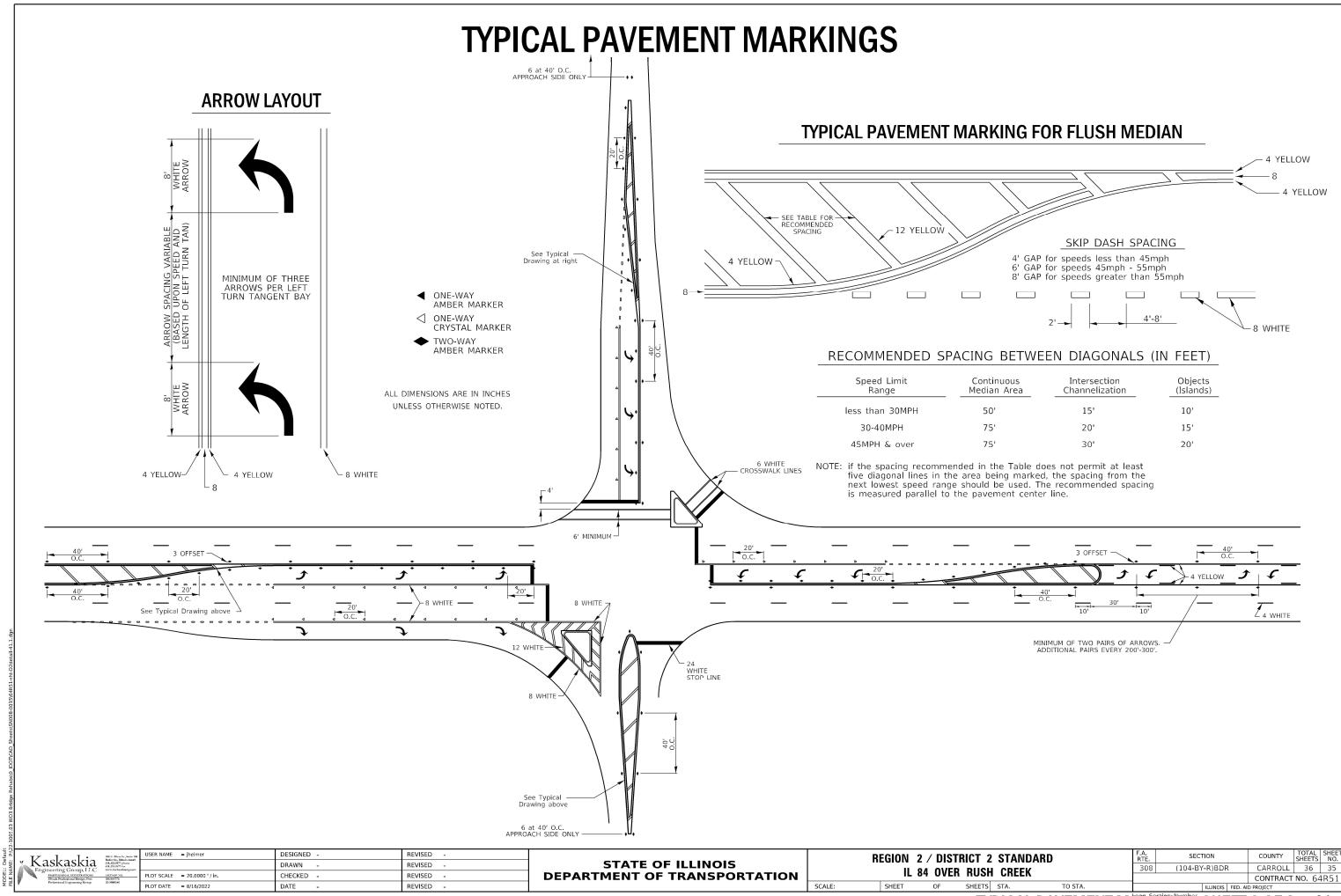
NAME: P:\	v K	askaskia gineering Group, LLC	208 H. Main St., Saine 100 Befferdite, Illinois 5123 638-233-5977 day 638-233-5977 day own.katkaskilaeng.com
_	-	PROPESSIONAL REGISTRATIONS	LICENSE NO.
щ	200	Elfinois Professional Design Firm	184.004773
ᇤ	₹	Professional Engineering Group	20-5080586

Main St., Suite 100 fle, Ellinois 62220 L.8977 phune L.5973 fax tackackineng.com 158. NO. 4773 0036	USEK IVAME	- jneimer	DESIGNED	-
			DRAWN	-
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	PLOT DATE	= 8/16/2022	DATE	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

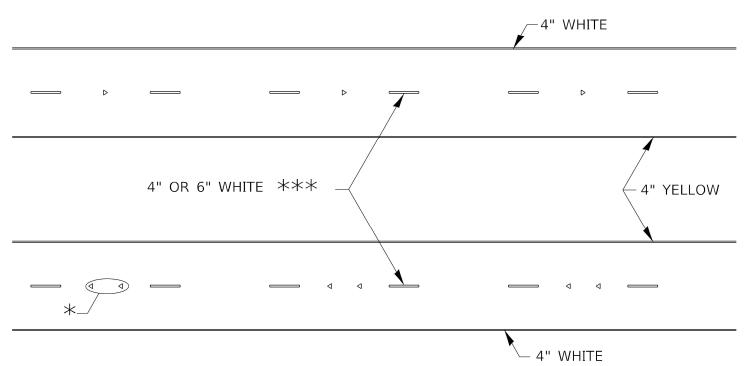
F	REGION 2 / DISTRICT 2 STANDARD						
	IL	84 OVER	RUSH	CREEK			
	SHEET	OF	SHEETS	STA	TO STA		

	F.A. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
	308	(104-BY-R)BDR			CARROLL	36	34
				CONTRACT	NO. 64	4R51	
ı				EE6 4	D DD O I F OF		



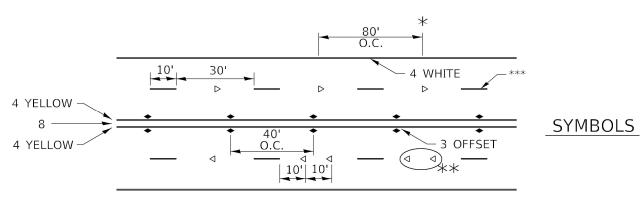
TYPICAL PAVEMENT MARKINGS

TYPICAL PARKING SPACING



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS. USE DOUBLE MARKERS WHEN ADT \geq 20,000.

MULTI-LANE / DIVIDED

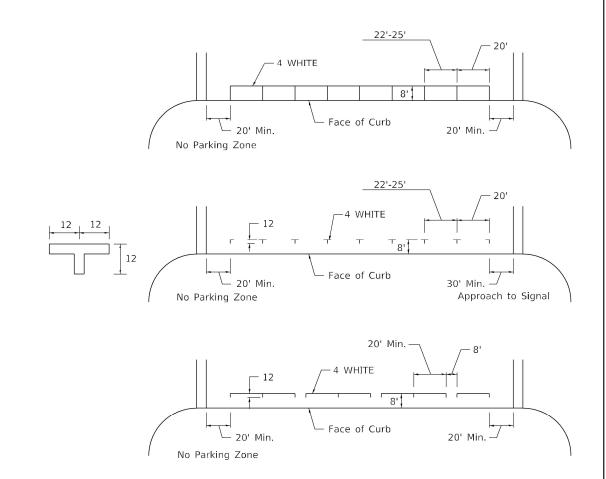


- * REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.
- ** USE DOUBLE MARKERS WHEN ADT ≥ 20,000

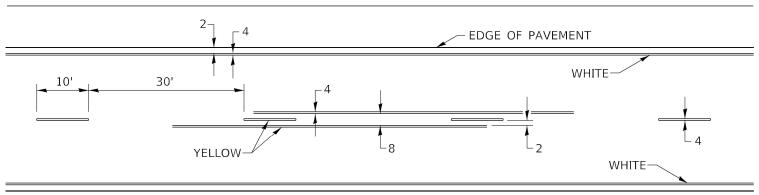
*** CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

MULTI-LANE / UNDIVIDED & ONE WAY

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



TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



TZ 1 1 ·	200 II. Main St., Smire 100 Befleville, Hilholds 52220 639,233,5877 phome 638,233,5977 ac renvolved tackfooting corn LICENSE, NO. 184,094773 20-5000556	USER NAME = jheimer	DESIGNED -	REVISED -
Kaskaskia Engineering Group, LLC			DRAWN -	REVISED -
PROFESSIONAL DESIGN From Illinois Professional Design From Professional Design From Professional Engineering Group		PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
		PLOT DATE = 8/16/2022	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

IL 84 OVER RUSH CREEK

SHEETS STA TO STA

UNIDORE

F.A. SECTION

308 (104-BY-R)BD