11-17-2017 LETTING ITEM 022

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

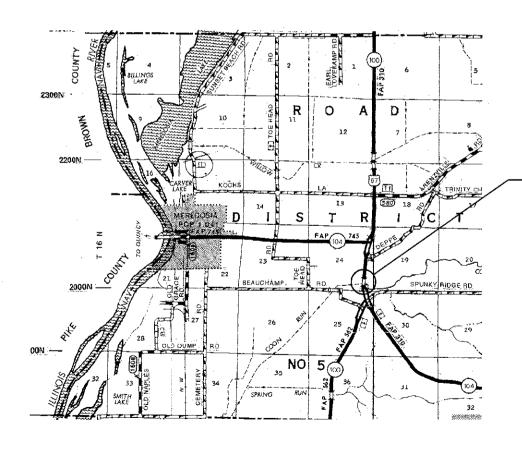
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED CONTRACT MAINTENANCE

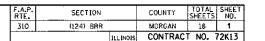
F.A.P. ROUTE 310 (US 67 / IL 100 / IL 104) SECTION (124) BRR

BRIDGE DECK OVERLAY MORGAN COUNTY

C-96-077-17



- PROJECT LOCATION SN 069-0017 US 67 OVER COON RUN 0.3 MI N OF IL 100



D-96-077-17



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 29 August 2017

ENGINEER OF DESIGN AND ENVIRONMENTS

20

Accele Company of the Com

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

BRIDGE MAINTENANCE ENGINEER: BRANDON DUDLEY (217) 785-9290

GROSS LENGTH = 540 FT. = 0.10 MILE NET LENGTH = 540 FT. = 0.10 MILE

CONTRACT NO. 72K13

100° 200° 308° ---- 1° = 100°

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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

1-800-892-0123 OR 811

)

0

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INDEX OF SHEETS

1 COVER SHEET

2 INDEX, STANDARDS, SIGNATURES, GENERAL NOTES, & SCHEDULES

3-4 SUMMARY OF QUANTITIES

5 TYPICAL SECTIONS

6 ROADWAY PLAN

STAGING PLAN

8-9 TRAFFIC CONTROL PLAN

10-18 SN 069-0017 BRIDGE PLANS

GENERAL NOTES:

BASE COURSE WIDENING SHALL BE COMPLETED PRIOR TO STAGING TRAFFIC.

AREAS OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS,

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT 6

EXAMINED August 8th 20 17
ENGINEER OF OPERATIONS

EXAMINED Aug 17 2 20 17
ENGINEER OF PROJECT IMPLEMENTATION

EXAMINED Avgvs+ 7 20 17

WENGINEER OF PROGRAM DEVELOPMENT

STANDARDS
000001-06
001001-02
001006
630001-11
631031-15
701001-02
701006-05
701201-04
701301-04
701306 - 03
701321-16
701326-04
701901-06
704001-08
780001-05
<i>78200</i> 6

PAVING SCHEDULE									
			BIT MATL	HMA SURF					
STA	TO	STA	(TACK CT)	COURSE					
			(POUND)	(TON)					
190+40	- 1	192+49	418	91					
193+79	- 1	195+80	402	88					
		TOTALS	820	179					

	PAVE	EMENT MARK	KING REMO	OVAL SCHEDULE	= }
STA	то	STA	LOC.	LINE TYPE	PAVT MARK REM (SO FT)
STAGE I					
189+05	-	<i>191+50</i>	<u> </u>	SKIP DASH	25
<i>191+05</i>	-	<i>1</i> 95+25	LT	SOLID	175
194+80	-	197+25	Œ.	SOLID/SKIP	128
STAGE II					
<i>191+1</i> 5	-	192+42	RT	SOL ID	53
193+68	- 1	195 + 15	RT	SOLID	61
	•			TOTAL	442

·			SHOULE	DER IMPROVEMENT	T SCHEDULE		•	
STA	TO STA		SIDE	BASE COURSE P DE WIDENING 8" SHL		EARTH EX. WIDENING	AGG WEDGE SHLDR	
				(SO YD)	(SO YD)	(CU YD)	(TON)	
190+40	-	192+42	RT	180	90	20	7.7	
190+40		<i>192+59</i>	LT	195	98	22	8.3	
193+68	-	<i>195+80</i>	RT	189	95	21	8.1	
193+87	-	195+80	LT	172	86	19.	7.3	
			TOTALS	736	369	82	31.4	

MIXTURE USE(S)	HMA BASE CSE	HMA SURFACE
	WIDENING *	CSE
AC/PG	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% ₪ IL N50	4.0% ₽ N70
MIX COMPOSITION	IL 19.0	IL 9.5
(GRADATION MIXTURE)		
FRICTION AGGREGATE	N/A	N/A
QUALITY MANAGEMENT	QC/OA	OC/OA
SUBLOT SIZE	N/A	N/A

^{*} BASE COURSE PAY ITEM ALLOWS FOR HMA OR PCC USE.

			•••		GUARDR/	AIL SCHEDULE					
				<i>GUARDRAIL</i>	SPBGR, TY A	TRAF. BARR.	TRAF. BARR.	TERM. MARKER	GUARDRAIL		
STA	TO	STA	LOC.	REMOVAL	6' POSTS	TERM. TY 1 SPC	TERM. TY 6	DIRECT APPLIED	MARK. TY B		
						(FOOT)	(FOOT)	(EACH)	(EACH)	(EACH)	(EACH)
<i>190+60</i>	-	<i>192+25</i>	RT	<i>1</i> 60	87.5	1	1 .	1	2		
191+20	-	192+48	LT	128	50	1	1	1	1		
193+78	-	<i>195+06</i>	RT	128	50	1	1	. 1	. 2		
194+05	-	195+70	LT	<i>1</i> 65	87.5	1	1	1	1		
			TOTALS	<i>581</i>	275	4	4	4	6		

USLR NAML = dudleybm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000 1 / In.	CHECKED -	REVISED -
PLOT DATE = 8/23/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, STANDARDS, GENERAL NOTES,				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO			
SIGNATURES, & QUANTITIY SCHEDULES					310	(124) BRR	MORGAN	18	2		
							CONTRAC	F NO. 7:	2K13		
SCALE;	SHEET	OF	SHEETS	STA.	TO STA.			ISJUDOIS FED. AID PROJECT			

0-01624-6008

100% STATE

BRIDGE TOTAL 0047 ITEM UNIT QUANTITY RURAL CU YD 82 82 TON 100 100 SQ YD 736 736 BITUMINOUS MATERIALS (TACK COAT) POUND 820 820 HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT SO YD SQ YD 107 107 HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70 TON 179 179 SQ YD 369 369 AGGREGATE WEDGE SHOULDER, TYPE B TON 32 CU YD 6.5 6.5 EACH 8 CU YD 8.6 8.6 SQ YD 572 572 SQ YD 33 33

__ 100% STATE

0-01624-6008

•		1 [BRIDGE
		TOTAL	0047
ITEM	UNIT	YTITMAUO	✓ RURAL
REINFORCEMENT BARS, EPOXY COATED	POUND	1230	1230
BAR SPLICERS	EACH	12	12
PREFORMED JOINT STRIP SEAL	FOOT	112	112
CONTROLLED LOW-STRENGTH MATERIAL	CU YD	5	5
STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	275	275
TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
GUARDRAIL REMOVAL	FOOT	581	581
MOBILIZATION	L SUM	1	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
TEMPORARY RUMBLE STRIPS .	EACH	9	9
	REINFORCEMENT BARS, EPOXY COATED BAR SPLICERS PREFORMED JOINT STRIP SEAL CONTROLLED LOW-STRENGTH MATERIAL STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS TRAFFIC BARRIER TERMINAL, TYPE 6 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT GUARDRAIL REMOVAL MOBILIZATION TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 TRAFFIC CONTROL AND PROTECTION, STANDARD 701306 TRAFFIC CONTROL AND PROTECTION, STANDARD 701326 TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	REINFORCEMENT BARS, EPOXY COATED POUND BAR SPLICERS EACH PREFORMED JOINT STRIP SEAL FOOT CONTROLLED LOW-STRENGTH MATERIAL CU YD STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS FOOT TRAFFIC BARRIER TERMINAL, TYPE 6 EACH TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT EACH GUARDRAIL REMOVAL FOOT MOBILIZATION L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701326 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701326 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701326 L SUM	ITEM UNIT COTAL CUANTITY REINFORCEMENT BARS, EPOXY COATED POUND 1230 BAR SPLICERS EACH 12 PREFORMED JOINT STRIP SEAL FOOT 112 CONTROLLED LOW-STRENGTH MATERIAL CU YD 5 STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS FOOT 275 TRAFFIC BARRIER TERMINAL, TYPE 6 EACH 4 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT EACH 4 GUARDRAIL REMOVAL FOOT 581 MOBILIZATION L SUM 1 TRAFFIC CONTROL AND PROTECTION, STANDARD 701306 L SUM 1 TRAFFIC CONTROL AND PROTECTION, STANDARD 701326 L SUM 1 TRAFFIC CONTROL AND PROTECTION, STANDARD 701326 L SUM 1 TEMPORARY BRIDGE TRAFFIC SIGNALS EACH 1

* SPECIALTY ITEM

W

CODE

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20200500

28100807

35650300

40600290

40600982

40600990

40603315

44004250

48102100

50102400

50300100

50300255

50300260

50300300

EARTH EXCAVATION (WIDENING)

STONE DUMPED RIPRAP, CLASS A4

BASE COURSE WIDENING 8"

TEMPORARY RAMP

PAVED SHOULDER REMOVAL

CONCRETE SUPERSTRUCTURE

BRIDGE DECK GROOVING

PROTECTIVE COAT

CONCRETE REMOVAL

FLOOR DRAINS

USER MAME = dudleybm	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 8/23/2017	DATÉ -	REVISED -	

STATE OF ILLINOIS	
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

					•	F,A RTI	P.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
		SUMMAR	(Y OF QUA	MIIIES		31	0	(124) BRR		MORGAN	18	3
										CONTRACT	NO. 72	2K13
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.			ILLINOIS	FCD. A	ID PROJECT		

100% STATE BRIDGE CODE TOTAL 0047 ITEM UNIT QUANTITY RURAL NO. 70300100 SHORT TERM PAVEMENT MARKING FOOT 100 100 70300150 SQ FT SHORT TERM PAVEMENT MARKING REMOVAL 33 33 70400100 TEMPORARY CONCRETE BARRIER FOOT 440 440 70400200 RELOCATE TEMPORARY CONCRETE BARRIER FOOT 410 410 70600260 IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 EACH 2 2 70600332 IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 EACH 2 2 TERMINAL MARKER - DIRECT APPLIED ***** 72501000 EACH 4 ***** 78001120 PAINT PAVEMENT MARKING - LINE 5" FOOT 2000 2000 * 78200006 GUARDRAIL REFLECTORS, TYPE B EACH 6 6 78300200 RAISED REFLECTIVE PAVEMENT MARKER REMOVAL EACH 4 4 X0322469 PLUG EXISTING FLOOR DRAIN 12 12 EACH X0323818 CLEANING AND PAINTING EXPOSED REBAR SQ FT 110 110

				100% STATE
		[BRIDGE
CODE			TOTAL	0047
NO.	ITEM	UNIT	QUANTITY	RURAL
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	120	120
Z0012132	BRIDGE DECK SCARIFICATION, 1"	SQ YD	594	594
Z0012164	BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2-1/2"	SQ YD	594	594
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SO FT	96	96
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	5	5
		-		
		:		
				
-				
		<u> </u>		

* SPECIALTY ITEM

X0327979

X7010202

PAVEMENT MARKING REMOVAL - GRINDING

TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)

SQ FT

EACH

442

1

442

1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

0-01624-6008

SUMMARY OF QUANTITIES

SHEET OF SHEETS STA.

TO STA.

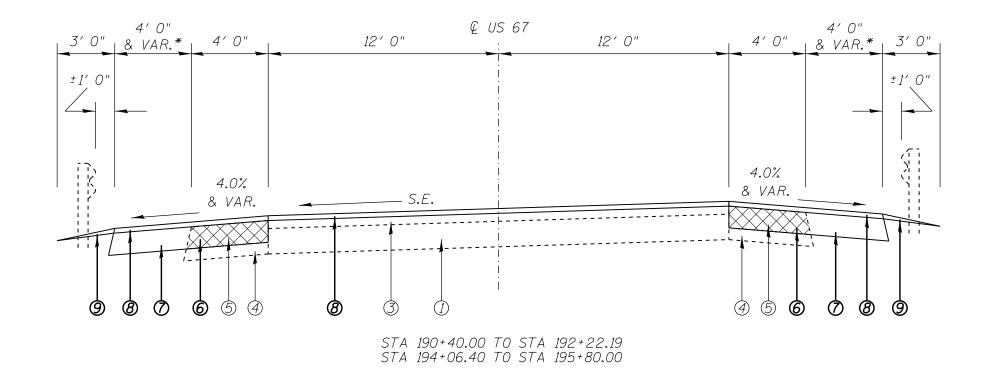
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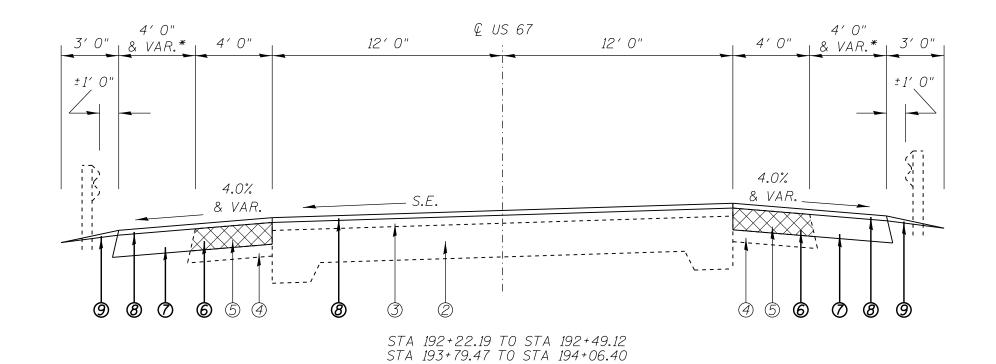
CONTRACT NO.

0-01624-6008

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- 1) EXISTING PCC PAVEMENT, 8"
- (2) EXISTING PCC PAVEMENT (16.5-10.5-16.5)
- (3) EXISTING HMA OVERLAYS, ±2-1/2"
- (4) EXISTING HMA SHOULDER
- (5) EXISTING HMA SHOULDER 8" (SPECIAL)
- 6) PROPOSED PAVED SHOULDER REMOVAL (8")
- 7) PROPOSED BASE COURSE WIDENING, 8"
- (8) PROPOSED HMA SURFACE COURSE, 1-1/2"
- 9) PROPOSED AGGRAGATE WEDGE SHOULDER TYPE B

NOTES:

BASE COURSE WIDENING 8" SHALL BE EXTENDED TO THE FACE OF THE CONCRETE PARAPET AT THE BRIDGE APPROACHES.

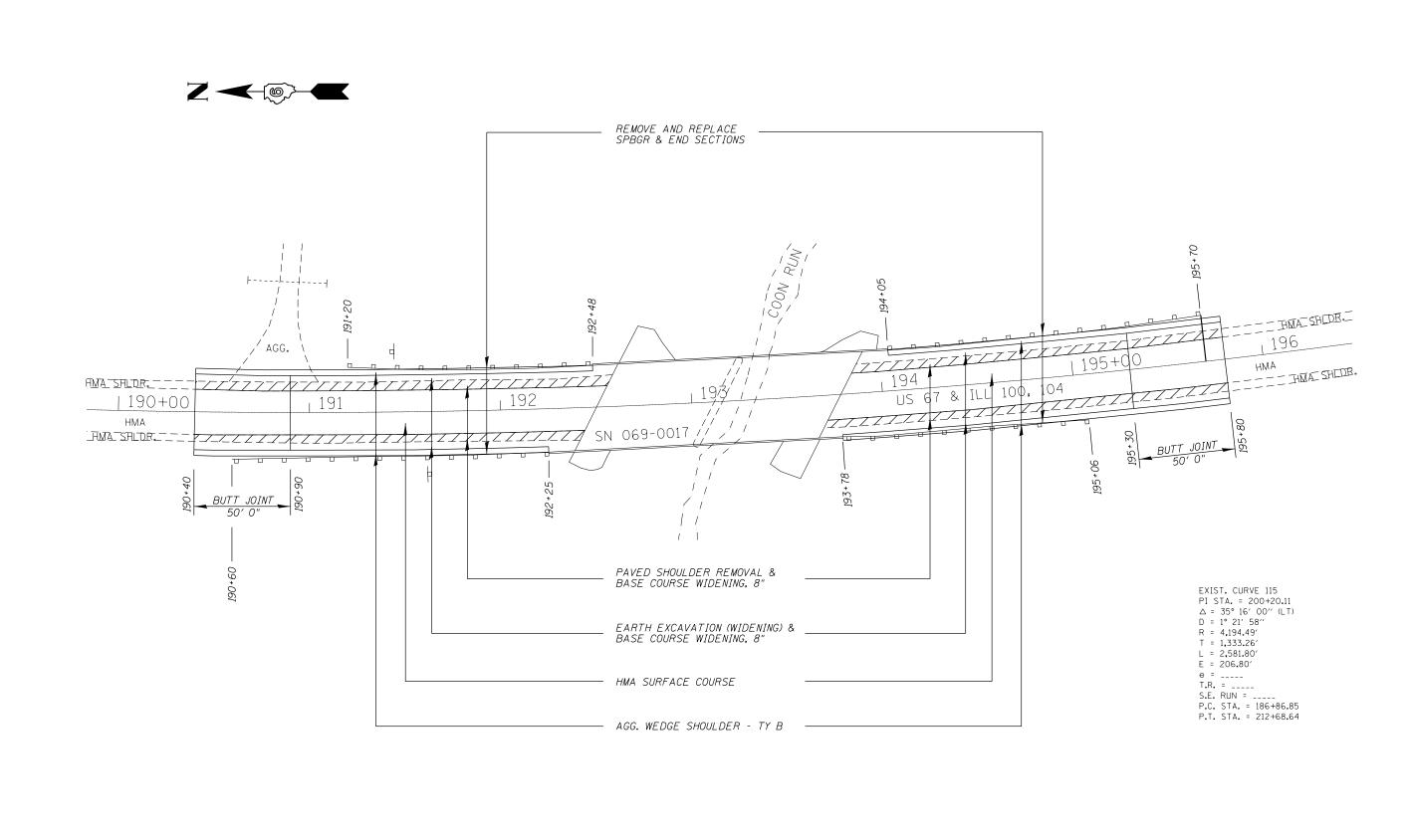
HIGH SIDE OF CURVE: WHEN THE SUPERELEVATION RATE OF THE PAVEMENT IS BETWEEN 0% AND 4%. THE SHOULDER SHALL BE SLOPED AT 4%. WHEN THE SUPERELEVATION RATE OF THE PAVEMENT EXCEEDS 4%, THE SHOULDER SHALL BE SLOPED SO THAT THE ALGEBRAIC DIFFERENCE BETWEEN PAVEMENT AND SHOULDER WILL NOT BE GREATER THAN 8%.

LOW SIDE OF CURVE: WHEN THE SUPERELEVATION RATE OF THE PAVEMENT IS GREATER THAN 4%, THE SHOULDER SHALL HAVE THE SAME CROSS SLOPE. OTHERWISE THE SHOULDER CROSS SLOPE SHALL BE 4%.

USER NAME = dudleybm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 8/23/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	TYPICAL SECTIONS					SECT	ΠΟN		COUNTY	TOTAL SHEETS	SHEET NO.
	TYPICAL SECTIONS				310	(124)	BRR		MORGAN	18	5
									CONTRACT	NO. 72	2K13
SHEET	OF	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		



MODEL: Default

JSER NAME = dudleybm

PLOT DATE = 8/23/2017

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DATE

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

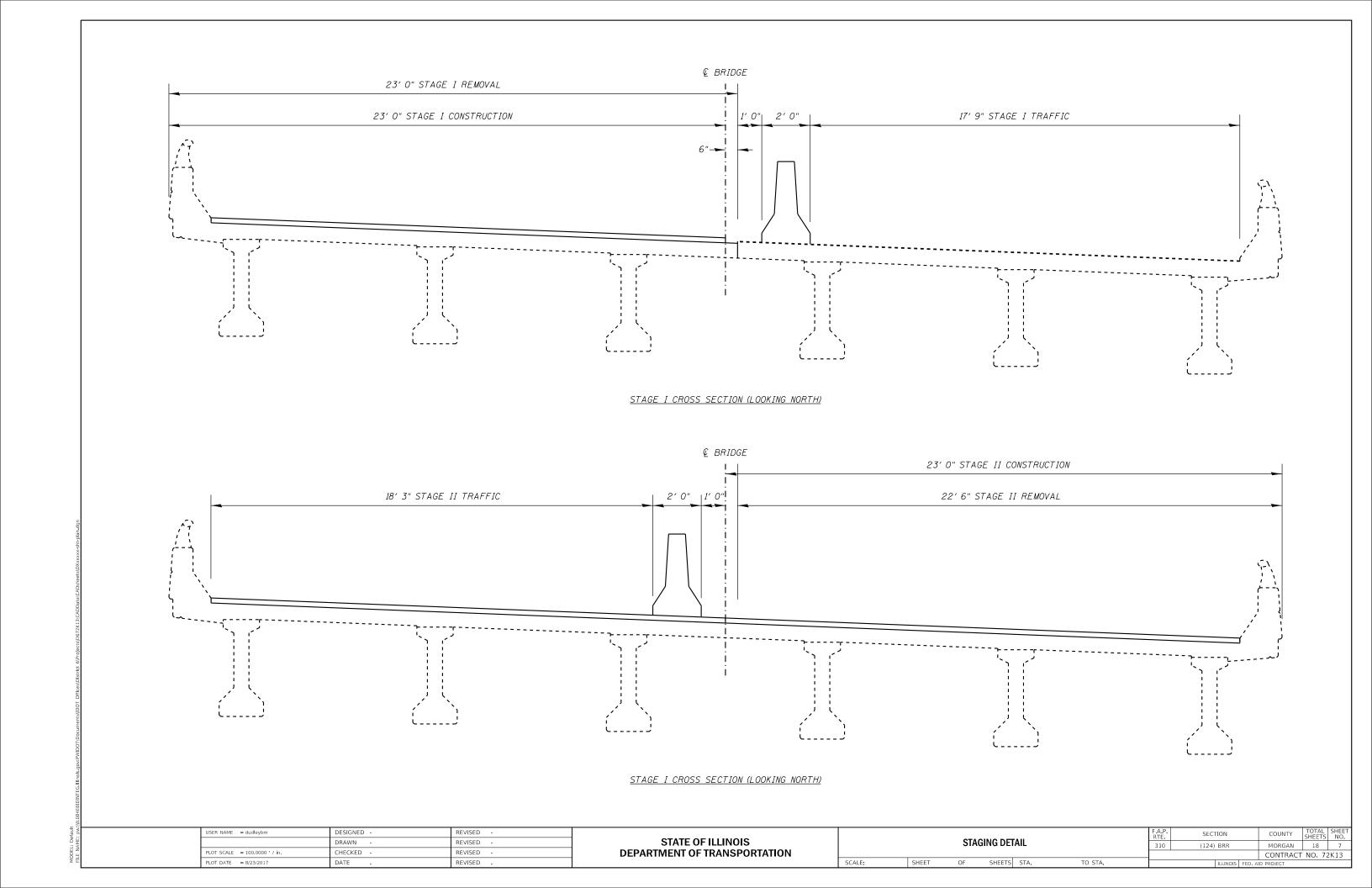
SHEET

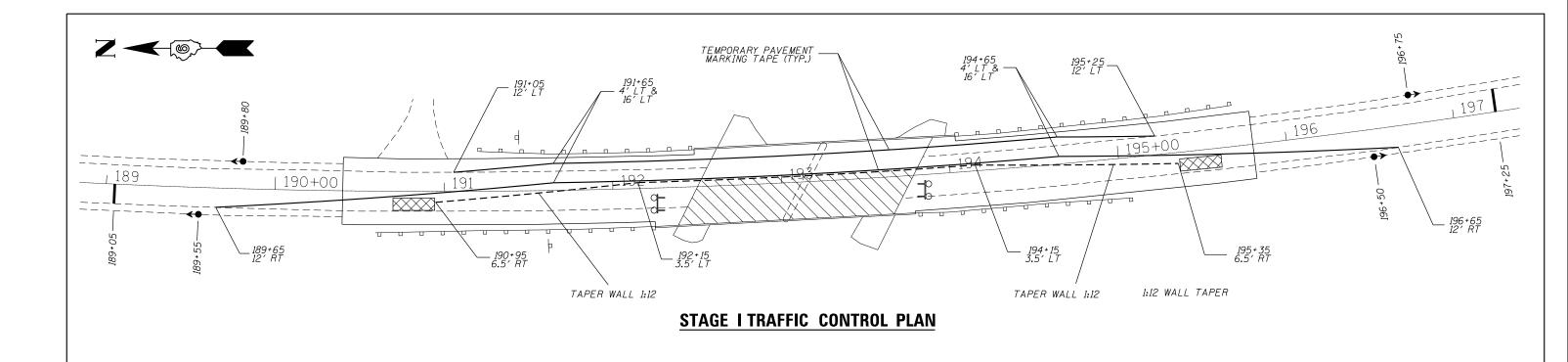
 ROADWAY PLAN
 F.A.P. RTE.
 SECTION
 COUNTY SHEETS NO.
 SHEETS NO.

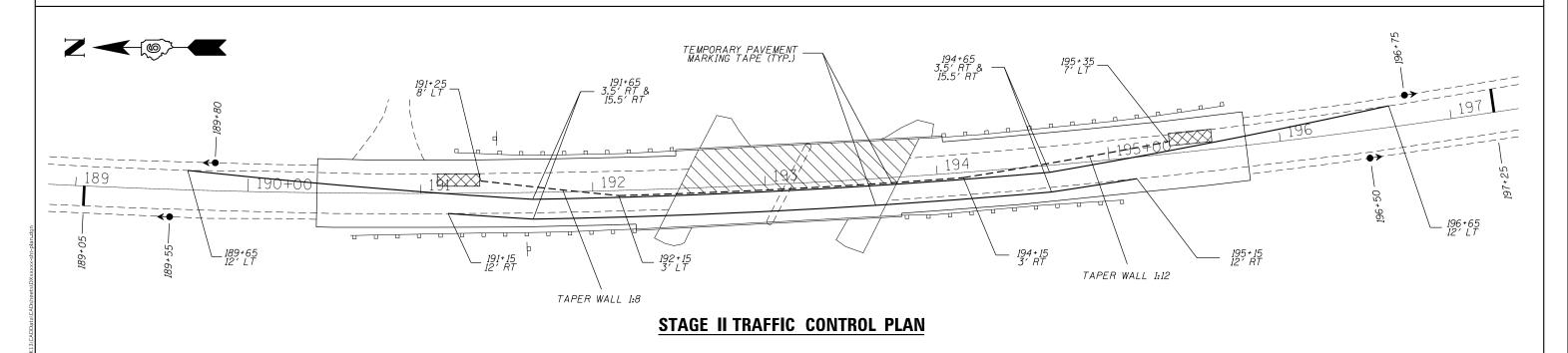
 310
 (124) BRR
 MORGAN
 18
 6

 CONTRACT NO. 72K13

 OF
 SHEETS
 STA.
 TO STA.
 ILLINOIS FED. ALID PROJECT







SYMBOLS

WORK AREA

TEMPORARY CONCRETE BARRIER

IMPACT ATTENUATOR

←●

TRAFFIC SIGNAL

9

TYPE III BARRICADE WITH FLASHING LIGHTS

TRAFFIC CONTROL NOTES:

1. TRAFFIC CONTROL DEVICES NOT SHOWN IN THIS DETAIL SHALL BE PER STANDARD 701321. DEVICES AND TEMPORARY PAVEMENT MARKINGS SHOWN IN THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL). IMPACT ATTENUATORS, TEMPORARY RUMBLE STRIPS, AND TEMPORARY CONCRETE BARRIER SHALL BE PAID SEPARATELY.

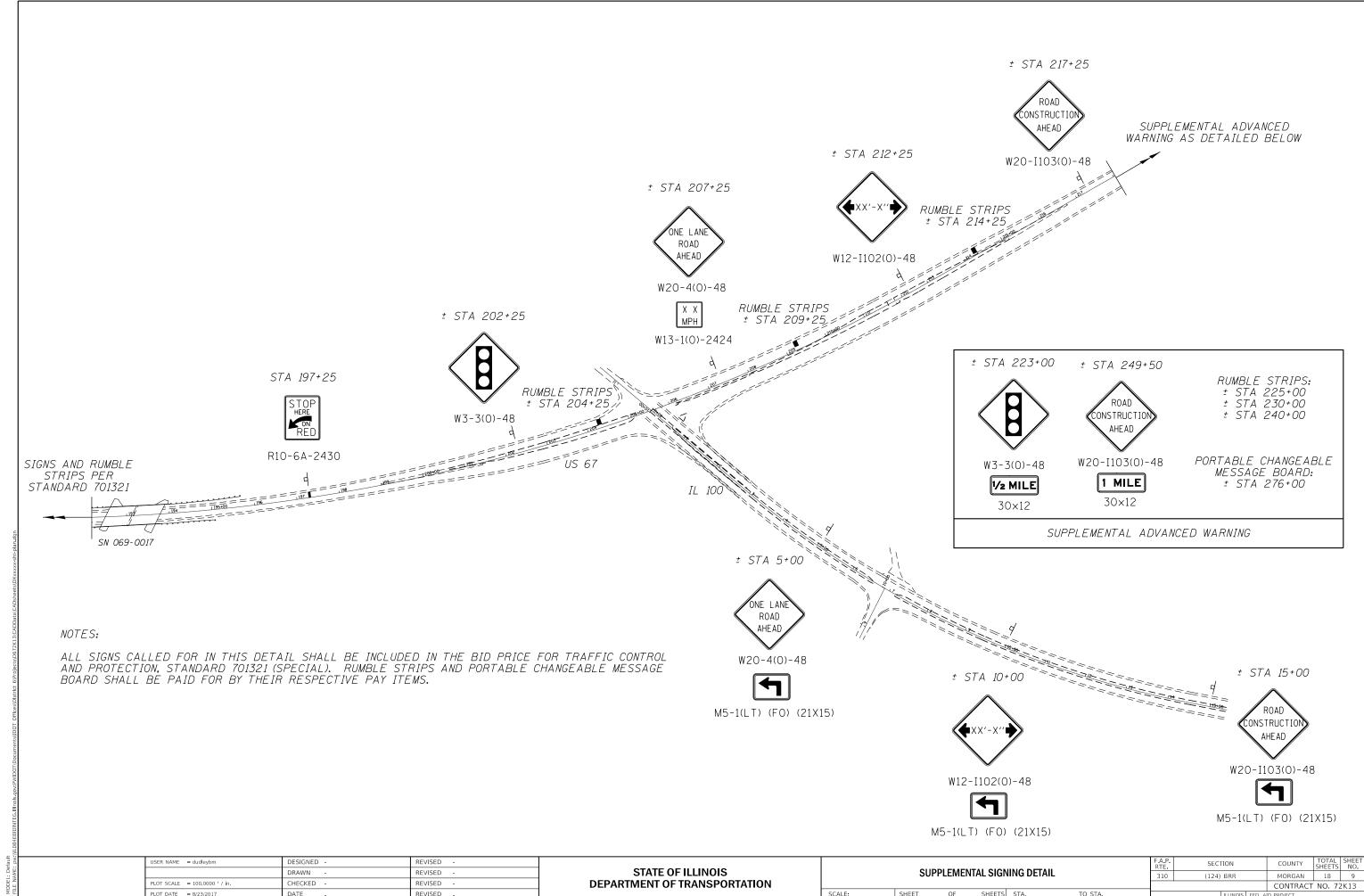
2. TEMPORARY CONCRETE BARRIER OFFSETS GIVEN IN THIS DETAIL REFER TO THE EDGE OF THE BARRIER NEAREST TO LIVE TRAFFIC.

3. SIGNS SHALL BE PROVIDED PER THE SIGNING DETAIL PROVIDED ON THE FOLLOWING PAGE AND PER STANDARD 701321. THE COST OF ALL REQUIRED SIGNS SHALL BE INCLUDED IN THE BID PRICE FOR TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL).

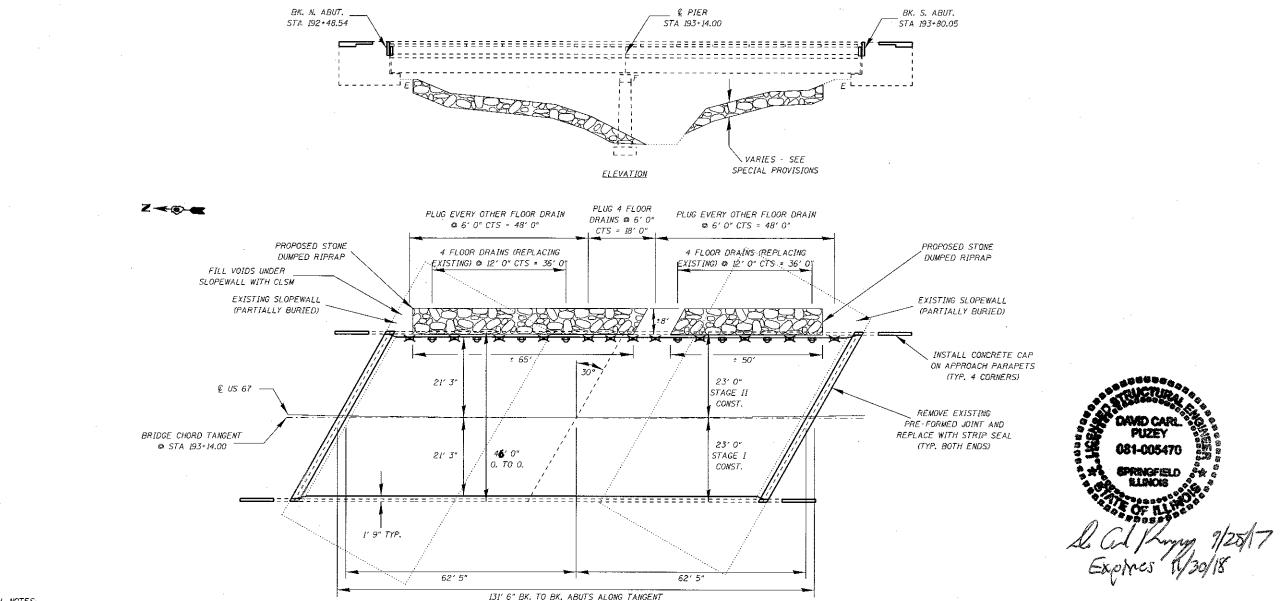
USER NAME = dudleybm	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	
PLOT DATE = 8/23/2017	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRACTIC STACING DI ANI					F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
TRAFFIC STAGING PLAN				TRAFFIC STAGING PLAN		(124) BRR		MORGAN	18	8
								CONTRACT	NO. 72	2K13
SHEET	OF	SHEETS	STA.	TO STA.		ILLINOI	S FED. A	ID PROJECT		



OF SHEETS STA.



GENERAL NOTES:

ALL STRUCTURAL STEEL SHALL BE AASHTO M-270 GRADE 36. UNLESS OTHERWISE NOTED.

PLAN

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

PRIOR TO POURING THE NEW CONCRETE DECK, ALL HEAVY OR 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 CONCRETE REMOVAL.

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 THE SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED, AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM. COST INCLUDED WITH CONCRETE REMOVAL.

JOINT OPENINGS SHALL BE ADJUSTED ACCORDING TO ARTICLE 520.04 OF THE STANDARD SPECIFICATIONS WHEN THE DECK IS POURED AT AN AMBIENT TEMPERATURE OTHER THAN 50°F.

THE ABUTMENT SURFACE IN THE AREAS OF EXPANSION JOINT REPLACEMENT SHALL HAVE A TINED FINISH AS PER ARTICLE 420.09(a)(i) OF THE STANDARD SPECIFICATIONS, COST INCLUDED WITH CONCRETE SUPERSTRUCTURE. THE DECK SURFACE IN THE AREAS OF EXPANSION JOINT REPLACEMENT SHALL BE GROOVED WITH THE DECK OVERLAY PER ARTICLE 503.16(a)(3)(b) OF THE STANDARD SPECIFICATIONS AND SHALL BE PAID AT THE BID PRICE PER SOURCE YARD FOR "BRIDGE DECK GROOVING."

PROTECTIVE COAT SHALL ONLY BE APPLIED TO THE DECK AND PARAPETS ADJACENT TO THE PROPOSED EXPANSION JOINTS AND THE NEW PARAPET CAPS, NOT THE MICROSILICA OVERLAY.

EXCAVATION WILL NOT BE REQUIRED FOR RIPRAP PLACEMENT. NO FILTER FABRIC OR BEDDING MATERIAL WILL BE REQUIRED. WORK SHALL CONSIST ONLY OF PLACING RIPRAP AS SHOWN ON THIS SHEET TO FILL EXISTING ERODED AREAS.

TOTAL BILL OF MATERIAL (069-0017)

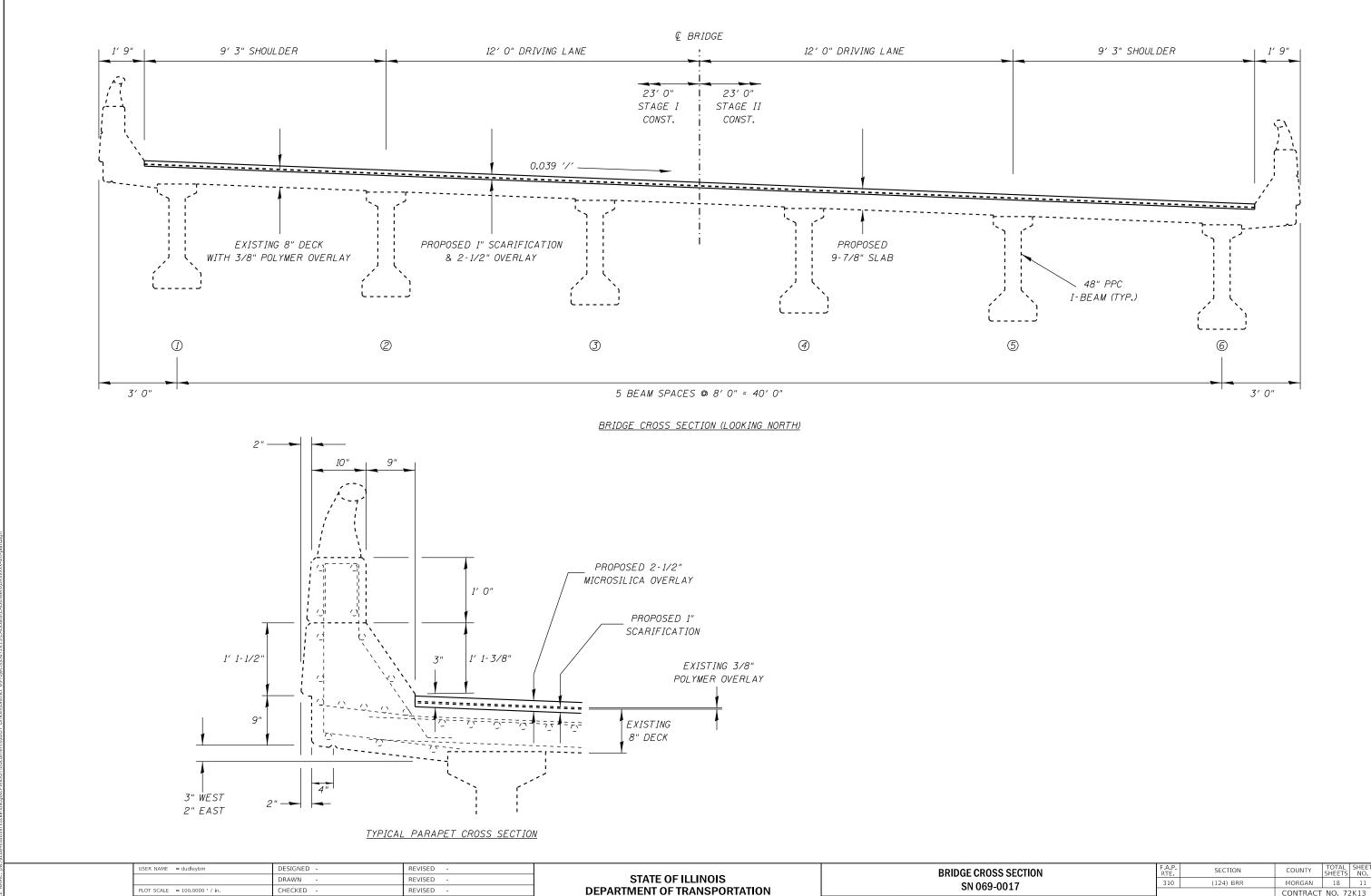
ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	6.5
Concrete Superstructure	Cu. Yd.	8.6
Bridge Deck Grooving	Sq. Yd.	572
Reinforcement Bars, Epoxy Coated	Pound	1230
Bar Splicers	Each	12
Preformed Joint Strip Seal	Foot	112
Bridge Deck Scarification, 1"	Sq. Yd.	594
Bridge Deck Microsilica Concrete Overlay, 2-1/2"	Sq. Yd.	594
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	5
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	96
Floor Drains .	Each	8
Plug Existing Floar Drains	Each	12
Cleaning and Painting Exposed Rebar	Sq. Ft.	110
Protective Coat	Sq. Yd.	33
Stone Dumped Riprap, Class A4	Ton	100
Controlled Low-Strength Material	Cu. Yd.	5

 USER NAME = dudleybm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/23/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

	GENERAL PLAN & ELEVATION					F.A.P. RTE.	5EC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
	SN 069-0017				∙310			MORGAN	18	10		
			000 00.							CONTRACT		2K13
5	SHEET 1 OF 9 SHEETS STA. TO STA.						ILLINOIS	FED. A	ID PROJECT			



SCALE:

SHEET 2 OF 9 SHEETS STA.

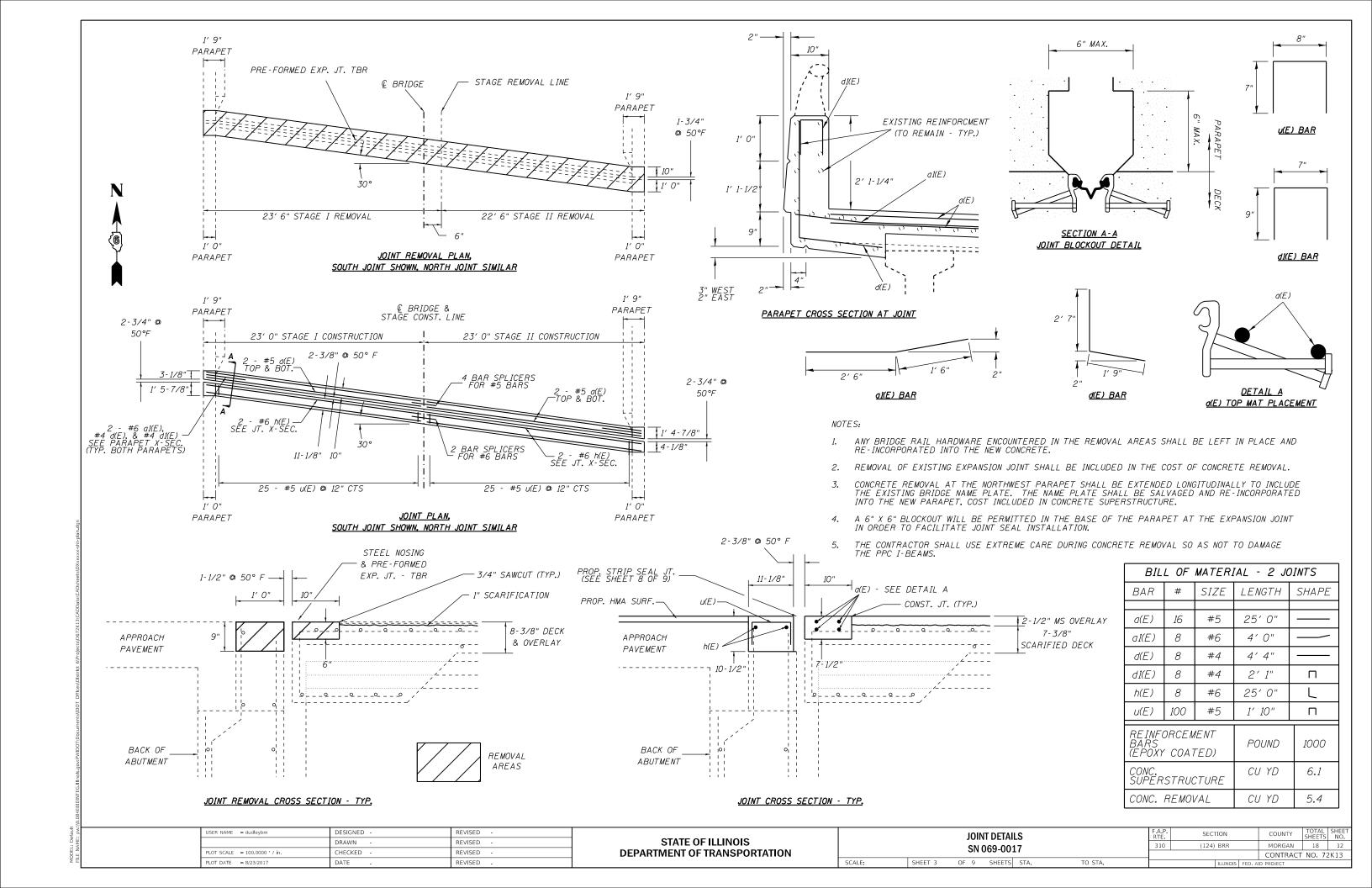
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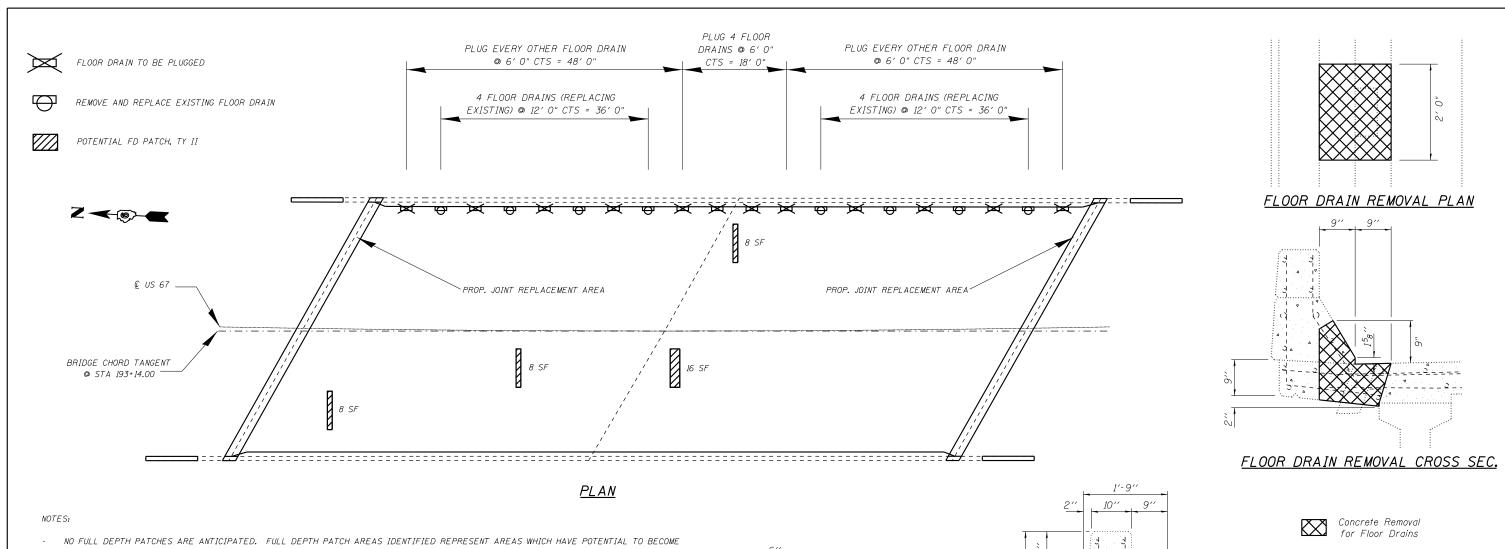
CONTRACT NO. 72K13

PLOT DATE = 8/23/2017

DATE

REVISED

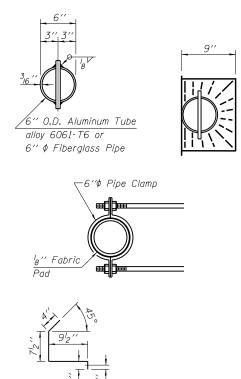


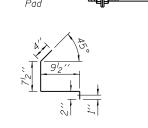


- FULL DEPTH PATCHES DURING SCARIFICATION OPERATIONS. THESE AREAS SHALL NOT BE INTENTIONALLY REMOVED UNLESS DECK SCARIFICATION REVEALS UNSOUND CONCRETE.
- EXTREME CAUTION SHALL BE EXERCISED WHILE REMOVING CONCRETE ADJACENT TO BEAMS. IN THESE AREAS, CONCRETE REMOVAL BELOW THE BOTTOM REINFORCEMENT MAT SHALL BE ACCOMPLISED WITH CHIPPING HAMMERS NO LARGER THAN 30 LBS. ANY DAMAGE TO BEAMS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- EXISTING DECK REINFORCEMENT WHICH PREVENTS INSTALLATION OF THE PROPOSED FLOOR DRAINS MAY BE CUT TO FACILITATE DRAIN INSTALLATION. APPROVAL FROM THE ENGINEER SHALL BE OBTAINED PRIOR TO CUTTING ANY EXISTING REINFORCEMENT.
- THE PIPE CLAMP, BEAM BRACKET, AND ALL HARDWARE NECESSARY FOR SECURING THE PROPOSED FLOOR DRAINS SHALL BE INCLUDED IN THE BID PRICE PER EACH FOR FLOOR DRAINS.
- REMOVAL AREAS FOR FLOOR DRAIN REPLACEMENT SHALL RECEIVE A I" SAW CUT AROUND THE ENTIRE PERIMETER BEFORE REMOVAL.
- THE NEW FLOOR DRAINS SHALL BE CAST MONOLITHICALLY WITH THE MICROSILICA OVERLAY. THE PORTION OF THE PARAPET REMOVED ABOVE THE DECK GRADE MAY BE CAST SEPARATELY AFTER THE OVERLAY IS COMPLETED. REMOVAL AREAS FOR FLOOR DRAIN REPLACEMENT SHALL BE PAID AS CONCRETE REMOVAL. REMOVAL OF EXISTING FLOOR DRAINS SHALL BE INCLUDED IN THE COST FOR CONCRETE REMOVAL. REPLACEMENT OF AREAS REMOVED SHALL BE PAID AS CONCRETE SUPERSTRUCTURE, EXCEPT FOR A NOMINAL 2-1/2" OVERLAY THICKNESS WHICH SHALL BE INCLUDED IN THE MEASURED AREA FOR BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2-1/2".

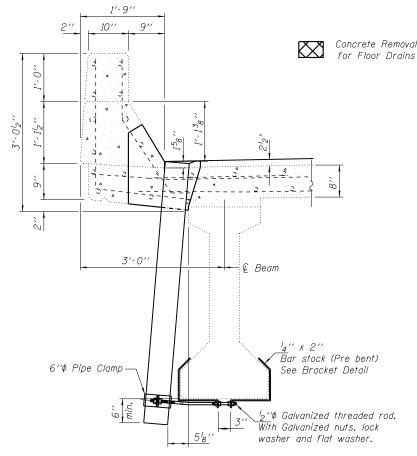
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	5
Floor Drains	Each	8
Plug Existing Floor Drains	Each	12
Concrete Removal	Cu. Yd.	1.1
Concrete Superstructure	Cu. Yd.	1.1





BRACKET DETAIL

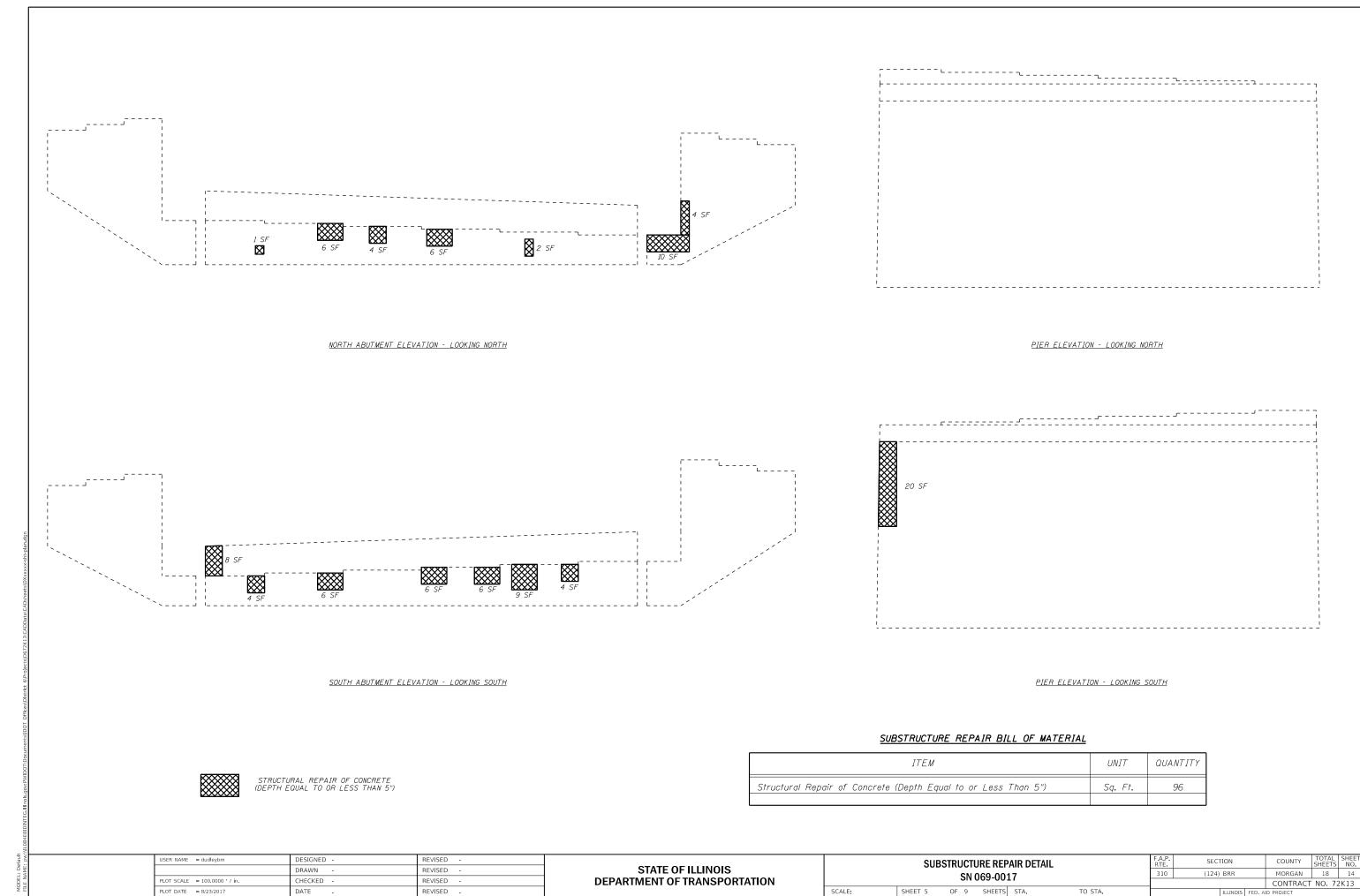


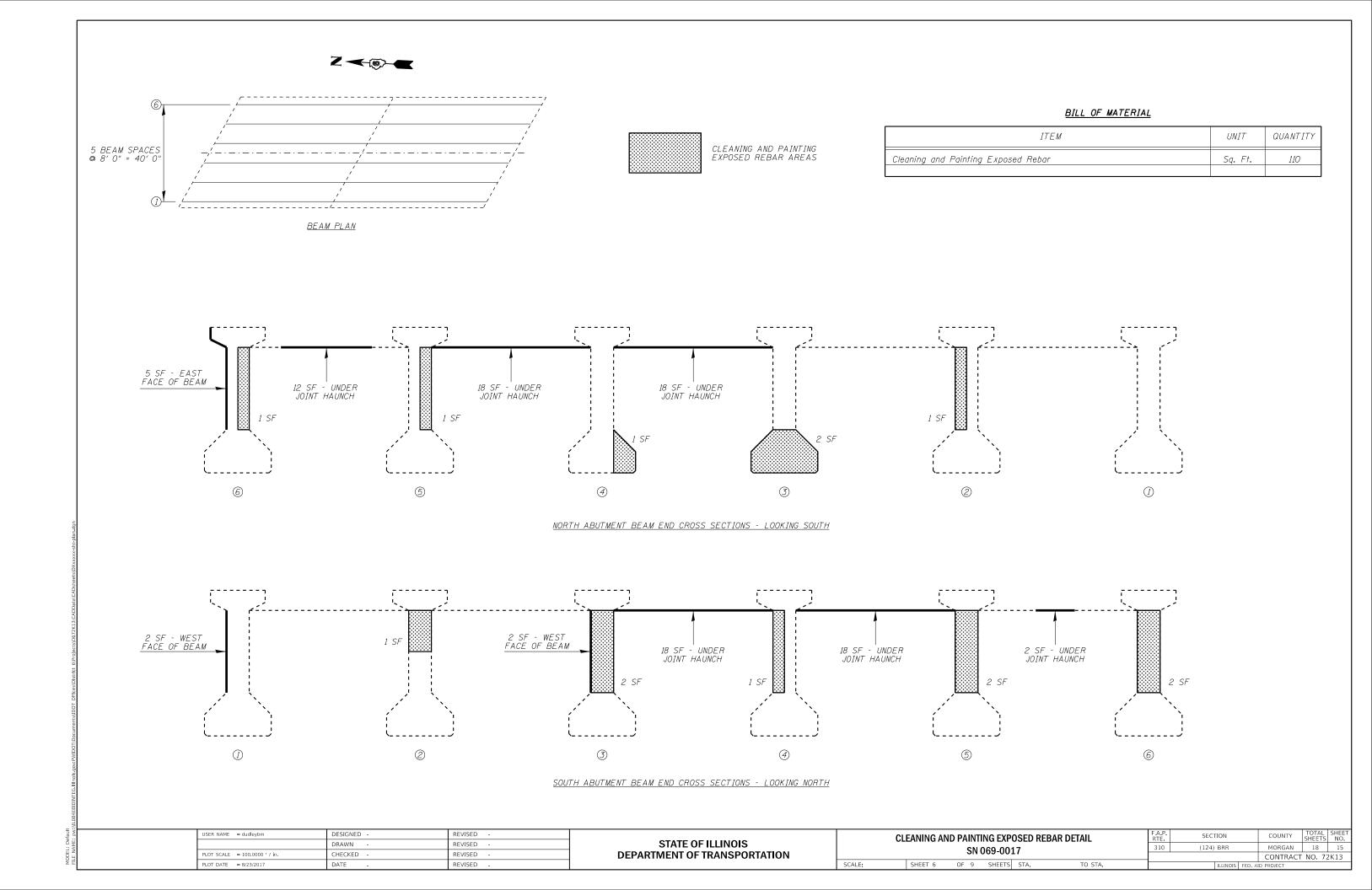
FLOOR DRAIN DETAIL

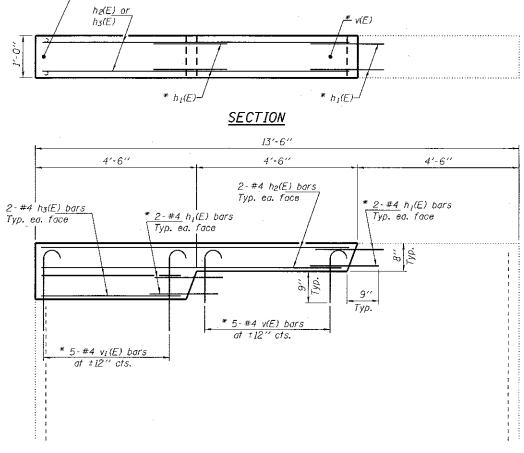
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	DRAWN -	REVISED -
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PLOT DATE = 8/23/2017	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DECK REPAIR & FLOOR DRAIN DETAILS SN 069-0017		F.A.P. RTE.	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.				
			310	(124)	BRR		MORGAN	18	13			
311 003-0017							CONTRACT	Γ NO. 72	2K13			
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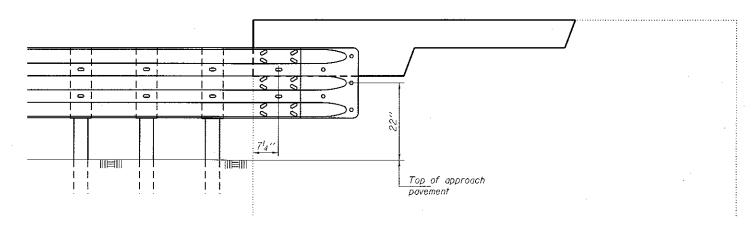




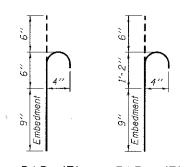


PROPOSED ELEVATION

* Epoxy grout $h_1(E)$, v(E) & $v_1(E)$ bars in 9" min. holes according to Article 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.



GUARDRAIL LOCATION

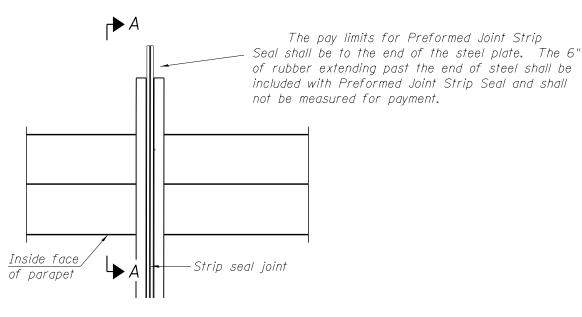


BAR v(E) BAR VI(E)

BILL OF MATERIAL 4 WINGWALLS

Bar	No.	Size	Length	Shape
h1(E)	32	#4	1'-9"	
ha(E)	16	#4	8'-6"	
h3(E)	16	#4	4'-0"	
v(E)	20	#4	1'-9''	L
v1(E)	20	#4	2'-5"	
			·	
Concrete	Superstru	icture	Cu. Yd.	1.4
Reinforcement Bars, Epoxy Coated			Pound	230

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PLAN THROUGH PARAPET

6"₁ 18" Top of locking edge rail Top of deck - --SECTION A-A Extend rubber past end of steel

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 configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

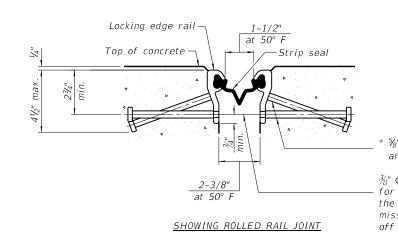
The manufacturer's recommended installation methods shall be followed.

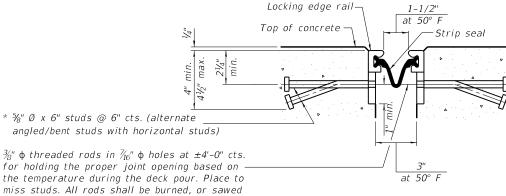
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be $\frac{3}{6}$ " 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.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal. 34" F-shape barrier shown, 42" F-shape similar as noted.

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. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

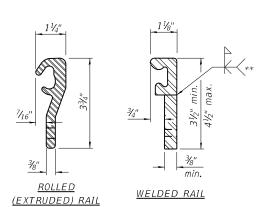




SHOWING WELDED RAIL JOINT off flush with the plates after concrete is set.

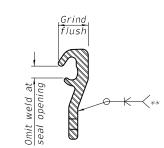
SCALE:

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



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	112

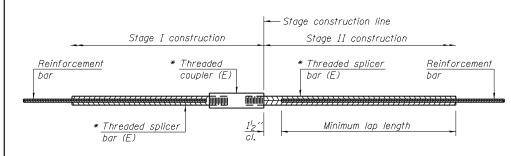
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

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SECTION COUNTY 310 (124) BRR MORGAN 18 17 CONTRACT NO. 72K13

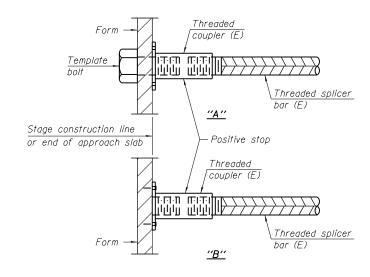


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + $l_2^{\prime\prime}$ + thread length

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

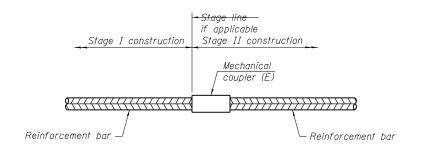
Location	Bar size	No. assemblies required	Minimum lap length
Abuts, (deck side)	#5	8	3′ 6"
Abuts. (appr. side)	#6	4	4′0"



INSTALLATION AND SETTING METHODS

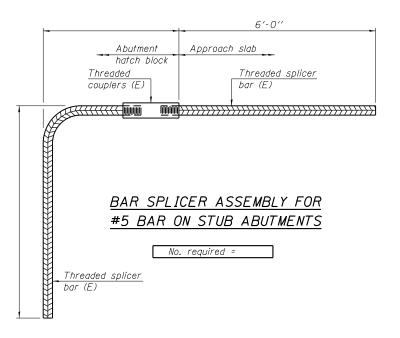
"A": Set bar splicer assembly by means of a template bolt.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



NOTES

Splicer bars shall be deformed $\overline{\text{with thre}}$ 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

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DEPARTMENT OF TRANSPORTATION

SCALE:

SHEET 9

BAR SPLICERS DETAILS SN 069-0017		F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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