

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328		WHITE	17	1
		ILLINOIS	CONTRACT NO. 78876	

D9 BRIDGE OVERLAY 2022-1

FOR INDEX OF SHEETS, SEE SHEET NO. 3
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-6

PROPOSED HIGHWAY PLANS

FAP 328 (US 45)
SECTION D9 BRIDGE OVERLAY 2022-1
PROJECT STP-PY00(391)
BRIDGE REPAIRS
WHITE COUNTY

C-99-073-21

TRAFFIC DATA

US 45: ACROSS SN 097 0024		
YEAR		US 45
2019	ADT =	2,550 13.1% TRUCKS
2022	ADT =	2,630 13.1% TRUCKS
2042	ADT =	3,210 13.2% TRUCKS

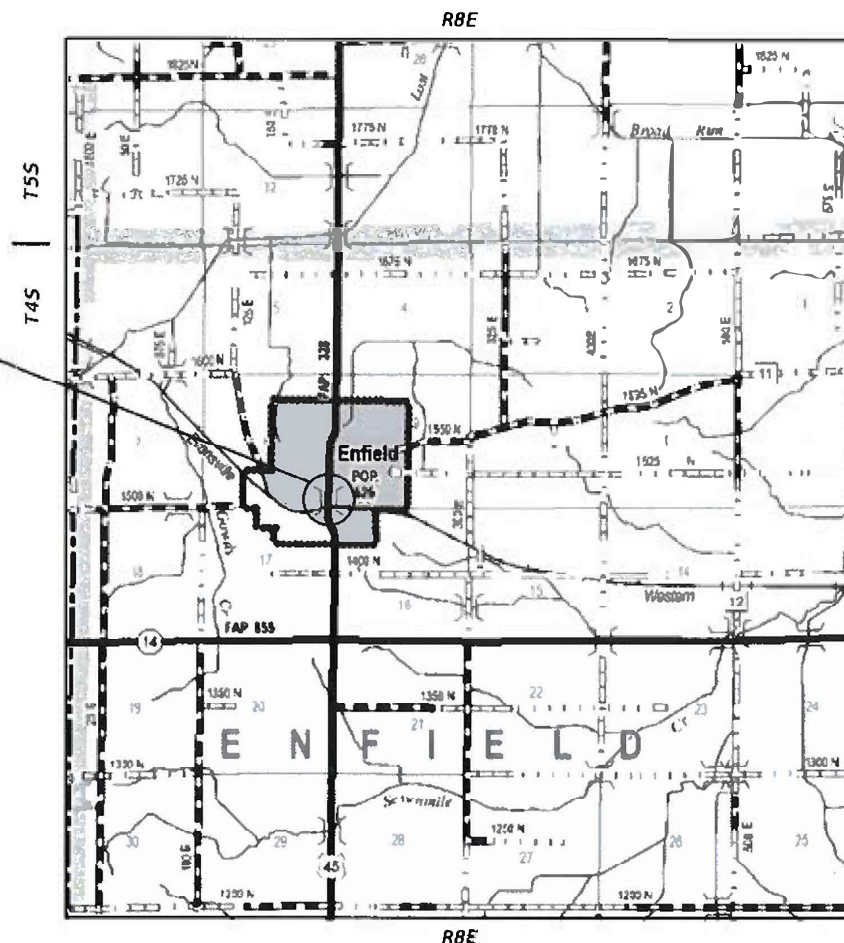
TOWNSHIPS
ENFIELD

DESIGN DESIGNATION : N/A
COORDINATE SYSTEM : ILLINOIS COORDINATE SYSTEM, EAST ZONE
POSTED SPEED : 35 MPH

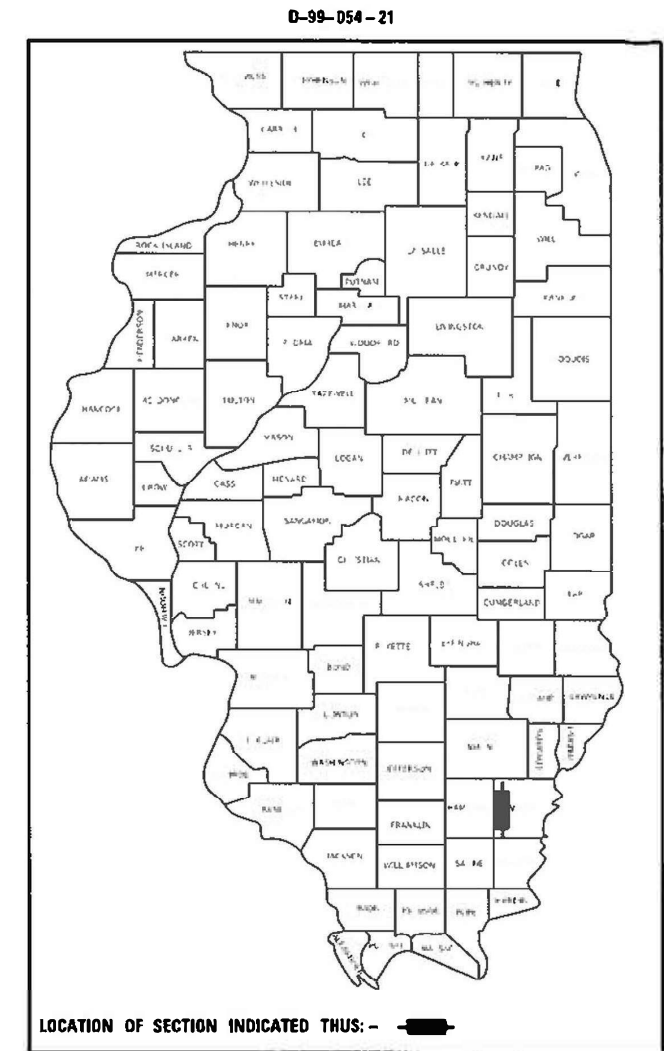
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: GRANT DETERDING
PROJECT DESIGNER: EHREN KIRBY

CONTRACT NO. 78876



GROSS LENGTH = 256 FT. = 0.05 MILES
NET LENGTH = 256 FT. = 0.05 MILES



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 10-12-2021
[Signature]
REGION FIVE ENGINEER

December 10, 2021
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

December 10, 2021
[Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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PLOT DATE	= 9/24/2021				

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SIGNATURE SHEET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328		WHITE	17	2
CONTRACT NO. 78876				

ILLINOIS ICD. / ID PROJECT
BRIDGE OVERLAY 2022.1

Prepared By: Charles Stein
DISTRICT STUDIES & PLANS ENGINEER

Examined By: Nancy Ste
DISTRICT LAND ACQUISITION ENGINEER

Examined By: Carrie Nelson
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: R. C. Co
DISTRICT OPERATIONS ENGINEER

Examined By: K. R. Os
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: Douglas J. McNeil
DISTRICT CONSTRUCTION ENGINEER

Examined By: R. C. Co
DISTRICT MATERIALS ENGINEER

INDEX OF SHEETS

SHEET NO	DESCRIPTION
1	COVER SHEET
2	SIGNATURE SHEET
3	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES, MIXTURE REQUIREMENTS
4-6	SUMMARY OF QUANTITIES
7	RESURFACING AND PAVEMENT MARKING SCHEDULES
8	STAGING SHEETS
9	GENERAL PLAN, ELEVATION AND APPROACH SLAB REPAIR/OVERLAY
10	TYPICAL SECTIONS AND STAGING
11-12	JOINT REPLACEMENT DETAILS
13-15	PREFORMED JOINT STRIP SEAL - SIDEWALK
16	BAR SPLICER DETAIL
17	DIAPHRAGM REPLACEMENT DETAIL

GENERAL NOTES

FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

ALL HOT MIX ASPHALT 2.016 TONS/CU. YD.

A CONTRACTOR'S RIGHT- OF- ENTRY PERMIT IS REQUIRED BEFORE ANY WORK CAN COMMENCE ON RAILROAD PROPERTY. THE COST TO OBTAIN THIS PERMIT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

EXTRA CARE SHALL BE TAKEN BY THE CONTRACTOR WHEN WORKING AROUND THE SIDEWALK ON THE EAST SIDE OF THE STRUCTURE, RUNNING NORTH AND SOUTH. IF DAMAGES OCCUR TO THE SIDEWALK DURING CONSTRUCTION OPERATIONS, THE SIDEWALK SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

COMMITMENTS: NONE

HIGHWAY STANDARDS

000001-08 STANDARDSYMBOLSABBREVIATIONS&PATTERNS-001
 001001-02 AREASOFREINFREBARS
 001006 DECIMALOFINCH&FOOT
 701001-02 OFFRDOP-2L2W-15FTMINFROMEOP
 701006-05 OFFRDOP-2L2W-15FTTOEOP
 701201-05 LNCLOSURE2L2W-DAYONLY
 701321-18 LNCLOSURE2L2W-BRIDGEREPAIRWITH%20BARRIER
 701901-08 TRAFCTRLDEVICES
 704001-08 TEMPCONCBARRIER
 862001-01 UPS
 BLR21-9 TYPAPPTRAFCTRLDEVICES-CONSTRONRURALLOCALHWYS

HMA MIXTURE REQUIREMENTS TABLES

Location(s):	Hot-Mix Asphalt Surface Course & Hot-Mix Asphalt Shoulders
Mixture Use(s):	Hot-Mix Asphalt Surface Course, Mix C, N70, IL-9.5FG
PG:	PG64-22
Design Air Voids:	See Special Provision
Mixture Composition:	4.0 %, 70 Gyration Design
(Mixture Gradation)	IL-9.5mm Fine Graded
Friction Aggregate:	Mix C
Mixture Weight:	112 lbs/Sq Yd/in
Quality Management Program:	QCQA
Sublot Size:	NA
Material Transfer Device (Required?)	No

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, HIGHWAY STANDARDS,
GENERAL NOTES, & MIXTURE REQUIREMENTS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	*	WHITE	17	3
			CONTRACT NO. 78876	
ILLINOIS FED. AID PROJECT				

BRIDGE OVERLAY 2022-1

SUMMARY OF QUANTITIES - CONT

COUNTY:	WHITE CO
ROUTE:	FAP 328 (US 45)
FUNDING:	80% FED / 20% STATE
LOCATION:	RURAL
TOTAL QUANTITY	SN 097-0024 0013

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	2	2
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	6	6
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28
70300100	SHORT TERM PAVEMENT MARKING	FOOT	144	144
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	48	48
70300221	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT	FOOT	930	930
70400100	TEMPORARY CONCRETE BARRIER	FOOT	312.5	312.5

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				SCALE: SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT BRIDGE OVERLAY 2022-1				

RESURFACING SCHEDULE

LOCATION STATION TO STATION				LENGTH	MAIN. WIDTH	SHLDR WIDTH	WATERPROOF MEMBRANE SYSTEM	HMA SURFACE REMOVAL - BUTT JOINT	HOT-MIX ASPHALT SURFACE COURSE, 1L-9.5 FG, MIX "C", N70				BITUM. MAT. (TACK COAT)	REMARKS	
									FOR INFORM. PURPOSES ONLY						
				FT	FT	FT	SQ YD	SQ YD	TON	TON	TON	TON	LBS		
US 45															
STA	7+37.00	TO	STA	7+67.00	30	24	8		107				9	48	BUTT - JOINT
STA	7+67.00	TO	STA	7+87.00	20	24	8				8			32	TRANSITION
STA	7+87.00	TO	STA	8+07.00	20	24	8			10				32	NORTH APPROACH
STA	8+09.50	TO	STA	9+20.50	111	32		395		45					BRIDGE DECK
STA	9+23.00	TO	STA	9+43.00	20	24	8			10				32	SOUTH APPROACH
STA	9+43.00	TO	STA	9+63.00	20	24	8				8			32	TRANSITION
STA	9+63.00	TO	STA	9+93.00	30	24	8		107				9	48	BUTT - JOINT
PROJECT TOTALS								395	214	99			224		

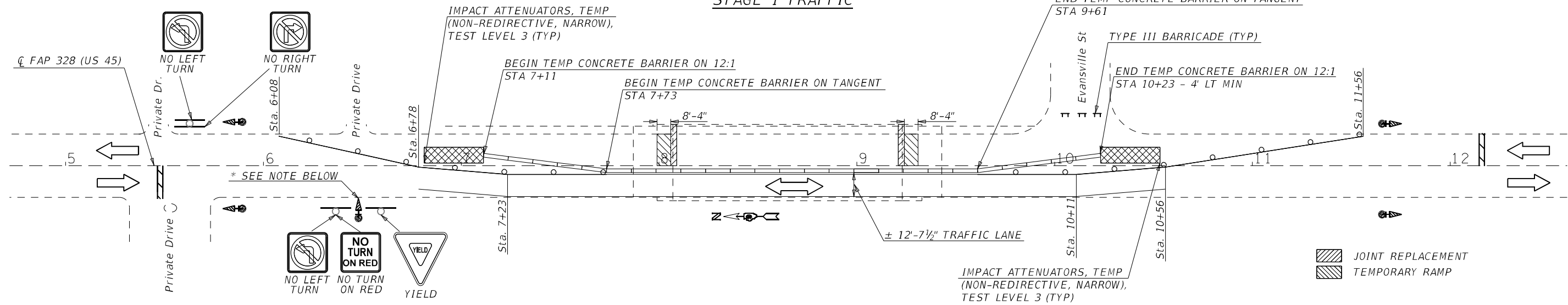
PAVEMENT MARKING SCHEDULE

START STATION	END STATION	NOTES	PVMNT MARKING REMOVAL - GRINDING	PAINT PAVEMENT MARKING		SHORT TERM PVMT MARK	SHORT TERM PVMT MARK REM	RAISED REFL PVMT MARK REM
				LINE - 4" WHITE	LINE - 4" YELLOW			
				SOLID	SKIP - DASH			
			SQ FT	FT	FT	FT	SQ FT	EACH
US 45								
5+24	12+16	CENTERLINE - SKIP DASH	60		180	144	48	8
6+78	10+56	EDGELINE - BOTH SIDES	252	756				
6+08	11+56	REMOVAL QUANTITY INCLUDED IF ADDITIONAL TEMP. PAVEMENT MARKING APPLICATION IS NEEDED FOR STAGING	312					
PROJECT TOTALS			624	936		144	48	8

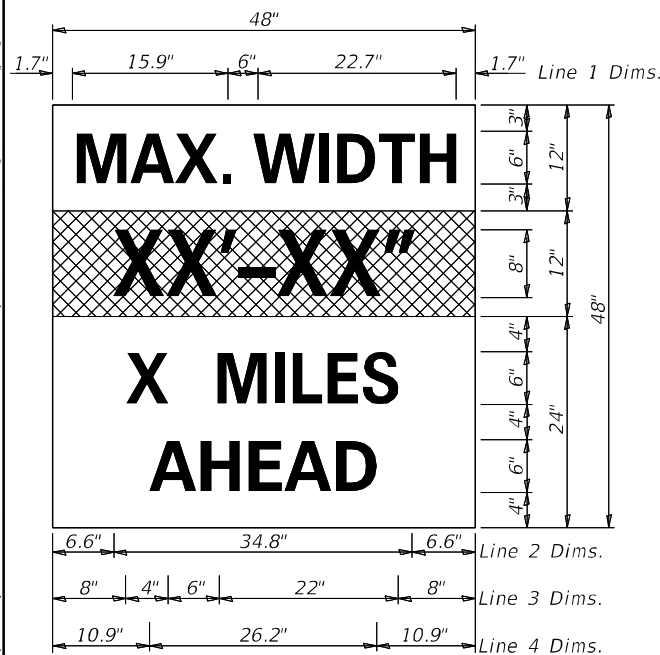
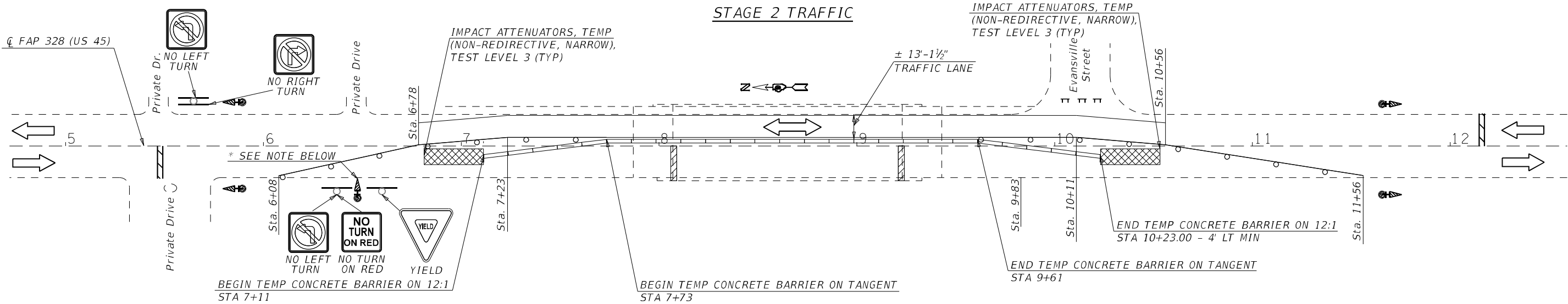
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STAGE 1 TRAFFIC



STAGE 2 TRAFFIC



Notes for Max Width Sign:

1. Install a Max Width Sign each direction on US 45 to give traffic approaching work zone enough advance notice to change routes if needed. Exact locations as directed by engineer.
2. The contractor shall furnish the posts and erect the signs at the locations directed by the engineer. All signs shall be post mounted.
3. The noted work, including signs, posts, hardware and labor shall be included in the contract unit price, each, for Traffic Control and Protection, Std. 701321, no other compensation will be allowed.
4. The width shown on the W12-1103 sign shall be 18" less than what is shown in the staged lane widths or as directed by the Engineer.
5. The "X" MILES AHEAD will be determined by the engineer.

Notes for Private Drive Signal

* The contractor shall provide a temporary signal across from the private entrance at the location detailed above. The signal shall contain a red arrow and two yellow arrows. The private drive signal shall be wired directly with the northbound phase. The private phases shall coordinate with the northbound phases as follows; red arrow to red, top yellow arrow to yellow and bottom yellow arrow to green. This Signal will be included in the cost of Temporary Bridge Traffic Signals, Each.

**STAGING SHEET
SN 097-0024**

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGING PLAN
SN 097-0024**

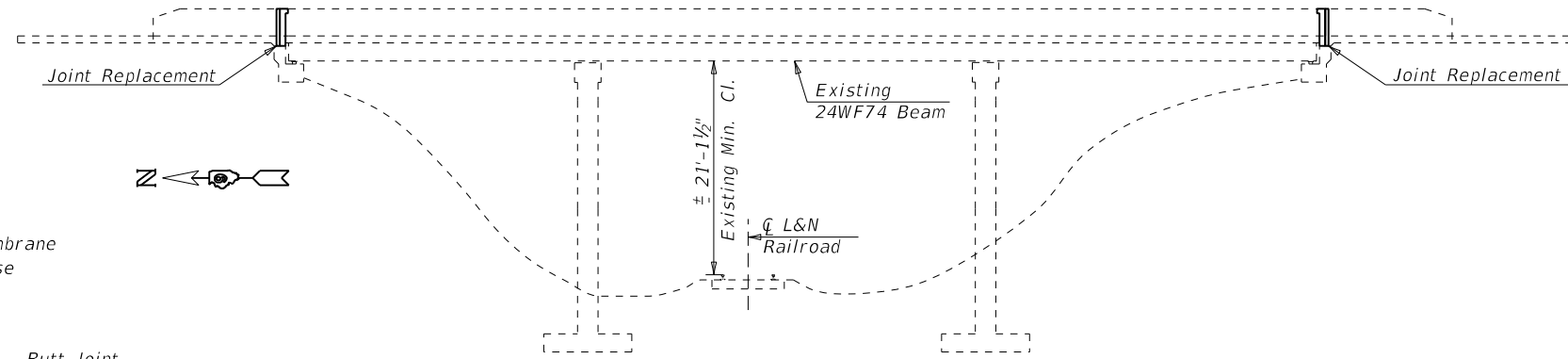
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			CONTRACT NO. 78876	
ILLINOIS FED. AID PROJECT				

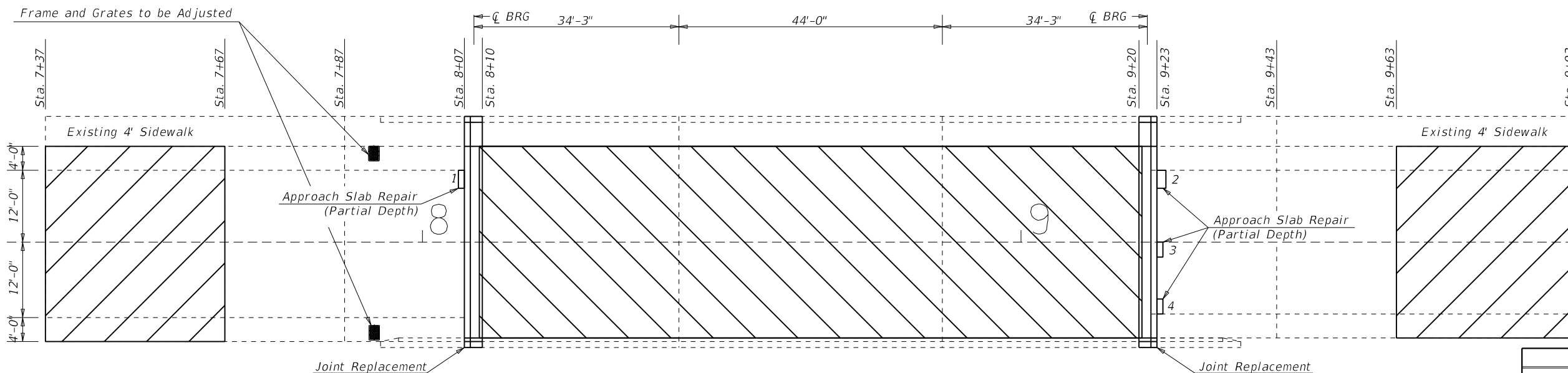
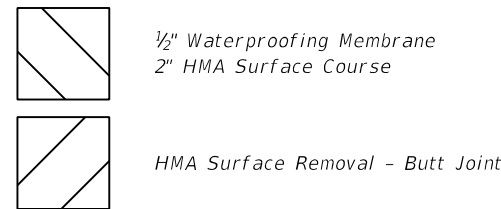
* D9 BRIDGE OVERLAY 2022-1

GENERAL 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 the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
 Diaphragm connection holes shall be 13#16"Ø for 3#4"Ø bolts. Two hardened washers shall be required at diaphragm connections.
 Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.
 All new structural steel shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for 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".



Elevation View



Plan View

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Hot-Mix Asphalt Surface Removal - Butt Joint	Sq Yd	214
Waterproofing Membrane System	Sq Yd	395
Hot-Mix Asphalt Surface Course, IL 9.5FG, Mix "C", N70	Ton	99
Approach Slab Repair (Partial Depth)	Sq Yd	1.4
Bar Splicers	Each	24
Concrete Removal	Cu Yd	10.9
Concrete Superstructure	Cu Yd	12.0
Protective Coat	Sq Yd	29
Reinforcement Bars, Epoxy Coated	Pound	1,270
Preformed Joint Strip Seal	Foot	76
Structural Steel Removal	Pound	850
Furnishing and Erecting Structural Steel	Pound	850

Approach Slab Repair (Partial Depth)

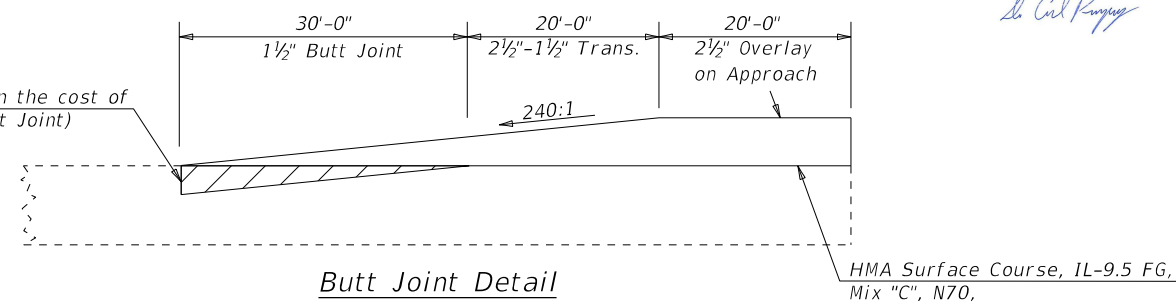
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1	1.0	3.0	0.3
2	1.5	3.0	0.5
3	1.0	2.5	0.3
4	1.0	2.5	0.3

Suggested Sequence of Construction

STAGE 1: Setup Traffic Control and complete joint reconstruction. Do the waterproofing membrane and overlay on the deck. Add temporary ramps to the approach and departure end of the joint.

STAGE 2: Switch Traffic Control Setup and complete the rest of the joint reconstruction. Pull the barrier and do the waterproofing membrane and overlay on the deck with the approaches according to the detail on Stage 2. Overlay the Stage 1 approaches per detail under flaggers.

Saw Cut (Included in the cost of HMA Surf. Rem. Butt Joint)



Butt Joint Detail



Expires 11-30-2022

David Carl Puzey

**GENERAL PLAN & ELEVATION
 US 45 OVER L&N RAILROAD
 F.A.P. RTE 328 - SECT. D9 BRIDGE OVERLAY 2022-1
 WHITE COUNTY
 STATION 8+65
 STRUCTURE NO. 097-0024**

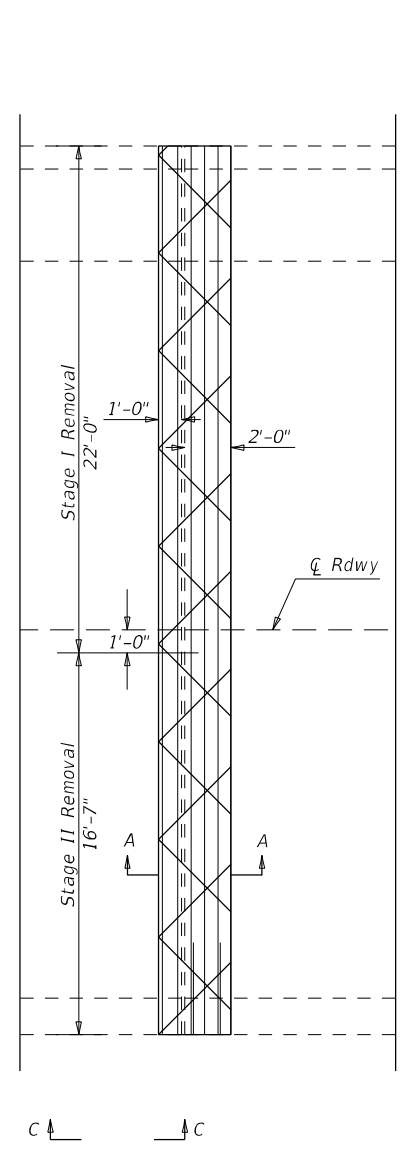
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION
 AND APPROACH SLAB REPAIR /OVERLAY**

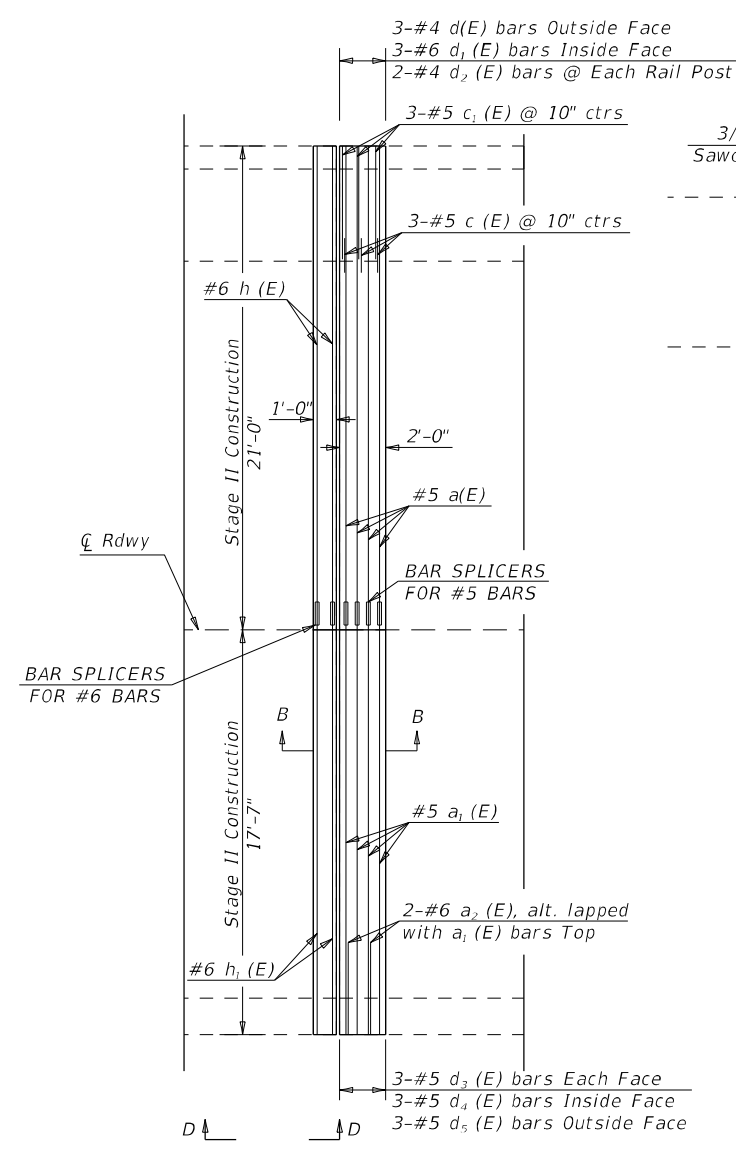
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						CONTRACT NO. 78876	
						ILLINOIS FED. AID PROJECT	

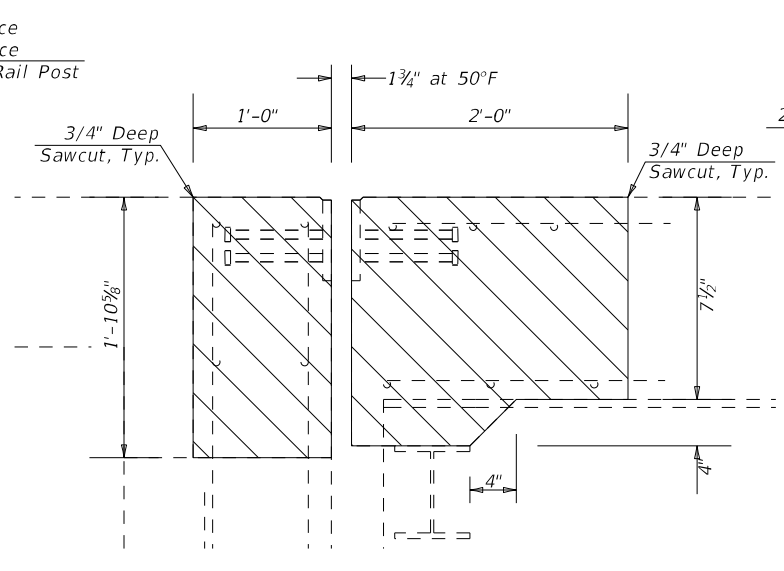
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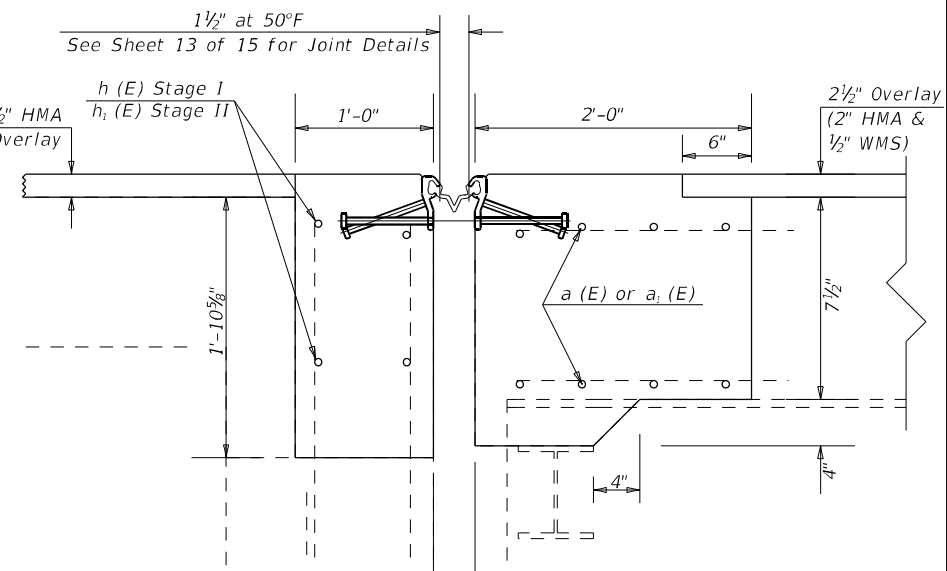
N. ABUT. PLAN
SHOWING CONCRETE REMOVAL
(S. Abut. Similar)



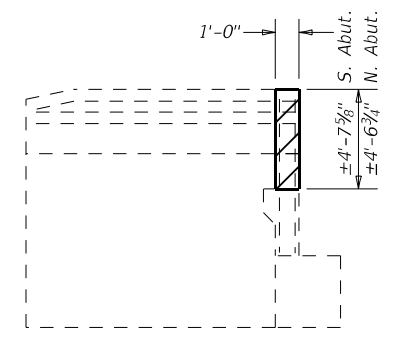
N. ABUT. PLAN
SHOWING NEW CONCRETE
(S. Abut. Similar)



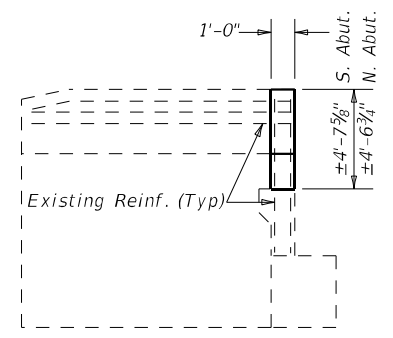
Section A-A



Section B-B



VIEW C-C
Showing Concrete
Removal



VIEW D-D
Showing Concrete
Superstructures

BILL OF MATERIAL
(BOTH ABUTMENTS)

Bar	No.	Size	Length	Shape
a (E)	16	#5	20'-6"	▬
a ₁ (E)	16	#5	17'-1"	▬
a ₂ (E)	4	#6	4'-0"	▬
h (E)	8	#6	19'-9"	▬
h ₁ (E)	8	#6	15'-9"	▬
d (E)	6	#4	4'-0"	┘
d ₁ (E)	6	#6	5'-9"	┘
d ₂ (E)	4	#4	2'-1"	┘
d ₃ (E)	12	#5	3'-0"	┘
d ₄ (E)	6	#5	2'-7"	┘
d ₅ (E)	6	#4	3'-0"	┘
c (E)	6	#5	2'-5"	┘
c ₁ (E)	6	#5	4'-9"	┘
Bar Splicers		Each	24	
Concrete Superstructure		Cu Yd	12.0	
Concrete Removal		Cu Yd	10.9	
Reinforcement Bars Epoxy Coated		Pound	1,270	

Notes:
 Before Jack Hammering begins, the perimeter of the determined removal area, layed out by the enigneer, shall have a 3/4" saw cut around the perimeter. The cost of this shall be included with "Concrete Removal".
 Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new costruction. 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 REPLACEMENT AT ABUTMENT

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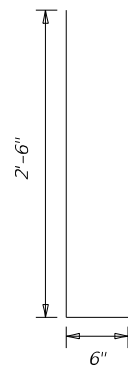
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

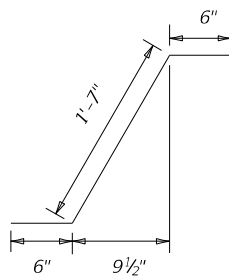
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SN 097-0024

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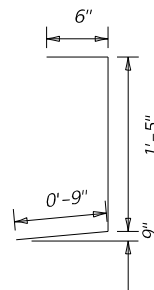
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CONTRACT NO. 78876			ILLINOIS FED. AID PROJECT	



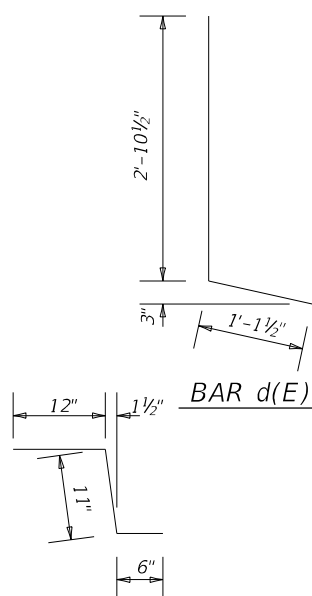
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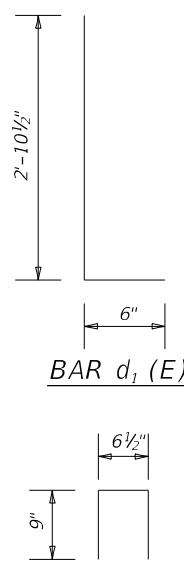
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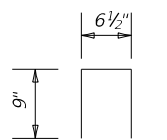
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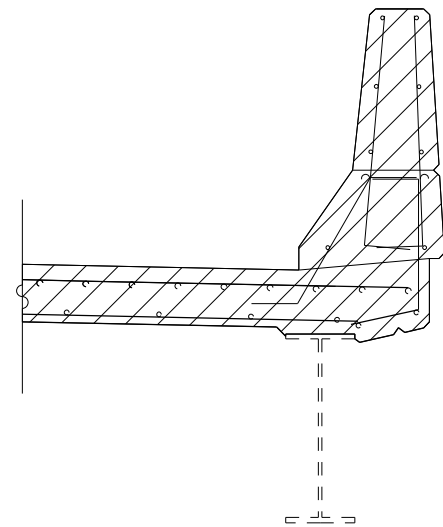
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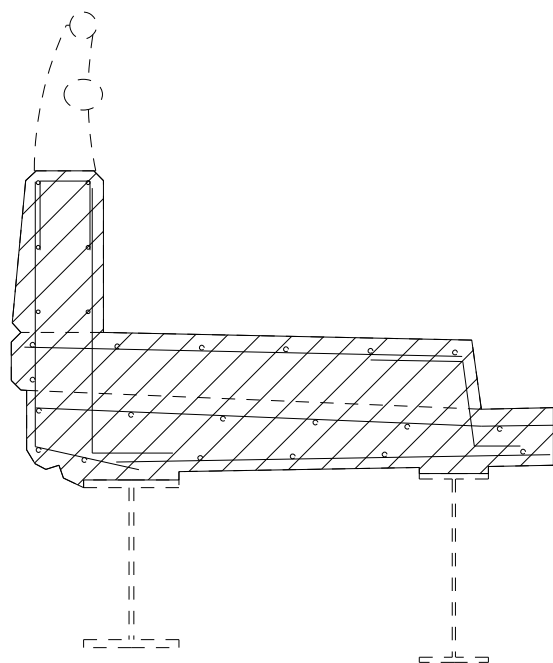
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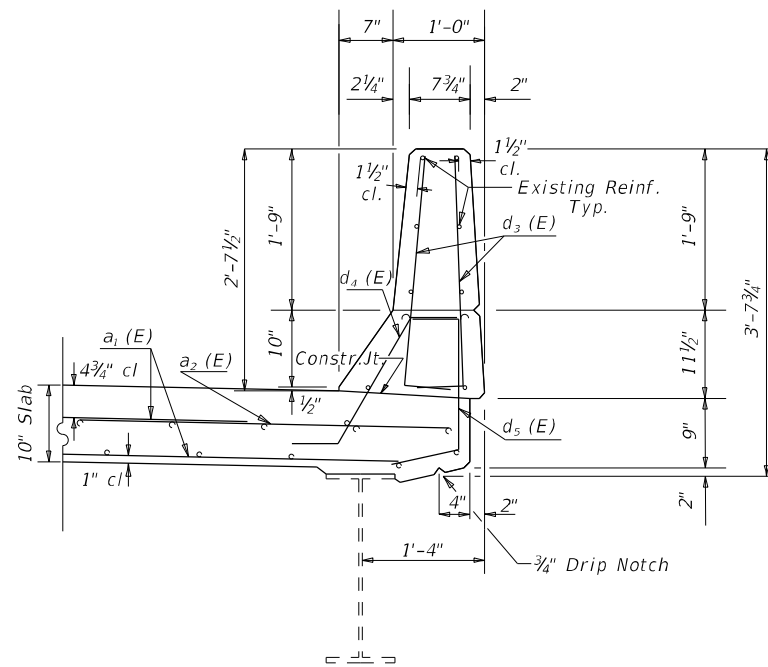
BAR d_2 (E)



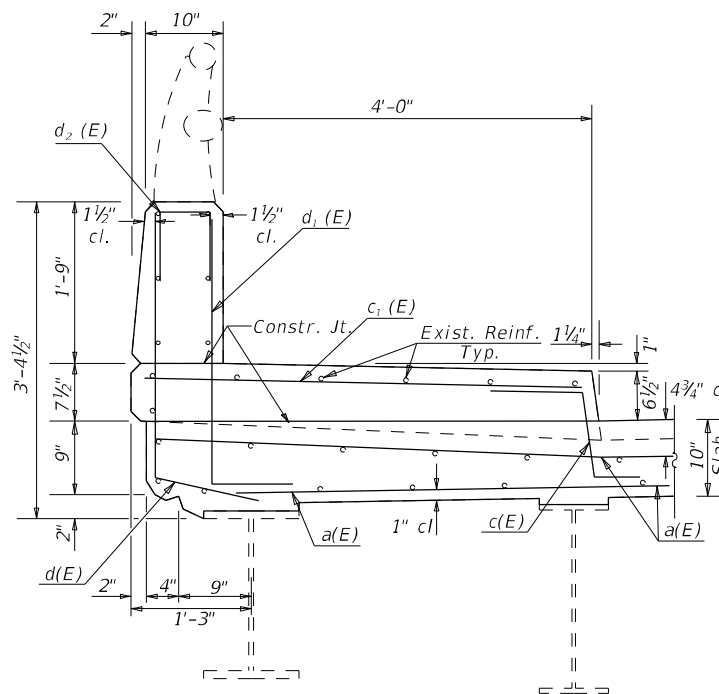
REMOVAL DETAIL OF PARAPET
(TYPICAL FOR ALL LOCATIONS)



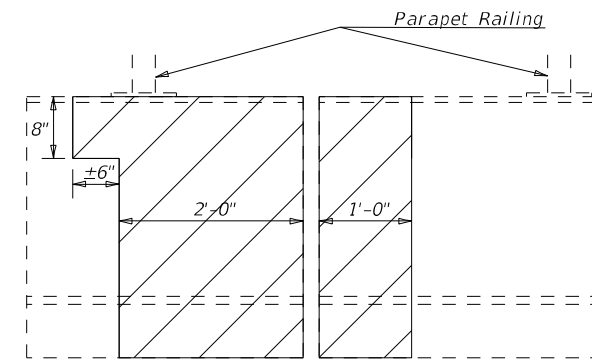
REMOVAL DETAIL OF PARAPET
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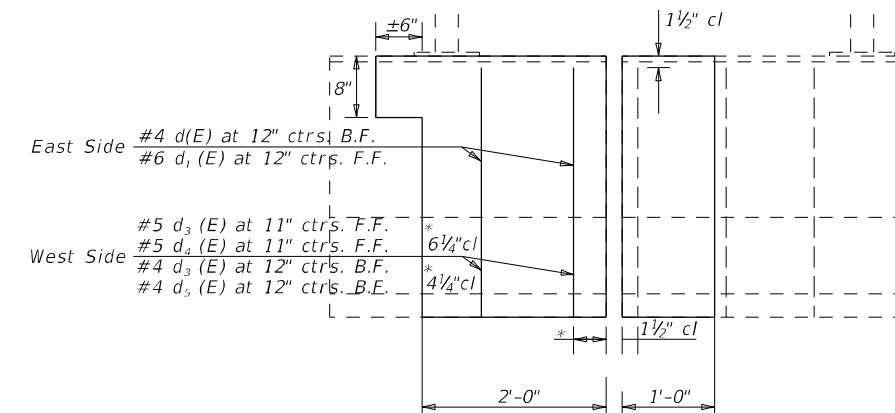
NEW CONCRETE AND REBAR DETAIL
(TYPICAL FOR ALL LOCATIONS)



NEW CONCRETE AND REBAR DETAIL
(TYPICAL FOR ALL LOCATIONS)



CONCRETE REMOVAL DETAIL FOR
PARAPET RAIL POST PLACEMENT
(TYPICAL FOR 2 LOCATIONS THAT APPLY)



CONSTRUCTION DETAIL FOR
PARAPET RAIL PLACEMENT
(TYPICAL FOR 2 LOCATIONS THAT APPLY)

JOINT REPLACEMENT AT ABUTMENT

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DRAWN -	REVISED -	
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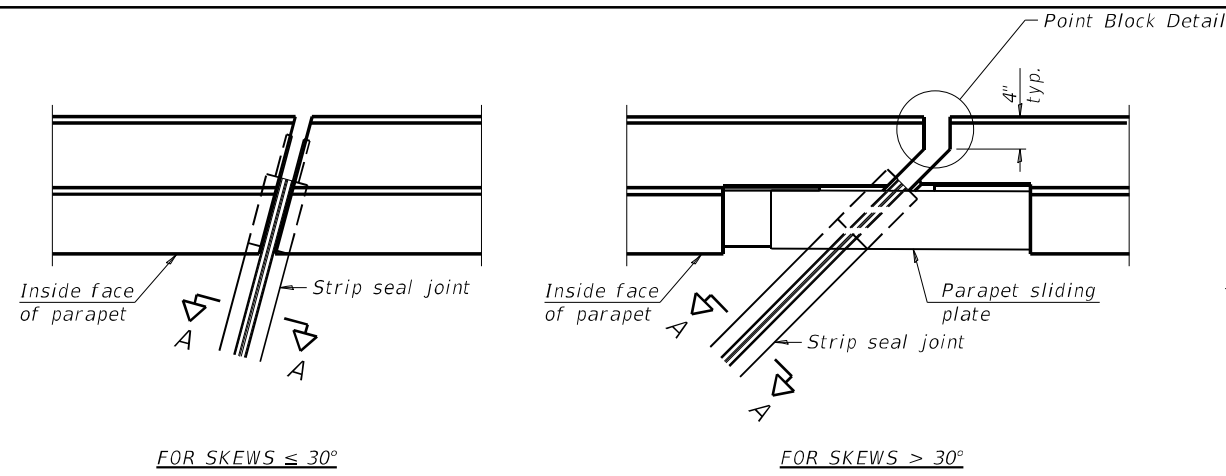
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT REPLACEMENT DETAILS
SN 097-0024

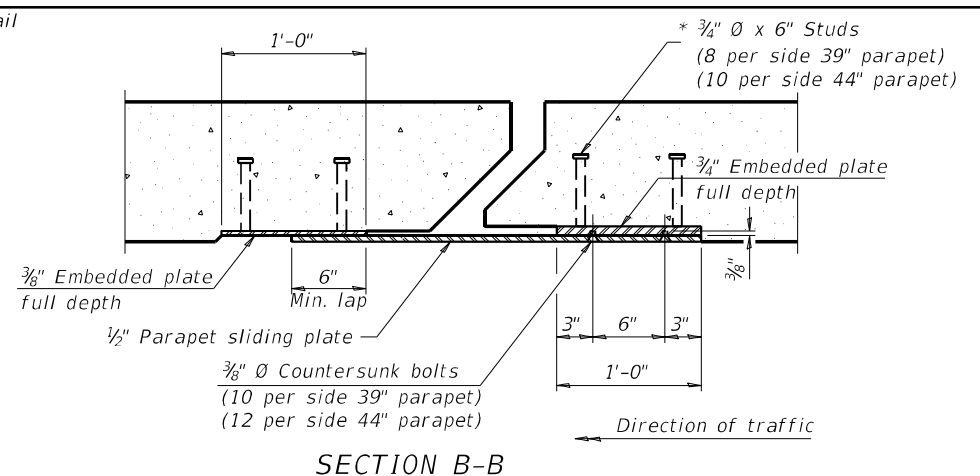
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	*	WHITE	17	12
CONTRACT NO. 78876				
ILLINOIS FED. AID PROJECT				

D9 BRIDGE OVERLAY 2022-1



PLAN AT PARAPET



SECTION B-B

Notes:

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

The 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 4 1/2" 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.

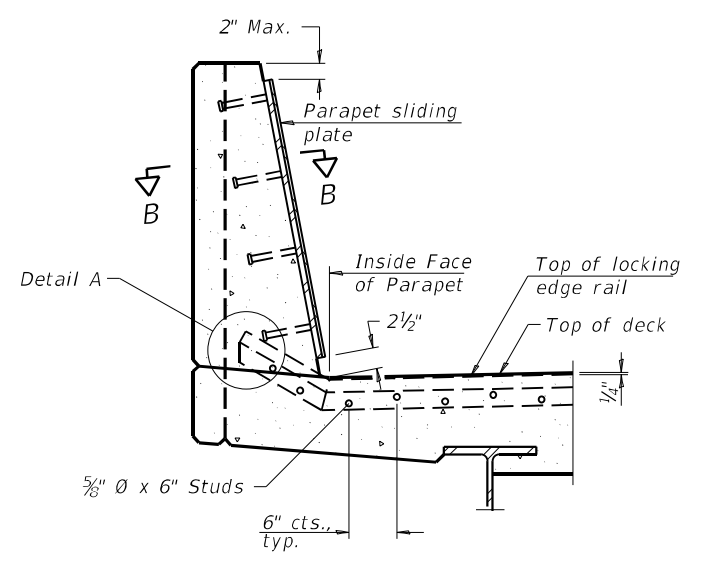
The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

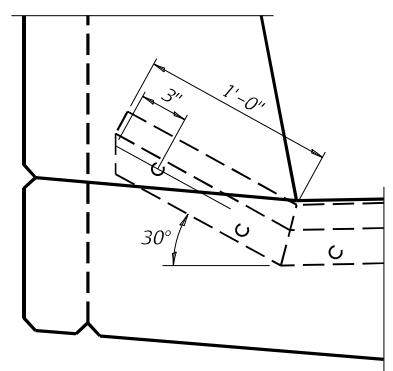
39" constant slope barrier shown, 44" constant slope barrier similar as noted.

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.

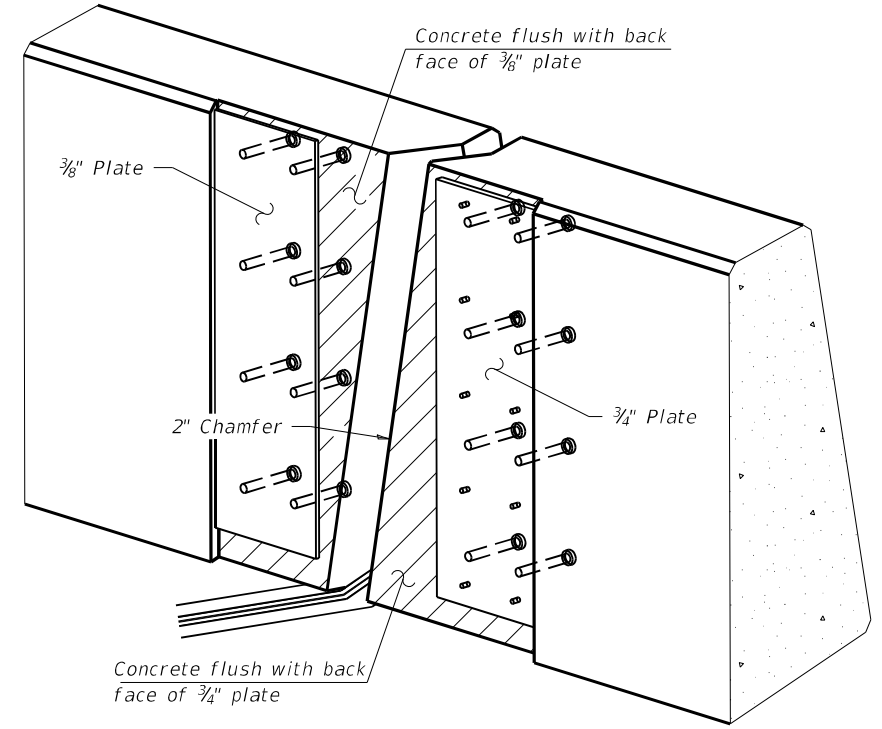


SECTION A-A

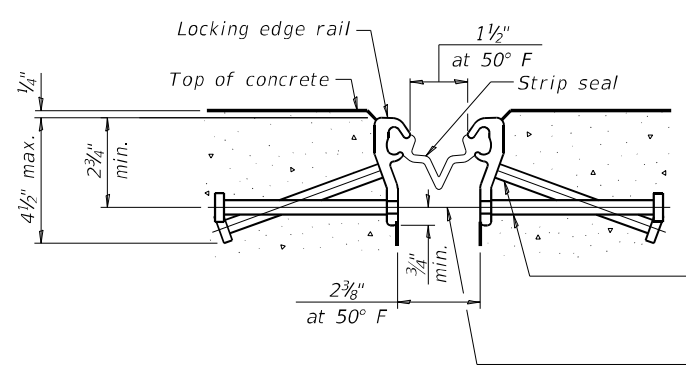
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



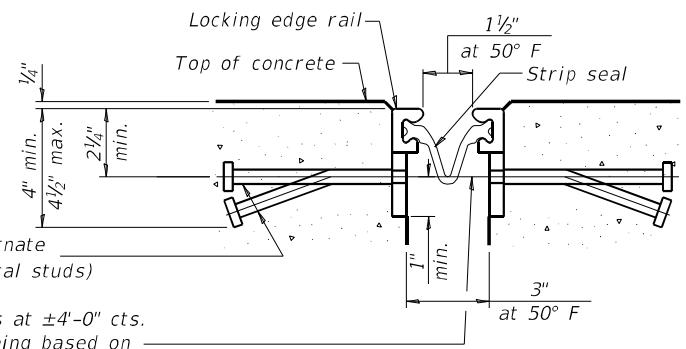
TRIMETRIC VIEW (Showing embedded plates only)



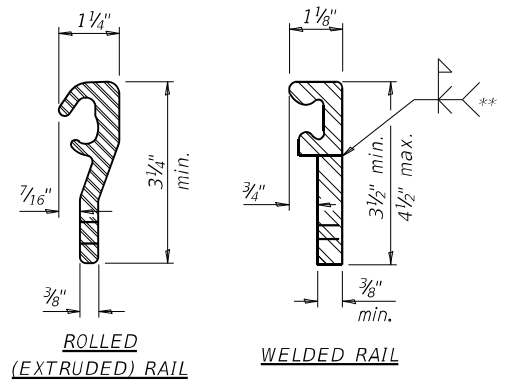
SHOWING ROLLED RAIL JOINT

* 5/8" ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

3/8" ϕ threaded rods in 7/16" ϕ holes at $\pm 4-0"$ 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.

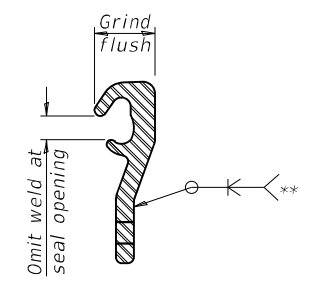


SHOWING WELDED RAIL JOINT



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	76

SECTION A-A

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

EJ-SS-S

1-1-2020

(Sheet 1 of 3)

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	DATE -	REVISED -

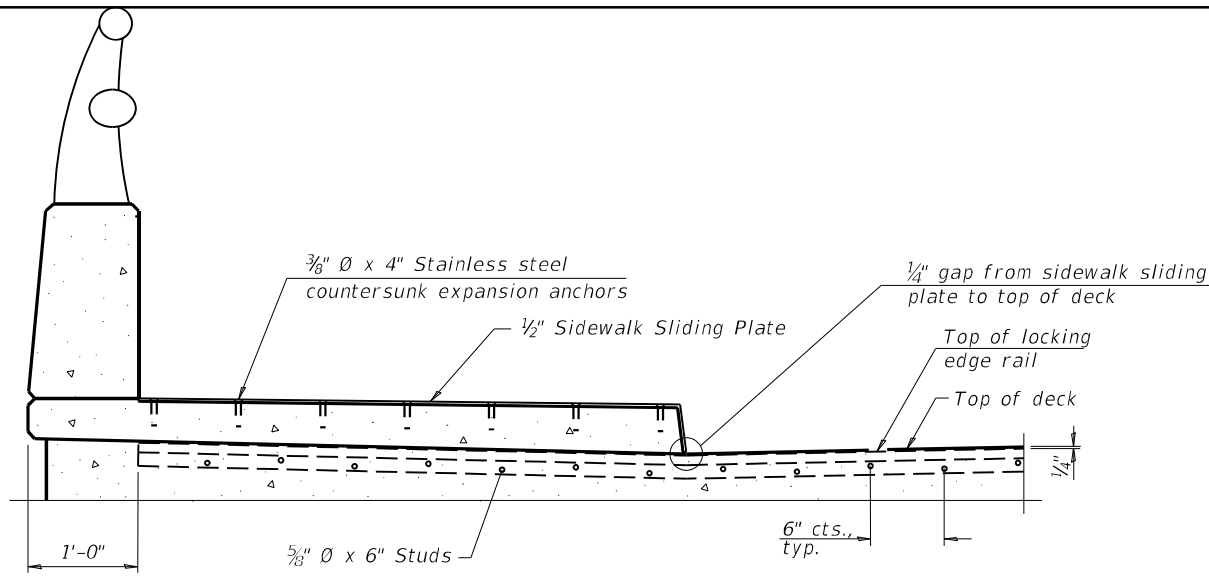
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL - SIDEWALK
STRUCTURE NO. 097-0024

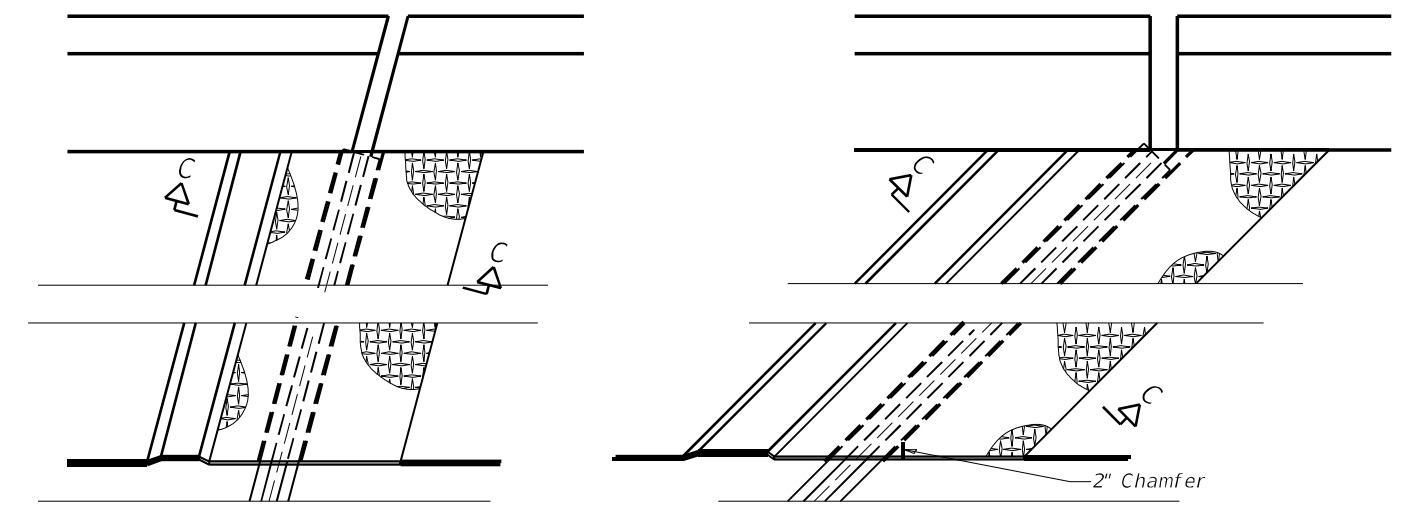
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	*	WHITE	17	13
			CONTRACT NO. 78876	
ILLINOIS FED. AID PROJECT				

D9 BRIDGE OVERLAY 2022-1



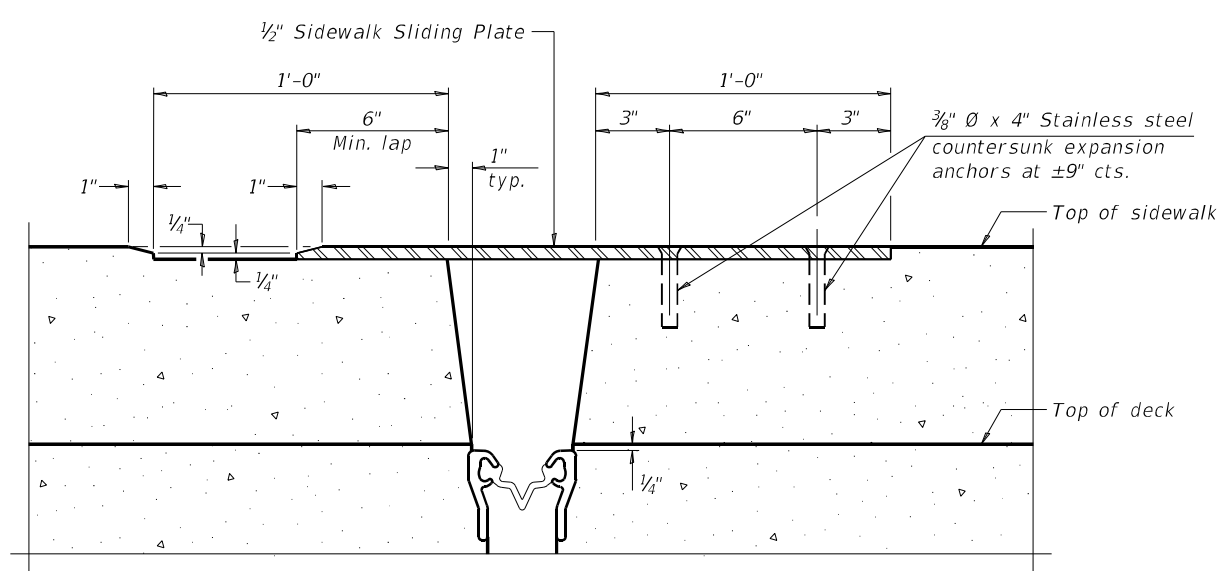
SECTION AT RAISED SIDEWALK



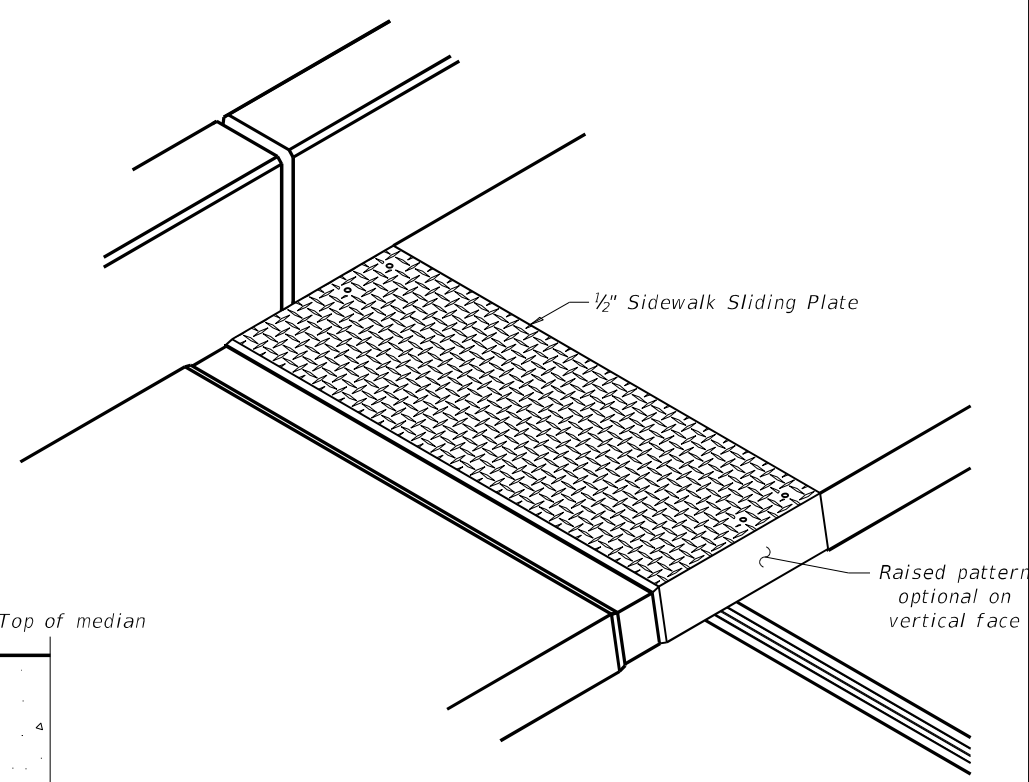
(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

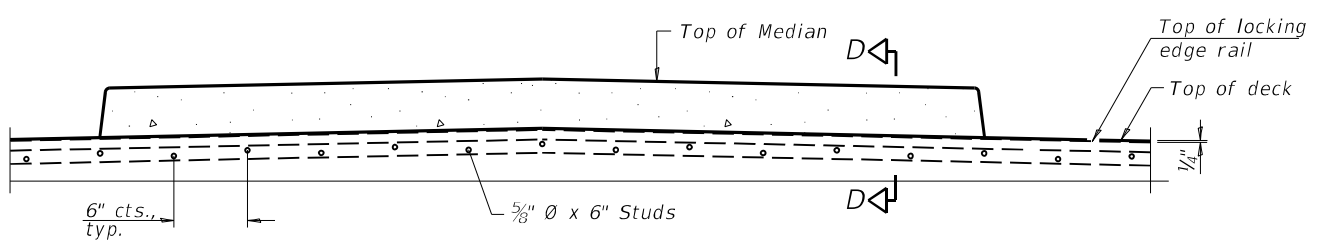
PLAN AT RAISED SIDEWALK



SECTION C-C

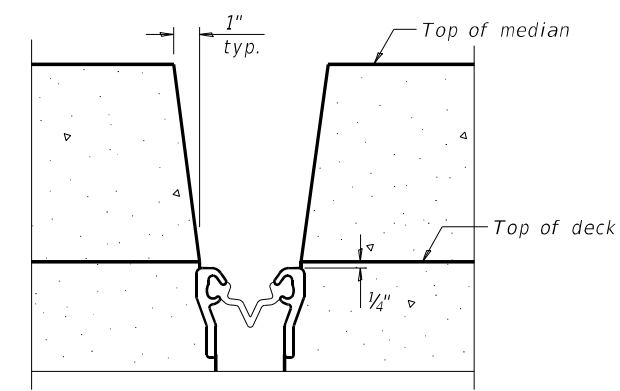


TRIMETRIC VIEW



SECTION AT MEDIAN

For skew > 30°, chamfer acute corners 2" similar to sidewalk.



SECTION D-D
(at Rt. L's)

EJ-SS-S

1-1-2020

(Sheet 2 of 3)

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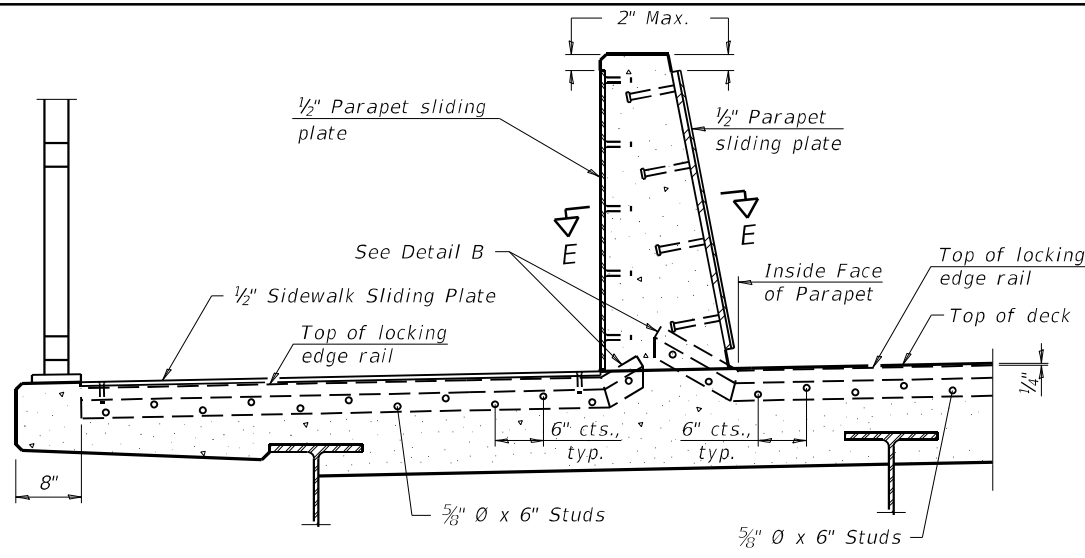
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

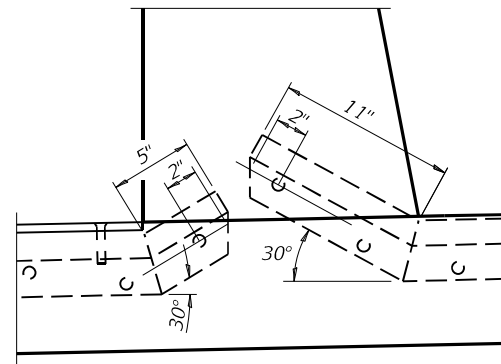
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CONTRACT NO. 78876				
ILLINOIS FED. AID PROJECT				

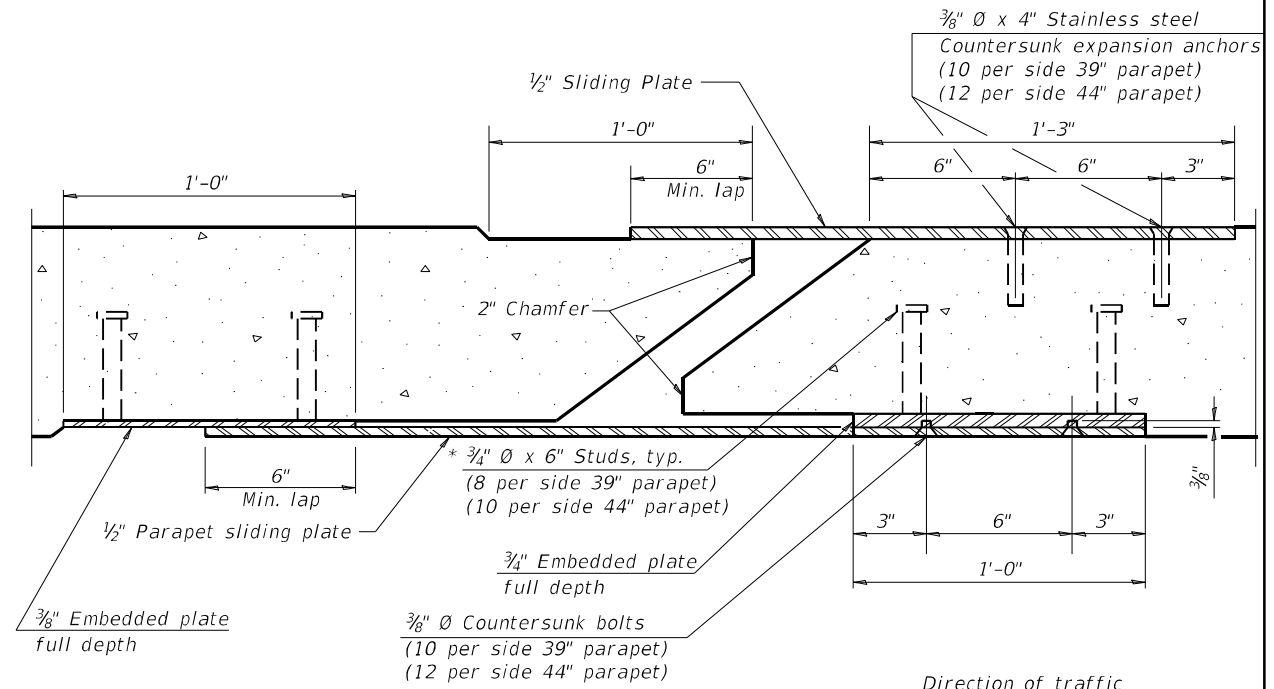
D9 BRIDGE OVERLAY 2022-1



SECTION AT DECK LEVEL SIDEWALK
 (Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

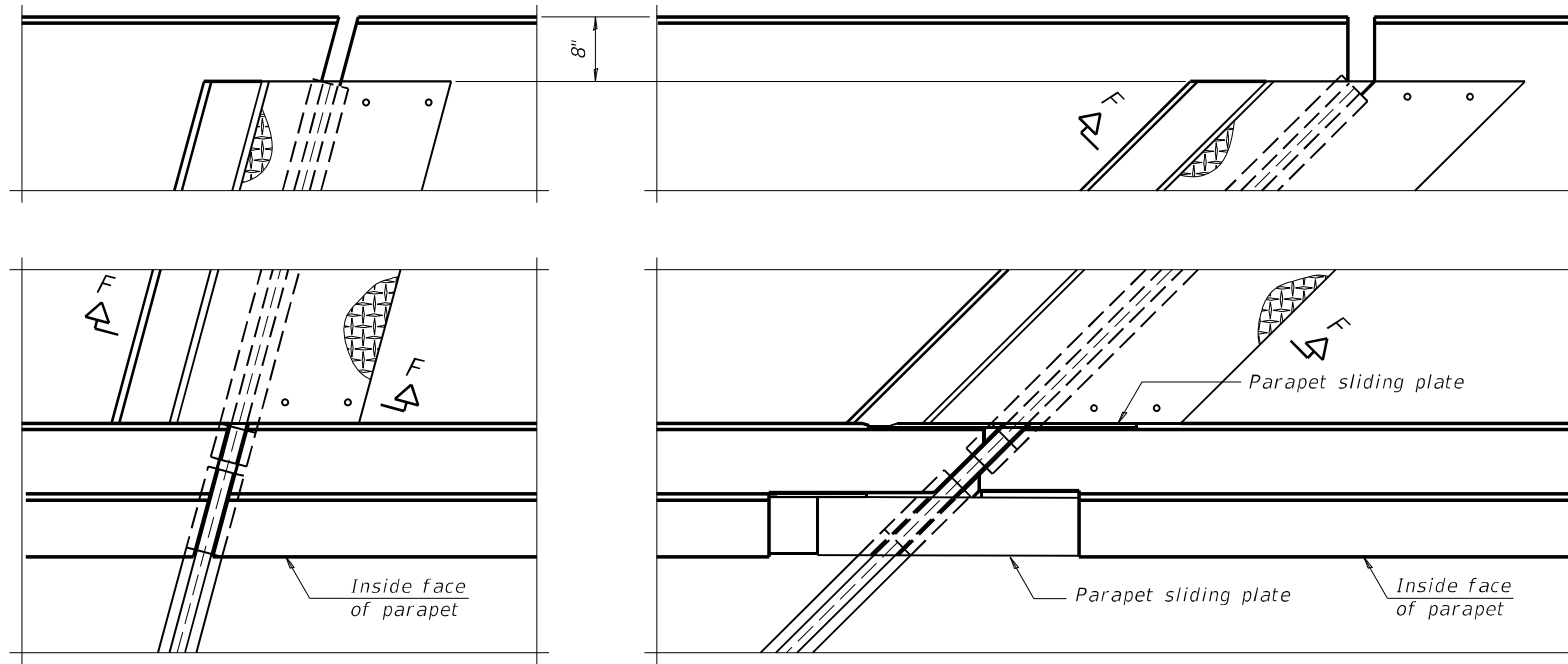


DETAIL B



SECTION E-E

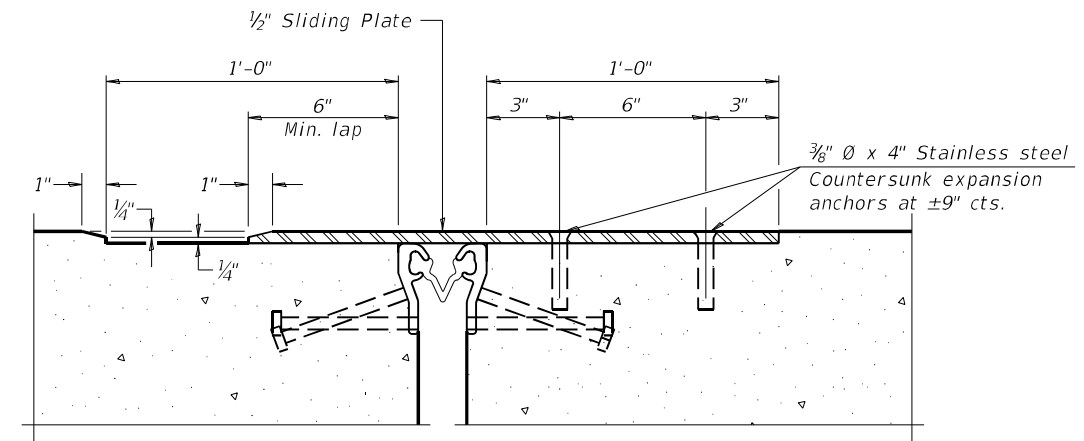
Direction of traffic



(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

PLAN AT DECK LEVEL SIDEWALK



SECTION F-F

EJ-SS-S

1-1-2020

(Sheet 3 of 3)

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL - SIDEWALK
 STRUCTURE NO. 097-0024**

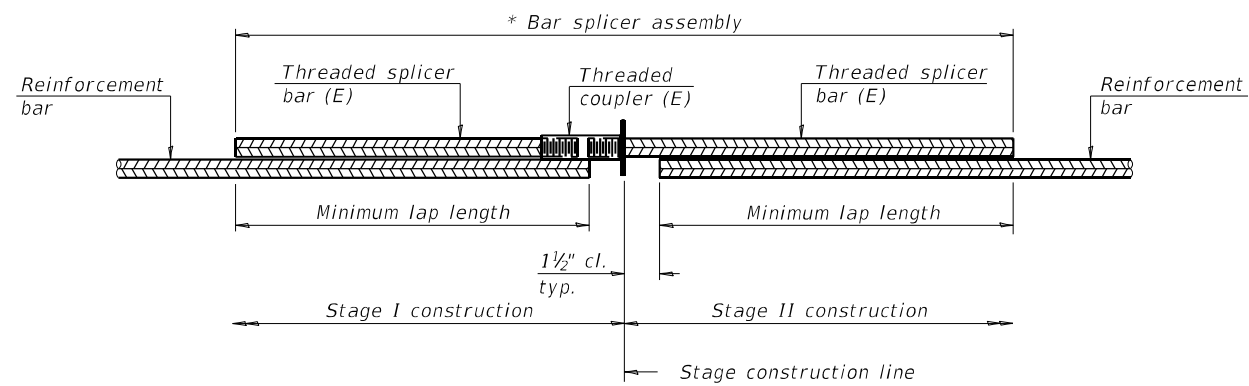
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328	*	WHITE	17	15
CONTRACT NO. 78876				

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ILLINOIS FED. AID PROJECT

D9 BRIDGE OVERLAY 2022-1

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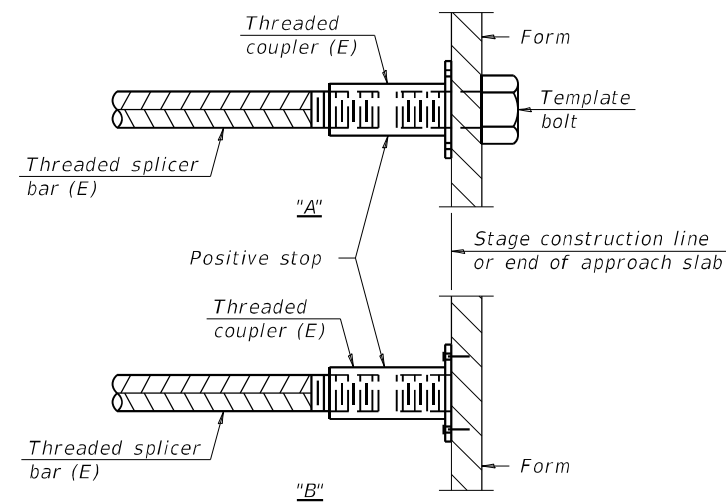


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

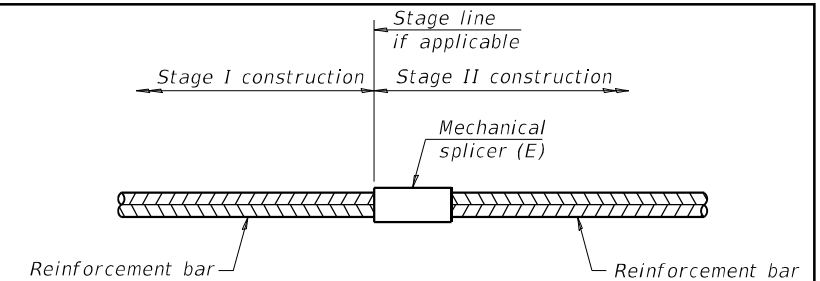
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	16	3'-6"
Hatch Block	#6	8	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 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

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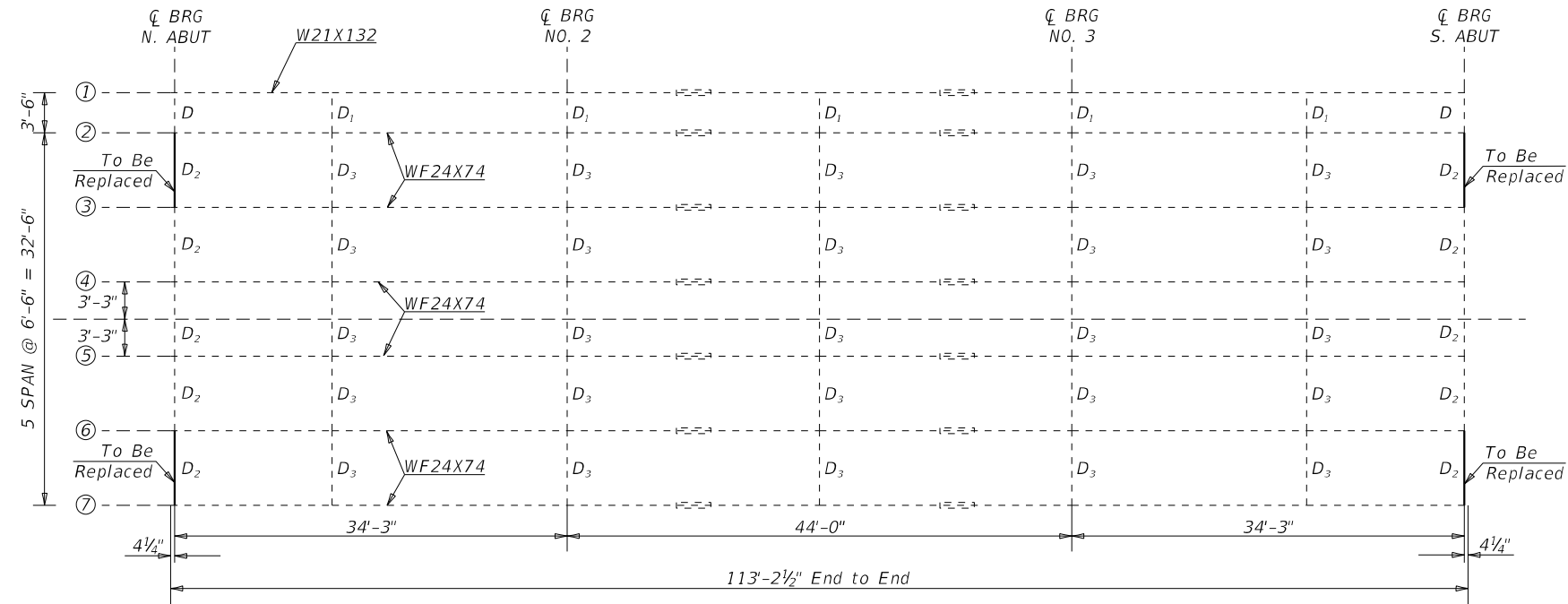
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**STATE OF ILLINOIS
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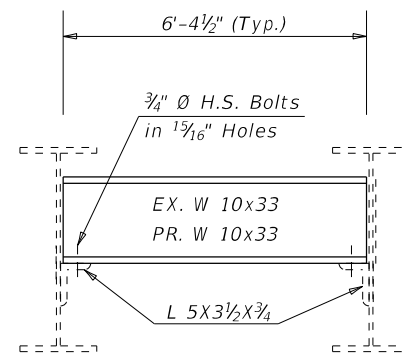
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 STRUCTURE NO. 097-0024**

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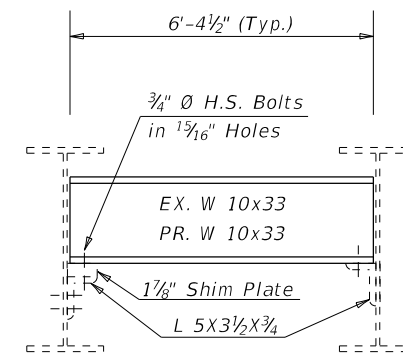
F.A.P. RTE. 328	SECTION *	COUNTY WHITE	TOTAL SHEETS 17	SHEET NO. 16
CONTRACT NO. 78876			ILLINOIS FED. AID PROJECT	



FRAMING PLAN



Typical North Abut. Detail



Typical South Abut. Detail

DIAPHRAGM REPLACEMENT

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Steel Removal	Pound	850
Furnishing and Erecting Structural Steel	Pound	850

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM REPLACEMENT DETAILS

SCALE: _____ SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	*	WHITE	17	17
CONTRACT NO. 78876				
ILLINOIS FED. AID PROJECT				

* BRIDGE OVERLAY 2022-1