

019

03-06-2020 LETTING ITEM 079

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
728	(2) BDR	MACOUPIN	15	1
CONTRACT NO. 72L44				

D-96-006-20

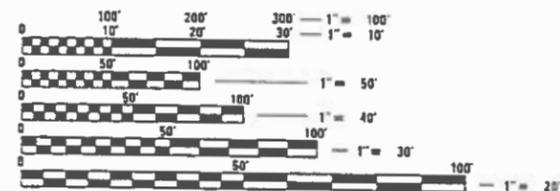
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

FAS ROUTE 728 (IL 138)
SECTION (2) BDR
PROJECT STP-1U8S(680)
BRIDGE DECK OVERLAY
MACOUPIN COUNTY

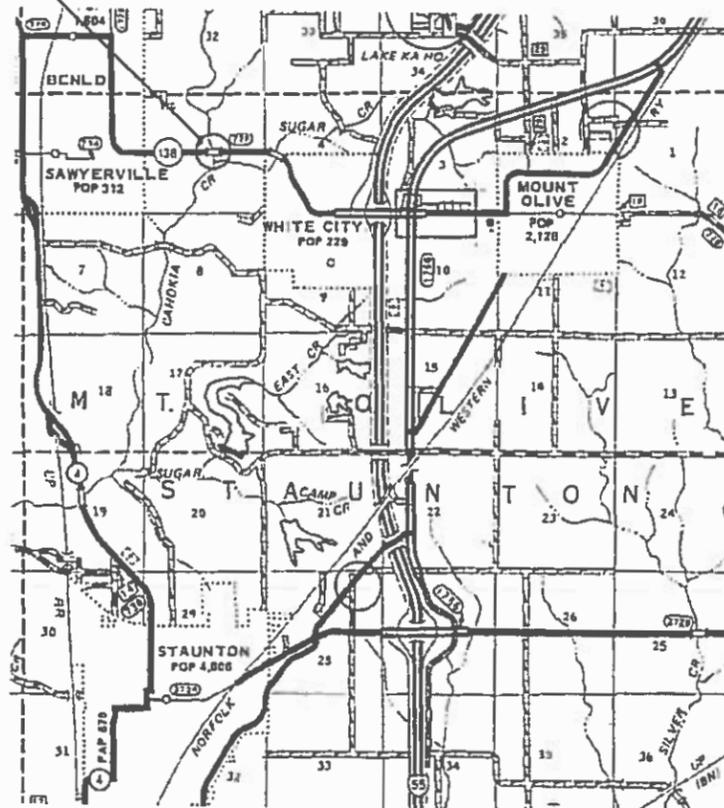
C-96-022-20

PROJECT LOCATION
SN 059-0054
IL 138 OVER CAHOKIA CREEK
1.9 MI WEST OF I-55



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

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



GROSS LENGTH = 426 FT. = 0.08 MILE
NET LENGTH = 426 FT. = 0.08 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Dec 11 2019
[Signature] REGIONAL ENGINEER

Jan 31 2020
[Signature] ENGINEER OF DESIGN AND ENVIRONMENT

Jan 31 2020
[Signature] DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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

CONTRACT NO. 72L44

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

6-01414-0040
 SN 059-0054
 80/20 FED/ST

6-01414-0040
 SN 059-0054
 80/20 FED/ST

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0047 MACOUPIN
20200500	EARTH EXCAVATION (WIDENING)	CU YD	44	44
28100809	STONE DUMPED RIPRAP, CLASS A5	TON	30	30
35650400	BASE COURSE WIDENING 9"	SQ YD	268	268
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	480	480
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	711	711
40600990	TEMPORARY RAMP	SQ YD	85	85
40604050	HOT-MIX ASPHALT SURFACE COURSE, IL 9.5, MIX "C", N50	TON	110	110
44004250	PAVED SHOULDER REMOVAL	SQ YD	108	108
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	20	20
50102400	CONCRETE REMOVAL	CU YD	3.9	3.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	4.5	4.5
50300260	BRIDGE DECK GROOVING	SQ YD	430	430
50300300	PROTECTIVE COAT	SQ YD	447	447
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	710	710

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0047 MACOUPIN
50800515	BAR SPLICERS	EACH	12	12
52000110	PREFORMED JOINT STRIP SEAL	FOOT	76	76
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
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6
70300100	SHORT TERM PAVEMENT MARKING	FOOT	100	100
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	33	33
70400100	TEMPORARY CONCRETE BARRIER	FOOT	375	375
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	375	375
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

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REV. - MS

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
728	(2) BDR	MACOUPIN	15	3
CONTRACT NO. 72L44			ILLINOIS FED. AID PROJECT	

6-01414-0040
 SN 059-0054
 80/20 FED/ST

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0047 MACOUPIN
* 78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	1000	1000
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	4	4
X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	319	319
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	1
* Z0007114	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES	L SUM	1	1
* Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1
Z0012130	BRIDGE DECK SCARIFICATION, 3/4"	SQ YD	429	429
Z0012164	BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2-1/2"	SQ YD	429	429
Z0012500	CONCRETE CURB REPAIR	FOOT	20	20
Z0015500	DEBRIS REMOVAL	L SUM	1	1
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	17	17

* SPECIALTY ITEM

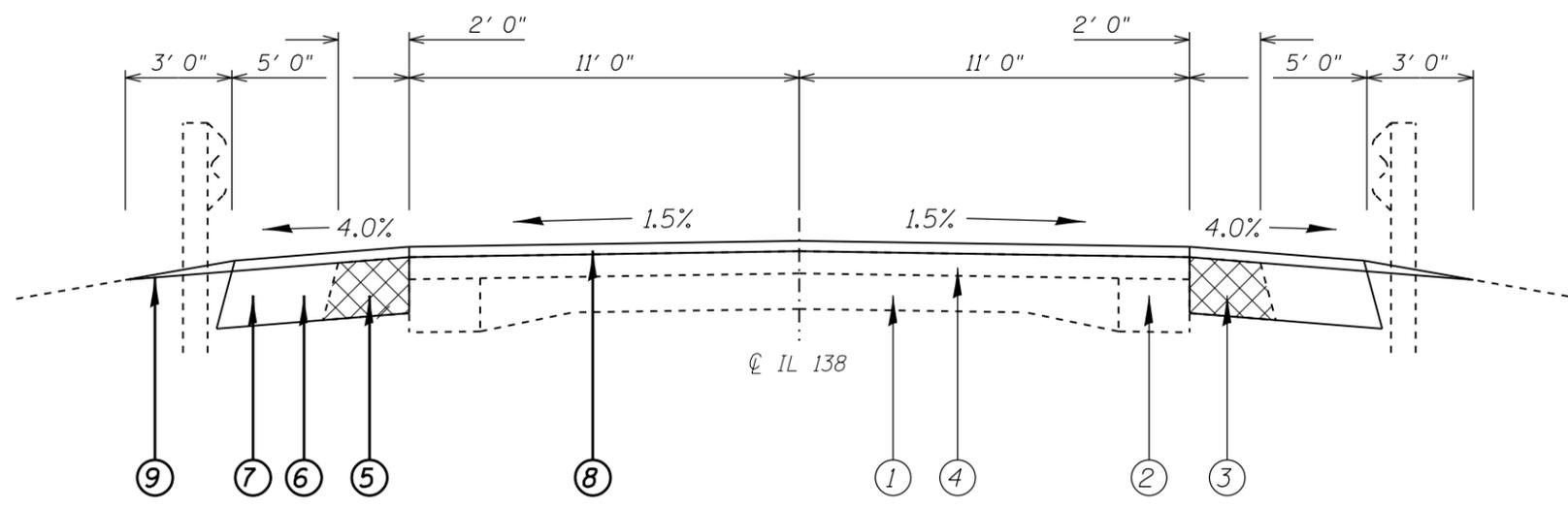
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

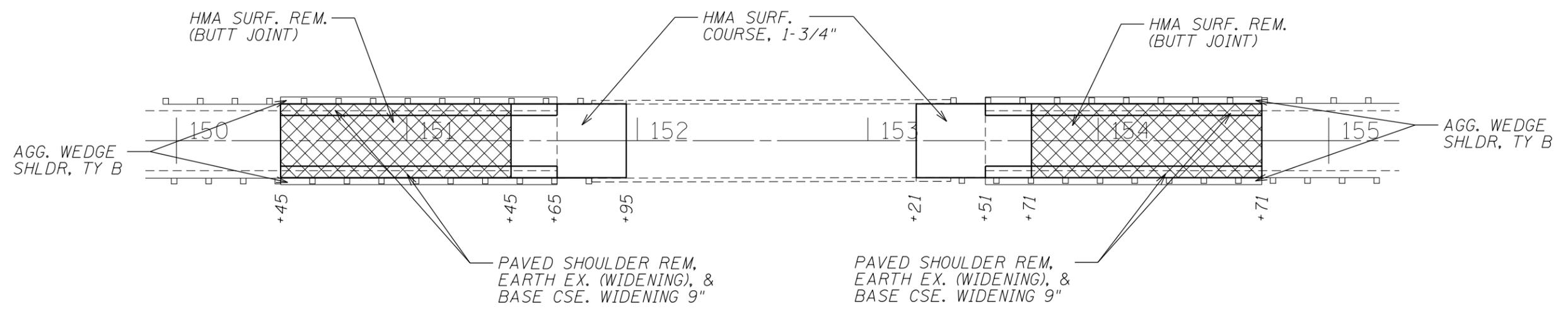
SUMMARY OF QUANTITIES			
SCALE:	SHEET	OF	SHEETS

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728	(2) BDR	MACOUPIN	15	4
				CONTRACT NO. 72L44
		ILLINOIS	FED. AID PROJECT	



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

STA 150+45.00 TO STA 151+65.00 *
 STA 153+51.00 TO STA 154+71.00 *
 * BRIDGE APPROACH PAVEMENT
 STA 151+65.00 TO STA 151+95.00
 STA 153+21.00 TO STA 153+51.00



ROADWAY PLAN

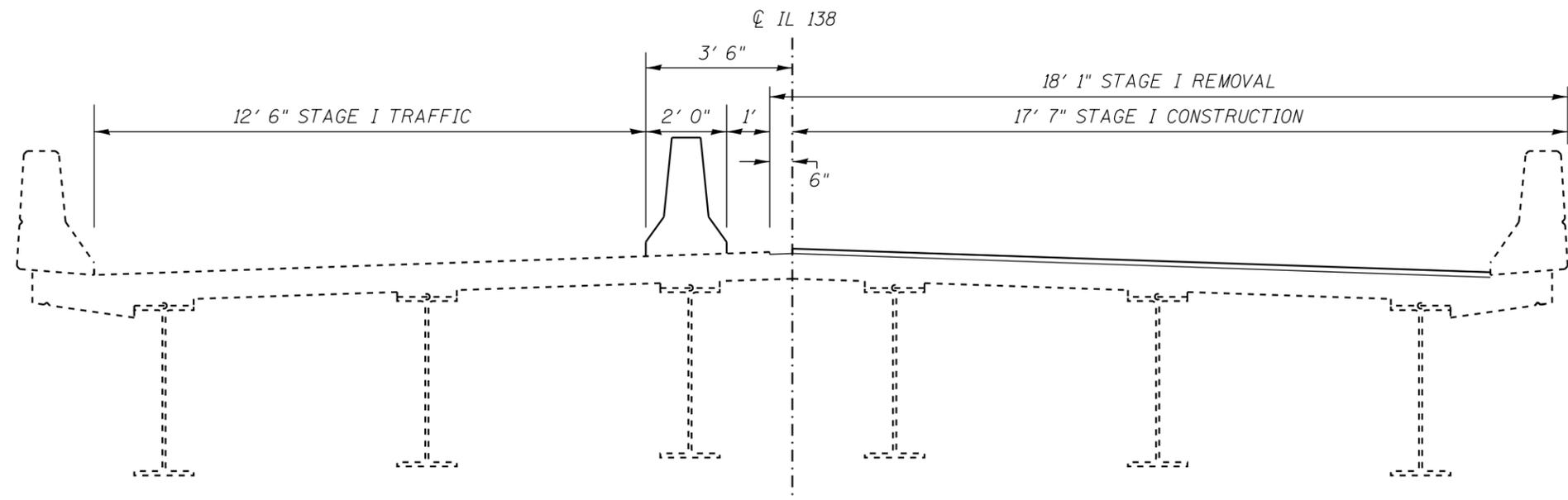
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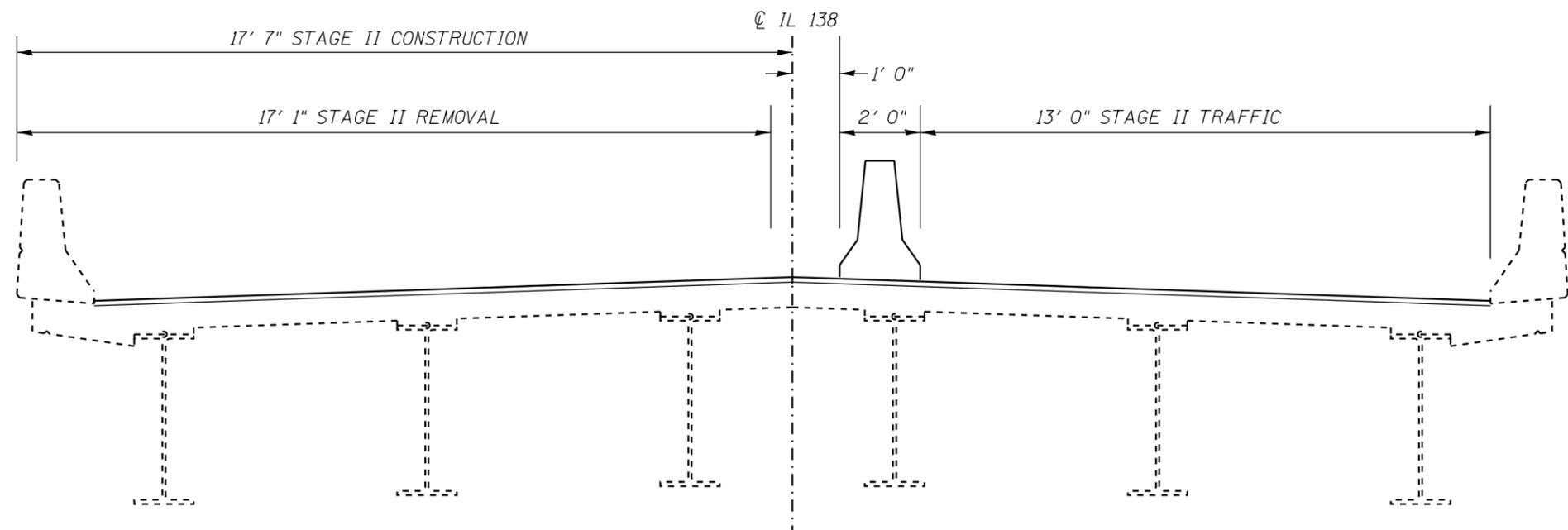
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION & ROADWAY PLAN	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
728	(2) BDR	MACOUPIN	15	5
CONTRACT NO. 72L44				
ILLINOIS FED. AID PROJECT				



STAGE I CROSS SECTION (LOOKING WEST)



STAGE II CROSS SECTION (LOOKING WEST)

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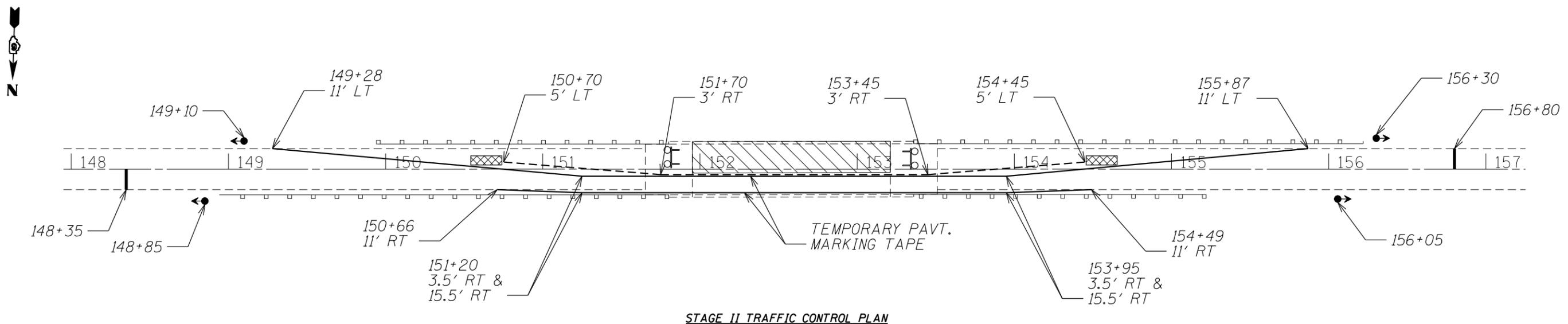
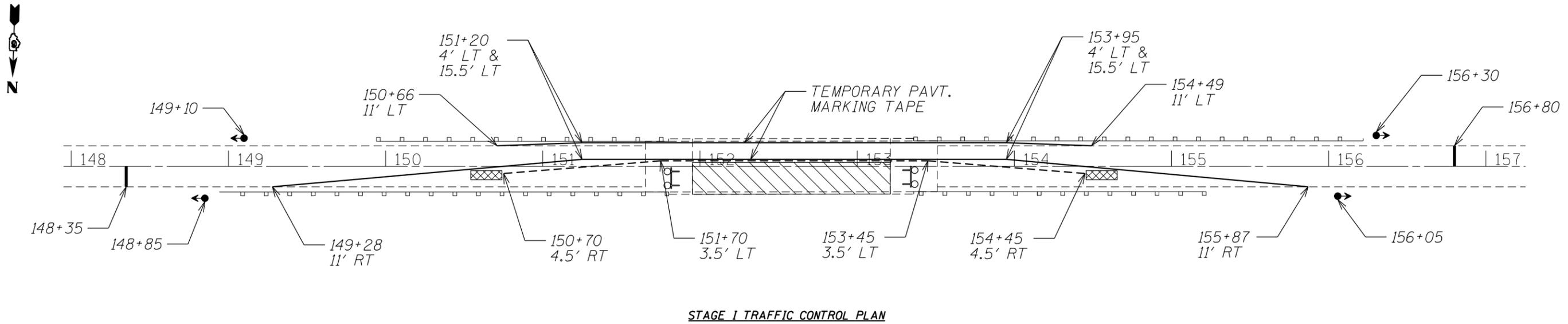
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC STAGING PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
728	(2) BDR	MACOUPIN	15	6
CONTRACT NO. 72L44				
ILLINOIS FED. AID PROJECT				



SYMBOLS

-  WORK AREA
-  TEMPORARY CONCRETE BARRIER
-  IMPACT ATTENUATOR
-  TRAFFIC SIGNAL
-  TYPE III BARRICADE WITH FLASHING LIGHTS

TRAFFIC CONTROL NOTES:

1. TRAFFIC CONTROL DEVICES NOT SHOWN IN THIS DETAIL SHALL BE PER STANDARD 701321. DEVICES, TEMPORARY PAVEMENT MARKINGS, AND TEMPORARY PAVEMENT MARKING REMOVAL SHOWN IN THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, STANDARD 701321. IMPACT ATTENUATORS, 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. ALL BARRIER WALL TAPERS SHALL BE 12:1.

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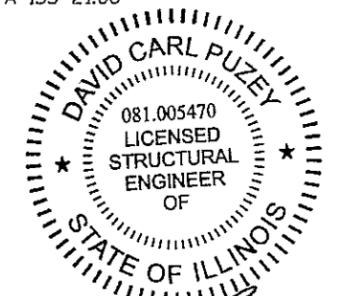
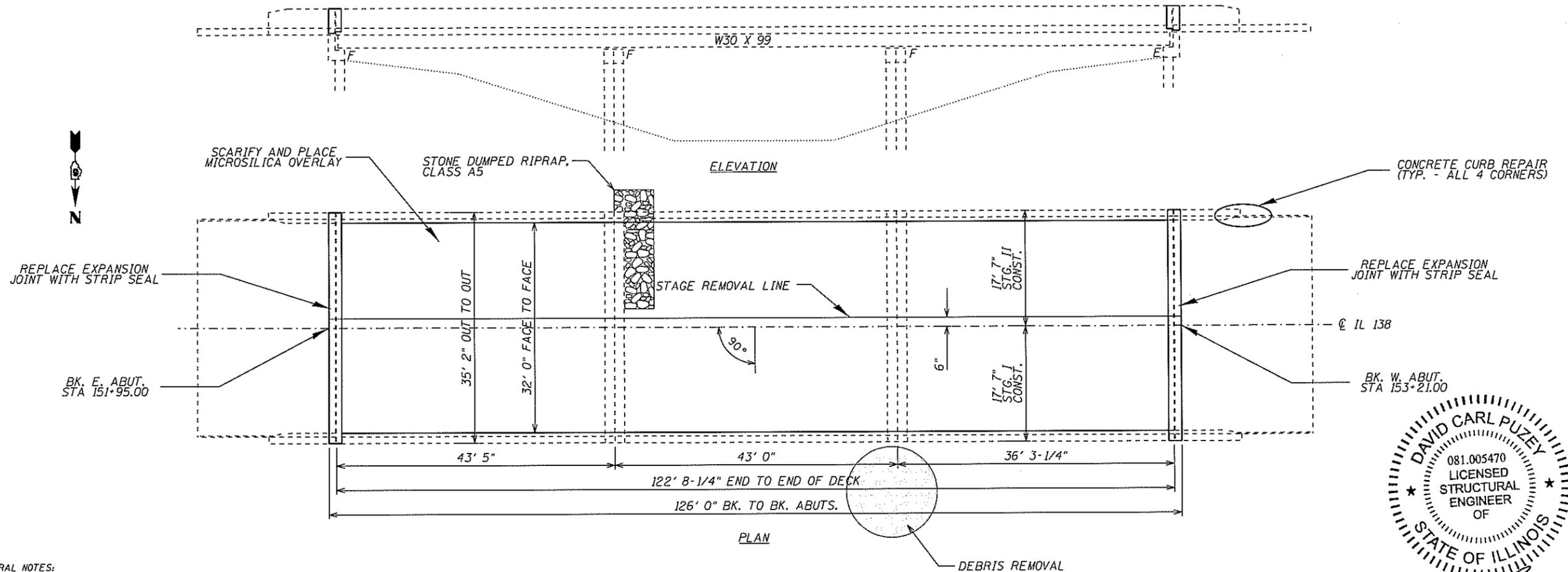
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
728	(2) BDR	MACOUPIN	15	7
CONTRACT NO. 72L44				
ILLINOIS FED. AID PROJECT				



David Carl Puzey 1/13/2020
 Expires 1/30/2020

TOTAL BILL OF MATERIAL (059-0054)

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	3.9
Concrete Superstructure	Cu. Yd.	4.5
Bridge Deck Grooving	Sq. Yd.	430
Reinforcement Bars, Epoxy Coated	Pound	710
Bar Splicers	Each	12
Preformed Joint Strip Seal	Foot	76
Bridge Deck Scarification, 3/4"	Sq. Yd.	429
Bridge Deck Microsilica Concrete Overlay, 2-1/2"	Sq. Yd.	429
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	17
Protective Coat	Sq. Yd.	447
Containment and Disposal of Non-Lead Paint Cleaning Residues No. 1	L Sum	1
Cleaning And Painting Steel Bridge No. 1	L Sum	1
Stone Dumped Riprap, Class A5	Ton	30
Debris Removal	L Sum	1
Concrete Curb Repair	Foot	20

STRUCTURE GENERAL NOTES:

SYNTHETIC FIBERS SHALL BE ADDED TO THE BRIDGE DECK MICROSILICA CONCRETE OVERLAY, SEE SPECIAL PROVISIONS.

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

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.

PROTECTIVE COAT SHALL BE APPLIED TO THE NEW CONCRETE AND THE MICROSILICA OVERLAY.

CONTAINMENT OF CLEANING RESIDUE IS REQUIRED TO CONTROL NUISANCE DUST. SEE SPECIAL PROVISIONS.

AREAS TO BE CLEANED AND PAINTED SHALL ONLY CONSIST OF ALL BEAM ENDS, END DIAPHRAGMS, AND STEEL COMPONENTS OF BEARINGS AT BOTH ABUTMENTS. BEAM END PAINTING (12 ENDS) SHALL EXTEND 5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY. CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES." ALL AREAS TO BE PAINTED SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING PER SSPC SP-10. ALL EXISTING STEEL CLEANED SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN, MUNSELL 7.5G 4/8. ALL OTHER SURFACES SHALL BE GRAY, MUNSELL 5B 7/1. THE SSPC-OP-1 PAINTING CONTRACTOR CERTIFICATION WILL BE REQUIRED. THE USE OF AIR MONITORS WILL NOT BE REQUIRED. FINISH COAT SHALL NOT BE APPLIED UNTIL AFTER ALL ADJACENT STRUCTURAL WORK IS COMPLETED.

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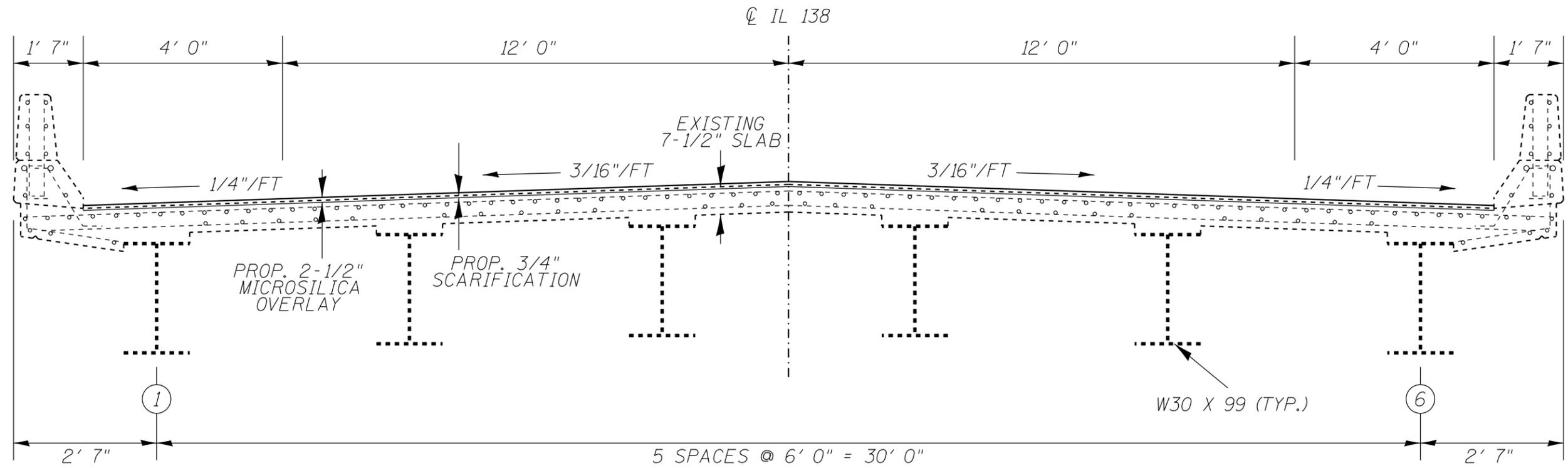
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

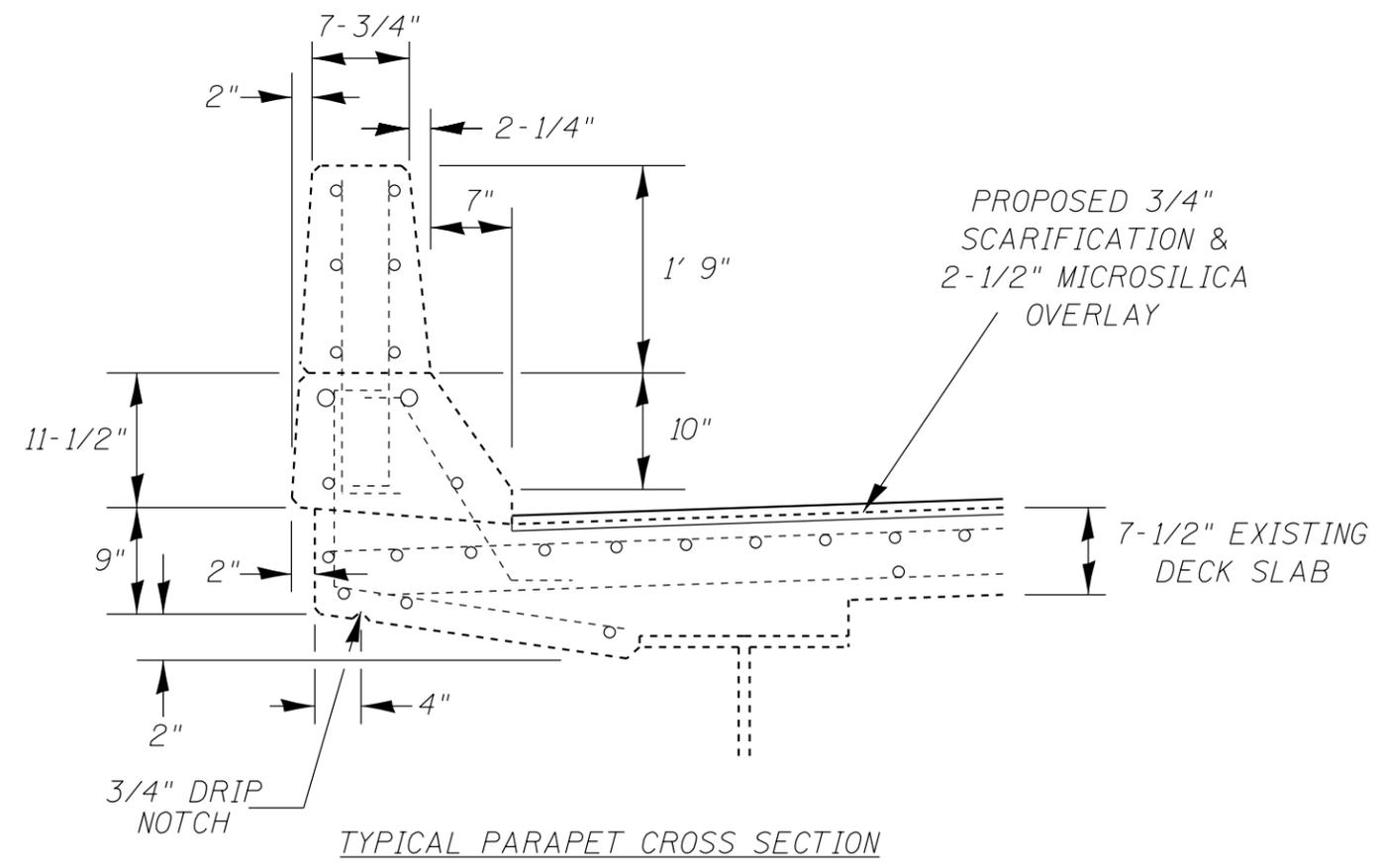
**BRIDGE PLAN & ELEVATION
SN 059-0054**

SCALE: SHEET 1 OF 8 SHEETS STA. TO STA.

F.A.S. RTE. 728	SECTION (2) BDR	COUNTY MACOUPIN	TOTAL SHEETS 15	SHEET NO. 8
CONTRACT NO. 72L44				
ILLINOIS FED. AID PROJECT				



BRIDGE CROSS SECTION, LOOKING WEST



TYPICAL PARAPET CROSS SECTION

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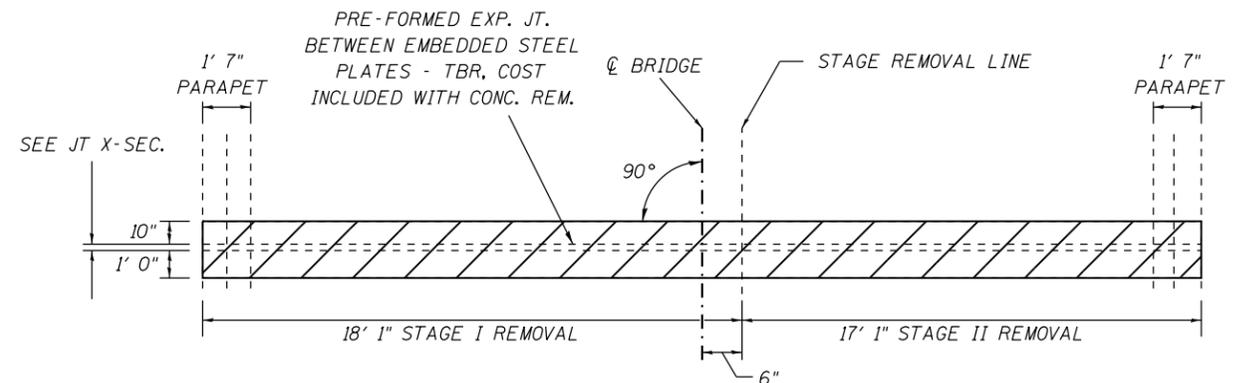
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

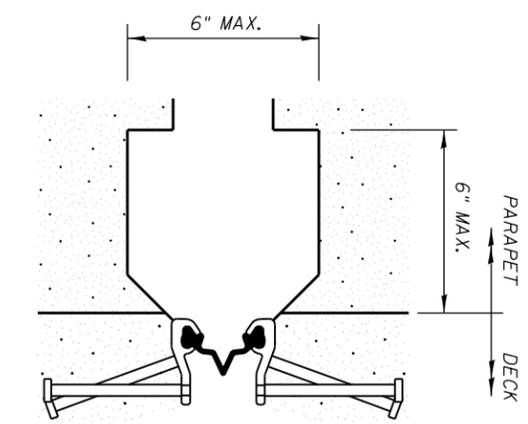
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SN 059-0054

SCALE: SHEET 2 OF 8 SHEETS STA. TO STA.

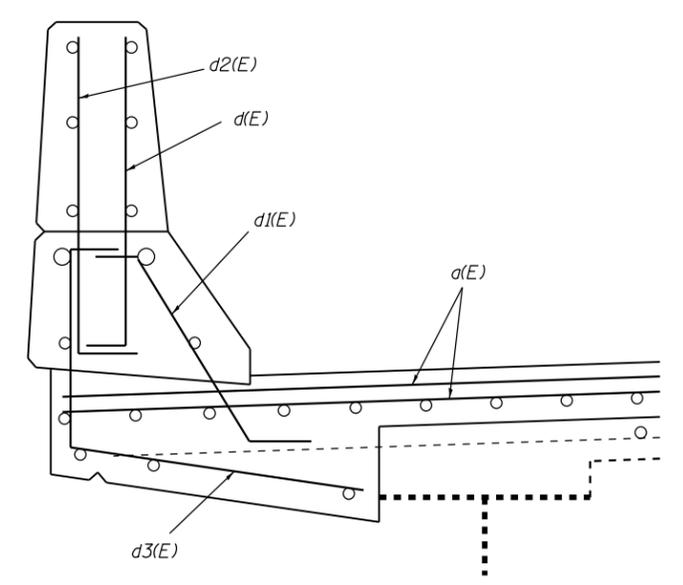
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728	(2) BDR	MACOUPIN	15	9
CONTRACT NO. 72L44				
ILLINOIS FED. AID PROJECT				



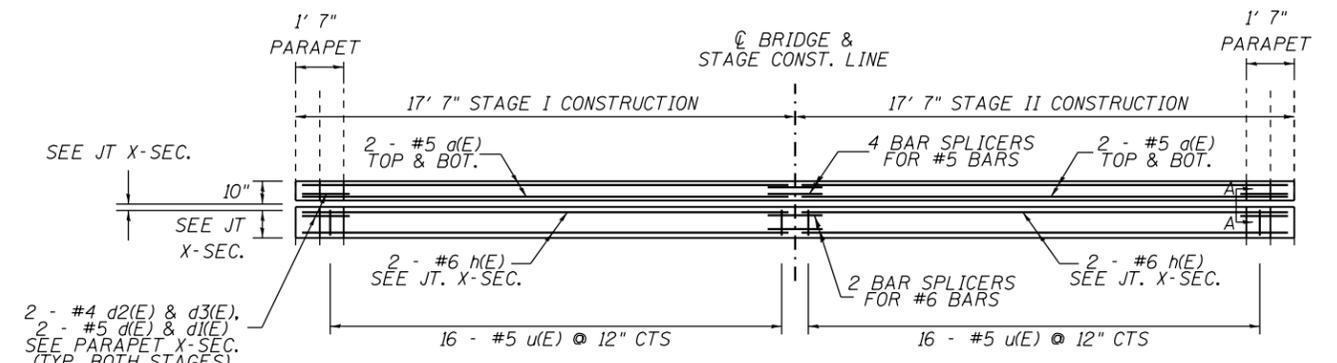
JOINT REMOVAL PLAN
WEST JOINT SHOWN, EAST JOINT SIMILAR



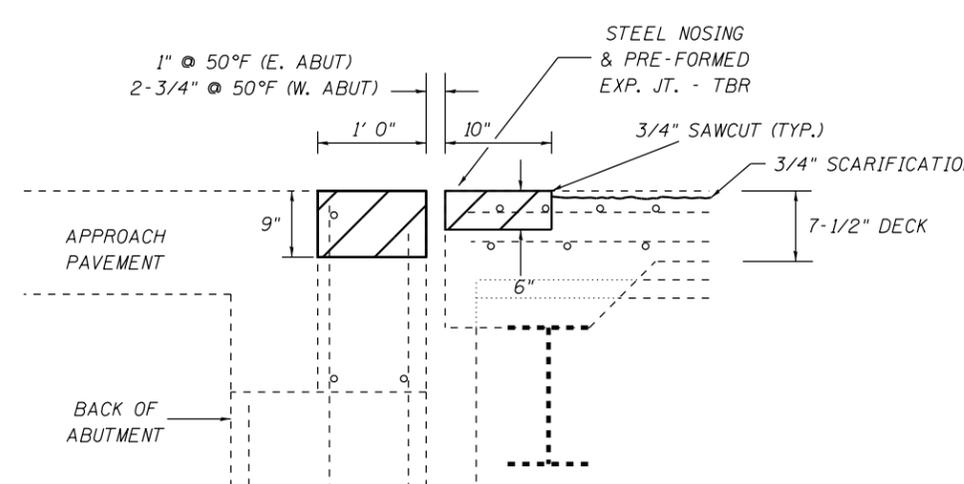
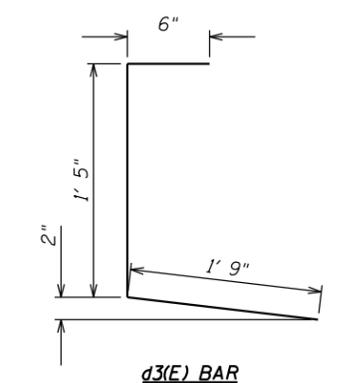
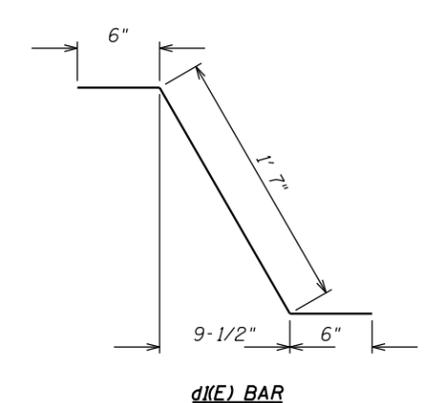
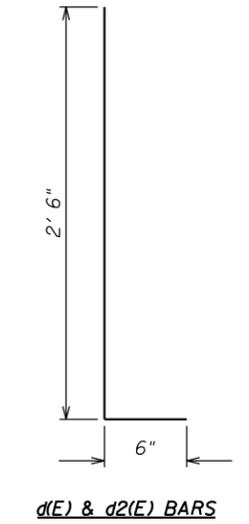
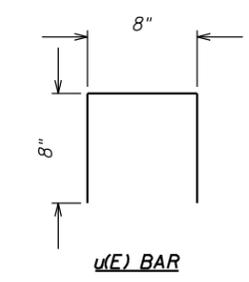
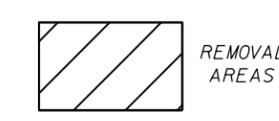
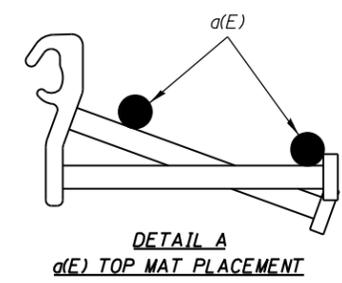
SECTION A-A
JOINT BLOCKOUT DETAIL
(TYPICAL ALL JOINTS)



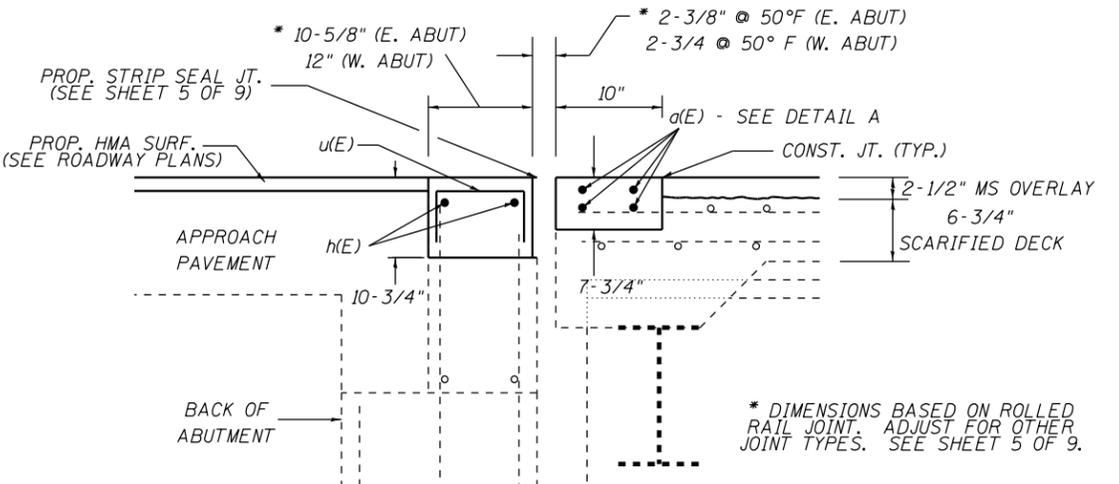
PARAPET CROSS SECTION AT JOINT



JOINT PLAN
WEST JOINT SHOWN, EAST JOINT SIMILAR



JOINT REMOVAL CROSS SECTION - TYP.



JOINT CROSS SECTION - TYP.

BILL OF MATERIAL - 2 JOINTS				
BAR	#	SIZE	LENGTH	SHAPE
d(E)	16	#5	17' 0"	—
d(E)	8	#5	3' 0"	└
d1(E)	8	#5	2' 7"	↘
d2(E)	8	#4	3' 0"	└
d3(E)	8	#4	3' 8"	└└
h(E)	8	#6	17' 0"	—
u(E)	64	#5	2' 0"	□
REINFORCEMENT BARS (EPOXY COATED)		POUND	710	
CONC. SUPERSTRUCTURE		CU YD	4.5	
CONC. REMOVAL		CU YD	3.9	

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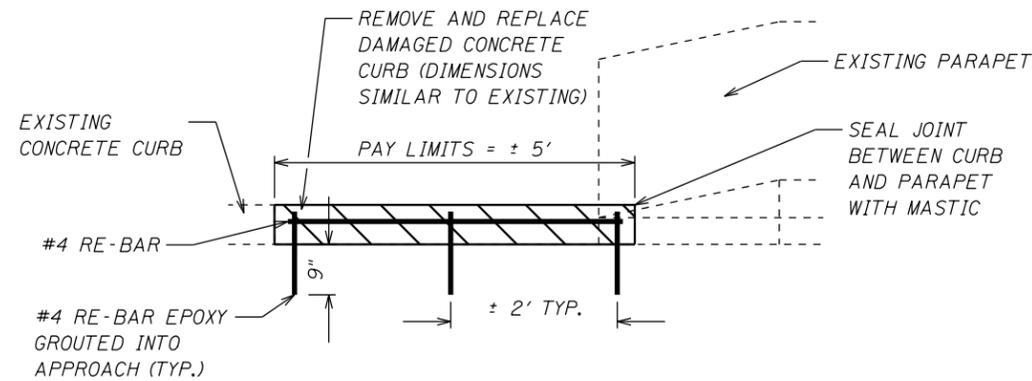
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	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE JOINT DETAILS
SN 059-0054

SCALE: SHEET 3 OF 8 SHEETS STA. TO STA.

F.A.S. RTE. 728	SECTION (2) BDR	COUNTY MACOUPIN	TOTAL SHEETS 15	SHEET NO. 10
CONTRACT NO. 72L44				
ILLINOIS FED. AID PROJECT				



SEC. A-A: CONCRETE CURB REPAIR ELEVATION



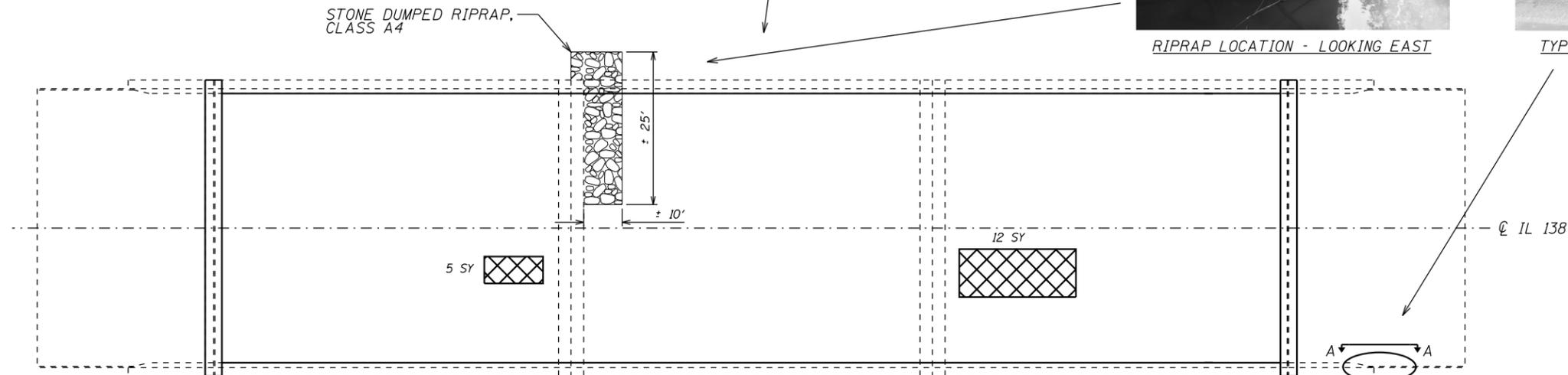
RIPRAP LOCATION & DEBRIS - LOOKING NORTH



RIPRAP LOCATION - LOOKING EAST



TYPICAL CONCRETE CURB REPAIR



DECK PATCHING & MISCELLANEOUS PLAN

DEBRIS REMOVAL



DEBRIS PILE - LOOKING WEST



DEBRIS PILE - LOOKING EAST

NOTES:

PATCHING LOCATIONS INDICATE PORTIONS OF THE DECK THAT HAVE HIGHER POTENTIAL FOR REQUIRING FULL DEPTH REPAIRS. THE CONTRACTOR SHALL ONLY PERFORM FULL DEPTH PATCHING AS INSTRUCTED BY THE ENGINEER. PATCHING SURVEY INFORMATION IS INCLUDED FOR INFORMATION ONLY.

THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS.

DEBRIS PHOTOS WERE TAKEN ON 7/26/2019 AND ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE CHANNEL, INCLUDING ANY ADDITIONAL DEBRIS THAT MAY HAVE ACCUMULATED AFTER PHOTOS WERE TAKEN.

CONCRETE CURB REPAIR SHALL BE AT ALL FOUR CORNERS OF BRIDGE. WORK SHALL CONFORM TO THE SPECIAL PROVISION FOR CONCRETE CURB REPAIR.

RIPRAP PLACEMENT SHALL MATCH THE EXISTING ADJACENT RIPRAP GRADES. NO EXCAVATION, FILTER FABRIC, OR BEDDING MATERIAL WILL BE REQUIRED.

 PROPOSED DECK SLAB REPAIR (FULL DEPTH)

DECK PATCHING & MISCELLANEOUS REPAIR BILL OF MATERIAL

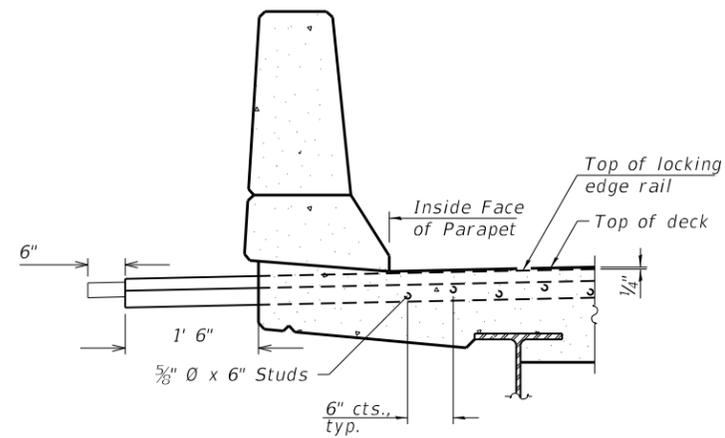
ITEM	UNIT	QUANTITY
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	17
Stone Dumped Riprap, Class A4	Ton	30
Debris Removal	L Sum	1
Concrete Curb Repair	Foot	20

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

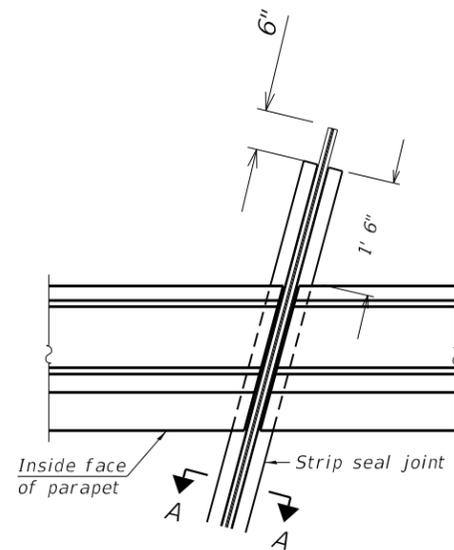
MISCELLANEOUS BRIDGE REPAIR DETAILS
SN 059-0054

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
728	(2) BDR	MACOUPIN	15	11
CONTRACT NO. 72L44				
ILLINOIS FED. AID PROJECT				

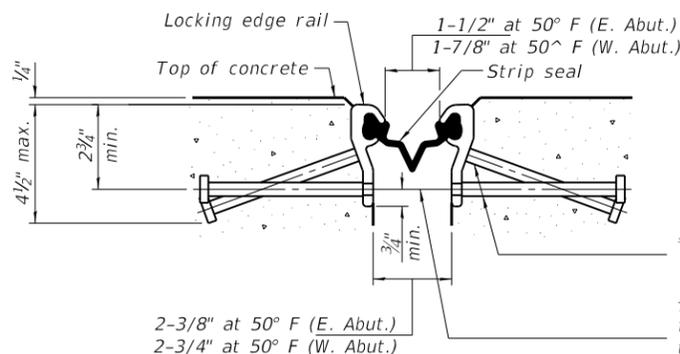
SCALE: SHEET 4 OF 8 SHEETS STA. TO STA.



ELEVATION AT PARAPET
 (Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



PLAN AT PARAPET
 (Skews < 30°)

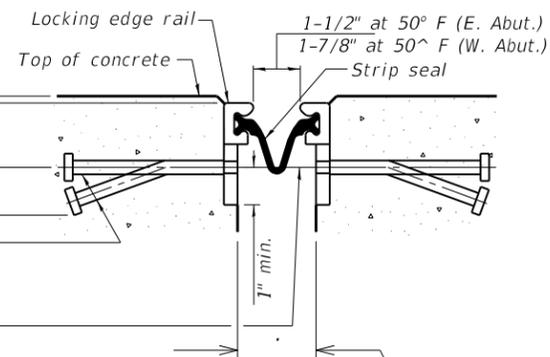


SHOWING ROLLED RAIL JOINT

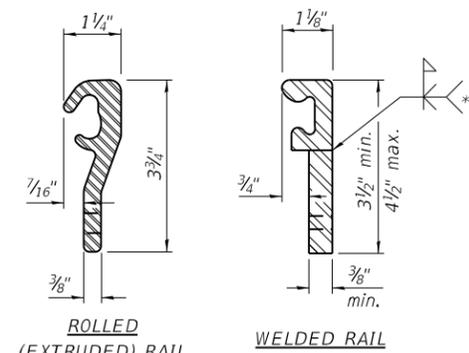
* 5/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)
 3/8" φ threaded rods in 7/16" φ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates immediately after concrete is set.

SECTION A-A

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

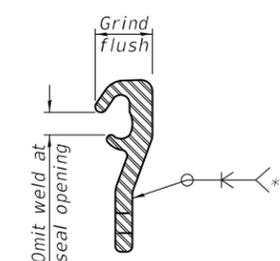


SHOWING WELDED RAIL JOINT



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

EJ-SS (MODIFIED) 8-11-17

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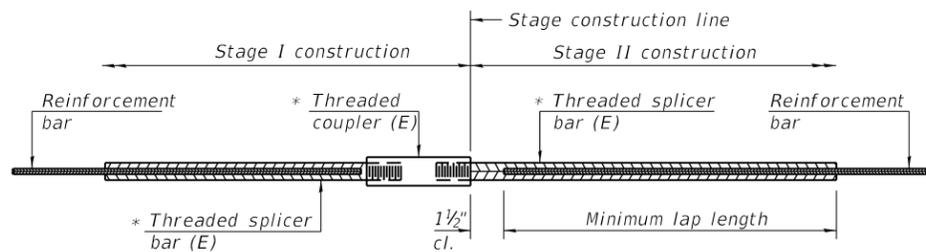
USER NAME = dudleybm	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/10/2019	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL
 STRUCTURE NO. 059-0054**

SCALE: SHEET 5 OF 8 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
728	(2) BDR	MACOUPIN	15	12
CONTRACT NO. 72L44				
ILLINOIS FED. AID PROJECT				

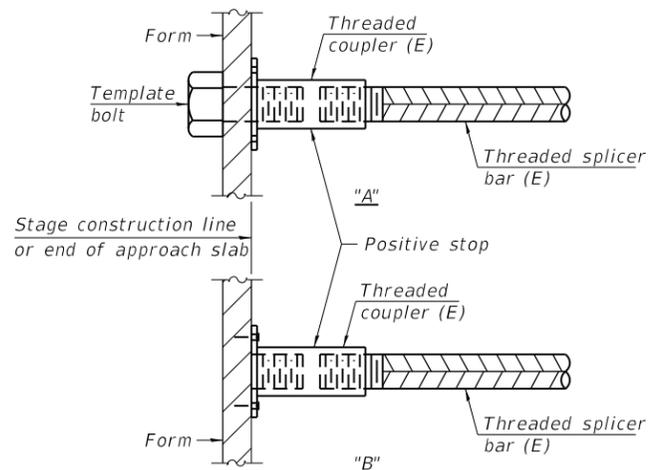


STANDARD BAR SPLICER ASSEMBLY

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

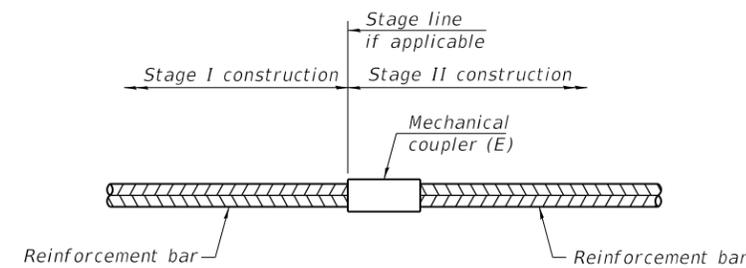
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

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



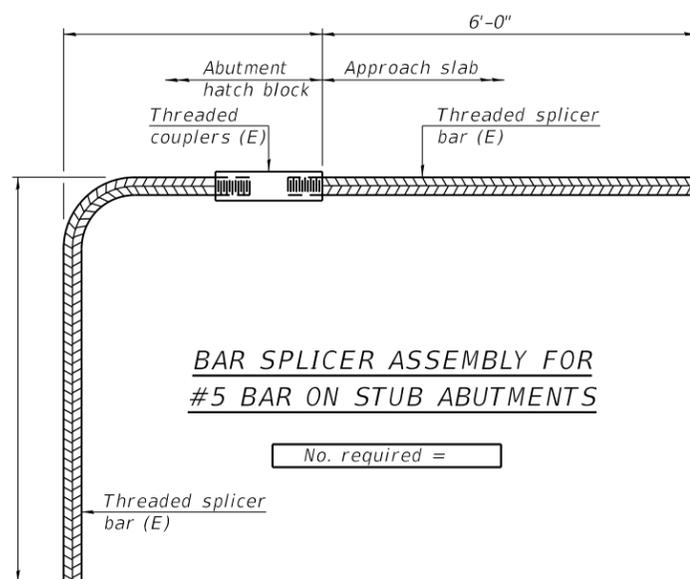
INSTALLATION AND SETTING METHODS

"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



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. 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

2-17-2017

MODEL: Default
FILE NAME: \\CENTRALDB\OPERATIONS\Bridges\Bids\plans_CAD\72L44 - 0590054_overby\abstrsheet.dgn

USER NAME = dudleybm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/10/2019	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

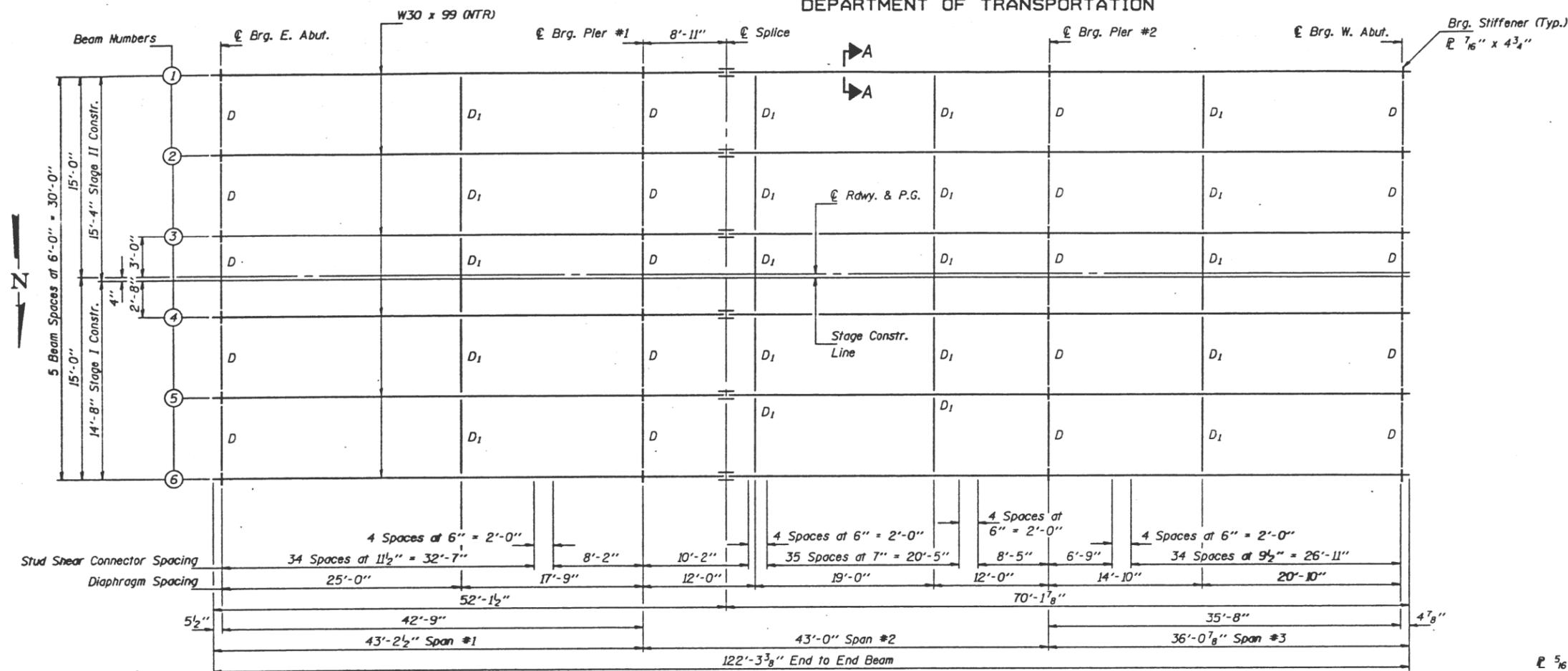
**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
SN 059-0054**

SCALE: SHEET 6 OF 8 SHEETS STA. TO STA.

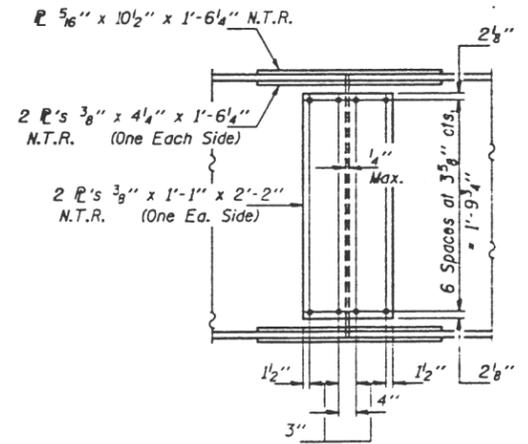
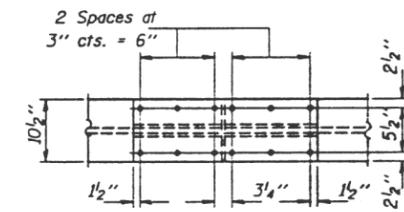
F.A.S. RTE. 728	SECTION (2) BDR	COUNTY MACOUPIN	TOTAL SHEETS 15	SHEET NO. 13
			CONTRACT NO. 72L44	
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	DATE	SHEET NO.
F.A.S. 728	2B-1	MACOUPIN	1/31/02	65
SHEET NO. 9				22 SHEETS



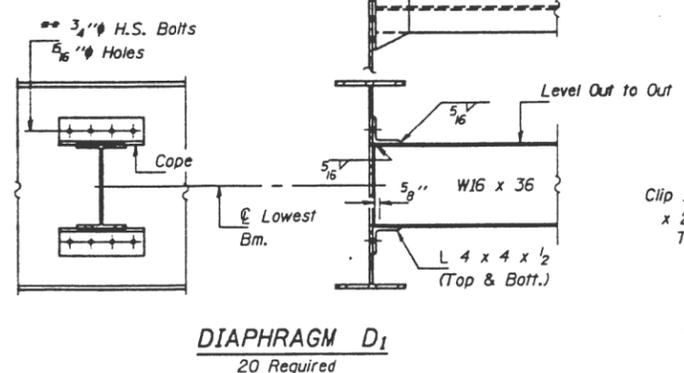
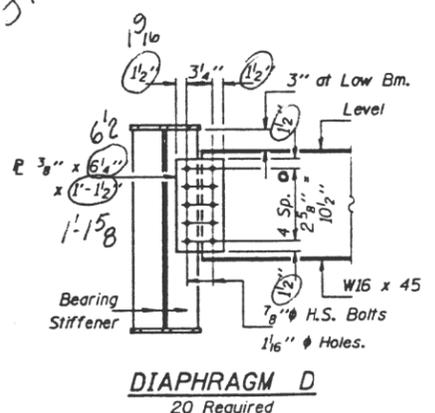
Notes: Two hardened washers shall be required over all holes in diaphragm connections.
"NTR" denotes plates to which Notch Toughness Requirements are applicable.



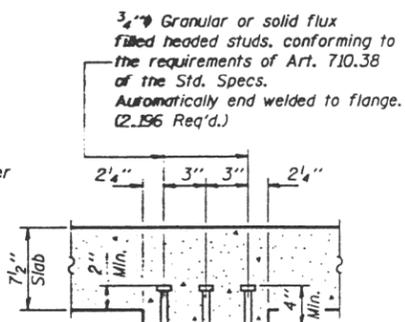
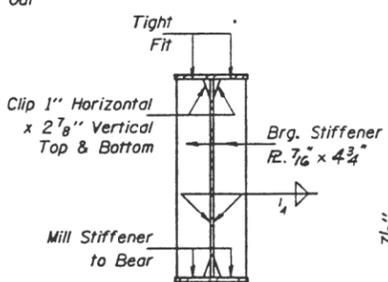
FIELD SPLICE DETAIL
(Use 7/8" H.S. Bolts)

STRUCTURAL STEEL
F.A.S. RT. 728 SEC. 2B-1
MACOUPIN COUNTY
STA. 152+58.00

RTB/SM
JTD/11/4/02



** Use 3/4" x 1 1/2" slotted holes in L 4 x 4 x 1/2 at Beam #4 only. Provide 5/16" plate washers for slotted holes. Bolts shall be finger-tightened prior to the deck pour. Fully tighten bolts after deck is poured.

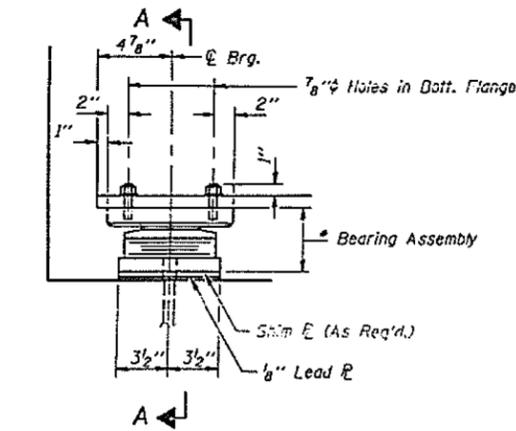


DESIGNED	Shil E. Morgan	EXAMINED	Rajiv D. Kasper
CHECKED	L. E. Fisher	PASSED	Ralph E. Anderson
DRAWN	John F. Schneller Jr.	APPROVED	
CHECKED	SEM GLE RTB		

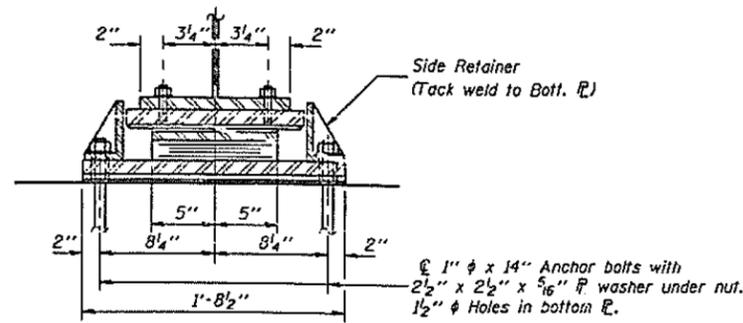
July 9 1992

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

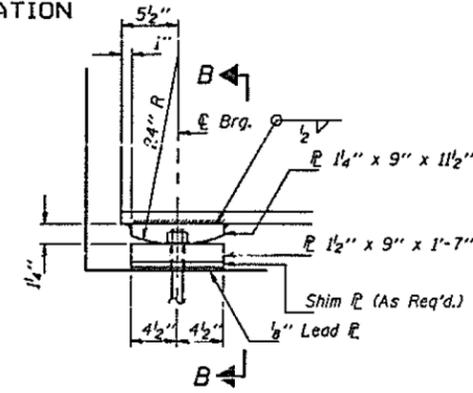
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 728	2B-1	MACOUPIN	131	67
SHEET NO. 11 22 SHEETS				



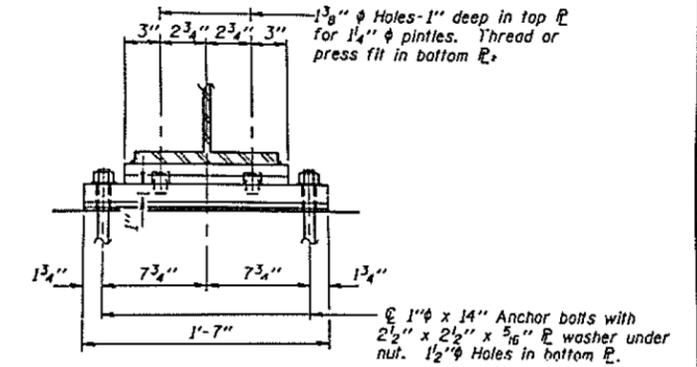
ELEVATION AT W. ABUT.



SECTION A-A



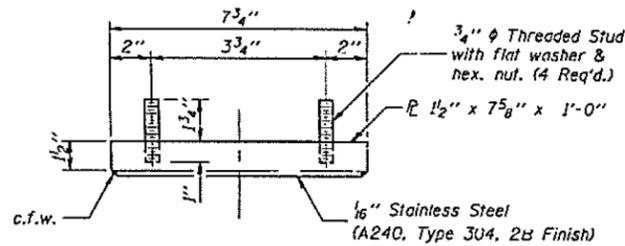
ELEVATION



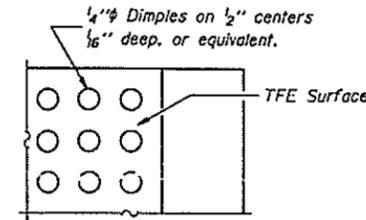
SECTION B-B

TYPE II TFE ELASTOMERIC EXP. BRG.

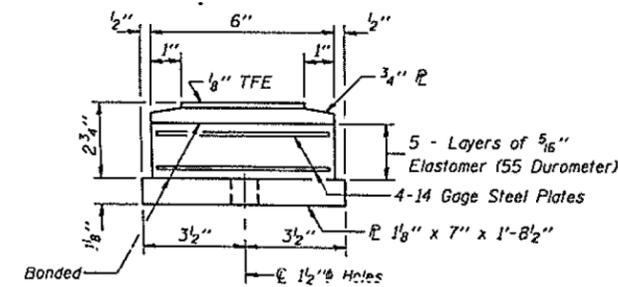
Notes:
See sheet #19 of 22 for Anchor Bolt Installation.
* Weight of Shims, Lead Plates, Side Retainers and Anchor Bolts is included in "Structural Steel" quantity.



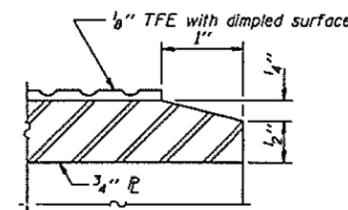
TOP BEARING ASSEMBLY



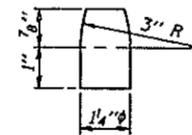
PLAN-TFE SURFACE



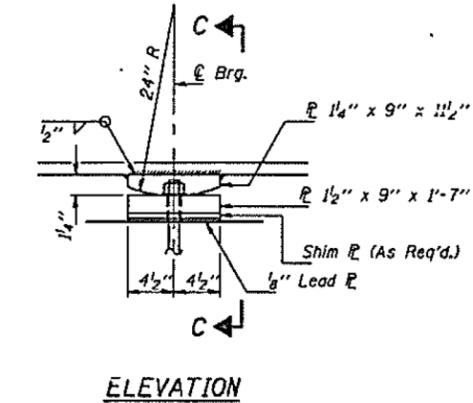
BOTTOM BEARING ASSEMBLY



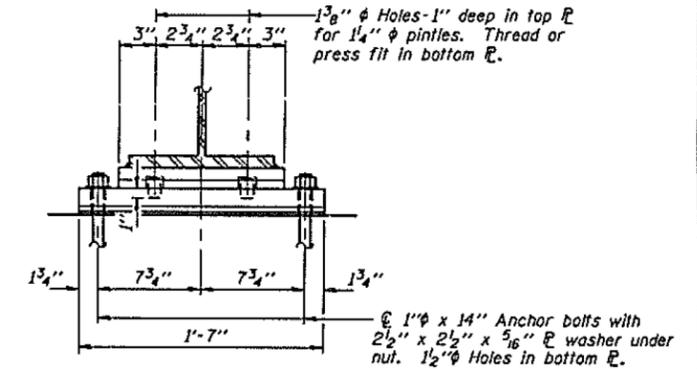
SECTION THRU TFE



PINTLE



ELEVATION

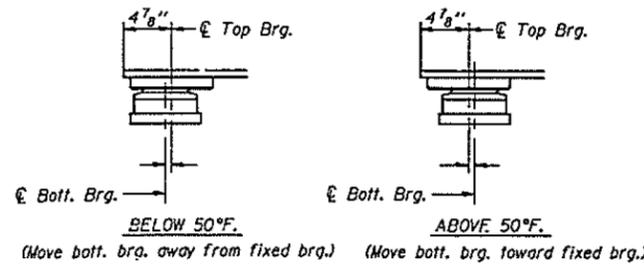


SECTION C-C

FIXED BEARINGS AT PIERS

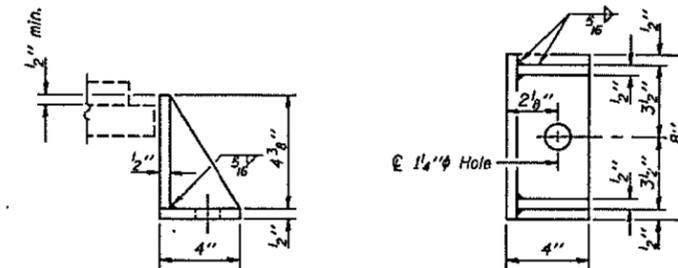
Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

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



SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



SIDE RETAINER

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

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	6

BEARINGS
F.A.S. RT. 728 SEC. 2B-1
MACOUPIN COUNTY
STA. 152+58.00

DESIGNED	Shelby E. Maguire
CHECKED	John R. Schneller Jr.
DRAWN	John R. Schneller Jr.
CHECKED	SEM G&E P10

EXAMINED	July 9 1992
APPROVED	Ralph E. Anderson
APPROVED	Director of Highways

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STEEL DETAILS - SN 059-0054
(FOR INFORMATION ONLY)

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
728	(2) BDR	MACOUPIN	15	15
CONTRACT NO. 72L44				

SCALE: SHEET 8 OF 8 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT