0

0

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA

2019 ADT: 14900 (ACTUAL) 2020 ADT: 15000 (ESTIMATED)

> MU%: 4.55 SU%: 4.5

STATE OF ILLINOIS

30-18 R-2 ST. CLAIR 29 1 ILLINOIS CONTRACT NO. 76N38

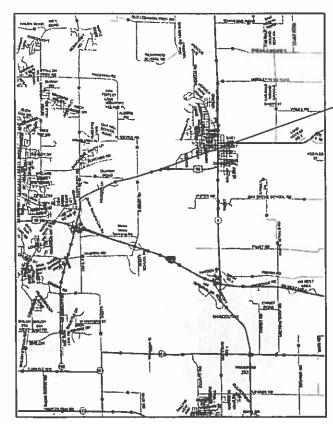
D-98-065-20

DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

FAP ROUTE 674 (US 50) SECTION 30-1BR-2 **BRIDGE REPAIRS & HMA OVERLAY**

R7W



SN 082-0036 STA, 228 + 74.79 183'-7 1/4" BK TO BK OF ABUTMENT 3 SPAN CONTINUOUS WIDE FLANGE SUPPORTED ON PILE BENT ABUTMENTS AND PIERS LAT.: 38.59411 LONG.: -89,83530

> STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

LOCATION OF SECTION INDICATED THUS: - -

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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 EXCAVATORS 1-800-892-0123 OR 811

PROJECT ENGINEER: HERVE GELIN (618) 346-3179 PROJECT MANAGER: BILLIE OWEN (618) 346-3209

CONTRACT NO. 76N38

PROJECT NHPP-V8NL(070) ST. CLAIR COUNTY C-98-079-20

NOT TO SCALE

GROSS / NET LENGTH = 183.60 FT, = 0.035 MILE

INDEX OF SHEETS

- INDEX OF SHEETS, HIGHWAY STANDARDS, MIXTURE
- REQUIREMENTS, GENERAL NOTES, & COMMITMENTS SUMMARY OF QUANTITIES
- TYPICALS
- SCHEDULE OF QUANTITIES
- PLAN SHEETS STAGING PLAN SHEETS
- WIDE LOAD SIGNING
- STRUCTURE PLANS

HIGHWAY STANDARDS

000001-07 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS 001001-02 AREAS OF REINFORCEMENT BARS

001006

01006

DECIMAL OF AN INCH AND OF A FOOT

101311-03

LANE CLOSURE, 2L, 2W, MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH

LANE CLOSURE, 2L, 2W, BRIDGE REPAIR W/ BARRIER

101326-04

101901-08

TRAFFIC CONTROL DEVICES

704001-08 TEMPORARY CONCRETE BARRIER 780001-05 TYPICAL PAVEMENT MARKINGS

781001-04 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

MIXTURE REQUIREMENTS

MIXTURE USE	POLY SURFACE	BASE COURSE WIDENING
AC/PG	SBS PG 76-22	SBS PG 64-22
RAP % (MAX)	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION
DESIGN AIR VOIDS	4.0% @ Ndes=90	4.0% @ Ndes=70
MIX COMPOSITION		
(GRADATION)	IL 9.5	IL 19.0
FRICTION AGG	MIXTURE "D"	MIXTURE "B"
QUALITY MGMT	OC/OA	OC/OA
PROGRAM	QC/QA	QC/QA

PLAN QUANTITIES FOR HOT-MIX ASPHALT SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LB/SO YD/IN

USER NAME = manntm	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 11/27/2019	DATE -	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS, HIGHWAY STANDARDS, MIXTURE **REQUIREMENTS, GENERAL NOTES, & COMMITMENTS** SHEET 1 OF 1 SHEETS STA.

SECTION COUNTY 674 121-BR-1 RANDOLPH 29 CONTRACT NO. 76K65

GENERAL NOTES

- ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. (1-800-892-0123 OR 811) OR FOR NON-MEMBERS THE UTILITY COMPANY DIRECTLY.
- THE CONTRACTOR AND THE ENGINEER SHALL BE AWARE THAT NO SURVEY WAS PERFORMED FOR THIS PROJECT. THE STATIONING, TOPOGRAPHY, AND QUANTITIES SHOWN IN THE PLANS WERE CREATED USING MICROFILM AND FIELD MEASUREMENTS. ALL SHALL BE ASSUMED TO BE APPROXIMATE. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE BASE OF THE TEMPORARY CNCRETE BARRIER SHALL BE PAINTED WITH THE APPROPRIATE LANE MARKING COLOR AND THE COST SHALL BE INCLUDED IN THE COST OF TEMPORARY CONCRETE BARRIER.
- IF THE CONTRACTOR, FOR HIS CONSTRUCTION ACTIVITY, REMOVES TREES WITHIN THE RIGHT-OF-WAY LIMITS WHICH ARE NOT DESIGNATED ON THE PLANS FOR REMOVAL, I.E. IN ORDER TO GAIN ACCESS TO THE PROJECT SITE; IT SHALL BE HIS RESPONSIBILITY TO REPLACE THE TREES AT A 1:1 RATIO. THE TREES SHALL BE REPLACED WITH A 1 GALLON NATIVE ILLINOIS TREE SPECIES AND SHALL BE APPROVED BY THE ENGINEER. THE TREE REMOVAL AND TREE REPLACEMENT SHALL BE AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMMENCATION, CHALL BE ALLOWED. ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- THE RESIDENT ENGINEER WILL VERIFY THE EXISTENCE OF HIGHWAY LIGHTING AND/OR INTELLIGENT TRANSPORTATION SYSTEMS (I.T.S.) UTILITIES WITHIN THE PROJECT LIMITS. IF HIGHWAY LIGHTING AND/OR I.T.S. EXISTS WITHIN THE PROJECT LIMITS, AND IF THESE ITEMS REQUIRE LOCATING, THE CONTRACTOR SHALL BE DIRECTED TO ACCOUNT OF THE CONTRACTOR SHALL BE DIRECTED. TO DO SO ACCORDING TO SECTION 803 OF THE STANDARD SPECIFICATIONS.
- TWO CHANGEABLE MESSAGE BOARDS SHALL BE REQUIRED FOR THIS PROJECT. THEY SHALL BE PLACED 2 WEEKS PRIOR TO ANY LANE CLOSURE AND SHALL REMAIN UP FOR THE DURATION OF THE PROJECT. THE CHANGEABLE MESSAGE BOARDS WILL BE PLACED AT THE DIRECTION OF THE ENGINEER.
- 7. THE CONTRACTOR SHALL PROVIDE POSITIVE AND ADEQUATE DRAINAGE AT ALL TIMES.
- THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUB-CONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION-RELATED SKILLS, E.G., MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSEWORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE, ETC.) AND OSHA 10 HOUR CERTIFICATION, TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL-TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT 618-346-3360 AND/OR THE HCCTP COORDINATOR AT 618-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINFE GOALS. WORKFORCE AND TRAINEE GOALS.
- THE CONTRACTOR SHALL TAKE CARE TO ENSURE HIS CONSTRUCTION ACTIVITIES DO NOT CAUSE ANY DAMAGE TO THE GUARDRAIL.
- All areas disturbed for any reason shall be permanently seeded with class 2a seed, fertilized and mulched as per section 250.04 of the standard specifications and as directed by the engineer. Final seeding shall be performed as soon as possible. The cost for performing this work shall be considered included in the unit price bid for the TITEM OF WORK INITIATING THE DISTURBANCE. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDED AT THE CONTRACTOR'S EXPENSE AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

COMMITMENTS

NONE

SCALE: NA

CONSTR. CODE 80 FED/20 STATE

				80 FED/20 STA
			1	URBAN BR I DGE
CODE			TOTAL	
CODE	I TEM	LINIT		0047
NO.	ITEM	UNIT	QUANTITY	082-0036
20200500	EARTH EXCAVATION (WIDENING)	CU YD	80	80
25600720	HOT MAY ACRUALT DACE COURSE WIDENING 111	50 VP	2.47	247
35600720	HOT-MIX ASPHALT BASE COURSE WIDENING, 11"	SQ YD	347	347
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	185	185
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	319	319
40600990	TEMPORARY RAMP	SQ YD	54	54
40604164	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N90	TON	100	100
44004250	PAVED SHOULDER REMOVAL	SQ YD	110	110
50102400	CONCRETE REMOVAL	CU YD	17.7	17.7
50300255	CONCRETE SUPERSTRUCTURE	CU YD	30.8	30.8
30300233	CONCRETE SUFERSTRUCTURE	CO 1D	30.0	30.0
50606701	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION1	L SUM	1	1
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4860	4860
50800515	BAR SPLICERS	EACH	48	48
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	635	635
60260100	INLETS TO BE ADJUSTED	EACH	2	2

REV. - MS

USER NAME = manntm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/2/2019	DATE -	REVISED -

	SUMMARY OF QUANTITIES								SECTION	COUNTY	TOTAL	SHEET NO.
								674	30-1BR-2	ST. CLAIR	30	3
								J		CONTRACT	NO. 70	6N38
SCALE: NONE	SHEET	1	OF	4	SHEETS	STA.	TO STA.		ILLINOIS	FED. AID PROJECT		

CONSTR. CODE 80 FED/20 STATE URBAN

CODE					TOTAL	BRIDGE 0047
NO.		ITEM		UNIT	QUANTITY	082-0036
63100089	TRAFFIC BARRIER TER	MINAL, TYPE 6B		EACH	1	1
67000400	ENGINEER'S FIELD OF	FICE, TYPE A		CAL MO	4	4
67100100	MOBILIZATION			L SUM	1	1
70100405	TRAFFIC CONTROL AND	PROTECTION, STANDAR	D 701321	EACH	1	1
70100500	TRAFFIC CONTROL AND	PROTECTION, STANDAR	D 701326	L SUM	1	1
70106500	TEMPORARY BRIDGE TR	AFFIC SIGNALS		EACH	1	1
70106700	TEMPORARY RUMBLE ST	RIPS		EACH	6	6
70107004	PAVEMENT MARKING BL	ACKOUT TAPE, 4"		FOOT	3234	3234
70107025	CHANGEABLE MESSAGE	SIGN				
				CAL DA	108	108
70300100	SHORT TERM PAVEMENT			FOOT	81	81
70300100	SHORT TERM PAVEMENT	MARKING				
		MARKING MARKING REMOVAL		FOOT	81	81
70300150	SHORT TERM PAVEMENT	MARKING REMOVAL MARKING - LINE 4"		FOOT SQ FT	81	1106

USER NAME = manntm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 12/2/2019	DATE -	REVISED -

		SUMMAF	RY OF O	UANTITIE	<u>s</u>	F.A.P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						674	30-1BR-2	ST. CLAIR	30	4
								CONTRACT	NO. 70	6N38
SCALE: NONE	SHEET 2	OF 4	SHEETS	STA.	TO STA.		ILLINOIS FEE	. AID PROJECT		

CONSTR. CODE 80 FED/20 STATE

URBAN

				BR I DGE
CODE			TOTAL	0047
NO.	ITEM	UNIT	QUANT I TY	082-003
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE4"	FOOT	3234	3234
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	10	10
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	4	4
78200010	BARRIER WALL REFLECTORS, TYPE B	EACH	8	8
78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	8	8
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10	10
X1200030	FILLING INLETS, TEMPORARY	EACH	2	2
X5870015	BRIDGE DECK CONCRETE SEALER	SQ FT	1770	1770
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	1079	1079
X7200200	WIDE LOAD SIGNING	L SUM	1	1
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	2650	2650
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUESNO. 1	L SUM	1	1

* SPECIALTY ITEM

USER NAME = manntm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 12/2/2019	DATE -	REVISED -

		SUMMAF	Y OF O	UANTITIE	 :S	F.A.P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						674	30-1BR-2	ST. CLAIR	30	5
								CONTRACT	NO. 7	6N38
SCALE: NONE	SHEET 3	OF 4	SHEETS	STA.	TO STA.		ILLINOIS	FED. AID PROJECT		

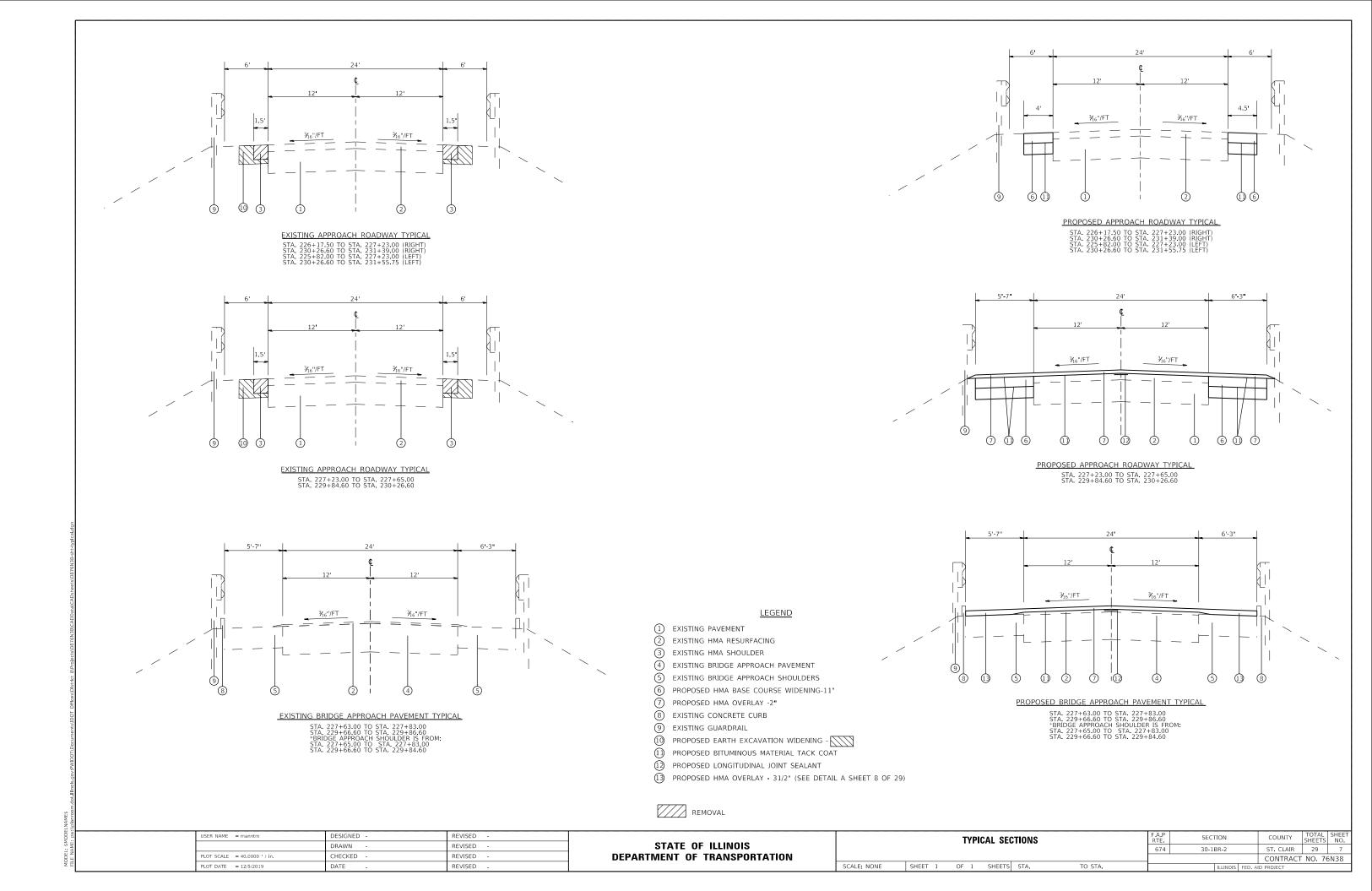
CONSTR. CODE 80 FED/20 STATE

				URBAN
			T	BR I DGE
CODE			TOTAL	0047
NO.	ITEM	UNIT	QUANTITY	
140.	TTEM	ONTT	QUANTITI	002-0030
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	20	20
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	100	100
Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	174	174

USER NAME = manntm	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 12/5/2019	DATE -	REVISED -	l

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

	SUMMARY OF QUANTITIES						SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						674	30-1BR-2	ST. CLAIR	30	6
								CONTRACT	NO. 7	6N38
SCALE: NONE	SHEET 4	OF 4	SHEETS	STA.	TO STA.		ILLINOIS FE	D. AID PROJECT		



RESURFACING SCHEDULE

			POLY HMA SURFACE COURSE,IL-9.5,	HMA SURFACE REM		BITUMINOUS MAT'L
			MIX"D", N90	BUTT JOINT	TEMPORARY RAMP	TACK COAT
STATION	ТО	STATION	TONS	SQ YDS	SQ YDS	POUNDS
227+23.00	TO	227+63.00	18.0	159.5	27.0	8.0
227+63.00	TO	227+83.00	9.5			4.0
227+83.00	ТО	229+66.60	*			*
229+66.60	TO	229+86.60	9.5			4.0
229+86.60	TO	230+26.60	18.0	159.5	27.0	8.0
		TOTAL	55.0	319.0	54.0	24.0

*SEE BRIDGE PLANS

WIDENING SCHEDULE

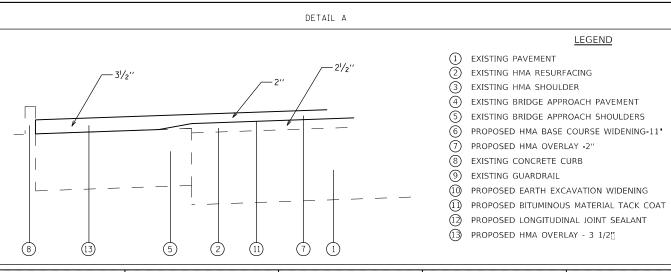
				PAVED SHOULDER	HMA BASE COURSE	EARTH EXCAVATION	*BITUMINOUS MAT'L	
				REMOVAL	WIDENING - 11"	WIDENING	TACK COAT	
LT/RT	STATION	то	STATION	SQ YD	SQ YD	CUY	POUNDS	REMARKS
RT	226+17.50	TO	227+23.00	18.0	53.0	12.0	2.5	
RT	227+23.00	TO	227+65.00	7.0	29.0	7.5	1.5	
RT	227+65.00	TO	227+83.00					BRIDGE APPROACH SHOULDER
RT	229+66.60	TO	229+84.60					BRIDGE APPROACH SHOULDER
RT	229+84.60	TO	230+26.60	7.0	29.0	7.5	1.5	
RT	230+26.60	TO	231+39.00	19.0	56.0	13.0	3.0	
LT	225+82.00	TO	227+23.00	23.5	63.0	14.0	3.0	
LT	227+23.00	TO	227+65.00	7.0	26.0	6.5	1.5	
LT	227+65.00	TO	227+83.00					BRIDGE APPROACH SHOULDER
LT	229+66.60	TO	229+84.60					BRIDGE APPROACH SHOULDER
LT	229+84.60	TO	230+26.60	7.0	26.0	6.5	1.5	
LT	230+26.60	TO	231+55.75	21.5	65.0	13.0	3.5	
			TOTAL	110.0	347.0	80.0	18.0	

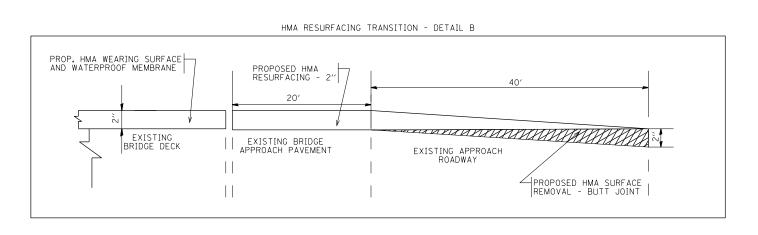
PAVEMENT MARKING SCHEDULE

			PAVEMENT MRKNG	SHORT TERM	SHORT TERM PVMNT	TEMP PAVEMENT	TEMP PAVEMENT	THERMOPLASTIC	RRPM	
			BLACKOUT TAPE, 4"	PAVEMENT MRKNG	MRKNG REMOVAL	MARKING - LINE 4"	MARKING REMOVAL	PVMNT MRKNG - LINE 4	REMOVAL	RRPM
STATION	TO	STATION	FOOT	FOOT	SQ FT	FOOT	SQ FT	FOOT	EACH	EACH
224+53.00	TO	225+17.25	257.0	6.5	88.0	257.0	86.0	257.0	1.0	1.0
225+17.25	TO	230+00.00	1931.0	48.3	660.0	1931.0	644.0	1931.0	6.0	6.0
230+00.00	TO	232+61.50	1046.0	26.3	358.0	1046.0	349.0	1046.0	3.0	3.0
		TOTAL	3234.0	81.0	1106.0	3234.0	1079.0	3234.0	10.0	10.0

GUARDRAIL AND BARRIER MARKER SCHEDULE

			GUARDRAIL	BARRIER	BARRIER
			REFLECTORS, TY A	REFLECTORS, TY B	REFLECTORS, TY C
STATION	TO	STATION	EACH	EACH	EACH
227+23.00	TO	227+63.00	2		
227+63.00	TO	227+83.00			
227+83.00	TO	229+66.60		8	8
229+66.60	TO	229+86.60			
229+86.60	TO	230+26.60	2		
		TOTAL	4	8	8





DEF

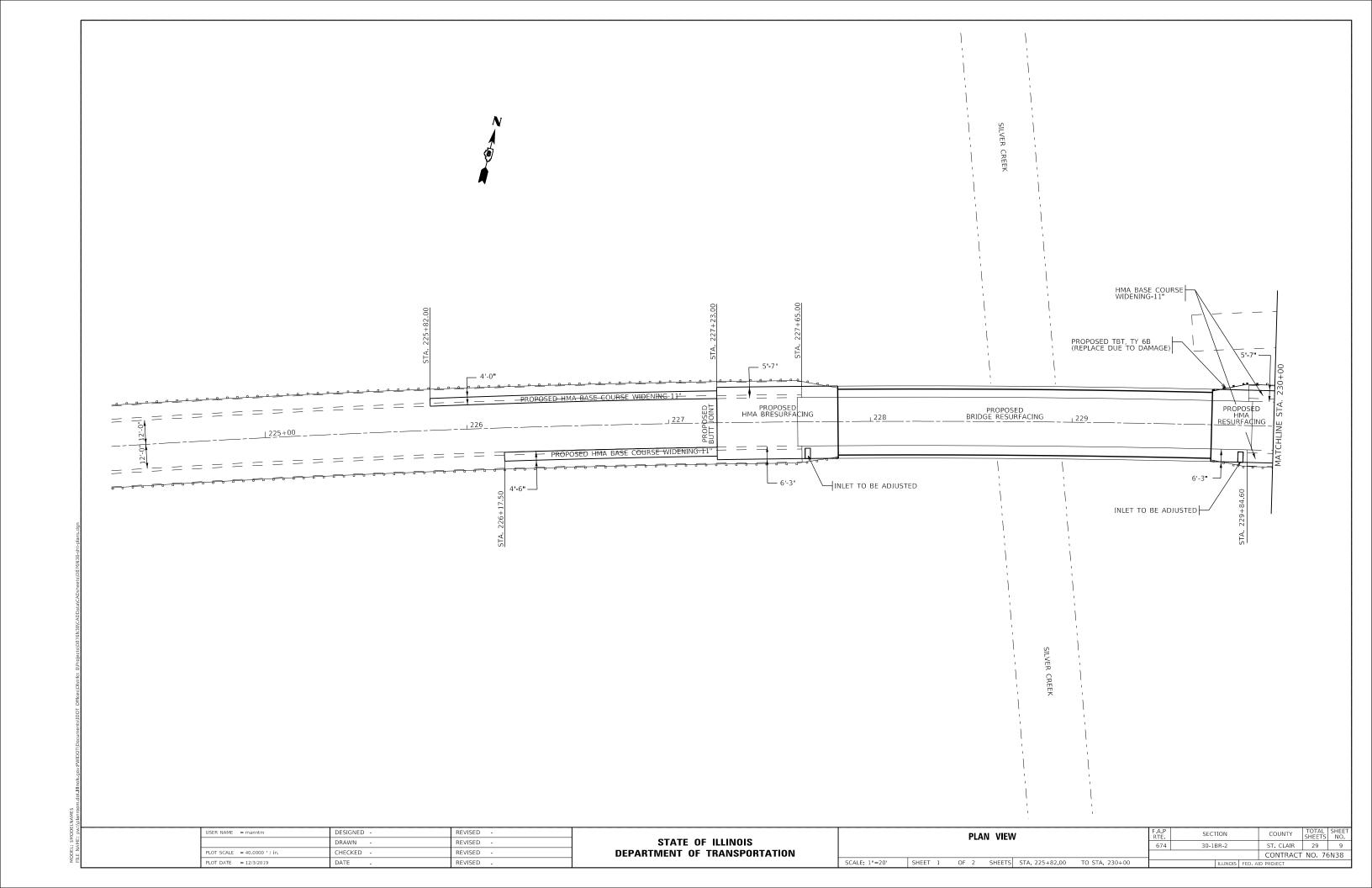
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

SHEET 1 OF 1 SHEETS STA. TO STA.

SCALE: NA

MODEL: \$MODELNAME\$



18 PCC PAVT (ABANDONED) 230 POPOSED HMA RESURFACING RESURFACING L 6'-3" COUNTY TOTAL SHEET NO.

ST. CLAIR 29 10

CONTRACT NO. 76N38 JSER NAME = manntm DESIGNED -REVISED -SECTION PLAN VIEW STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DRAWN -REVISED -30-1BR-2

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. 230+00

TO STA. 231+55.75

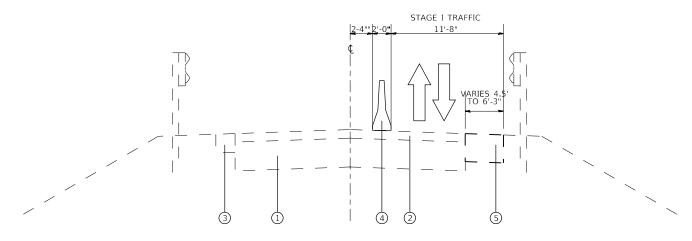
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PLOT DATE = 12/3/2019

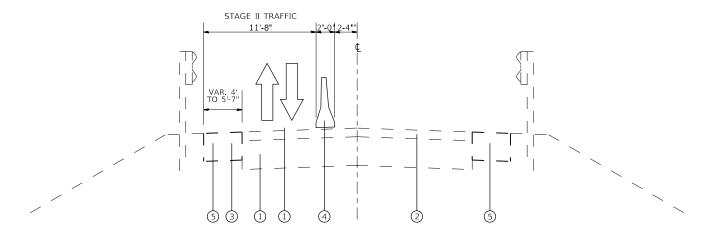
CHECKED -

DATE

REVISED -



STAGE I TRAFFIC AND WIDENING



STAGE II TRAFFIC AND WIDENING

<u>LEGEND</u>

- (1) EXISTING PAVEMENT
- 2 EXISTING HMA RESURFACING
- 3 EXISTING HMA SHOULDER
- 4 TEMPORARY CONCRETE BARRIER
- PROPOSED STAGE CONSTRUCTION WIDENING 11"

SUGGESTED SEQUENCE OF CONSTRUCTION

- PRESTAGE CONSTRUCTION:

 1. PRESTAGE CONSTRUCTION SHALL CONSIST OF: REMOVAL OF THE EXISTING HMA SHOULDER FOR CONSTRUCTION OF THE PROPOSED WIDENING ON THE SOUTH SIDE OF THE PAVEMENT FOR STAGE I TRAFFIC.

 2. TRAFFIC CONTROL FOR THIS WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF TC&P STD 701326.

- STAGE I CONSTRUCTION:

 1. STAGE I CONSTRUCTION SHALL CONSIST OF: CLOSING THE WESTBOUND LANE OF US 50 AND SWITCHING BOTH LANES OF TRAFFIC TO THE EASTBOUND LANE; STAGE I BRIDGE REPAIRS AND HMA OVERLAY; AND REMOVAL OF THE EXISTING HMA SHOULDERS FOR CONSTRUCTION OF THE PROPOSED WIDENING ON THE NORTH SIDE OF THE PAVEMENT FOR STAGE II TRAFFIC. THIS WORK WILL BE DONE TO THE LIMITS SHOWN IN THE PLANS.

 2. TRAFFIC CONTROL FOR THIS WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF TC&P STD 701321.

- STAGE II CONSTRUCTION
 1. STAGE II CONSTRUCTION SHALL CONSIST OF: CLOSING THE EASTBOUND LANE OF US 50 AND SWITCHING BOTH LANES OF TRAFFIC TO THE WESTBOUND LANES AND STAGE II BRIDGE REPAIRS AND HMA OVERLAY. THIS WORK WILL BE DONE TO THE LIMITS SHOWN IN THE PLANS.

 2. TRAFFIC CONTROL FOR THIS WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF TC&P STD 701321.

- NOTES:

 1. THE PROPOSED WIDENING SHALL CONSIST OF HMA BASE COURSE-11" AND SHALL INCLUDE GRADING AGAINST WIDENING TO DRAIN.

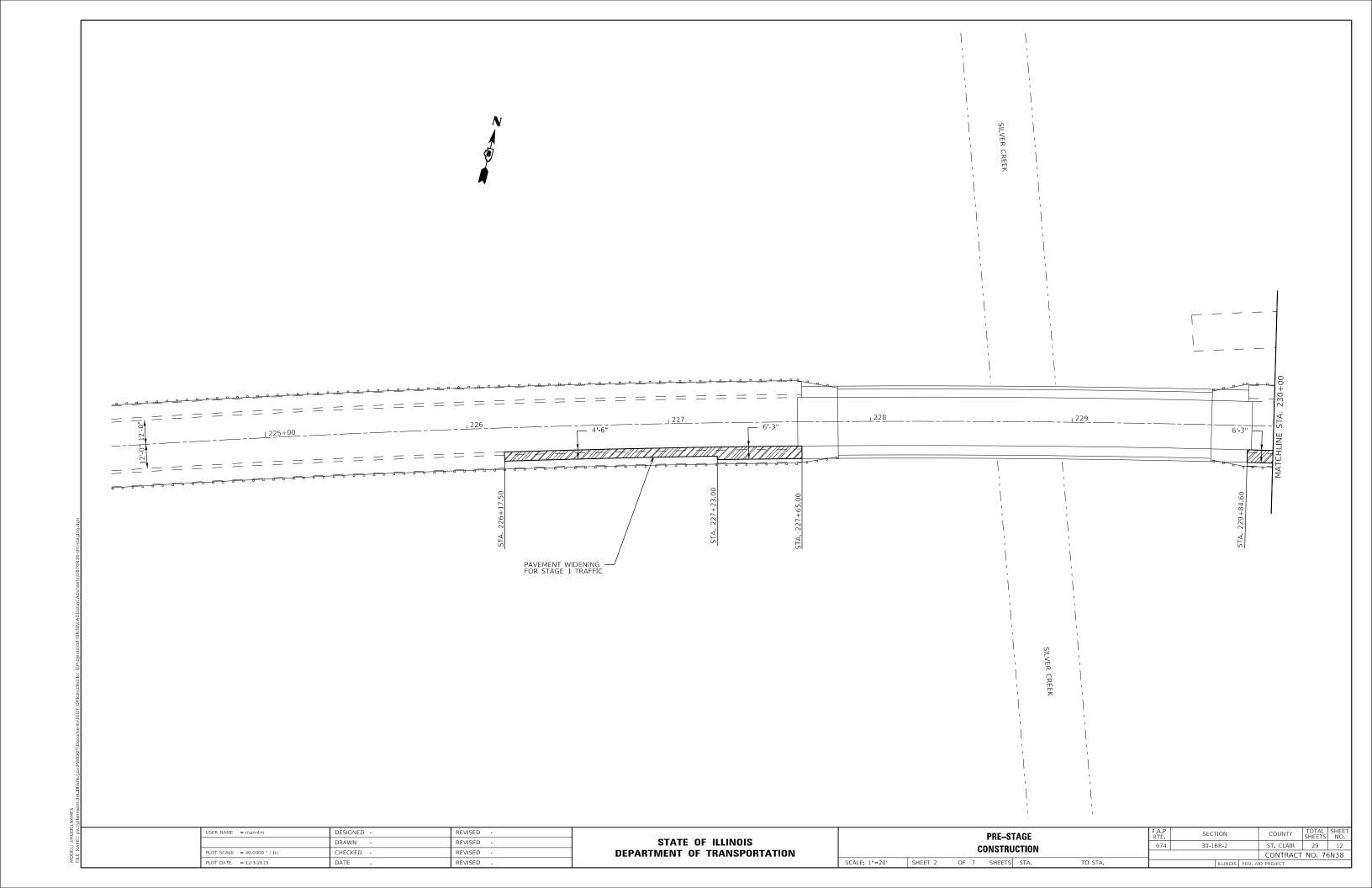
 2. ALL CONFLICTING PAVEMENT MARKING SHALL BE COVERED PRIOR TO PLACING PAVEMENT MARKING NECESSARY FOR STAGE CONSTRUCTION.

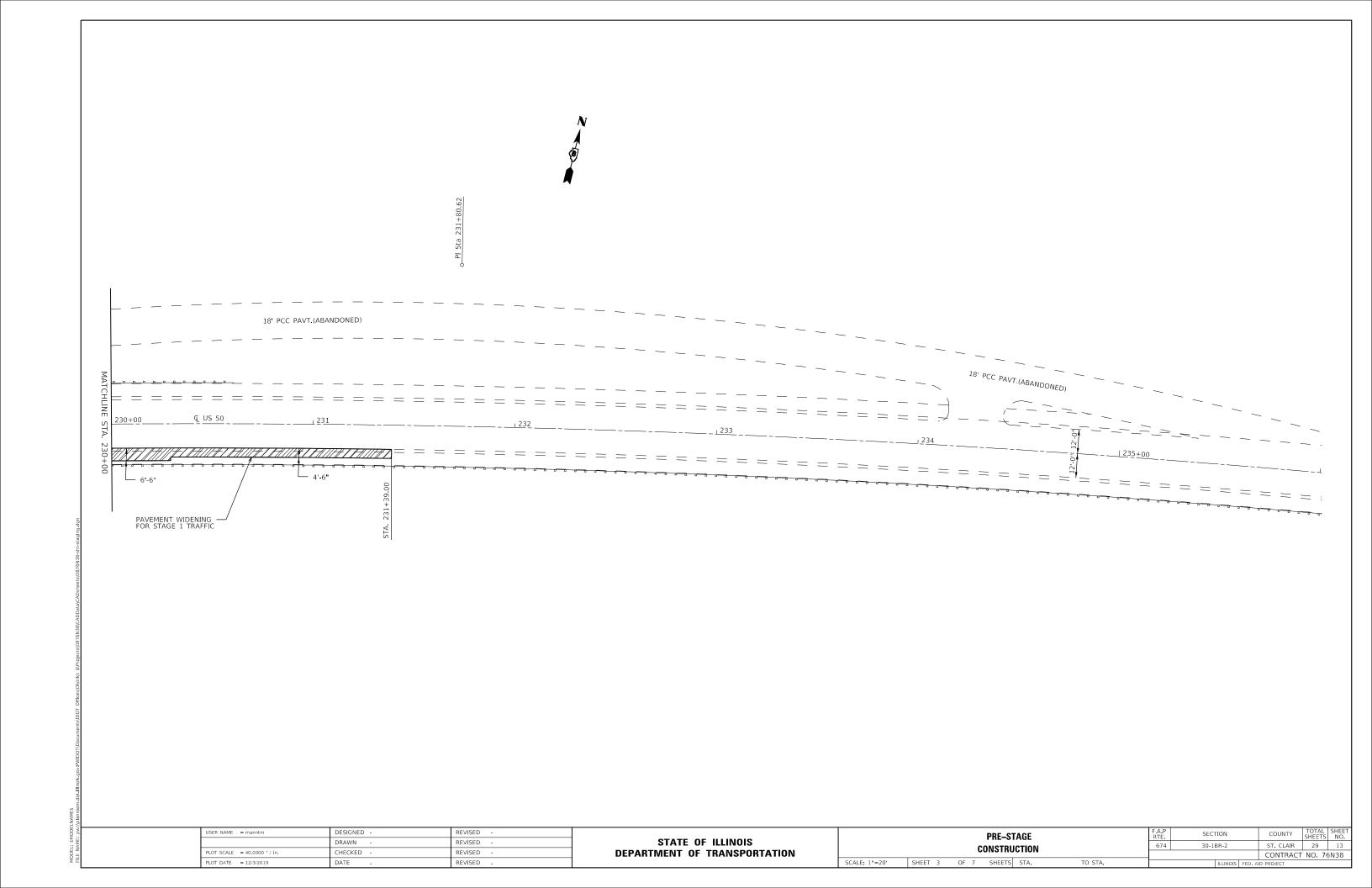
 3. CHANGEABLE MESSAGE SIGNS SHALL BE PLACED 2 WEEKS PRIOR TO CONSTRUCTION AND AT THE DIRECTION OF THE ENGINEER.

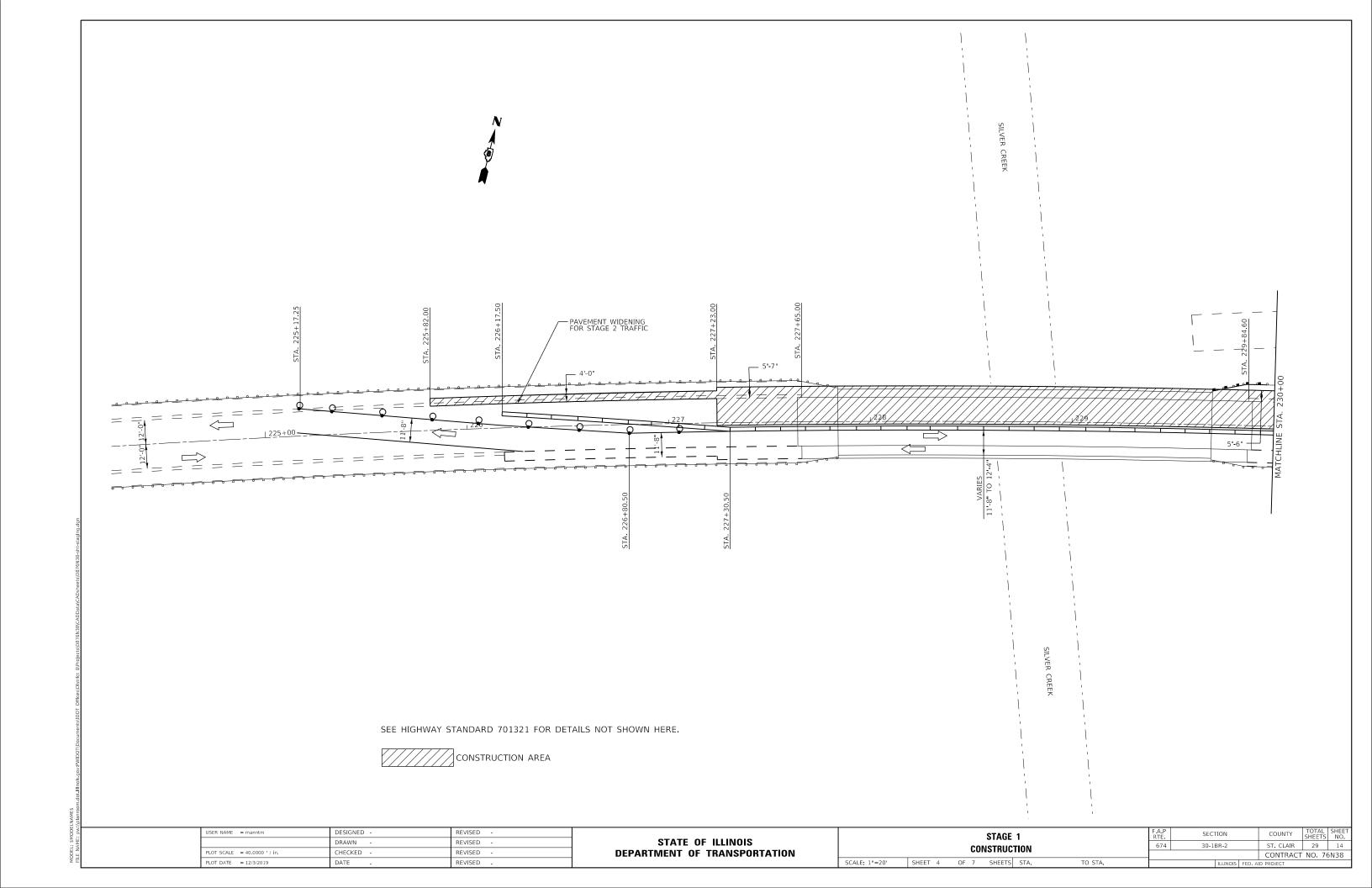
DESIGNED -JSER NAME = manntm REVISED DRAWN REVISED LOT SCALE = 40.0000 ' / in. HECKED REVISED PLOT DATE = 11/27/2019 DATE REVISED

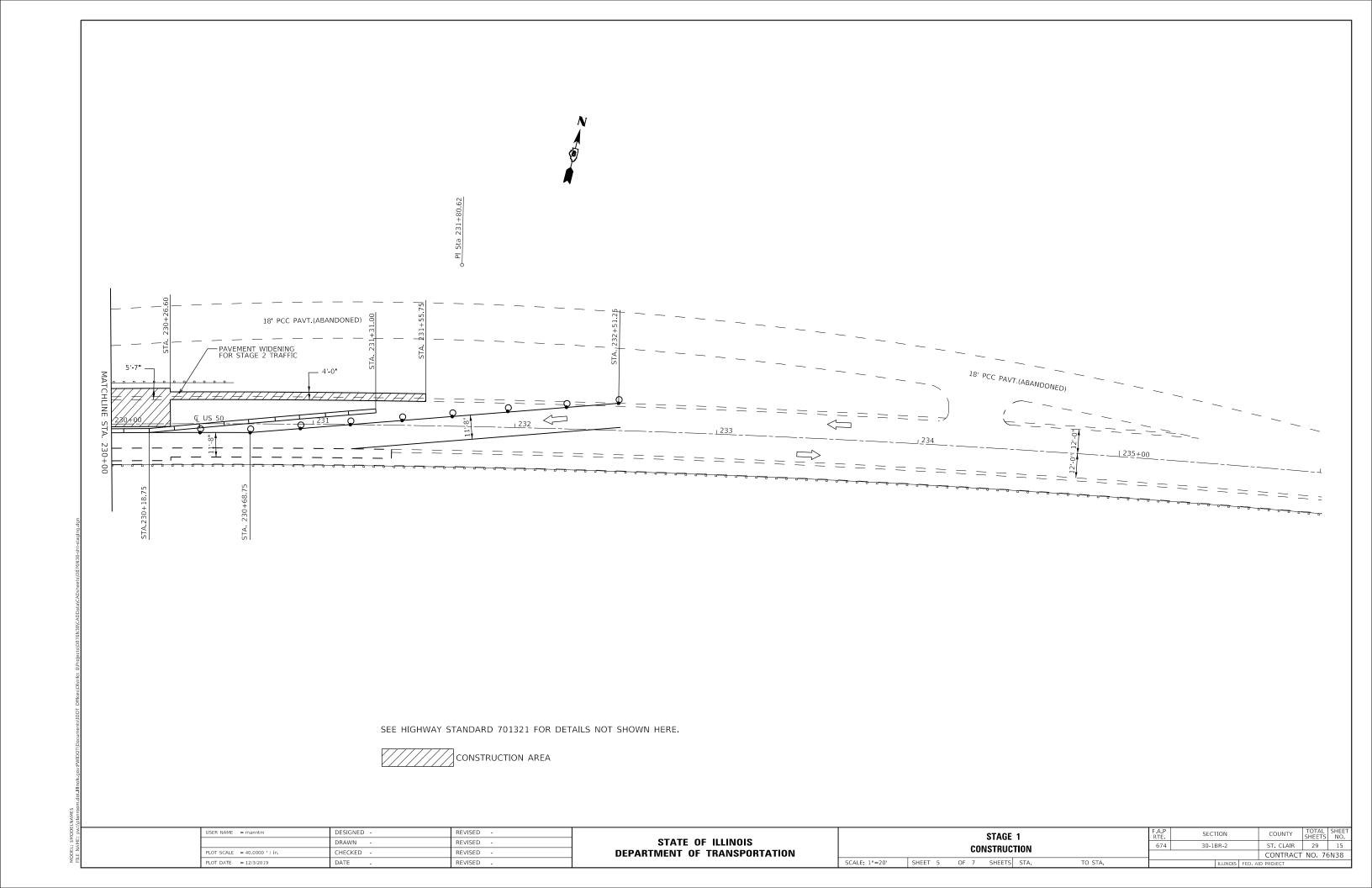
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

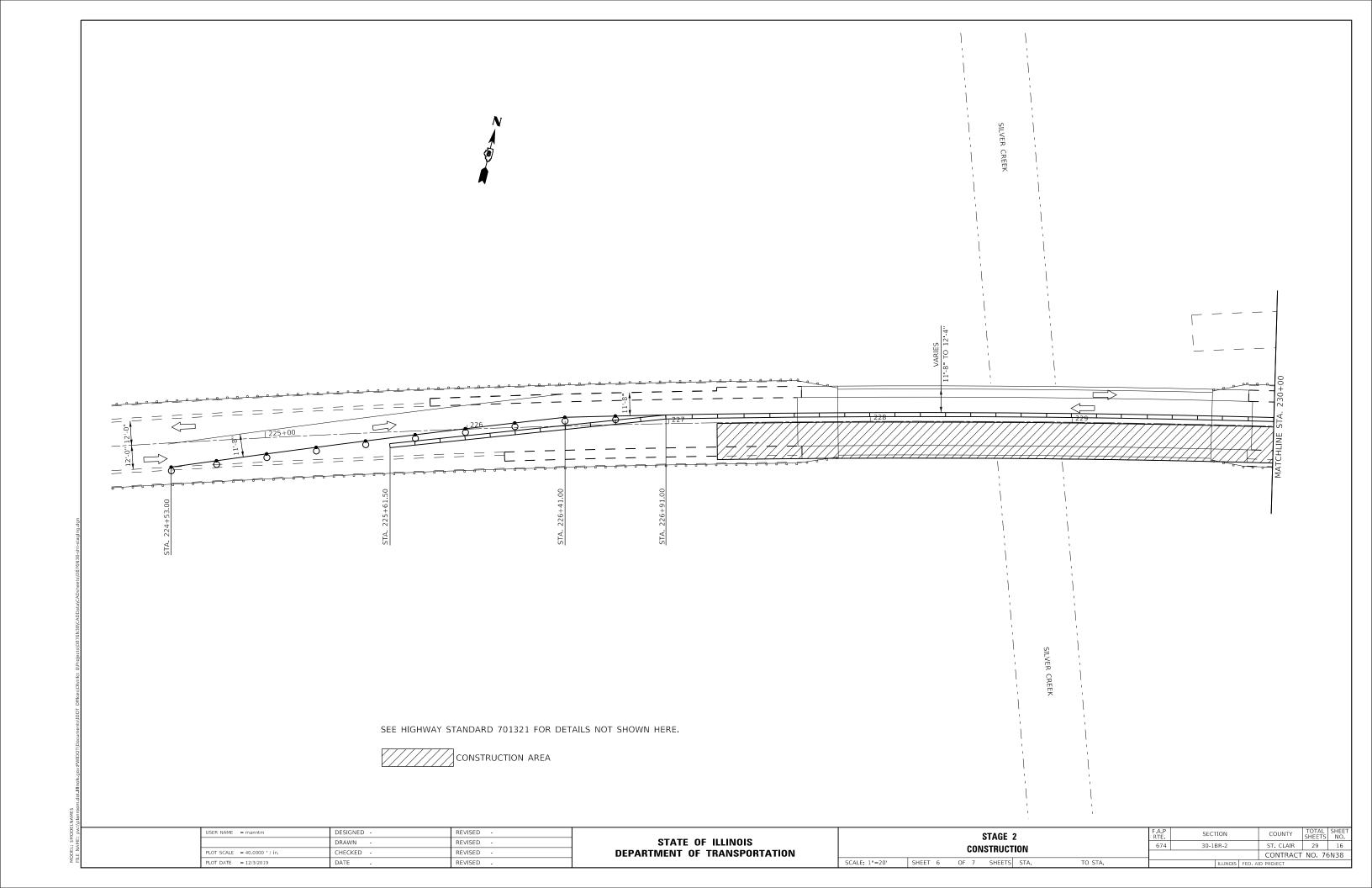
SECTION COUNTY STAGE CONSTRUCTION 674 30-1BR-2 ST. CLAIR 29 11 CONTRACT NO. 76N38 SCALE: 1"=20' SHEET 1 OF 7 SHEETS STA. TO STA.

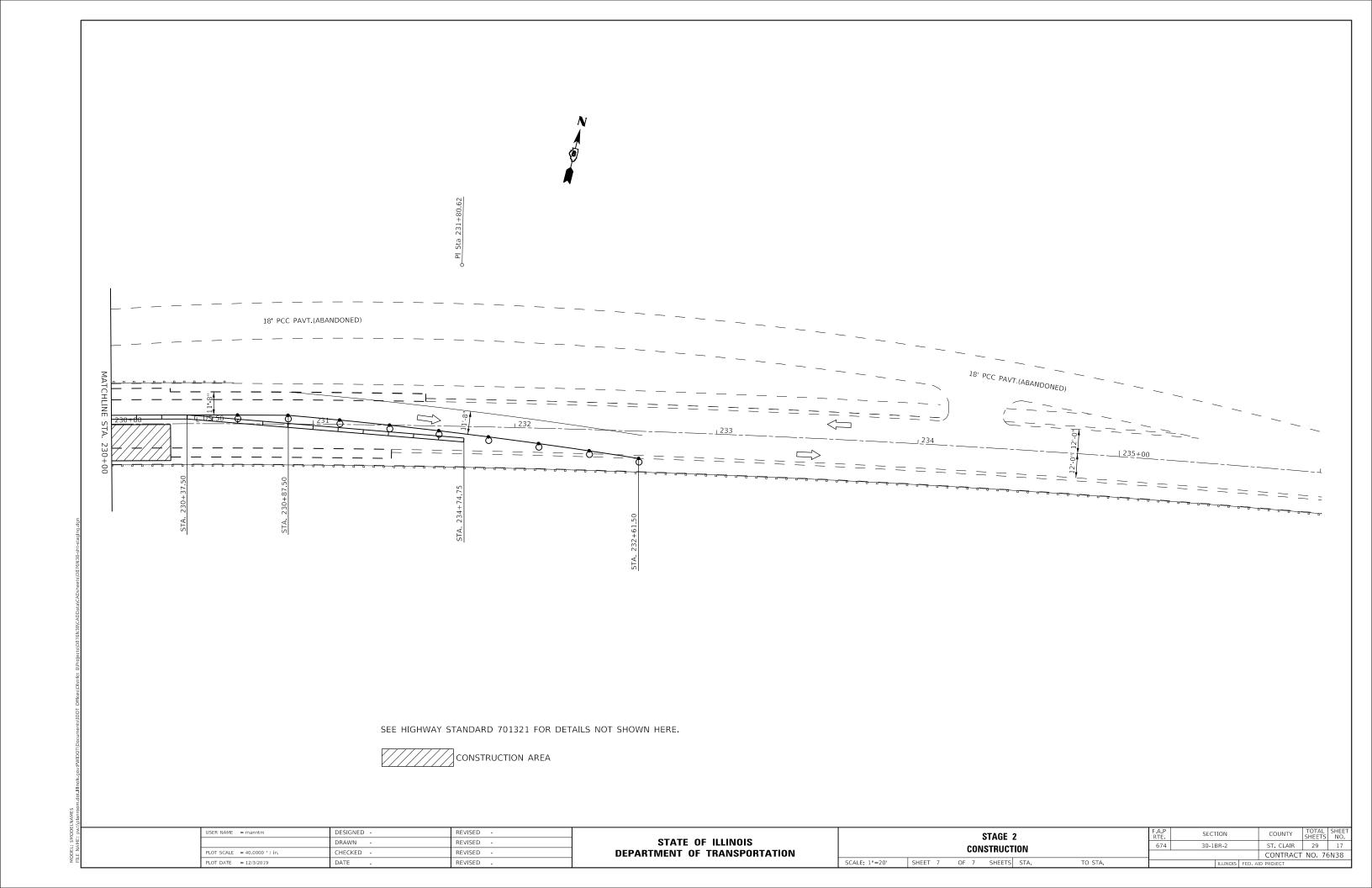












- 1. ALL SIGNS REQUIRED WILL BE SUPPLIED TO THE CONTRACTOR BY I.D.O.T.
- 2. THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT SIGNS AT THE LOCATIONS SHOWN ON THIS SHEET, AS DIRECTED BY THE R.E./R.T. THE POSTS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
- 3. THE CONTRACTOR SHALL GIVE ILLINOIS DEPARTMENT OF TRANSPORTATION, BUREAU OF OPERATIONS TWO WEEKS NOTICE FOR SIGNS. THE CONTRACTOR SHALL PICK UP THE SIGNS AT THE T.M. BUILDING IN FAIRVIEW HEIGHTS, AND RETURN THEM UPON COMPLETION OF THE CONTRACT. CONTACT JEAN SLAPE, AT (618) 394-2189.
- 4. THE ABOVE NOTED WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE, LUMP SUM, FOR WIDE LOAD SIGNING AND NO OTHER COMPENSATION WILL BE ALLOWED.

[EAST] (3)

(2)

5. SIGN SPACING WILL BE 400' OR TO FIT FIELD CONDITIONS.

SIGNS REQUIRED

MAX WIDTH

10FT 2IN 1 MILES AHEAD

MAX WIDTH 10FT 2IN

1 ½ MILES AHEAD

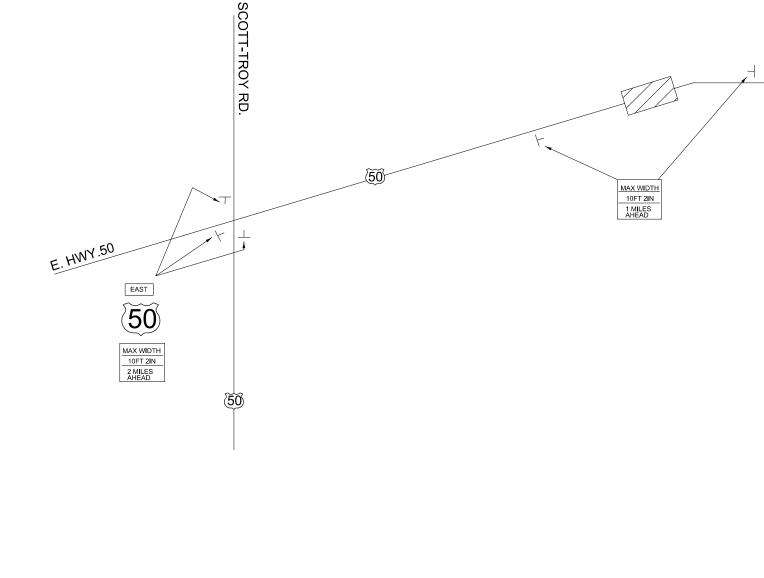
MAX WIDTH

10FT 2IN

2 MILES
AHEAD

(2)

6. THE HEIGHT TO THE BOTTOM OF THE LOWEST SIGN SHALL NOT BE LESS THAN 6'.



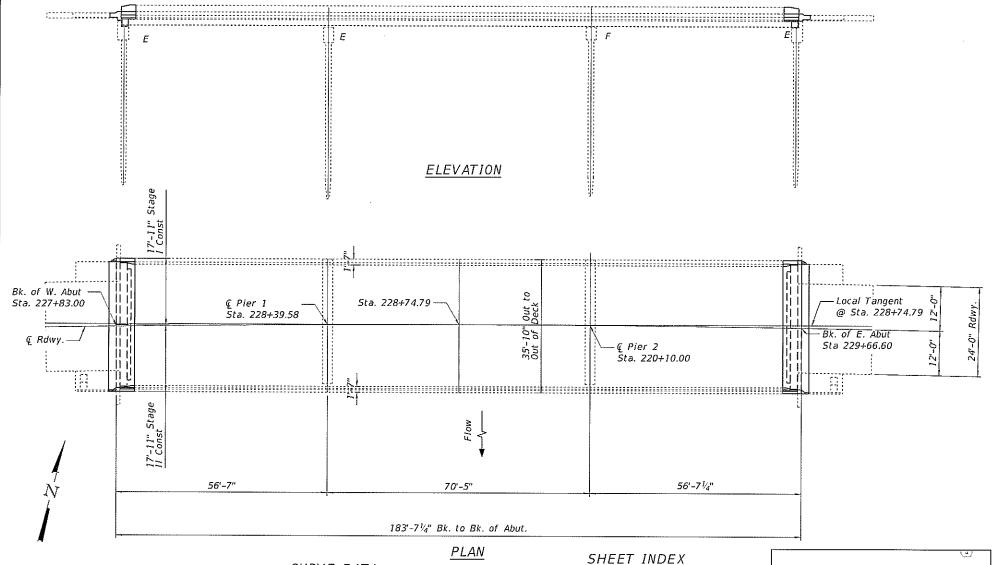
NOTE : NOT TO SCAL	NOT	Ε:	NOT	TO	SCAL
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MAX WIDTH 10FT 2IN

JSER NAME = manntm DESIGNED -REVISED SECTION WIDE LOAD STATE OF ILLINOIS DRAWN REVISED ST. CLAIR 29 18 674 30-1BR-2 SIGNING PLOT SCALE = 100.0000 ' / in. CHECKED REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 76N38 REVISED SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA. PLOT DATE = 12/3/2019 DATE

Existing Structure: 082-0036 was built in 1939 under contract HG768, SBI Route 12, Sec 30-1R-B. It is a 3 span continuous wide flange supported on pile bent abutments and piers. There was reconstruction in 1971. The superstructure was replaced in 1984 F.A.S. Route 1780.

The deck ends and approach ends shall be removed and replaced solid. The deck shall be patched, and overlayed with waterproofing membrane system and hot-mix asphalt.



CURVE DATA

 $\Delta = 18^{\circ}-04'-15''$

 $D = 0^{\circ}-54'-0''$

 $R = 6366.20^{\circ}$

CARL DURING WILLIAM STRUCTURAL ENGINEER

OF ILLIAM V23/2021

EXPINES W/30/2020

T = 1012.34L = 2007.87E = 80.01P.C. Sta. 221+68.85 P.I. Sta. = 231+81.19P.T. Sta. = 241+76.72 $S.E. = 0.0125 \, ft/ft$

LVC = 220'

EX. PROFILE GRADE (Along & of Rdwy)

- 1) General Plan and Elevation
- 2) Deck Section
- 3) Joint Removal 4) Joint Replacement
- 5) X-Sec (Curb & Appr Pvmt Rem)
- 6) X-Sec (Curb & Appr Pvmt Repl)
- 7) Joint Details
- 8) Parapet Sec, Offset & Waterproofing Staging
- 9) Diaphragms at Abuts
- 10) Temporary Concrete Barrier
- 11) Bar Splicers

DESIGN STRESSES FIELD UNITS

f'c = 4.000 psify = 60,000 psi (Reinforcement)

LOCATION SKETCH

.Go ale

Lebahor

(4)

MidAmerica St. Louis Airport (BLV)

-SN 082-0036

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding $lambda_4$ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Cleaning and Painting of the existing structural steel shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures". After removal of deck ends and end diaphragms, but prior to encasement of the steel beams, all beams, bearings, and other structural steel within 5 ft. (measured along the beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning (SSPC-SP10).

The designated areas cleaned per Near White Blast Cleaning shall be painted according to the requirements of paint system 1- OZ/E/U. The color of the final finish coat for all steel surfaces shall be Federal Color Standard 595a 20045.

SSPC QP1 and SSPC QP2 Certification is required for this Contract.

Existing reinforcement extending into removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged *during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Concrete Removal".

Areas of deck repairs shown are estimated. The engineer shall show actual locations of deck repairs on as-built plans.

The bridge HMA is calculated based on 1½" excluding 3/4" for WMS.

The concrete at joints shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with "Concrete Superstructure".

Bridge deck concrete sealer shall be placed on top/inside faces of (parapets & curbs) (full length) and on top of new concrete at joints.

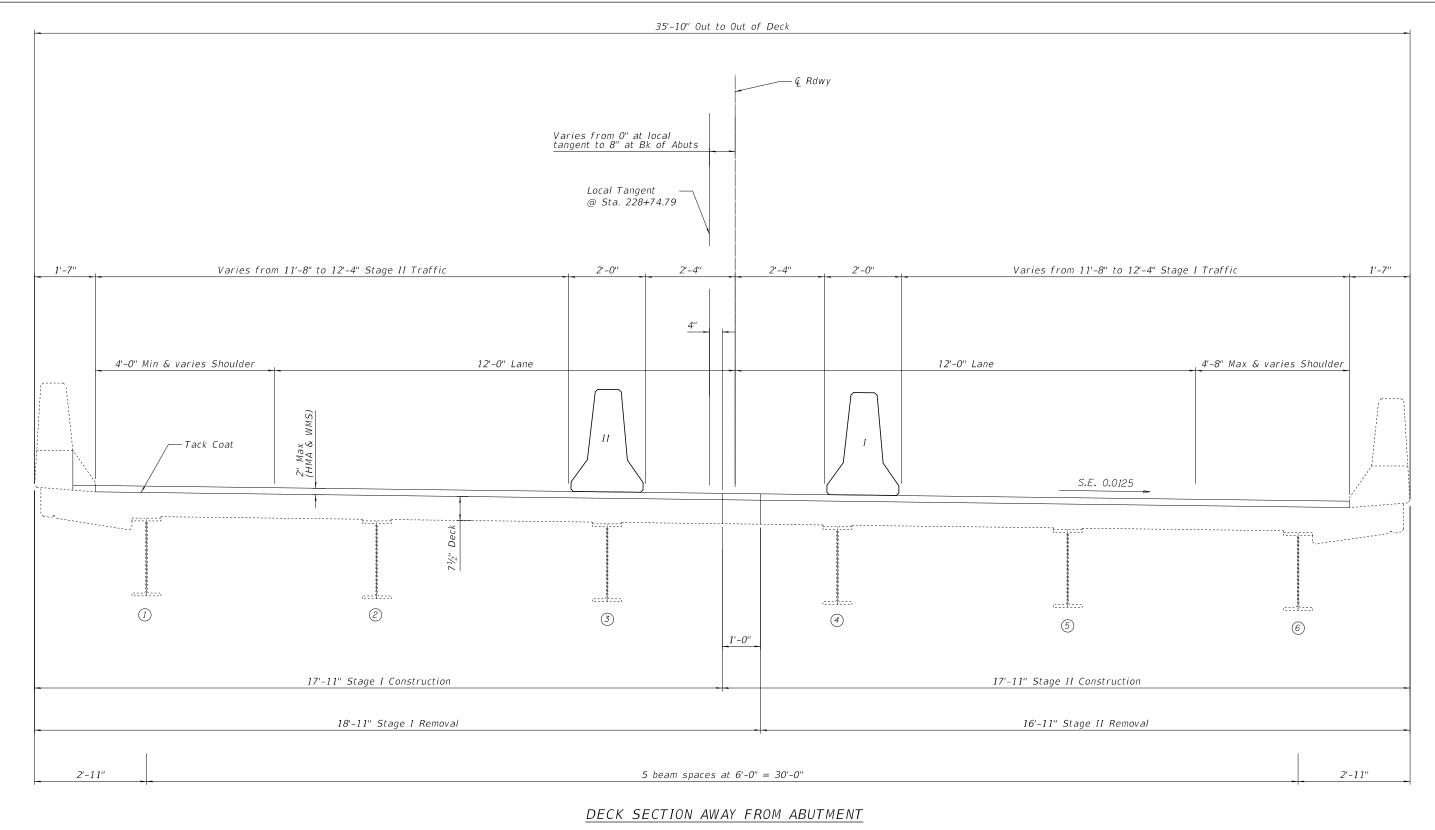
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Polymerized HMA Surface Course, Mix "D" N90	Ton	45
Concrete Removal	Cu. Yd.	17.7
Oncrete Superstructure	Cu. Yd.	30.8
Reinforcement Bars, Epoxy Coated	Pound	4860
Bar Splicers	Each	48
Vaterproofing Membrane System	Sq. Yd.	635
Deck Slab Repair (Partial)	Sq. Yd.	100
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	20
Bridge Deck Concrete Sealer	Sq. Ft.	1770
ongitudinal Joint Sealant	Foot	174
Bituminous Material (Tack Coat)	Pound	143
tructural Steel Removal	Pound	2650
Cleaning and Painting Structural Steel,	L. Sum	1
ocation No. 1	_	
Containment & Disposal of Lead Paint	L. Sum	1
Cleaning Residues No. 1		

DESIGNED - Anthony Y, Vinson REVISED -DRAWN - Anthony Y. Vinson REVISED -PLOT SCALE # 0:2-0000 ':" / In CHECKED - TSB REVISED PLOT DATE = 1/3/2020 DATE REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

GENERAL PLAN & ELEVATION (US 50 over Silver Creek) SECTION COUNTY 674 ST. CLAIR 29 19 30-188-2 SN 082-0036 CONTRACT NO. 76N38 SCALE: SHEET 1 OF 11 SHEETS STA. TO STA. ILUNOIS FED. AID PROJECT

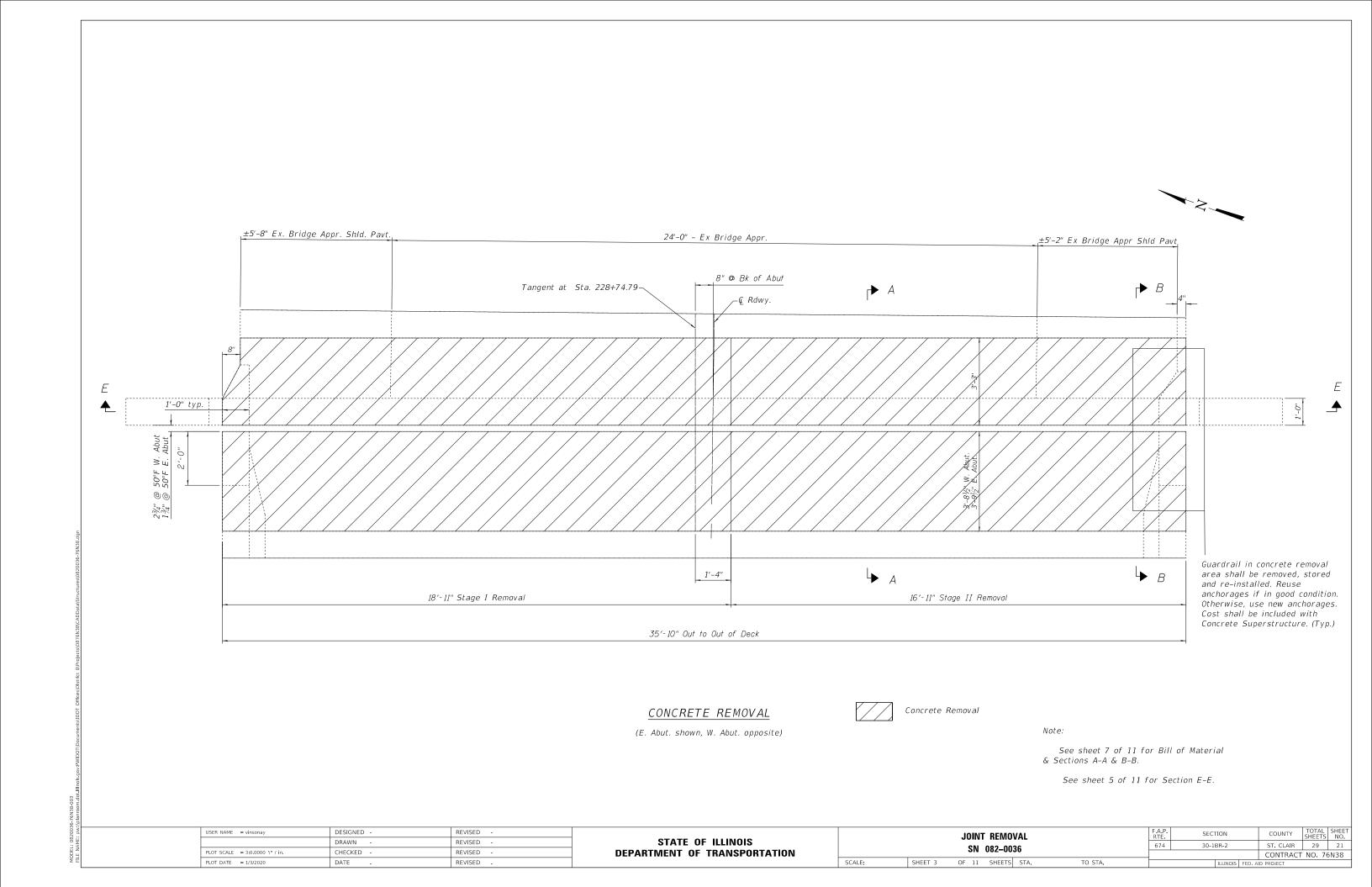


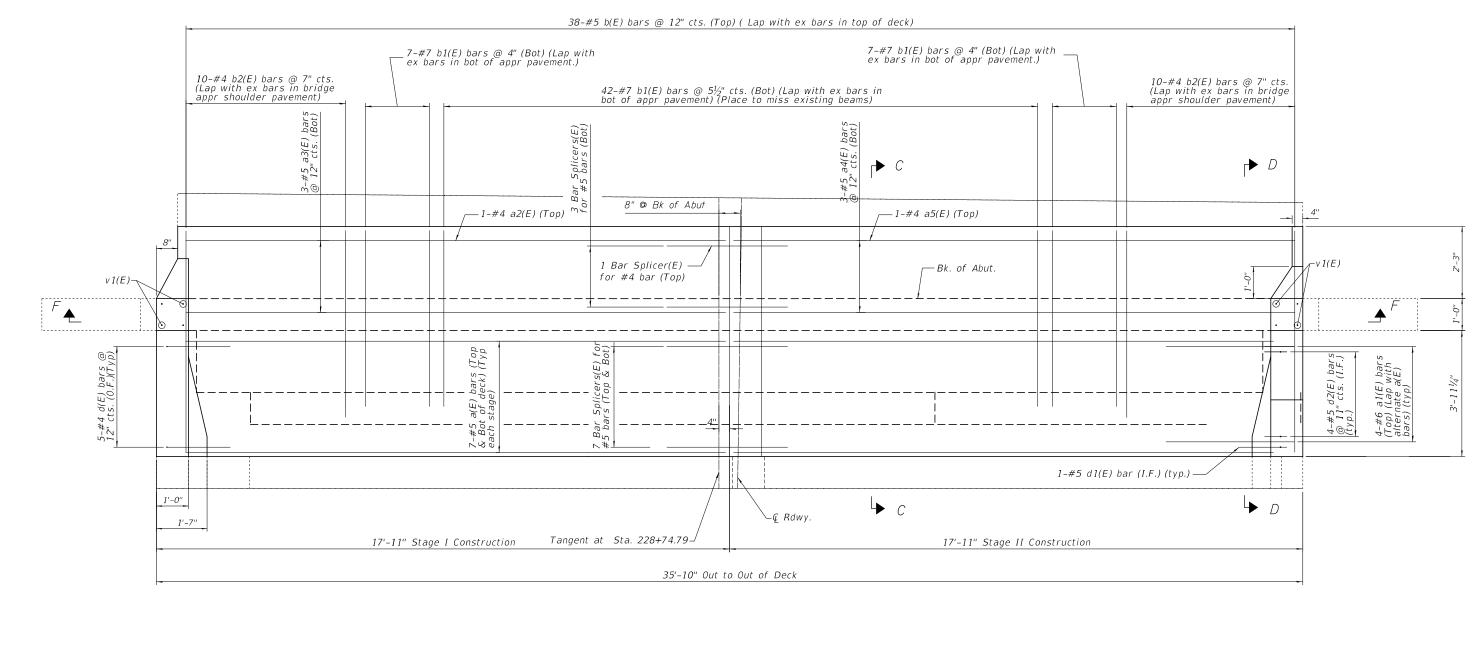
(Looking East)

Note:

A tack coat, per Section 406, with a residual asphalt rate of 0.025 lb/ sq ft should be placed on top of the $\frac{1}{2}$ " thick Asphalt Sand Seal Protection Layer of the Waterproofing Membrane System, before the HMA surfacing is placed.

USER NAME = vinsonay	DESIGNED - AYV	REVISED -			DECK CROSS SECTION		F.A.P. RTF	SECTION	COUNTY	TOTAL SHEETS	SHEET
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PLOT SCALE = 2:6.0000 ''" / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	SN 082-0036				CONTRACT	NO. 76	N38	
PLOT DATE = 1/3/2020	DATE -	REVISED -		SCALE:	SHEET 2 OF 11 SHEETS STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		





CONCRETE REPLACEMENT

(E. Abut. shown, W. Abut. opposite)

Note:

See sheet 7 of 11 for Bill of Material & Sections C-C & D-D.

See sheet 6 of 11 for Section F-F.

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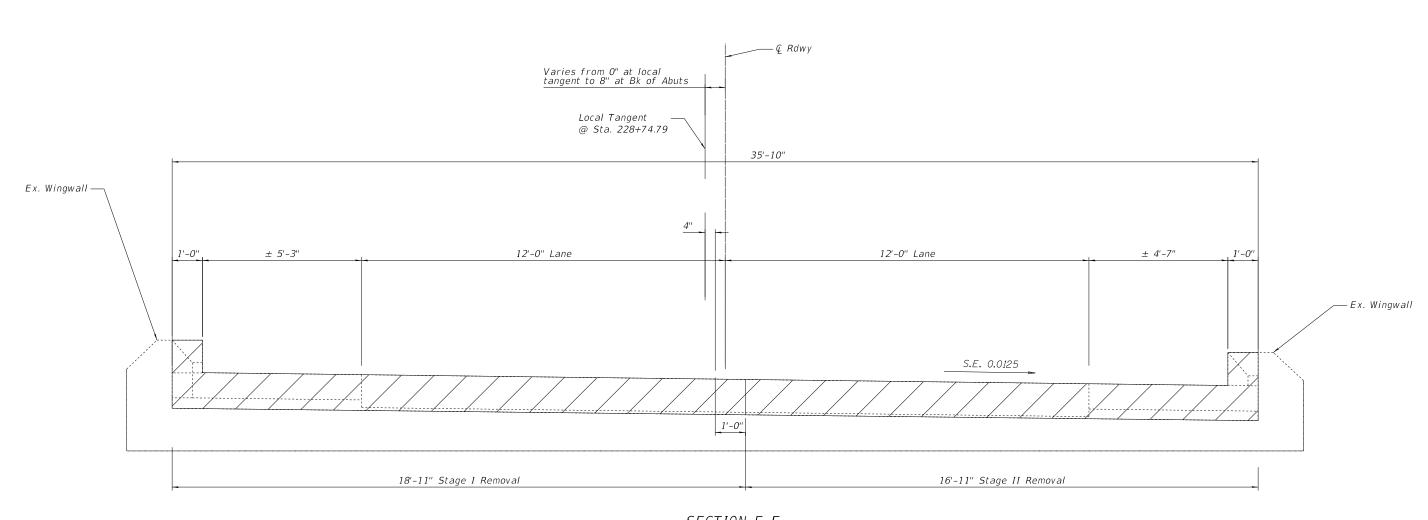
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PLOT DATE = 1/3/2020	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

	JOINT REPLACEMENT SN 082-0036						SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
							30-1BR-2	ST. CLAIR	29	22
		JIV	002-00	,,,				CONTRACT	NO. 76	5N38
	SHEET 4	OF 11	SHEETS	STA.	TO STA.		ILLINOIS FI	ED. AID PROJECT		

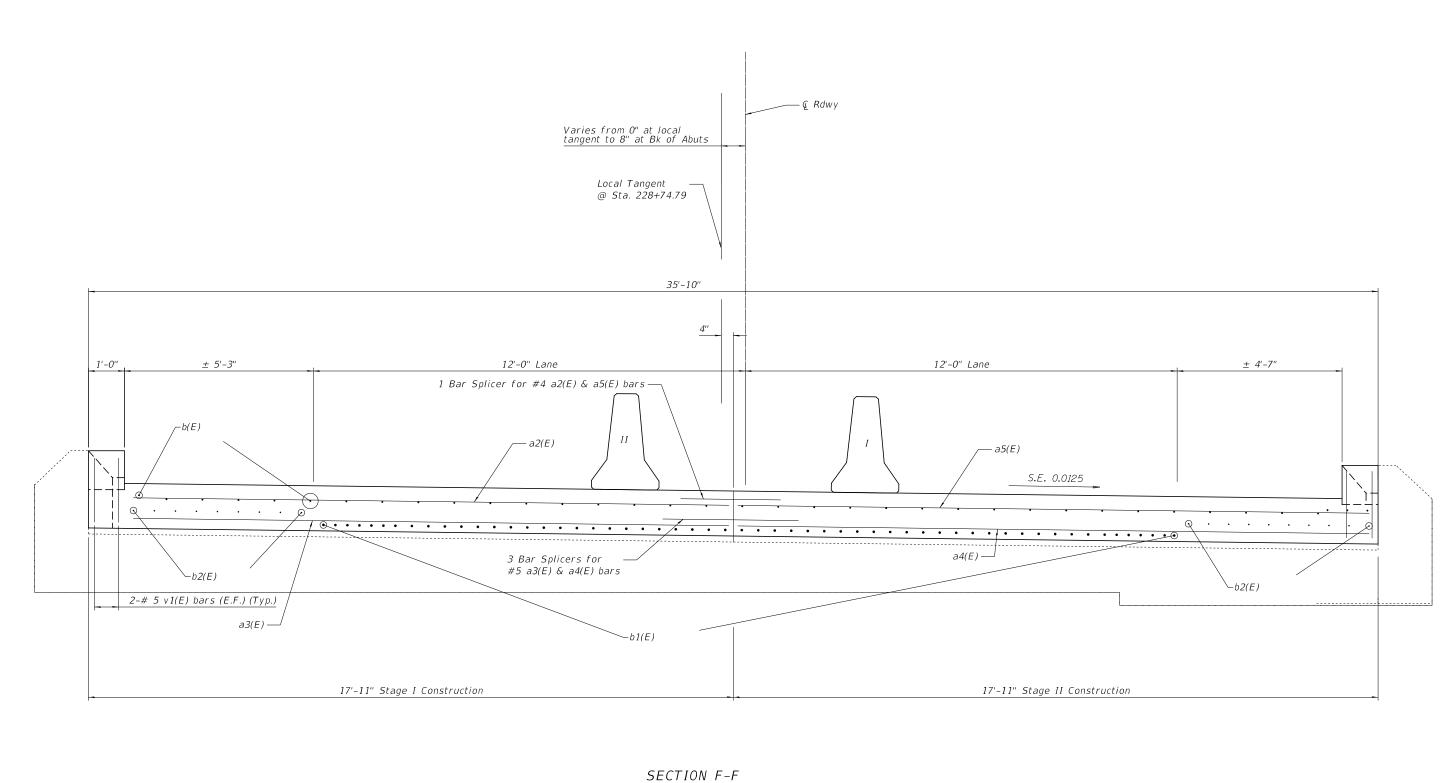
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SECTION E-E

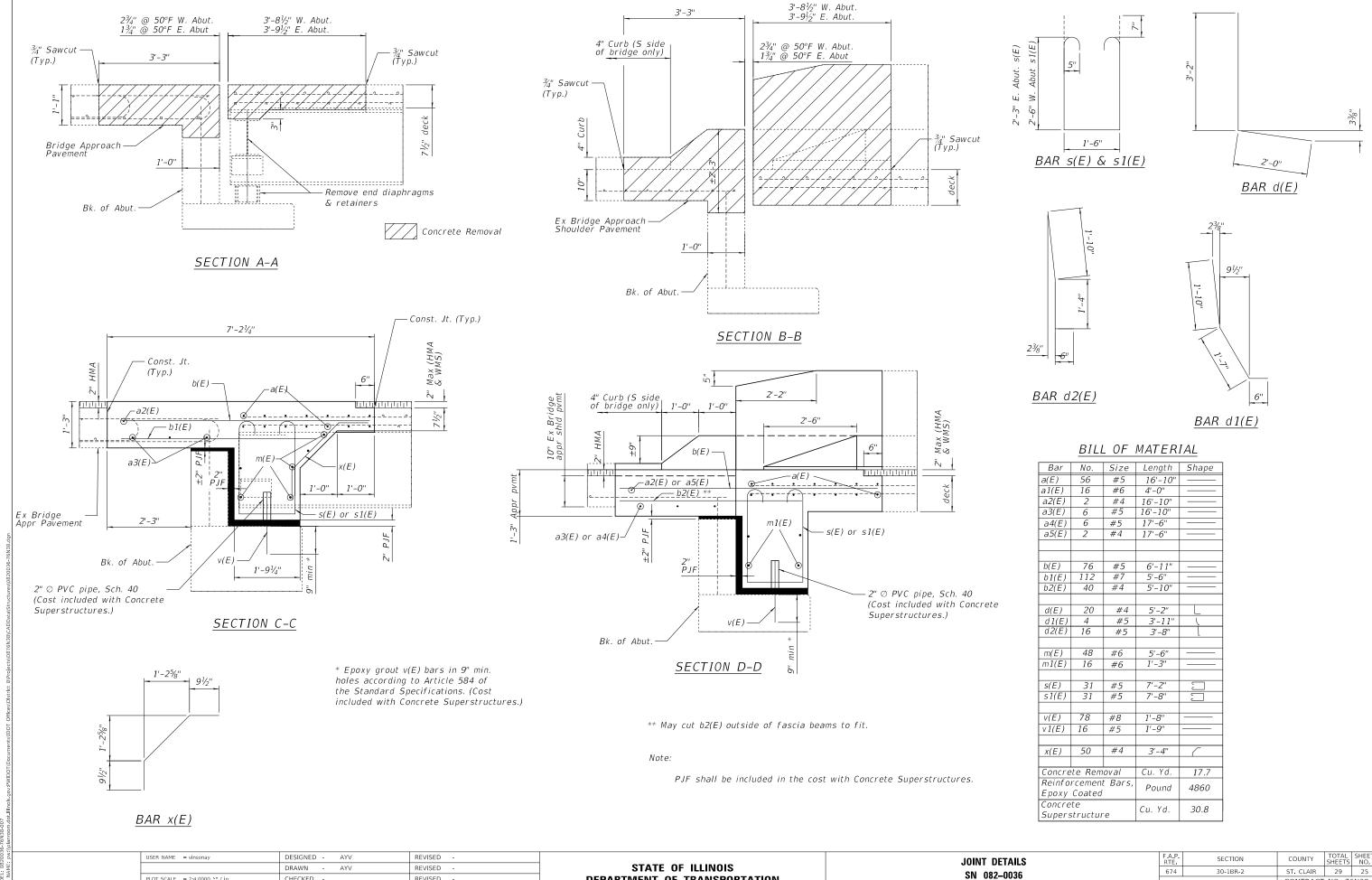
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PLOT DATE = 11/27/2019	DATE -	REVISED -	ı

	CROSS SECTION	l (Curb, Ap	proach	& Shou	der Approach	Pavement Removal)	F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
			-	082-00		·	674	30-1BR-2		ST. CLAIR	29	23
314 002-0030									CONTRACT	NO. 76	5N38	
ı	SCALE:	SHEET 5	OF 11	SHEETS	STA.	TO STA.		ILLINOIS	FED. AII	D PROJECT		



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	DRAWN - AYV	REVISED -	
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PLOT DATE = 11/27/2019	DATE -	REVISED -	

	CROSS SECTION (Curb, Approach & Shoulder Appr. Pavement Replacement)						F.A.P. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.	
ı	SN 082-0036					674	30-1BR-2	ST. CLAIR	29	24		
ı			J	1 002-00	JU					CONTRACT	NO. 76	5N38
ı	SCALE:	SHEET 6	OF 1	1 SHEETS	STA.	TO STA.		ILLING	OIS FED. A	ID PROJECT		



DEPARTMENT OF TRANSPORTATION

SCALE:

SHEET 7

OF 11 SHEETS STA.

TO STA.

CONTRACT NO. 76N38

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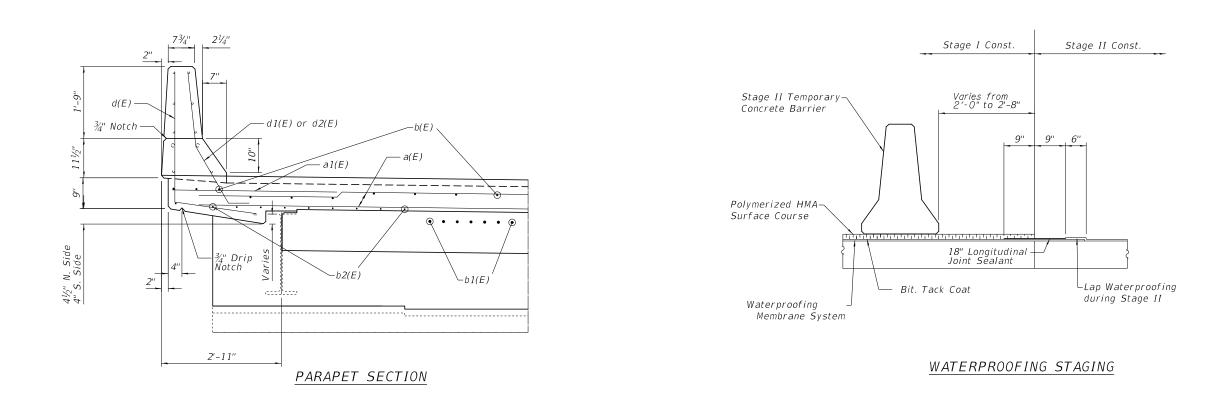
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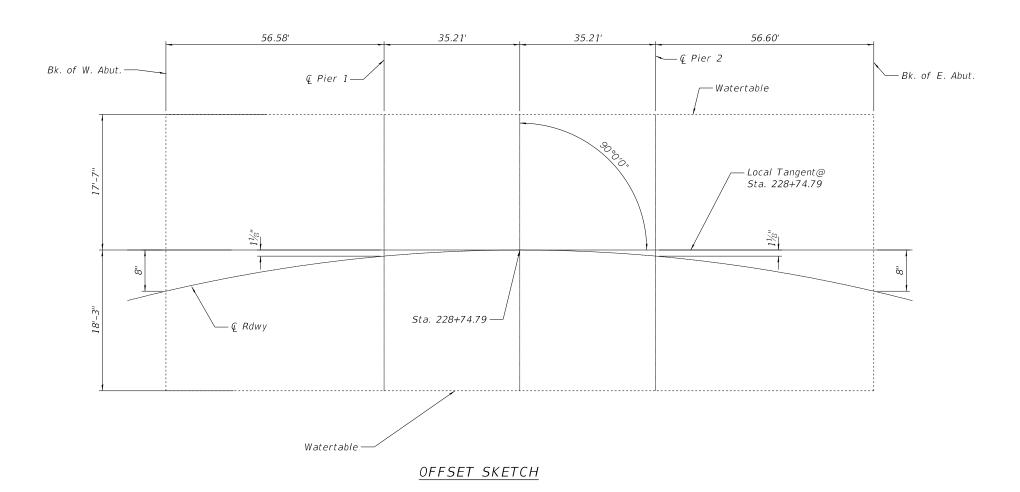
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STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

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PLOT DATE = 11/27/2019

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COUNTY TOTAL SHEET NO.

ST. CLAIR 29 26

CONTRACT NO. 76N38

SECTION

30-1BR-2

674

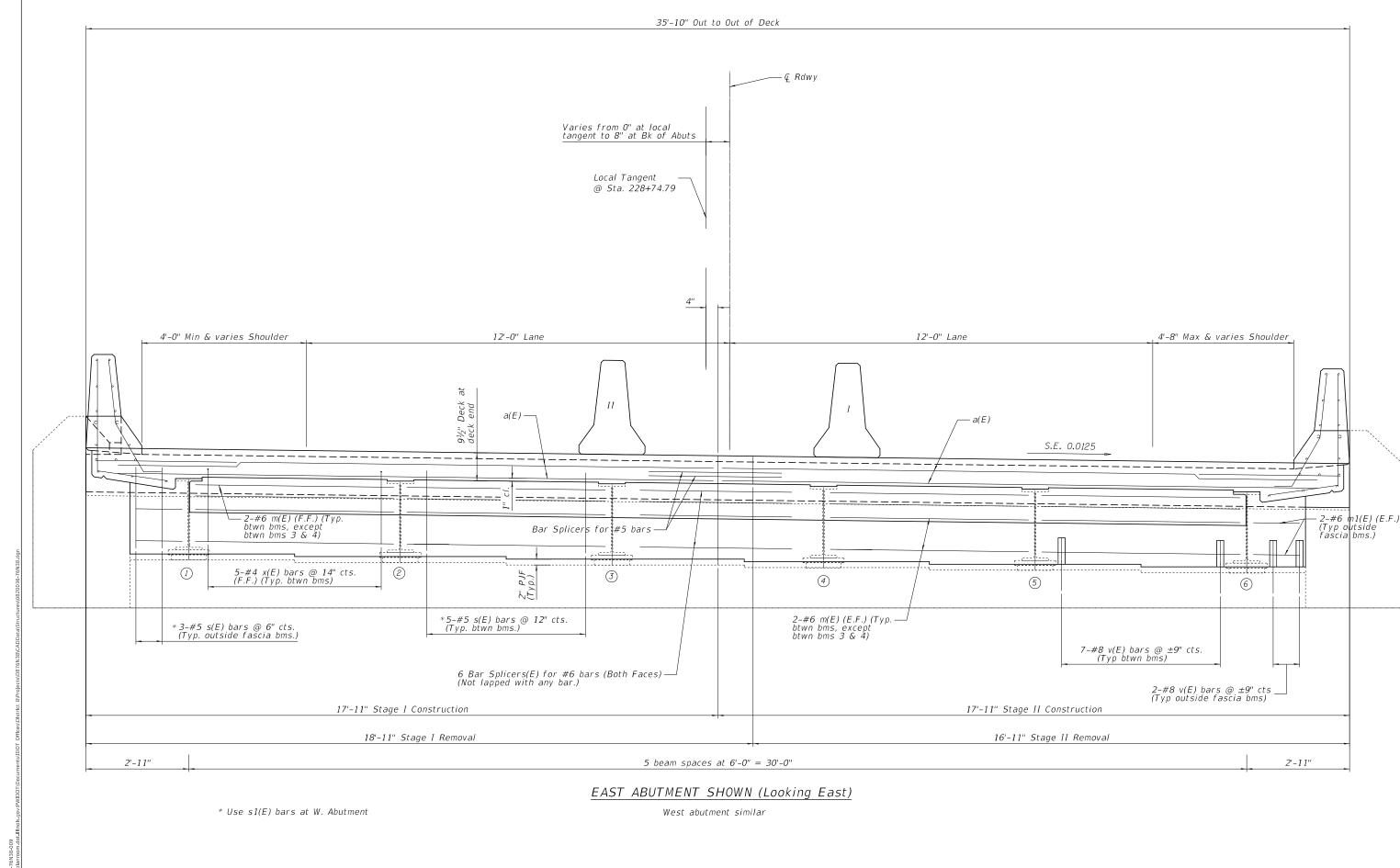
TO STA.

PARAPET SECTION, OFFSET & WATERPROOFING STAGING

SN 082-0036

SHEET 8 OF 11 SHEETS STA.

SCALE:



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

SECTION

30-1BR-2

674

TO STA.

DIAPHRAGMS AT ABUTMENTS

SN 082-0036

OF 11 SHEETS STA.

SHEET 9

SCALE:

COUNTY

ST. CLAIR 29 27

CONTRACT NO. 76N38

MODEL: 0820036-76N38-009

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PLOT DATE = 1/3/2020

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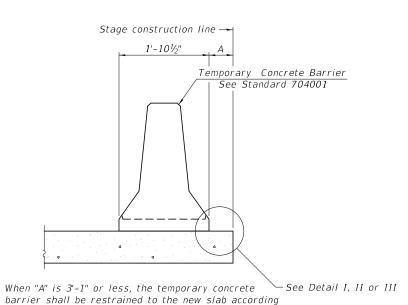
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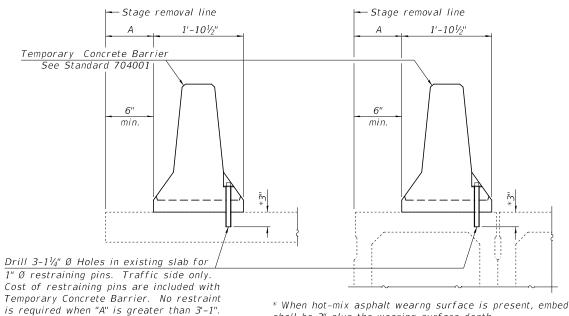
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to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



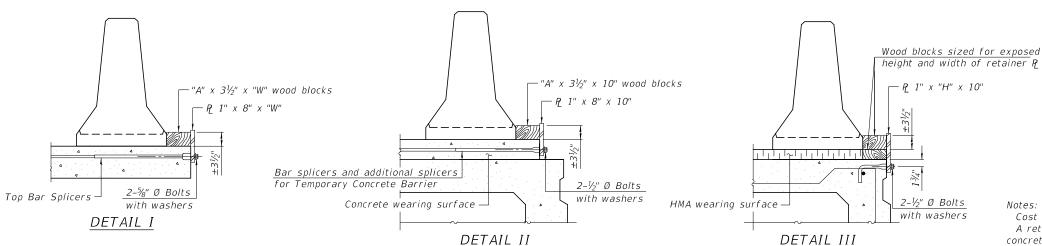
* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

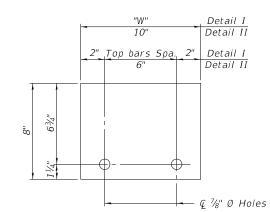
EXISTING DECK BEAM

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

SECTIONS THRU SLAB OR DECK BEAM

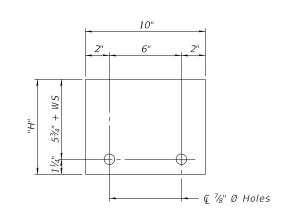
EXISTING SLAB





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

(Detail I and II)



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

BAR SPLICER FOR #4 BAR - DETAIL III

Notes:

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

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

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

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

R-27

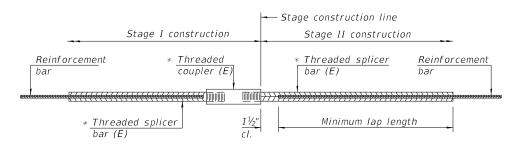
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION							SEC.	TION
	674	30-1	BR-2					
SCALE:	SHEET 10	OF 11	SHEETS	STA.	TO STA.			ILLIN

COUNTY ST. CLAIR 29 28 CONTRACT NO. 76N38

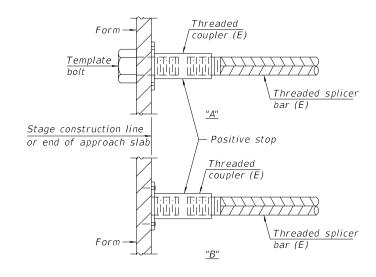


STANDARD BAR SPLICER ASSEMBLY

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

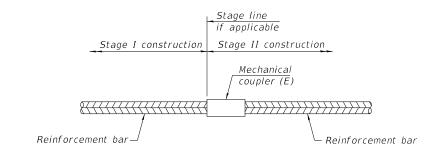
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	ntion Bar No. size r		Minimum lap length
Abut s	#5	34	3'-6"
Abuts	#4	2	2'-5"
Abuts	#6	12	4'-0"



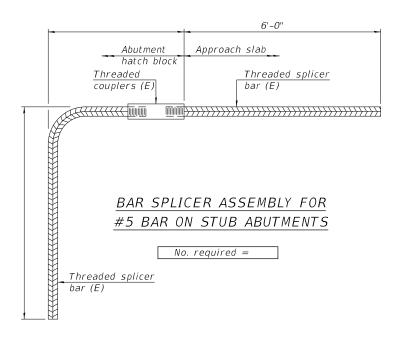
INSTALLATION AND SETTING METHODS

"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

2-17-2017

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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCALE:

BAR SPLIC	F.A.P. RTE	A.P. SECTION					
	674	30-1BR-2					
		110010	RE NO. C	002-0000			
.E:	SHEET 11	OF 11	SHEETS	STA.	TO STA.		ILLINOIS

COUNTY ST. CLAIR 29 29 CONTRACT NO. 76N38