

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	D7 BRIDGE REPAIRS 2022	CUMBERLAND	20	1
		ILLINOIS	CONTRACT NO. 74995	

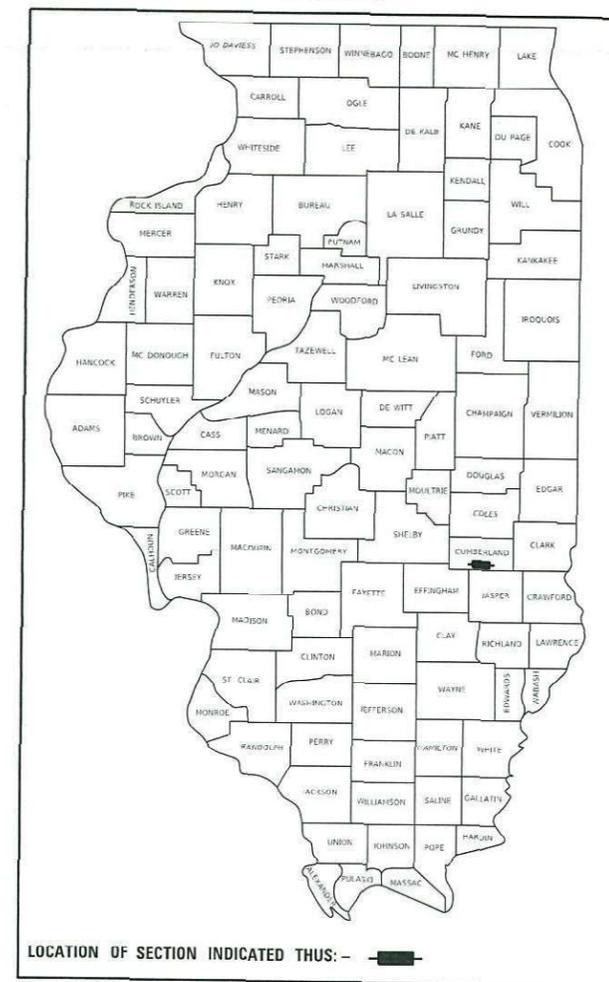
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

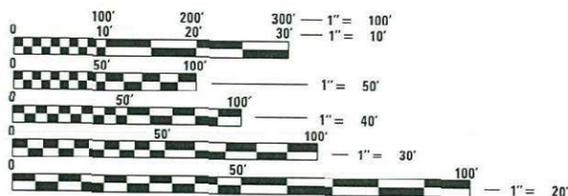
FAS ROUTE 1707 (US 40)
SECTION D7 BRIDGE REPAIRS 2022-1
PROJECT STP-XA48 (302)
BRIDGE DECK OVERLAY, BRIDGE DECK REPAIRS
CUMBERLAND COUNTY

C-97-080-20

D-97-072-20



PROJECT LOCATION
STRUCTURE #018-0007



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 EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: BRIAN LEWIS
PROJECT MANAGER: MICHELE REEDER

CONTRACT NO. 74995

GROSS LENGTH = 525 FT. = 0.1 MILE
NET LENGTH = 525 FT. = 0.1 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 18 2021
Jeffrey P. Mynen
REGIONAL ENGINEER

October 1 2021
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

October 2021
Stephen M. Lewis
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

THIS PROJECT IS LOCATED 1.3 MILES EAST OF WOODBURY ON US-40 OVER BIG MUDDY CREEK IN CUMBERLAND COUNTY AT STUCTURE NUMBER 018-0007.

THE WORK IN THIS SECTION CONSISTS OF HMA SURFACE REMOVAL AND RESURFACING, APPROACH SLABS, GUARDRAIL, BRIDGE DECK SCARIFICATION, BRIDGE DECK CONCRETE OVERLAY, DECK PACTHING, EXPANSON JOINTS, PAINT PAVEMENT MARKING, AND ANY OTHER WORK NEEDED TO COMPLETE THIS SECTION.

THE FOLLOWING APPLICATION RATES WERE USED IN CALCULATING PLAN QUANTITIES AND HAVE BEEN INCLUDED FOR REFERENCE:
HOT-MIX ASPHALT BINDER AND SURFACE 112 LB/SQ YD/INCH

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:

APPLICATION	AC/PG	DESIGN AIR VOIDS	MIXTURE COMPOSITION	FRICTION AGGREGATE	QUALITY MANAGEMENT
HMA SURFACE COURSE, MIX "C", N70 (1 1/2")	PG 64-22	4.0% @ N=70	IL - 9.5	MIXTURE C	QC/QA

INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5	TYPICAL SECTION
6	SCHEDULE OF QUANTITIES
7-8	PLAN SHEET
9-11	DETOUR SIGNING
12-20	STRUCTURE REPAIR PLANS

HIGHWAY STANDARDS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED FOLLOWING THE LAST NUMBERED SHEET OF THE PLANS.

001006	DECIMAL OF AN INCH AND OF A FOOT
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
420401-13	PAVEMENT CONNECTOR (PC) FOR BRIDGE APPROACH SLAB
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
630001-12	STEEL PLATE BEAM GUARDRAIL
631031-17	TRAFFIC BARRIER TERMINAL, TYPE 6
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701901-08	TRAFFIC CONTROL DEVICES
BLR-21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION
420001-09	PAVEMENT JOINTS
720001-05	TYPICAL PAVEMENT MARKING APPLICATIONS
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH

REV. - MS

MODEL: D:\draft
 FILE NAME: p:\w\l\dot\pw\be\er\com\p\mid\dot\Documents\DOT\off\as\dir\ct\7\projects\74995\CADD\data\CAD\sheet\074995-sht-genote.dgn

USER NAME = steffenmk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS AND GENERAL NOTES		F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
DRAWN -	REVISED -			SCALE:	SHEET OF SHEETS	STA. TO STA.	1707	*	CUMBERLAND	20	2
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -					* D7 BRIDGE REPAIRS 2022-1				
PLOT DATE = 8/19/2021	DATE -	REVISED -					ILLINOIS		DFR/D PROJECT		

MODEL: Default
 FILE: \\msc-pw-bentley.com:PNW001\Documents\DOT_Offices\District_7\Projects\74995\CADDData\CAD\sheet74995-sh-500.dgn

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0059 80% FED 20% STATE		
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	140	140		
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	311	311		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	462	462		
40604052	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	TON	39	39		
42000060	WELDED WIRE REINFORCEMENT	SQ YD	133	133		
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SO YD	190	190		
44000100	PAVEMENT REMOVAL	SO YD	185	185		
50104650	SLOPE WALL REMOVAL	SO YD	55	55		
50157300	PROTECTIVE SHIELD	SO YD	307	307		
50300225	CONCRETE STRUCTURES	CU YD	24.4	24.4		
50300260	BRIDGE DECK GROOVING	SO YD	1100	1100		
50300300	PROTECTIVE COAT	SO YD	1280	1280		
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	95.8	95.8		

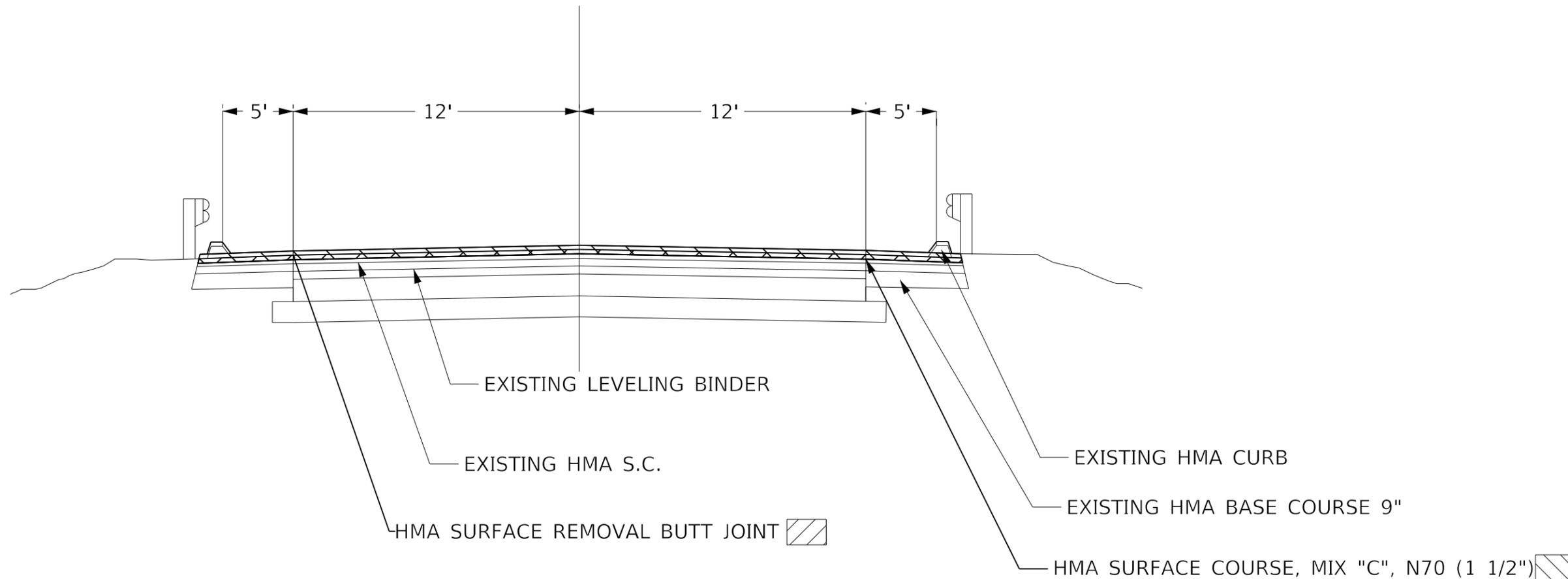
SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0059 80% FED 20% STATE		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	41270	41270		
50800530	MECHANICAL SPLICERS	EACH	68	68		
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	350	350		
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
63200310	GUARDRAIL REMOVAL	FOOT	500	500		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4		
67100100	MOBILIZATION	L SUM	1	1		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28		
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1238	1238		
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	12	12		
Z0001495	BRIDGE APPROACH SHOULDER REMOVAL	SO YD	72	72		
X7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1		
Z0004552	APPROACH SLAB REMOVAL	SO YD	160	160		
Z0012110	BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, 2 1/4"	SO YD	1050	1050		
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SO YD	1050	1050		

* SPECIALTY ITEM

REV. - MS
REV-SEP

USER NAME = steffemk DESIGNED - DRAWN - PLOT SCALE = 100.0000' / in. CHECKED - PLOT DATE = 8/19/2021 DATE -	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES SCALE: SHEET 3 OF SHEETS STA. TO STA.	F.A.S. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO. 1707 * CUMBERLAND 20 3 * D7 BRIDGE REPAIRS 2022-1 CONTRACT NO. 74995 ILLINOIS FED. AID PROJECT
---	--	---	---	---

PROPOSED TYPICAL CROSS SECTION
 STA. 424+48 TO STA. 425+08
 STA. 429+12 TO STA. 429+74



NOTE: NOT TO SCALE

MODEL: Default
 FILE NAME: p:\project\aw_bentley.com\PIV\DOT\Documents\DOT_offices\District_7\Project\74995\CADD\BentCAD\sheet\074995-ht-typical.dgn

USER NAME = steffenmk	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 5,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/19/2021	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL CROSS SECTION

SCALE: SHEET OF 20 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	*	CUMBERLAND	20	5
* D7 BRIDGE REPAIRS 2022-1			CONTRACT NO. 74995	
ILLINOIS FED. AID PROJECT				

GUARDRAIL REMOVAL	LOCATION			UNIT	CODE NUMBER
				FOOT	63200310
	OFFSET	QUANTITY			
			(FOOT)	(FOOT)	
SIDE	STATION	TO	STATION		
NW	424+47.0	TO	425+72.0	18	125.0
NE	428+67.3	TO	429+92.3	18	125.0
SW	424+27.0	TO	425+52.0	18	125.0
SE	428+47.6	TO	429+72.6	18	125.0
TOTALS:					500.0

PAVING SCHEDULE			LENGTH	BITUMINOUS MATERIALS (TACK COAT)	HMA SURFACE REMOVAL- BUTT JOINT	PAVEMENT REMOVAL	APPROACH SLAB REMOVAL	HMA SURFACE COURSE, IL-9.5, MIX "C", N70	WELDED WIRE REINFORCEMENT	PAVEMENT CONNECTOR	APPROACH SHOULDER REMOVAL
STATION TO STATION	FOOT	POUND	SQ YD	SQ YD	SQ YD	TON	SQ YD	SQ YD	SQ YD		
424+48.0 TO 425+08.0	60.0	153.0	-	-	-	-	-	-	-		
424+48.0 TO 425+08.0	60.0	-	-	-	-	19.0	-	-	-		
424+48.0 TO 425+08.0	60.0	-	227.0	-	-	-	-	-	-		
425+06.9 TO 425+31.7	24.9	-	-	-	-	-	66.3	-	-		
425+08.0 TO 425+33.0	25.0	-	-	-	-	-	-	94.9	-		
425+08.0 TO 425+38.0	30.0	-	-	113.3	-	-	-	-	-		
425+38.0 TO 425+62.0	24.0	-	-	-	64.0	-	-	-	-		
425+38.0 TO 425+72.0	34.0	-	-	-	-	-	-	-	19.6		
428+68.0 TO 428+94.0	26.0	-	-	-	-	-	-	-	15.0		
425+38.0 TO 425+53.0	15.0	-	-	-	-	-	-	-	9.2		
428+58.0 TO 428+94.0	36.0	-	-	-	96.0	-	-	-	-		
429+12.0 TO 429+74.0	62.0	158.1	-	-	-	-	-	-	-		
428+48.0 TO 428+94.0	46.0	-	-	-	-	-	-	-	28.1		
428+87.0 TO 429+12.0	25.0	-	-	-	-	-	-	94.9	-		
428+88.1 TO 429+13.0	24.9	-	-	-	-	-	66.3	-	-		
429+12.0 TO 429+74.0	62.0	-	-	-	-	19.7	-	-	-		
428+93.0 TO 429+12.0	19.0	-	-	71.8	-	-	-	-	-		
429+12.0 TO 429+74.0	62.0	-	235.0	-	-	-	-	-	-		
TOTAL:		312	462	186	160	39	133	190	72		
TOTALS:		312	462	186	160	39	133	190	72		

GUARDRAIL SCHEDULE				STEEL PLATE BEAM GUARDRAIL TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6
	STATION	TO	STATION	FOOT	EACH
NW Quad	424+47.0	TO	425+34.4	87.43	0
NW Quad	425+34.4	TO	425+72.0	0	1
NE Quad	429+04.9	TO	429+92.3	87.35	0
NE Quad	428+67.3	TO	429+04.9	0	1
SW Quad	424+27.0	TO	425+14.9	87.85	0
SW Quad	425+14.9	TO	425+52.5	0	1
SE Quad	428+85.3	TO	429+72.6	87.35	0
SE Quad	428+47.6	TO	428+85.3	0	1
TOTAL =				350	4

COMPUTATIONS	PAINT PAVEMENT MARKING - LINE 4"			UNIT	CODE NUMBER
	LOCATION	LENGTH	PRA GAPAS	FOOT	78001110
			YELLOW	WHITE	QUANTITY
	STATION TO STATION	(FOOT)	(FOOT)		FOOT
	424+30.0	429+80.0	550.0	67	137.5
			TOTALS:	138	1100
					1238

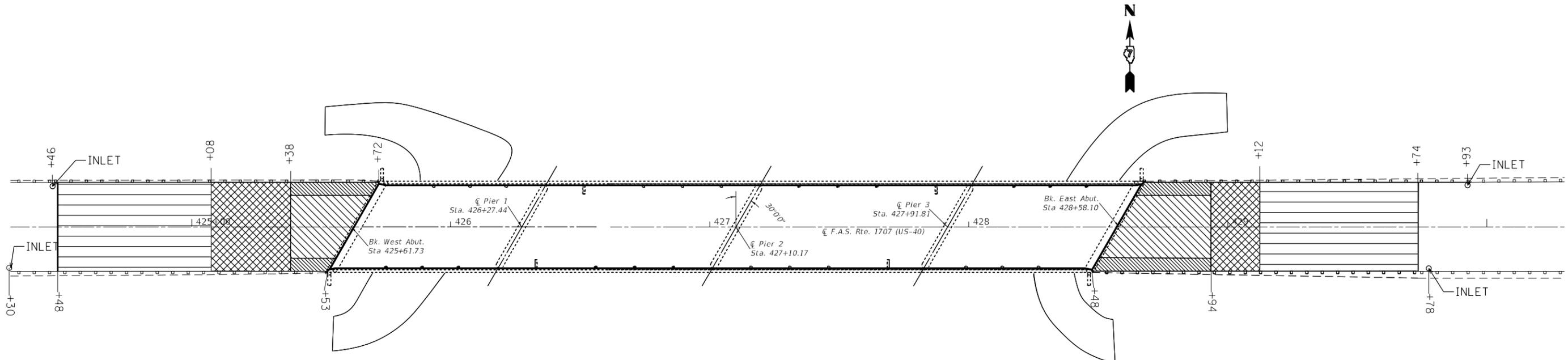
MODEL: Default
 FILE NAME: p:\ultra\paw_bentley.com\PIV\DOT\Documents\DOT Office\Director_7\Projects\74995\CADD\DATA\CAD\sheet\074995-rlt-ctc.tbl.dgn

USER NAME = steffenmk	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/19/2021	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SCALE:	SHEET	OF	SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	*	CUMBERLAND	20	6
* D7 BRIDGE REPAIRS 2022-1		CONTRACT NO. 74995		
		ILLINOIS	FED. AID PROJECT	



- PAVEMENT REMOVAL
- APPROACH SLAB REMOVAL
- BRIDGE APP SHOULDER REMOVAL
- HMA SURFACE REMOVAL BUTT JOINT

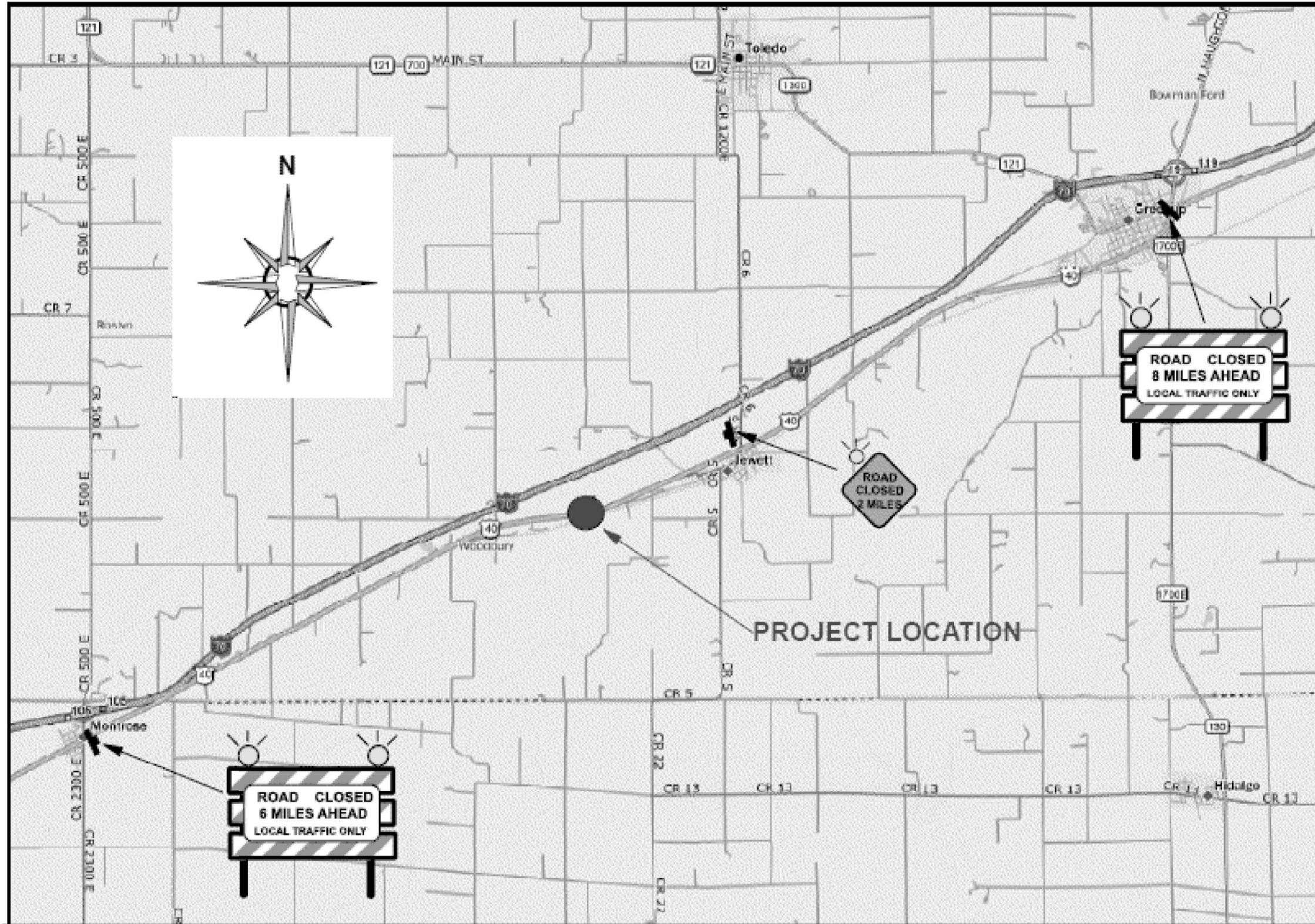
MODEL: Default
 FILE NAME: p:\ultra-cw-bead-fy.com\FW\DOT\Documents\DOT Office\District 7\Projects\74995\CADD\Bridges\CAD\sheet\0774995-sht-01.dgn

USER NAME = steffenmk	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40,0000 * / in.	CHECKED -	REVISED -
PLOT DATE = 8/19/2021	DATE -	REVISED -

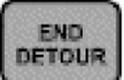
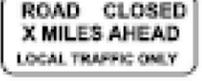
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REMOVAL PLAN				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	*	CUMBERLAND	20	7
* D7 BRIDGE REPAIRS 2022-1			CONTRACT NO. 74995	
ILLINOIS FED. AID PROJECT				



SIGN LEGEND

 W20-3(O)-48	 W20-2(O)-48
 M4-8a(O)-3024	 M4-8-2412
 M6-1L(O)-3018	 M6-1R(O)-3018
 M5-1L(O)-3018	 M5-1R(O)-3018
 M6-3(O)-3018	 M6-2(O)-3018
 M3-2-3015	 M3-4-3015
 M1-4-36	 R11-3a-6030

**SHALL BE USED IN CONJUNCTION
WITH STANDARDS BLR 21 & 701901**

MODEL: Default
 FILE NAME: p:\projects\new\beadefy.com\PIVDOT\Documents\DOT Office\Bridges\74995\CD\beadefy.com\PIVDOT\Documents\DOT Office\Bridges\74995\CD\beadefy.com

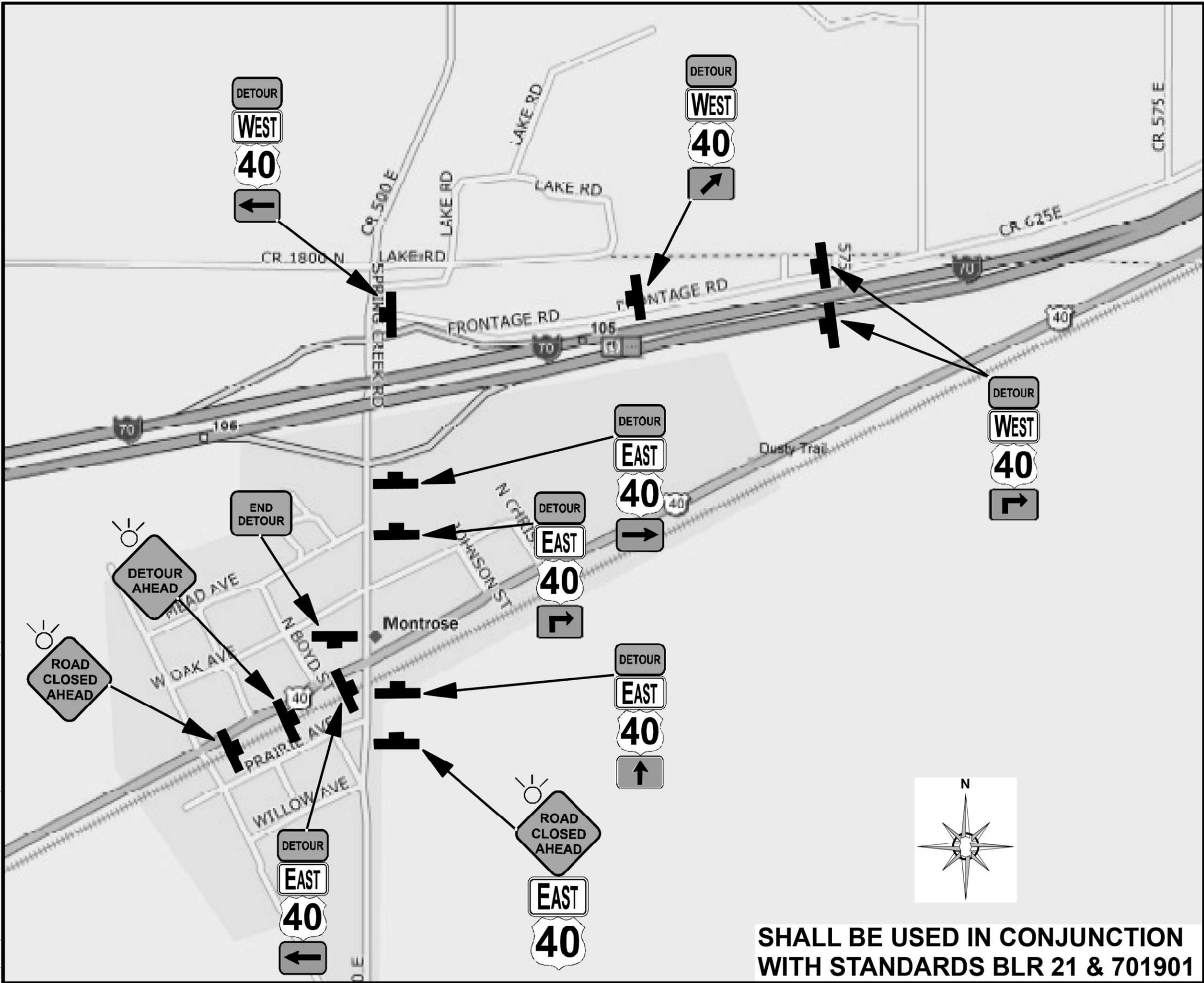
USER NAME = stefenmk	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/19/2021	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETOUR SIGNING
US 40**

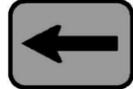
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	*	CUMBERLAND	20	9
* D7 BRIDGE REPAIRS 2022-1		CONTRACT NO. 74995		
ILLINOIS FED. AID PROJECT				



**SHALL BE USED IN CONJUNCTION
WITH STANDARDS BLR 21 & 701901**

SIGN LEGEND

 W20-3(O)-48	 W20-2(O)-48
 M4-8a(O)-3024	 M4-8-2412
 M6-1L(O)-3018	 M6-1R(O)-3018
 M5-1L(O)-3018	 M5-1R(O)-3018
 M6-3(O)-3018	 M6-2(O)-3018
 M3-2-3015	 M3-4-3015
 M1-4-36	 R11-3a-6030

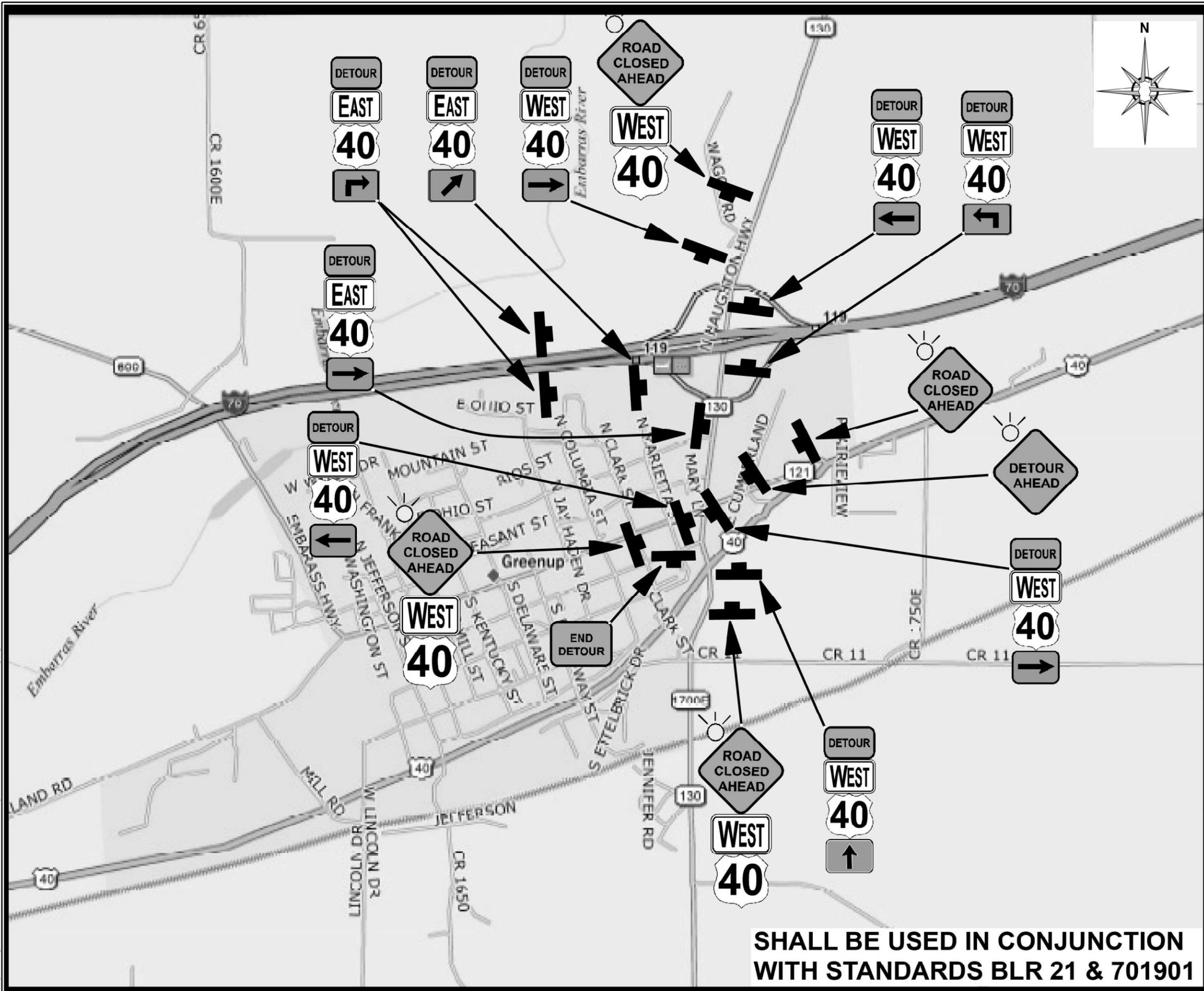
MODEL: Default
 FILE: \\bls01\project\aw\beadby.com\FWIDOT\Documents\DOT Office\Director_T\Project\74995\CADD\Drawings\CD\Sheet\074995-eh-01.dwg

USER NAME = steffnmk	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 8/19/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETOUR SIGNING				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	*	CUMBERLAND	20	10
* D7 BRIDGE REPAIRS 2022-1		CONTRACT NO. 74995		
ILLINOIS / FED. AID PROJECT				



SIGN LEGEND

 W20-3(O)-48	 W20-2(O)-48
 M4-8a(O)-3024	 M4-8-2412
 M6-1L(O)-3018	 M6-1R(O)-3018
 M5-1L(O)-3018	 M5-1R(O)-3018
 M6-3(O)-3018	 M6-2(O)-3018
 M3-2-3015	 M3-4-3015
 M1-4-36	 R11-3a-6030

SHALL BE USED IN CONJUNCTION WITH STANDARDS BLR 21 & 701901

MODEL: Default
 FILE: \\mupic-paw-beadefy.com\FWIDOT\Documents\DOT Office\Director_7\Projects\74995\CADD\Drawings\74995-eh-dwg.dgn

USER NAME = steffemk	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/19/2021	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETOUR SIGNING

SCALE: SHEET OF SHEETS STA. TO STA.

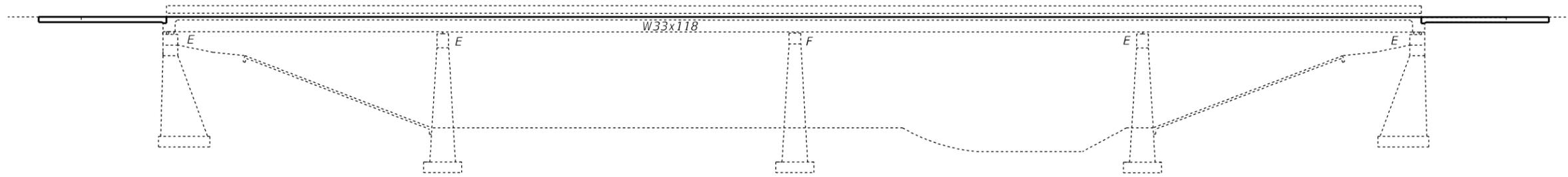
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	*	CUMBERLAND	20	11
* D7 BRIDGE REPAIRS 2022-1		CONTRACT NO. 74995		
ILLINOIS FED. AID PROJECT				

BENCHMARK:

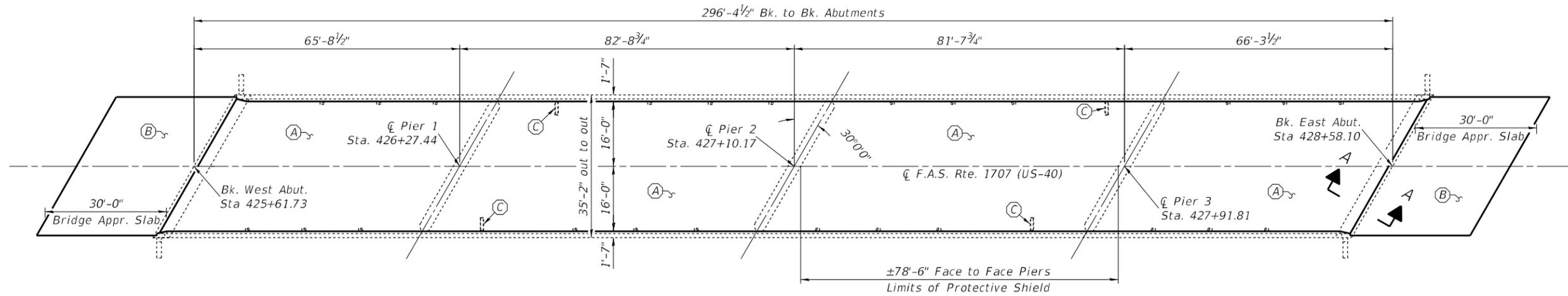
Brass Disk on northwest wingwall of SN 018-0007, Sta. 425+73, 18' left, Elev 536.96

EXISTING STRUCTURE:

SN 018-0007 carries US 40 (FAS 1707) over Muddy Creek. The existing four span, steel beam superstructure with semi-integral abutments was constructed in 1991 and substructure was constructed in 1949. The proposed project consists of bridge deck scarification, deck patching, bridge deck overlay, new approach slabs, and slope wall repairs.



ELEVATION



PLAN



Expires 11-30-2022

David Carl Puze

- (A) - Bridge Deck Scarification, 3/4", Deck Slab Repair, & Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 2-1/4"
- (B) - Remove & Replace Bridge Approach Slab
- (C) - Adjust Existing Scupper

MODEL: Default
 FILE: \\mdepc-pw-backend.com\FWIDOT\Documents\DOT Office\District 7\Projects\74995\CADD\Drawings\CAD\Sheet\074995-Pl-018-0007 Bridge Repair Plans.dgn

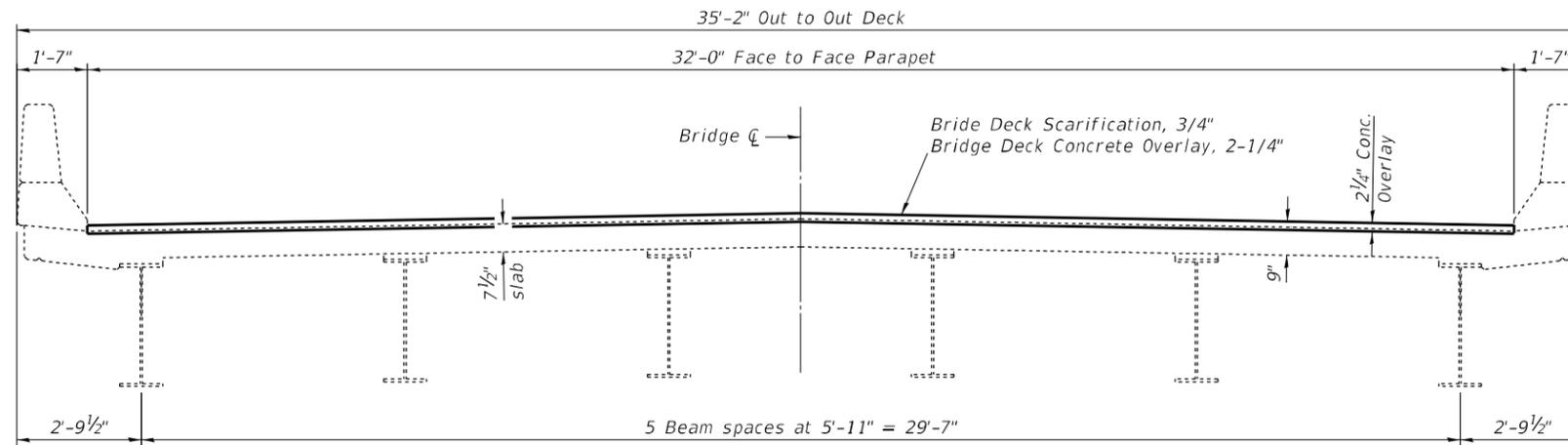
USER NAME = Default	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - D. Macklin	REVISED -
PLOT DATE = 9/9/2021	DATE - Oct, 2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN & ELEVATION
S.N. 018-0007**

SCALE: SHEET 1 OF 9 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	D7 BRIDGE REPAIRS 2022-1	CUMBERLAND	20	12
CONTRACT NO. 74995				
ILLINOIS FED. AID PROJECT				



DECK CROSS SECTION
Looking East

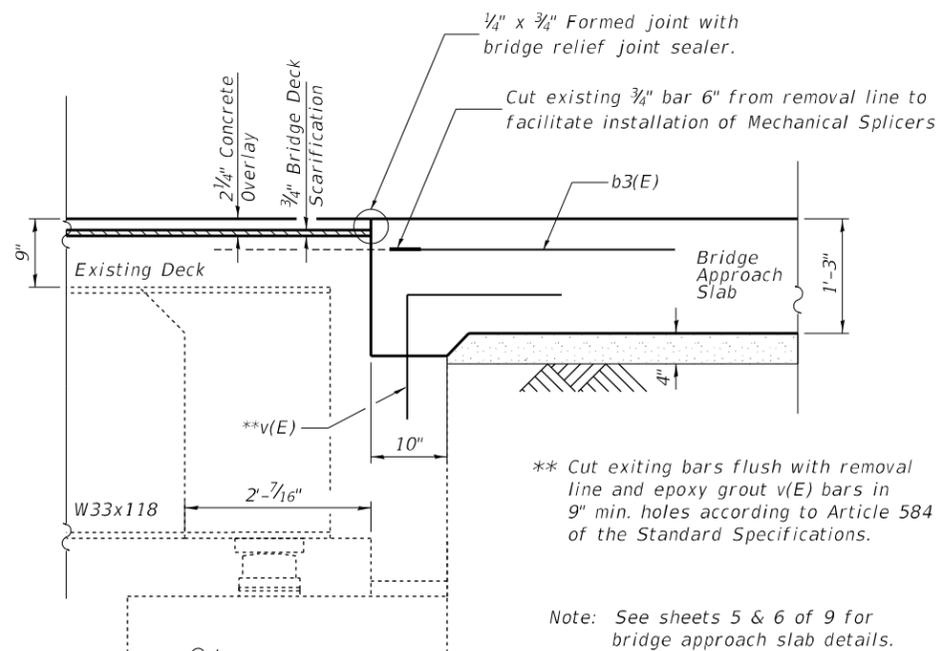
GENERAL NOTES

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.

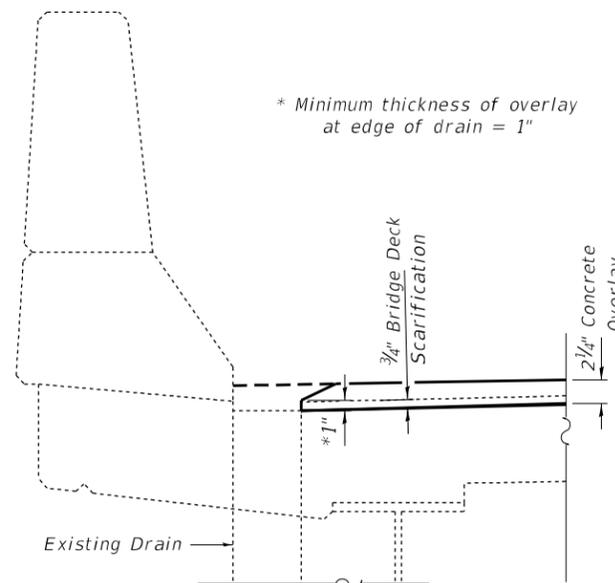
Reinforcement Bars designated (E) shall be epoxy coated.

Protective Coat to be applied to areas of new concrete only, including bridge deck concrete overlay.

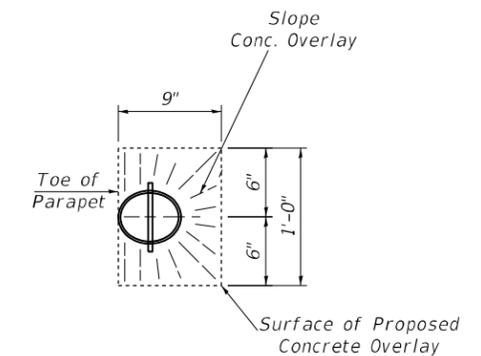
Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on as-built plans.



SECTION A-A



FLOOR DRAIN PRESERVATION



TOP PLAN OF FLOOR DRAIN

TOTAL BILL OF MATERIALS

ITEM	UNIT	QUANTITY
Bridge Deck Fly Ash or GGBF Concrete Overlay, 2-1/4"	Sq. Yd.	1,050
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	3.6
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	8.2
Bridge Deck Scarification, 3/4"	Sq. Yd.	1,050
Bridge Deck Grooving	Sq. Yd.	1,100
Protective Coat	Sq. Yd.	1,280
Concrete Superstructure (Approach Slab)	Cu. Yd.	95.8
Concrete Structures	Cu. Yd.	24.4
Reinforcement Bars, Epoxy Coated	Pound	41,270
Mechanical Splicers	Each	68
Slope Wall Removal	Sq. Yd.	55
Stone Dumped Riprap, Class A4	Ton	140
Drainage Scupper to be Adjusted	Each	4
Protective Shield	Sq. Yd.	307

MODEL: Default
 FILE NAME: p:\ulidect-pw-bead-fy.com\PIV\DOT\Documents\DOT Office\Director: 7\Projects\74995\CADD\Bids\CAD\Sheet\074995-Pl-018-0007 Bridge Repair Plans.dgn
 PLOT SCALE = 100,0000' / in.
 PLOT DATE = 9/9/2021

USER NAME = Default	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - D. Macklin	REVISED -
PLOT DATE = 9/9/2021	DATE - Oct, 2020	REVISED -

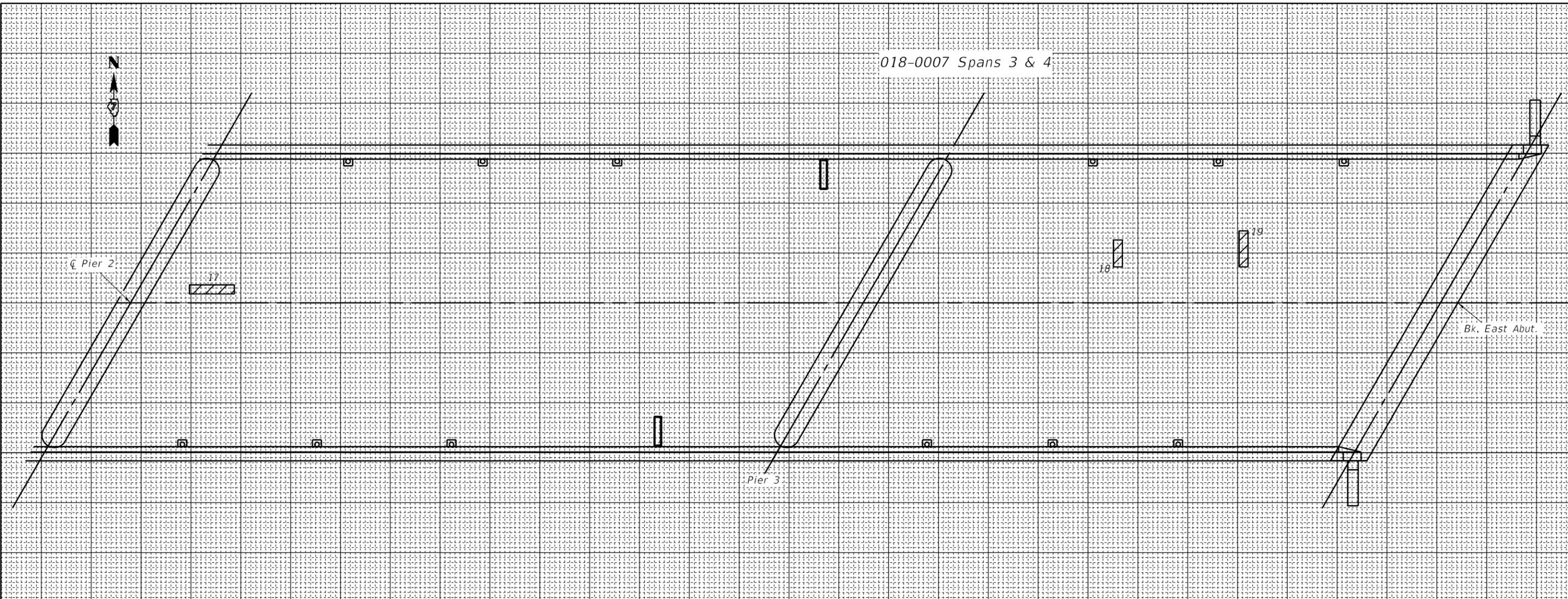
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK CROSS-SECTION, GENERAL NOTES, &
BILL OF MATERIALS S.N. 018-0007**

SCALE: SHEET 2 OF 9 SHEETS STA. TO STA.

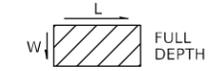
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	D7 BRIDGE REPAIRS 2022-1	CUMBERLAND	20	13
CONTRACT NO. 74995			ILLINOIS FED. AID PROJECT	

018-0007 Spans 3 & 4



PATCH	SIZE		DECK SLAB REPAIR (FD TY I) SQ YD	DECK SLAB REPAIR (FD TY II) SQ YD
	LENGTH	WIDTH		
NO.				
17	5.0	1.0		0.6
18	1.0	3.0	0.3	
19	1.0	4.0	0.4	
TOTALS			0.7	0.6

THE LOCATIONS AND SIZES SHOWN GRAPHICALLY ABOVE ARE APPROXIMATE. SEE THIS TABLE FOR ACTUAL SIZES.



DATE OF SURVEY: April 2020
 SURVEY BY: DPM & RAW
 METHOD OF SURVEY: VISUAL

ESTIMATED PAY QUANTITIES:
 DECK SLAB REPAIR (FULL DEPTH TYPE I)
 0.8 SQ YD
 DECK SLAB REPAIR (FULL DEPTH TYPE II)
 0.6 SQ YD

MODEL: Default
 FILE NAME: p:\1181-pw-bentley.com\p1181\DOT\Documents\DOT - Offices\District 7\Projects\179995\CAD\Drawings\179995-sh-018-0007 Bridge Repair Plans.dgn

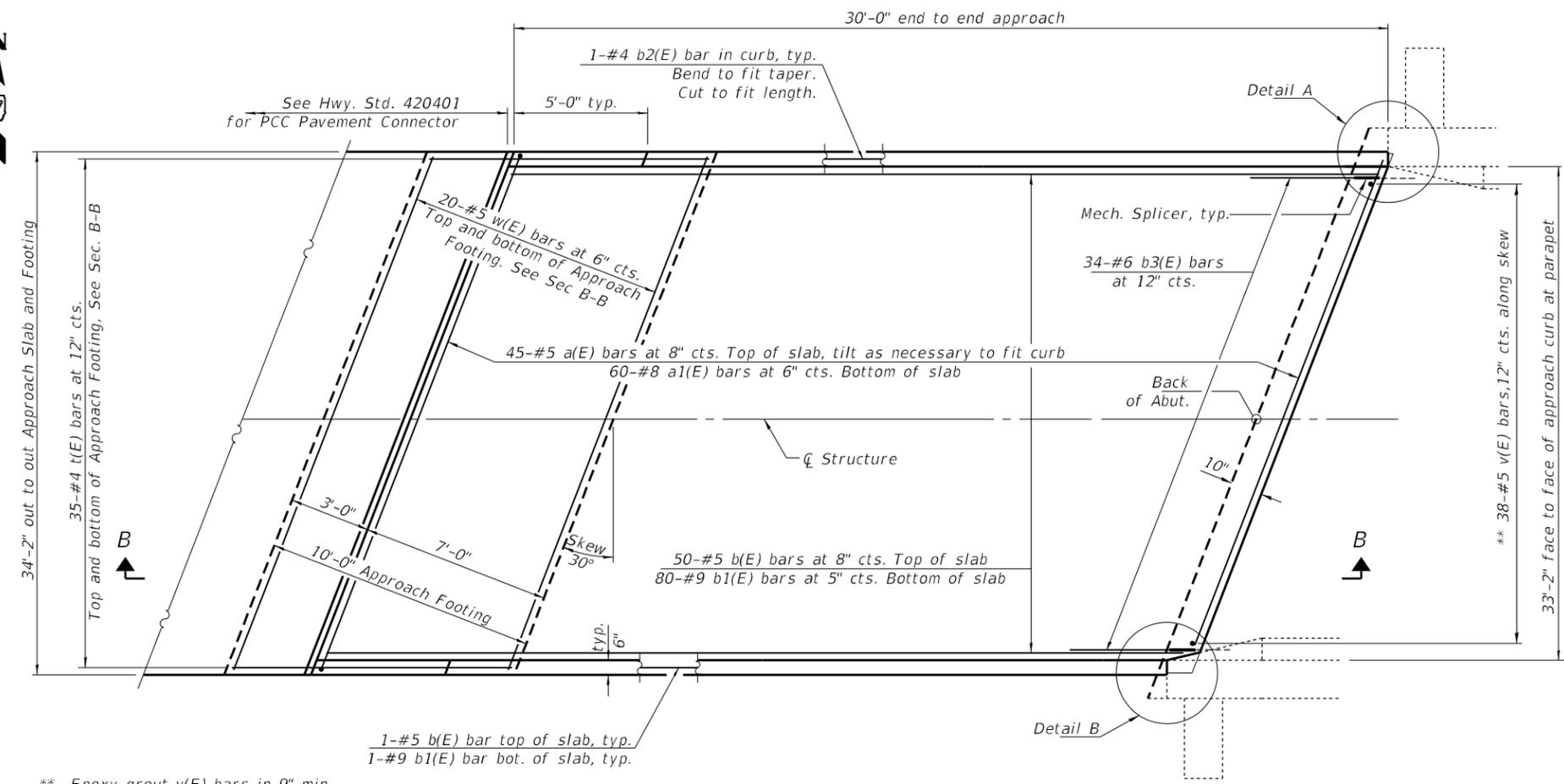
USER NAME = steffemk	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED - D. Macklin	REVISED -
PLOT DATE = 8/19/2021	DATE - Oct, 2020	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

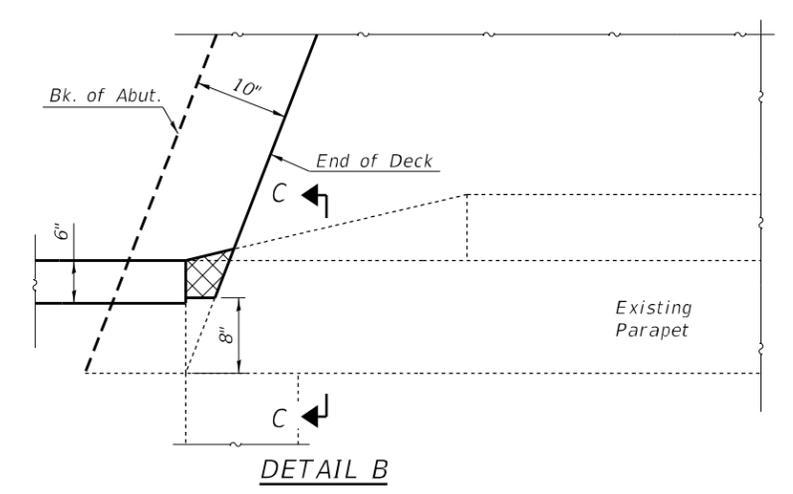
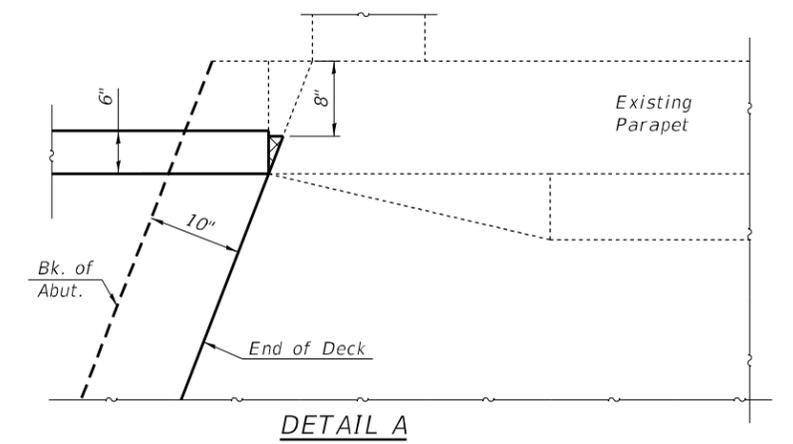
**BRIDGE DECK PATCHING, SPANS 3 & 4
 S.N. 018-0007**

SCALE: SHEET 4 OF 9 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	D7 BRIDGE REPAIRS 2022-1	CUMBERLAND	20	15
CONTRACT NO. 74995				
ILLINOIS FED. AID PROJECT				

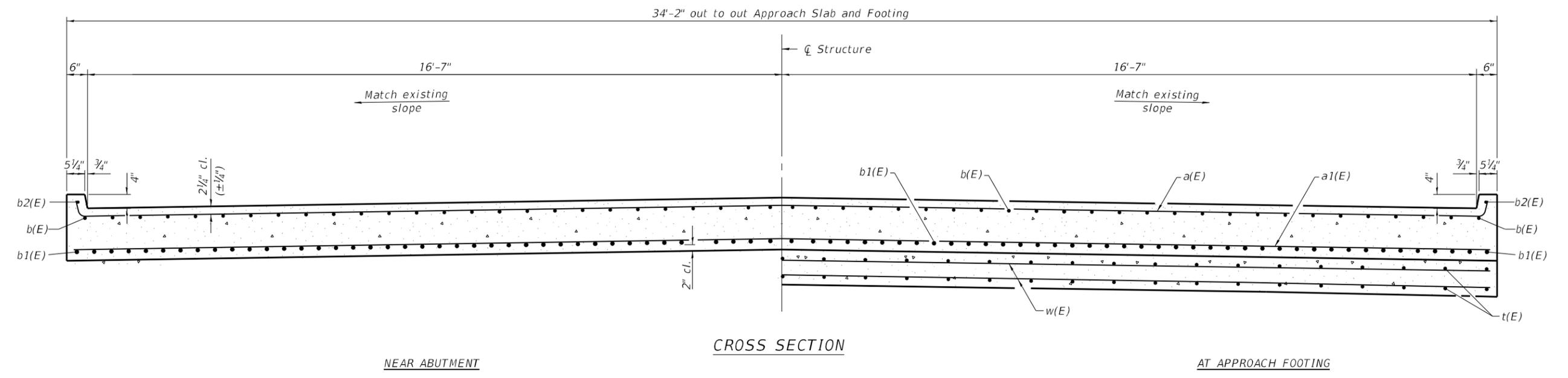


- Remove/Replace approach under parapet, keeping parapet in place
 Note: Contractor shall use caution not to damage existing parapets during removal of existing approach slabs. Any damage to parapets shall be repaired at Contractor's expense.



** Epoxy grout v(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.

PLAN
West Approach Shown
East Approach Similar



NEAR ABUTMENT

CROSS SECTION

AT APPROACH FOOTING

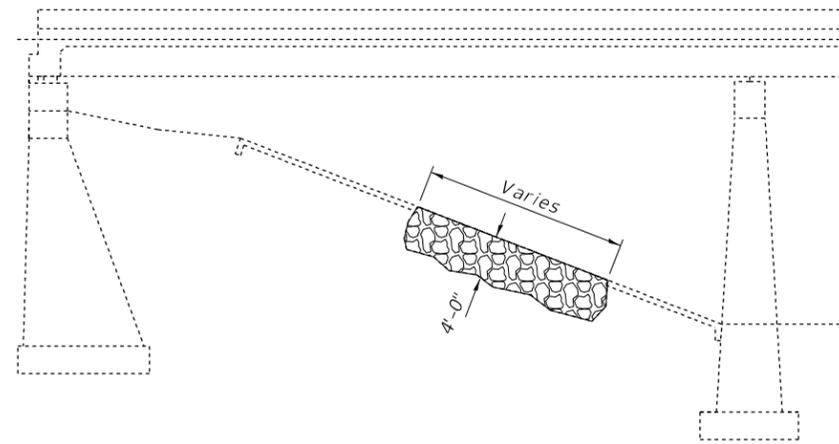
MODEL: Default
 FILE: A:\MISC_Plan\Subcontract\aw_bec\aw_bec.dwg
 PROJECT: 74995\DOT Documents\DOT Office\District 7\Project\74995\CADD\Drawings\74995-018-0007 Bridge Repair Plans.dgn

USER NAME = steffemk	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - D. Macklin	REVISED -
PLOT DATE = 8/19/2021	DATE - Oct, 2020	REVISED -

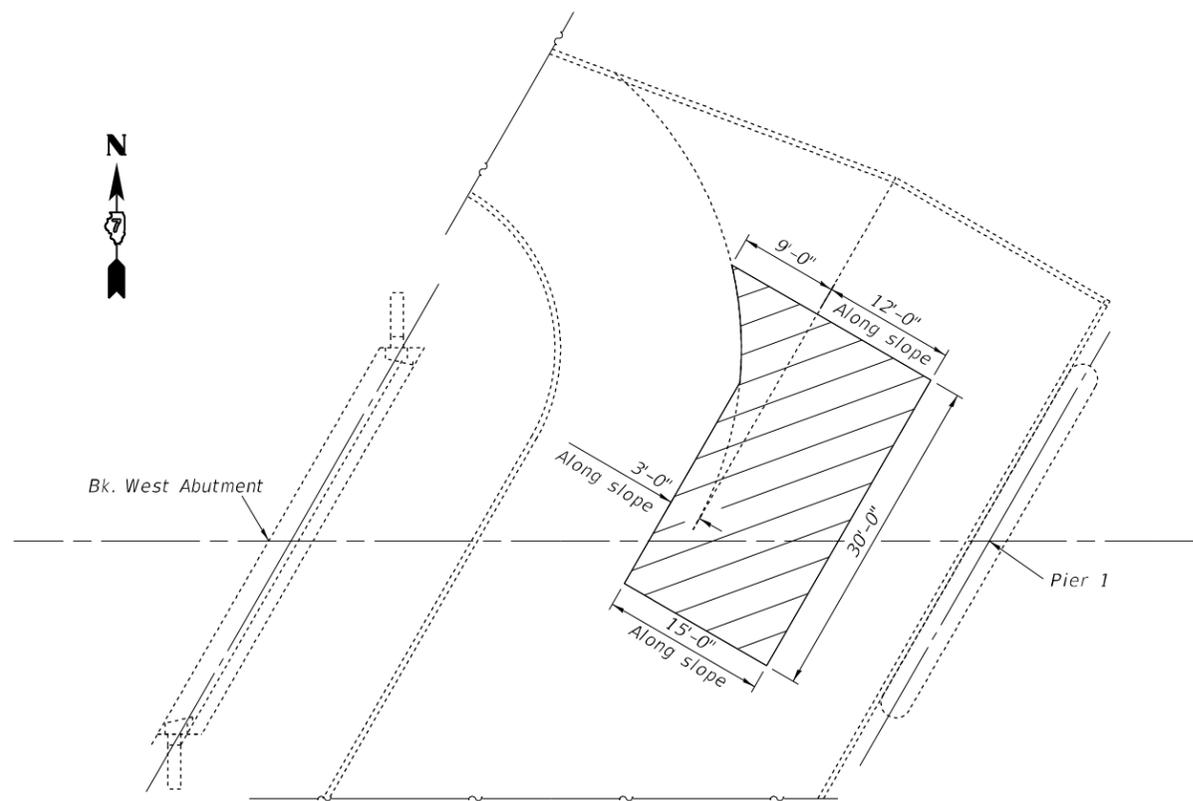
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 018-0007			
SCALE:	SHEET 5	OF 9 SHEETS	STA. TO STA.

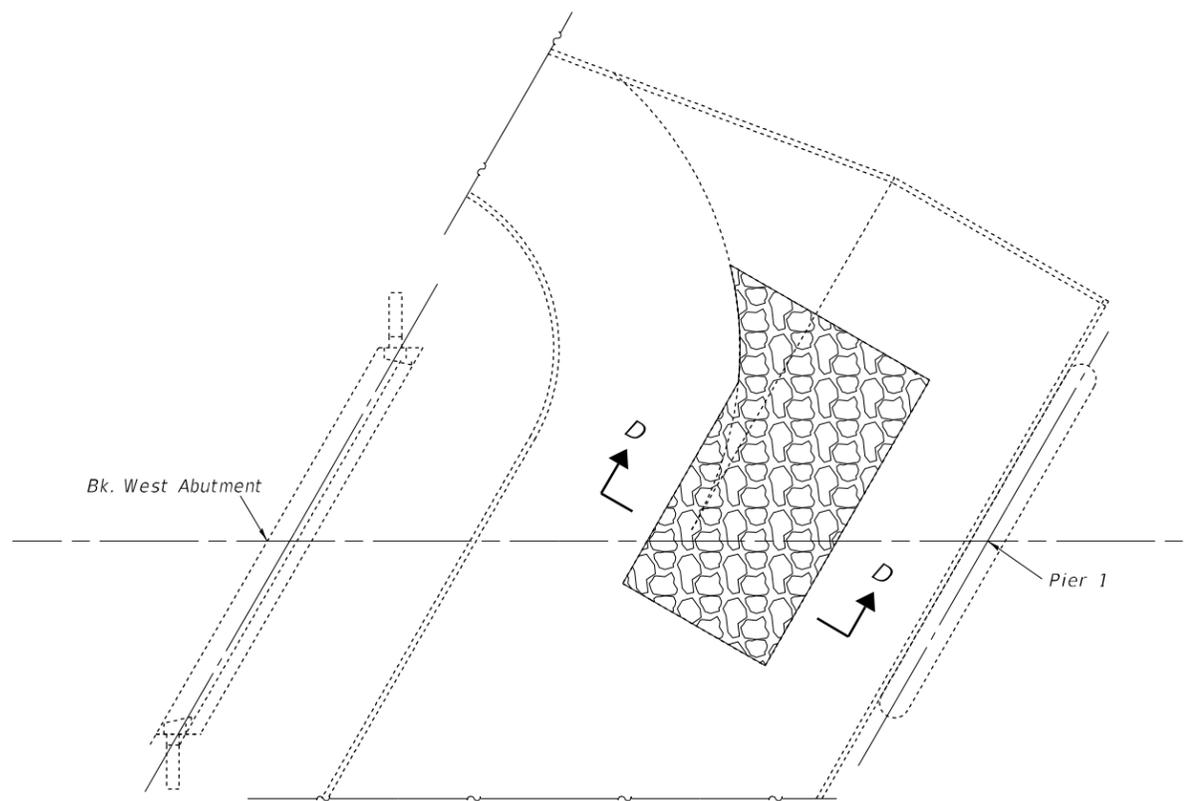
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	D7 BRIDGE REPAIRS 2022-1	CUMBERLAND	20	16
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74995	



SECTION D-D



PLAN VIEW
SLOPE WALL REMOVAL



PLAN VIEW
RIP RAP PLACEMENT

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
Slope Wall Removal	Sq. Yd.	55
Stone Dumped Riprap, Class A4	Ton	140

NOTES

Prior to removal of slopewall, a 3/4" deep saw cut shall be made along all boundaries of the removal area. Saw cuts will be included with the cost of slope wall removal.

MODEL: Default
 FILE NAME: p:\project-sw-bead-4.com\FW\DOT\Documents\DOT Office\District 7\Projects\74995\CADD\Bldg\CAD\Sheet\0774995-rl-018-0007 Bridge Repair Plans.dgn
 PROJECT: 74995

USER NAME = steffenmk	DESIGNED - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - T. Walk	REVISED -
PLOT DATE = 8/19/2021	CHECKED - D. Macklin	REVISED -
	DATE - Oct, 2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

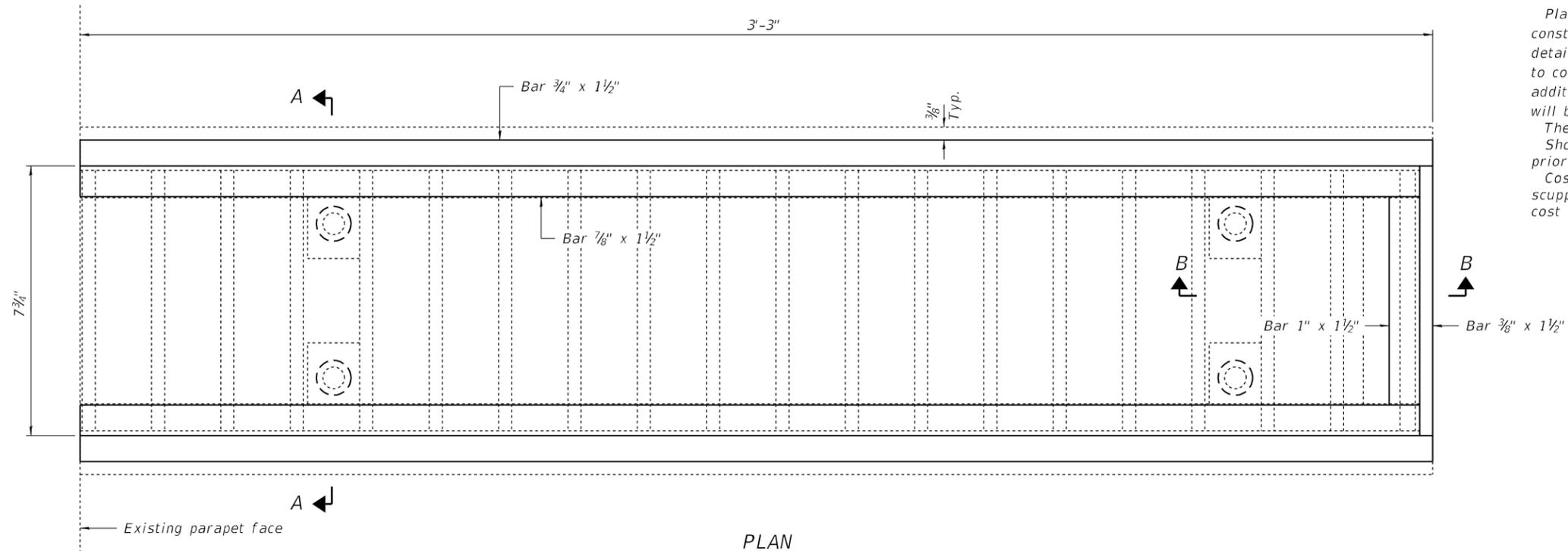
**WEST ABUTMENT SLOPE WALL REPAIR DETAIL
S.N. 018-0007**

SCALE: SHEET 7 OF 9 SHEETS STA. TO STA.

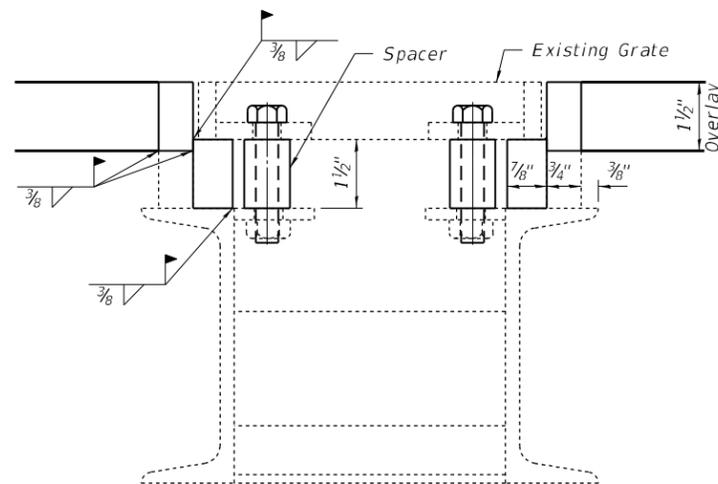
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	D7 BRIDGE REPAIRS 2022-1	CUMBERLAND	20	18
CONTRACT NO. 74995				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

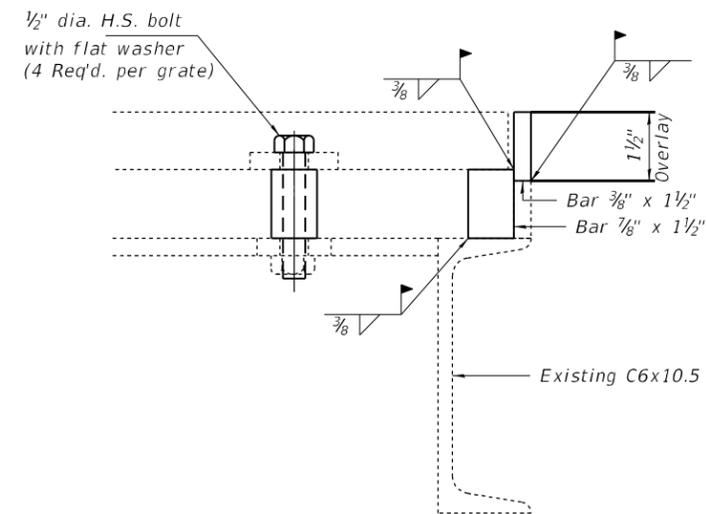
All structural steel shall conform to AASHTO Classification M-270 Gr. 36.
 The adjusting scupper ring shall be galvanized.
 Bolts shall be 1/2" dia., AASHTO M164 Type I, mechanically galvanized.
 Plan dimensions and details relative to existing plans are subject to nominal construction variations. The 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 contractor shall ensure that no damage is done to existing grates to be reused.
 Shop plans for proposed adjusting scupper ring shall be submitted for approval prior to fabrication.
 Cost of all labor and materials necessary to remove existing grates, clean existing scuppers, install adjusting scupper rings and reinstalling grates is included in the cost per unit each for **Drainage Scupper to be Adjusted**



PLAN



SECTION A-A



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Adjust Existing Scupper	Each	4

MODEL: Default
 FILE NAME: p:\ultra\caw\beadefy.com\FWIDOT\Documents\DOT Office\District 7\Projects\74995\CADD\Drawings\CAD\Sheet\0774995-Pl-018-0007 Bridge Repair Plans.dgn

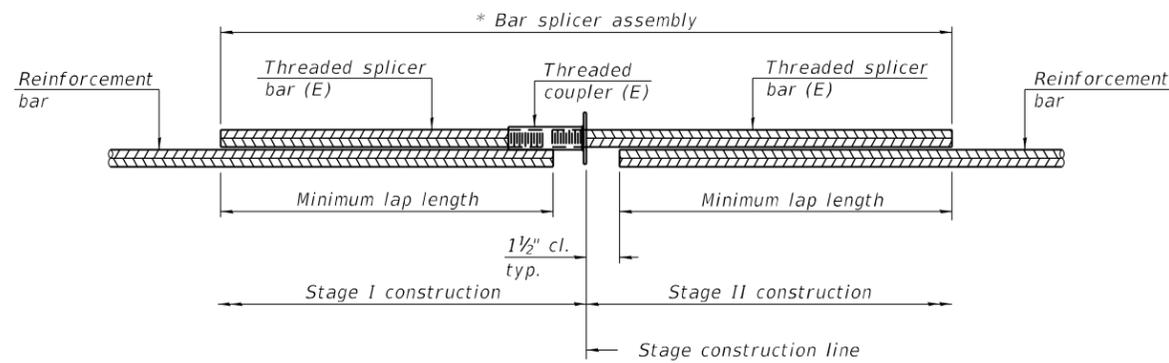
USER NAME = steffemk	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - D. MacKlin	REVISED -
PLOT DATE = 8/19/2021	DATE - Oct, 2020	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ADJUSTING EXISTING SCUPPER
 S.N. 018-0007**

SCALE: SHEET 8 OF 9 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	D7 BRIDGE REPAIRS 2022-1	CUMBERLAND	20	19
CONTRACT NO. 74995				
ILLINOIS FED. AID PROJECT				

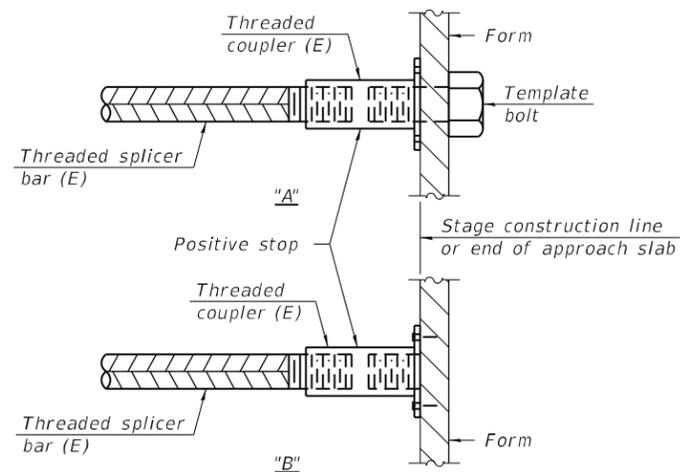


STANDARD BAR SPLICER ASSEMBLY PLAN
(All components shall be provided from one supplier)

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

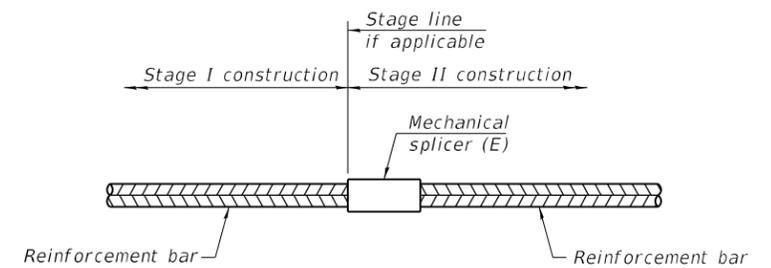


INSTALLATION AND SETTING METHODS

"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
Approach Slab	#6	68

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.

MODEL: Default
 FILE: M:\MSD\paw_bec\paw.com\FW\DOT\Documents\DOT Office\District 7\Project\74995\CADD\Bals\CAD\sheet\0774995-sh-018-0007 Bridge Repair Plans.dgn

BSD-1

1-1-2020

USER NAME = steffenmk	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - D. Macklin	REVISED -
PLOT DATE = 8/19/2021	DATE - April 2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 018-0007**

SCALE: SHEET 9 OF 9 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1707	D7 BRIDGE REPAIRS 2022-1	CUMBERLAND	20	20
CONTRACT NO. 74995				
ILLINOIS FED. AID PROJECT				