

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	1
		ILLINOIS	CONTRACT NO. 76P80	

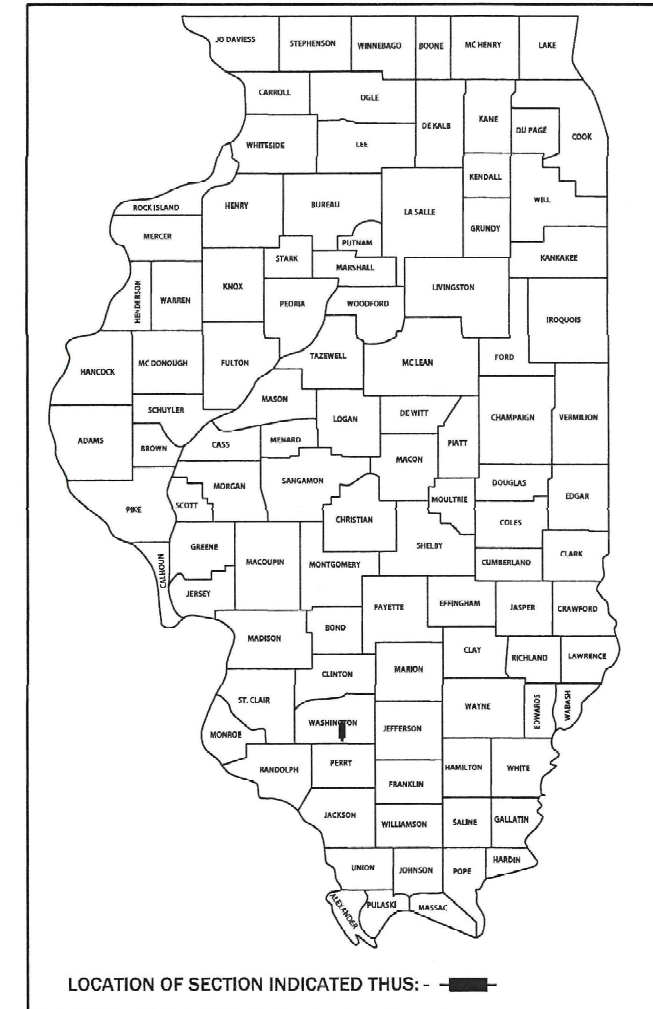
**INDEX OF SHEETS**

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
**PROPOSED  
HIGHWAY PLANS**

FAP ROUTE 42 (IL ROUTE 127)  
SECTION 9BR-1  
PROJECT  
BRIDGE JOINT REPLACEMENT AND REPAIR - CM  
WASHINGTON COUNTY

D-98-024-22

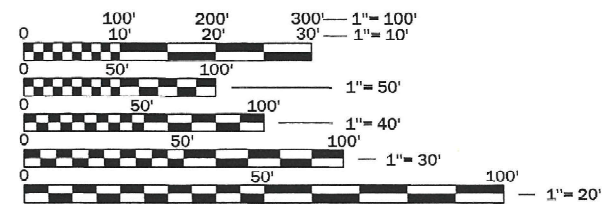


PLANS PREPARED BY:

**LOCHMUELLER GROUP**  
1928 Sra Bradley R. Smith Drive  
Troy, IL 62294  
PHONE: 618.667.1400

**DESIGN DESIGNATION**

ROADWAY CLASSIFICATION = OTHER PRINCIPLE ARTERIAL  
DESIGN SPEED = 55 MPH  
2019 ADT = 5100 (ACTUAL)  
2022 ADT = 5300 (ESTIMATED)  
2042 ADT = 6700 (ESTIMATED)  
SU = 4.2% MU = 5.4%

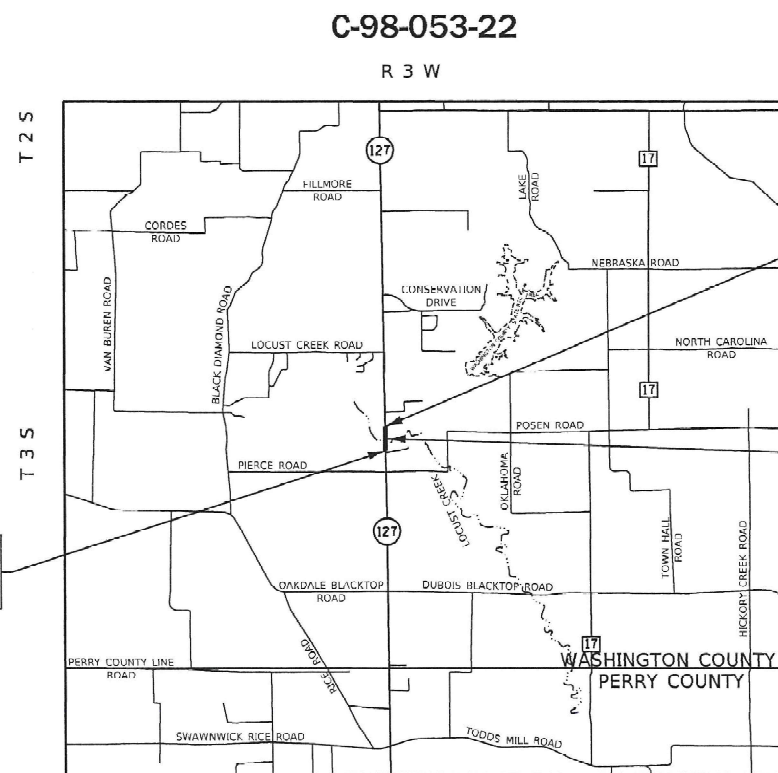


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER BILLIE OWEN 618-346-3209

CONTRACT NO. 76P80



IL ROUTE 127  
PROJECT BEGINS  
STA 652+58.00

IL ROUTE 127  
PROJECT ENDS  
STA 655+24.00

IL ROUTE 127 OVER LOCUST CREEK  
STRUCTURE NO. 095-0065  
229'-3" BK TO BK ABUTS  
LAT: 38.25729381  
LONG: -89.38026209

**LOCATION MAP**  
PILOT KNOB TOWNSHIP

GROSS LENGTH = 266.00 FEET = 0.050 MILES  
NET LENGTH = 266.00 FEET = 0.050 MILES



*Elizabeth S. Witt*  
ILLINOIS PROFESSIONAL ENGINEER NO. 062-061876  
EXP. 11-30-2023  
APPLIES TO SHEETS 1-14

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED Jan. 19, 2022  
Stephen Travia REGIONAL ENGINEER  
May 13, 2022 [Signature]  
ENGINEER OF DESIGN AND ENVIRONMENT  
May 13, 2022 [Signature]  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

## HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-18	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

## GENERAL NOTES

1. UTILITIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA:
 

AT&T ILLINOIS	COMMUNICATIONS
CLEARWAVE COMMUNICATIONS	COMMUNICATIONS
TRI-COUNTY ELECTRIC COOPERATIVE, INC	ELECTRIC
WASHINGTON COUNTY	WATER
2. LIMITED SURVEY WAS PERFORMED FOR THIS PROJECT AND THE PLANS WERE CREATED USING MICROFILM AND FIELD MEASUREMENTS.
3. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
4. EARTH EXCAVATION INCLUDES ANY EXCAVATION REQUIRED FOR INSTALLATION OF STONE RIPRAP, CLASS A4.
5. A QUANTITY OF 5 TONS OF AGGREGATE SHOULDER (SPECIAL) HAS BEEN INCLUDED IN THE PLANS TO ADDRESS EROSION OF THE EXISTING AGGREGATE SHOULDERS IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER.
6. TWO CHANGEABLE MESSAGE SIGNS SHALL BE REQUIRED FOR THIS PROJECT. THEY SHALL BE PLACED ON THE APPROACHES ON IL ROUTE 127 TWO WEEKS PRIOR TO ANY LANE CLOSURE AND SHALL REMAIN FOR FOUR WEEKS. THE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ALONG IL ROUTE 127 OR AT THE DIRECTION OF THE ENGINEER.

## COMMITMENTS

NONE

REV. - MS

FILE NAME: X:\Production\11ea\2020\420-0017\PRJ-02\CAD\CADD\_Sheets\0876P80-ht-gennots.dgn



USER NAME	+ Betsy	DESIGNED	- ESW	REVISED	-
MODEL NAME	+ Gen-01	DRAWN	- LEC	REVISED	-
PLOT SCALE	+ 0.1667' / in	CHECKED	- BRM	REVISED	-
PLOT DATE	+ 1/1/2022	DATE	- 10/8/2021	REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**HIGHWAY STANDARDS, GENERAL NOTES  
AND COMMITMENTS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	2
CONTRACT NO. 76P80				
		ILLINOIS	FED. AID PROJECT	

FILE NAME: X:\P\production\11ea\2020\420-0017\PRJ-02\CAD\CADD\_Sheets\DB76P80-ph-500.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				100% STATE		
				BRIDGE		
				0047		
				RURAL		
20200100	EARTH EXCAVATION	CU YD	30	30		
28100107	STONE RIPRAP, CLASS A4	SQ YD	46	46		
28200200	FILTER FABRIC	SQ YD	46	46		
44004000	PAVED DITCH REMOVAL	FOOT	26	26		
50102400	CONCRETE REMOVAL	CU YD	11.9	11.9		
50300100	FLOOR DRAINS	EACH	48	48		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	11.9	11.9		
50300300	PROTECTIVE COAT	SQ YD	39	39		
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5609	5609		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2150	2150		
50800515	BAR SPLICERS	EACH	26	26		
52000110	PREFORMED JOINT STRIP SEAL	FOOT	90	90		
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12	12		



USER NAME + Betsy  
 MODEL NAME + SOQ 1  
 PLOT SCALE + 40,0000' / in.  
 PLOT DATE + 1/7/2022

DESIGNED - ESW  
 DRAWN - LEC  
 CHECKED - BRM  
 DATE - 10/8/2021

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
 IL ROUTE 127

SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	3
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				

FILE NAME: X:\Production\Files\2020\420-9017\PRJ-92\CAD\CADD\_Sheets\DB76P80-ph-500.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				100% STATE		
				BRIDGE		
				0047		
				RURAL		
52100510	ANCHOR BOLTS, 3/4"	EACH	24	24		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6		
67100100	MOBILIZATION	L SUM	1	1		
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	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		
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	1206	1206		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	84	84		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	503	503		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	425	425		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	425	425		
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2		

REV. - MS



USER NAME + Betsy	DESIGNED - ESW	REVISED -
MODEL NAME + SOQ 2	DRAWN - LEC	REVISED -
PLOT SCALE + 40.0000' / in.	CHECKED - BRM	REVISED -
PLOT DATE + 1/7/2022	DATE - 10/8/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
IL ROUTE 127

SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	4
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				

FILE NAME: X:\P\production\11ea\2020\420-0017\PRJ-02\CAD\CADD\_Sheets\DB76P80-ph-500.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				100% STATE		
				BRIDGE		
				0047		
				RURAL		
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
78100300	REPLACEMENT REFLECTOR	EACH	11	11		
X1200030	FILLING INLETS, TEMPORARY	EACH	2	2		
X1200270	RECONNECT SHOULDER INLET SPECIAL	EACH	1	1		
X4811900	AGGREGATE SHOULDERS (SPECIAL)	TON	5	5		
X5870015	BRIDGE DECK CONCRETE SEALER	SQ FT	11347	11347		
X5930100	CONTROLLED LOW-STRENGTH MATERIAL, SPECIAL	CU YD	3	3		
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	11	11		
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	13	13		
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	12	12		
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	3127	3127		
Z0001905	STRUCTURAL STEEL REPAIR	POUND	2553	2553		
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE 1)	SQ YD	18	18		



USER NAME + Betsy	DESIGNED - ESW	REVISED -
MODEL NAME + SOQ 3	DRAWN - LEC	REVISED -
PLOT SCALE + 40,0000' / in.	CHECKED - BRM	REVISED -
PLOT DATE + 1/7/2022	DATE - 10/8/2021	REVISED -

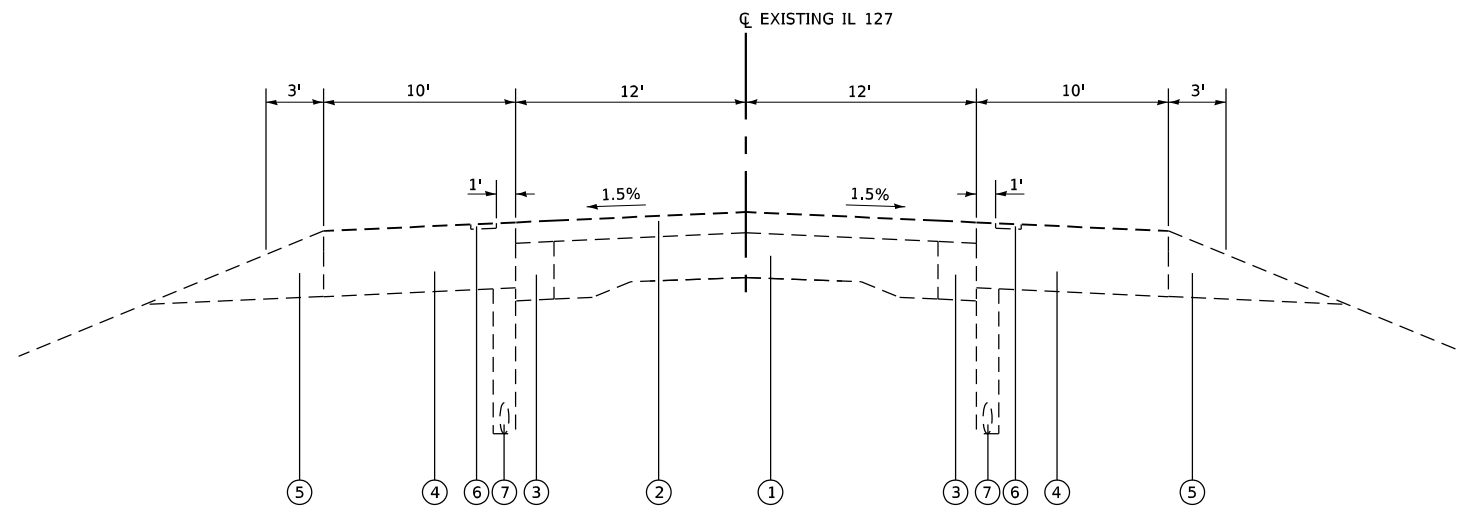
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
IL ROUTE 127

SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.

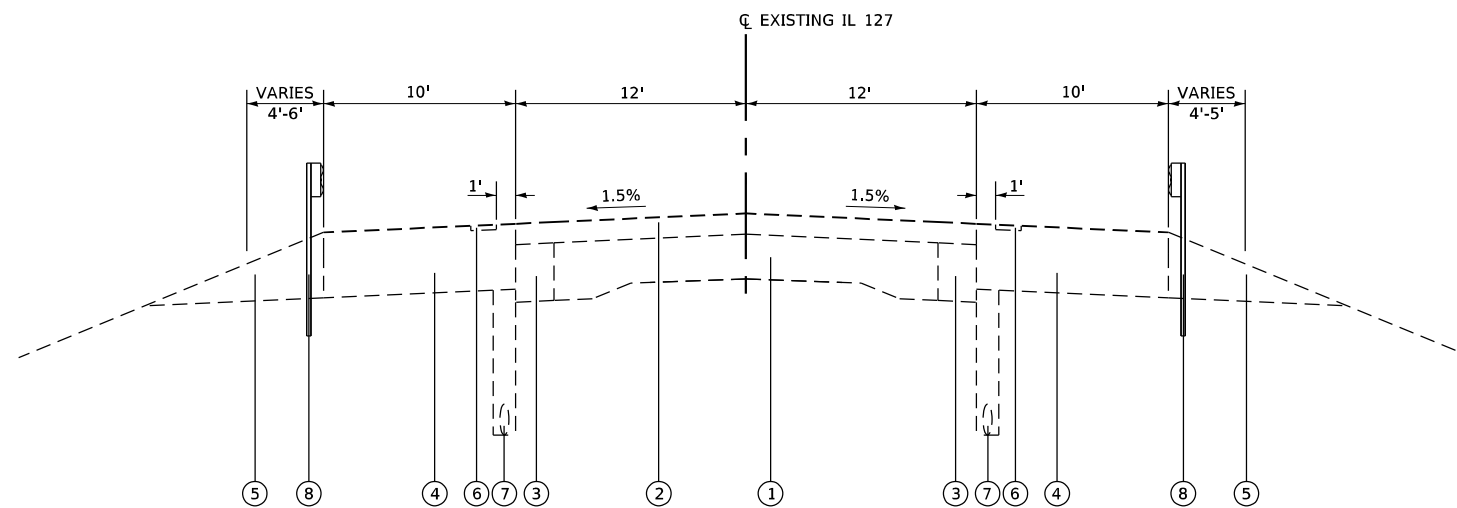
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	5
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				





**EXISTING IL 127 TYPICAL SECTION**

STA 649+00 TO STA 651+26  
 STA 656+53 TO STA 659+00



**EXISTING IL 127 TYPICAL SECTION**

STA 651+26 TO STA 652+75  
 BRIDGE OMISSION STA 652+75 TO STA 655+04  
 STA 655+04 TO STA 656+53

\* GUARDRAIL BEGINS STA 651+76 LT

\*\* GUARDRAIL ENDS STA 656+04

**LEGEND**

- ① EXISTING PCC PAVEMENT 9"-7"-9" AND VARIES
- ② EXISTING HOT-MIX ASPHALT RESURFACING, 3 3/4"
- ③ EXISTING HOT-MIX ASPHALT WIDENING, 10"
- ④ EXISTING HOT-MIX ASPHALT SHOULDERS, VARIES 9 3/4" TO 15 3/4"
- ⑤ EXISTING AGGREGATE SHOULDER, TYPE B
- ⑥ EXISTING SHOULDER RUMBLE STRIPS, 16"
- ⑦ EXISTING PIPE UNDERDRAIN, 4"
- ⑧ EXISTING STEEL PLATE BEAM GUARDRAIL

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USER NAME	+ Betsy	DESIGNED	- ESW	REVISED	-
MODEL NAME	+ Typ 01	DRAWN	- LEC	REVISED	-
PLOT SCALE	+ 10,0000' / in.	CHECKED	- BRM	REVISED	-
PLOT DATE	+ 1/7/2022	DATE	- 10/8/2021	REVISED	-

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SECTIONS  
 IL ROUTE 127

SCALE: 1"=5' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	7
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				

### MAINTENANCE OF TRAFFIC SCHEDULE

LOCATION				TEMPORARY RUMBLE STRIPS	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3	FILLING INLETS, TEMPORARY
STATION TO STATION	SIDE	ROADWAY	STAGE	(EACH)	(FOOT)	(FOOT)	(EACH)	(EACH)	(EACH)
632+86 TO 642+86	RT	IL ROUTE 127	1	3					
651+77 TO 656+01	LT/RT	IL ROUTE 127	1		425		2		
655+17	RT	IL ROUTE 127	1						1
655+18	LT	IL ROUTE 127	1						1
665+00 TO 675+00	LT	IL ROUTE 127	1	3					
651+77 TO 656+02	LT/RT	IL ROUTE 127	2			425		2	
SUBTOTAL				6	425	425	2	2	2
PAY TOTAL				6	425	425	2	2	2

### ROADWAY SCHEDULE

LOCATION			EARTH EXCAVATION	STONE RIPRAP, CLASS A4	FILTER FABRIC	PAVED DITCH REMOVAL	RECONNECT SHOULDER INLET SPECIAL
STATION TO STATION	SIDE	ROADWAY	(CU YD)	(SQ YD)	(SQ YD)	(FOOT)	(EACH)
652+63 TO 652+76	LT	IL ROUTE 127	6.7	11.0	11.0	13	
652+64 TO 652+77	RT	IL ROUTE 127	6.7	11.0	11.0	13	
655+03 TO 655+21	LT	IL ROUTE 127	7.1	11.7	11.7		1
655+03 TO 655+21	RT	IL ROUTE 127	7.2	11.7	11.7		
SUBTOTAL			27.7	45.4	45.4	26	1
PAY TOTAL			30	46	46	26	1

### PAVEMENT MARKING SCHEDULE

LOCATION			PAVEMENT MARKING BLACKOUT TAPE, 5"	SHORT TERM PAVEMENT MARKING REMOVAL	REPLACEMENT REFLECTOR	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL
STATION TO STATION	SIDE	ROADWAY	(FOOT)	(SQ FT)	(EACH)	(EACH)
649+80 TO 658+00	MID	IL ROUTE 127	205	85.4	11	11
651+40 TO 656+43	RT	IL ROUTE 127	503	209.6		
651+42 TO 656+40	LT	IL ROUTE 127	498	207.5		
SUBTOTAL			1206	502.5	11	11
PAY TOTAL			1206	503	11	11

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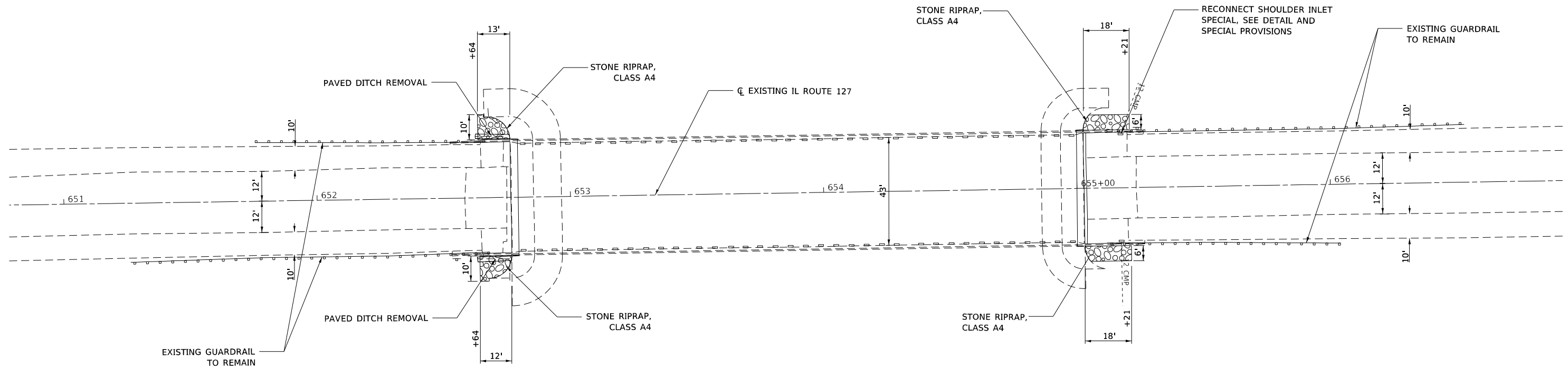
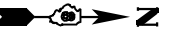
USER NAME + Betsy	DESIGNED - ESW	REVISED -
MODEL NAME + SCHEDULE 01	DRAWN - LEC	REVISED -
PLOT SCALE + 2,0000 1/ in.	CHECKED - BRM	REVISED -
PLOT DATE + 1/7/2022	DATE - 10/8/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

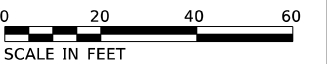
SCHEDULE OF QUANTITIES IL ROUTE 127			
SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	8
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				





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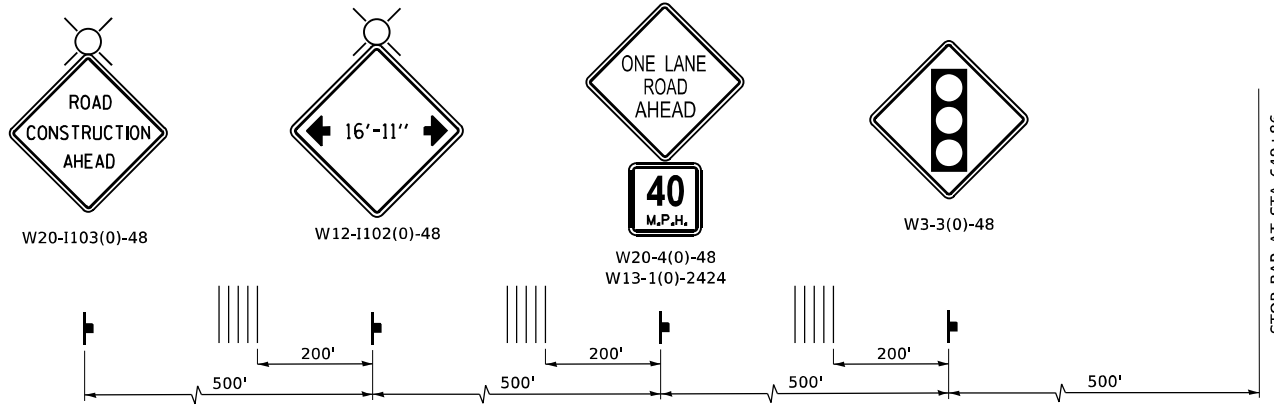
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MODEL NAME	+ PLN SHT	DRAWN	- LEC	REVISED	-
PLOT SCALE	+ 40,0000' / in.	CHECKED	- BRM	REVISED	-
PLOT DATE	+ 1/7/2022	DATE	- 10/8/2021	REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

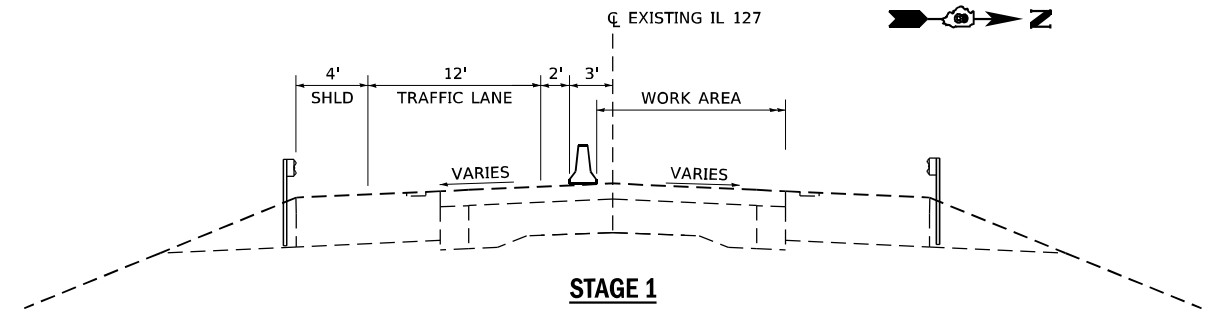
**ROADWAY PLAN  
IL ROUTE 127**

SCALE: 1"=20'    SHEET 1 OF 1 SHEETS    STA.    TO STA.

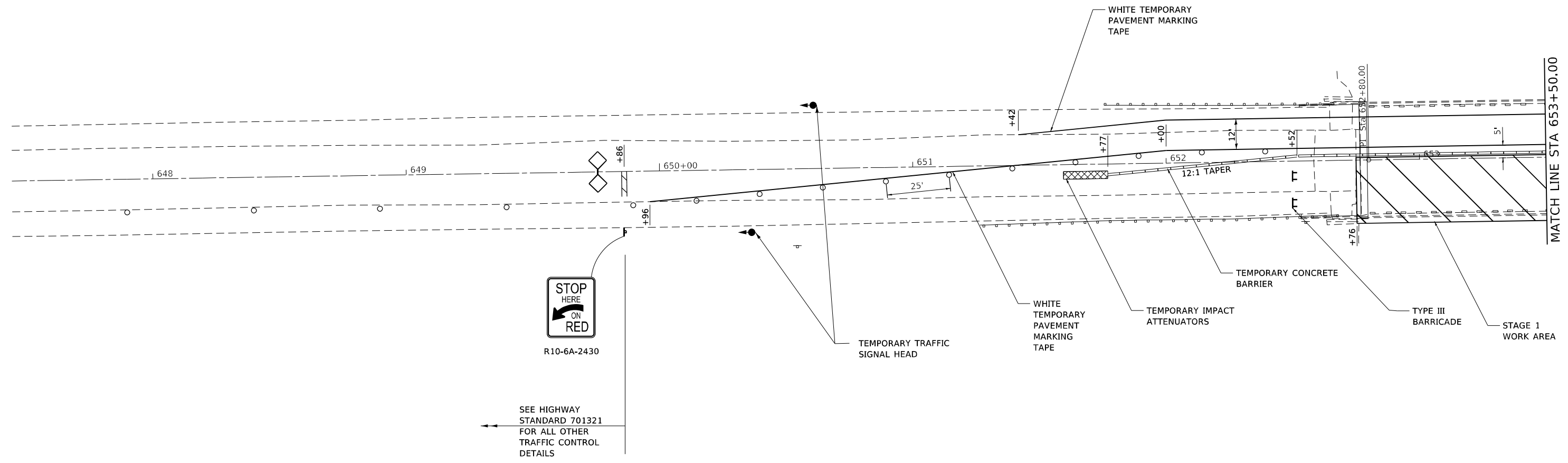
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	9
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				



**ADVANCE WARNING SIGN SEQUENCE DETAIL**



**STAGE 1**



SEE HIGHWAY STANDARD 701321 FOR ALL OTHER TRAFFIC CONTROL DETAILS

**LEGEND**

- WORK AREA
- SIGN
- TYPE III BARRICADE
- TRAFFIC SIGNAL
- DETECTOR LOOPS
- IMPACT ATTENUATOR
- DRUMS
- TEMPORARY CONCRETE BARRIER
- TEMPORARY RUMBLE STRIPS

**NOTES**

1. DRUMS ALONG TAPER SHALL HAVE STEADY BURNING BI-DIRECTIONAL LIGHT AS SHOWN ON HIGHWAY STANDARD 701321.
2. GUARDRAIL AND TEMPORARY CONCRETE BARRIER SHALL HAVE CRYSTAL, BI-DIRECTIONAL WALL REFLECTORS AS SHOWN ON HIGHWAY STANDARD 701321.
3. ANY DETAILS NOT SHOWN SHALL BE ACCORDING TO HIGHWAY STANDARD 701321.



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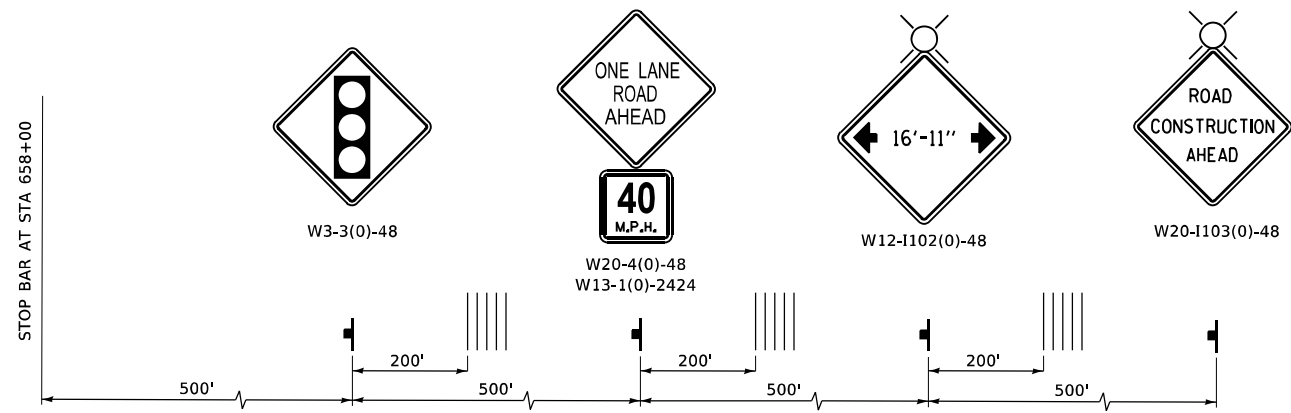
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MODEL NAME	+ MOT Stage 1_1	DRAWN	- LEC	REVISED	-
PLOT SCALE	+ 40,0000' / in.	CHECKED	- BRM	REVISED	-
PLOT DATE	+ 1/7/2022	DATE	- 10/8/2021	REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

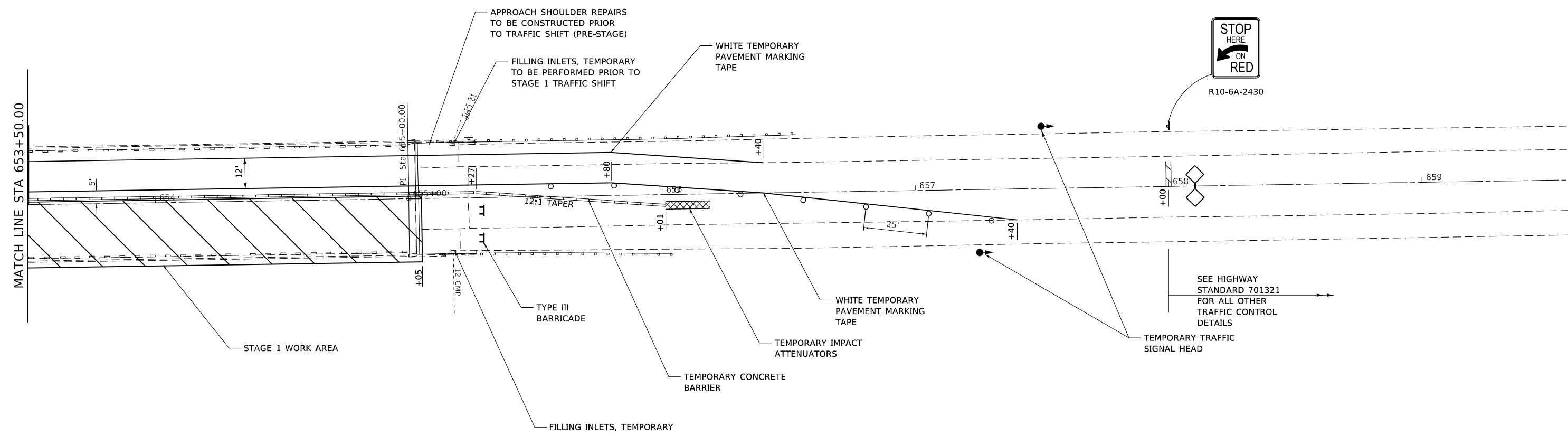
**MAINTENANCE OF TRAFFIC - STAGE 1  
IL ROUTE 127**

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	10
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				



**ADVANCE WARNING SIGN SEQUENCE DETAIL**



**LEGEND**

- WORK AREA
- SIGN
- TYPE III BARRICADE
- TRAFFIC SIGNAL
- DETECTOR LOOPS
- IMPACT ATTENUATOR
- DRUMS
- TEMPORARY CONCRETE BARRIER
- TEMPORARY RUMBLE STRIPS

**NOTES**

1. DRUMS ALONG TAPER SHALL HAVE STEADY BURNING BI-DIRECTIONAL LIGHT AS SHOWN ON HIGHWAY STANDARD 701321.
2. GUARDRAIL AND TEMPORARY CONCRETE BARRIER SHALL HAVE CRYSTAL, BI-DIRECTIONAL WALL REFLECTORS AS SHOWN ON HIGHWAY STANDARD 701321.
3. ANY DETAILS NOT SHOWN SHALL BE ACCORDING TO HIGHWAY STANDARD 701321.



FILE NAME: X:\Production\11ea\2020\420-0017\PRJ-02\CAD\CADD\_Sheets\DB76P80-ht-MOT\_Stage\_1.dgn



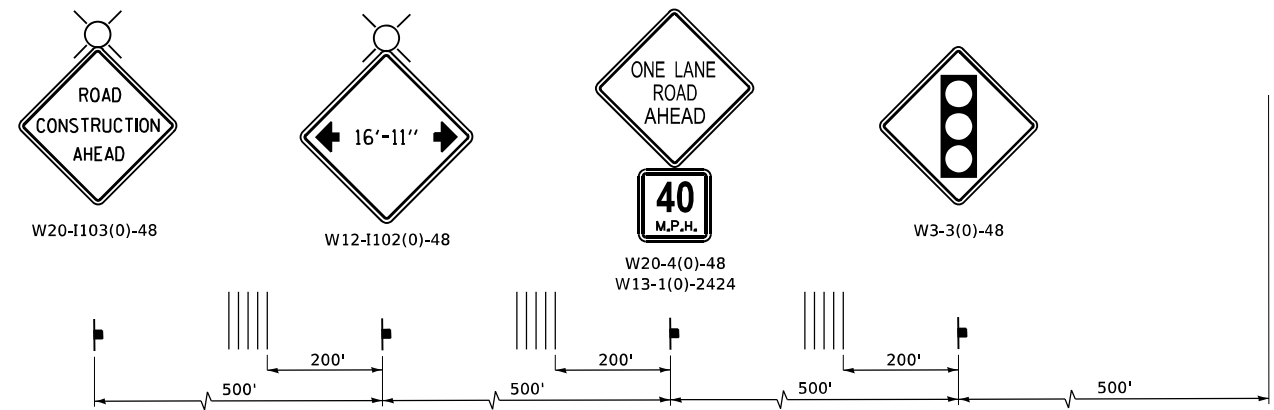
USER NAME	+ Betsy	DESIGNED	- ESW	REVISED	-
MODEL NAME	+ MOT Stage 1_2	DRAWN	- LEC	REVISED	-
PLOT SCALE	+ 40,0000' / in.	CHECKED	- BRM	REVISED	-
PLOT DATE	+ 1/7/2022	DATE	- 10/8/2021	REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

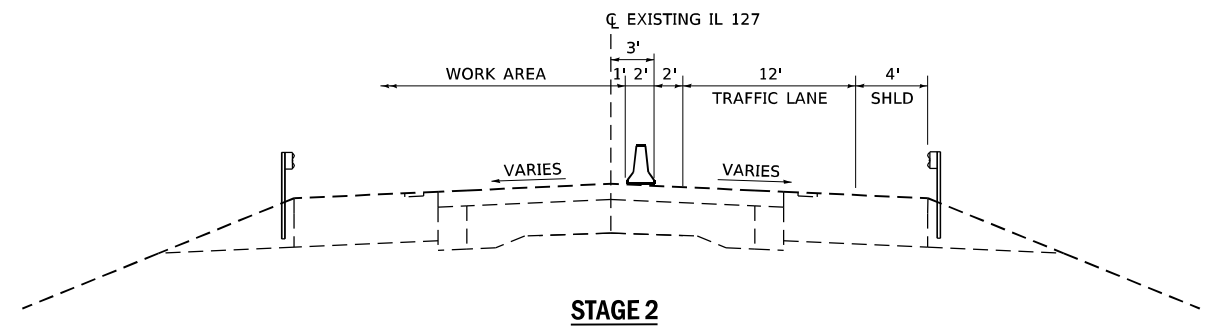
**MAINTENANCE OF TRAFFIC - STAGE 1  
IL ROUTE 127**

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. TO STA.

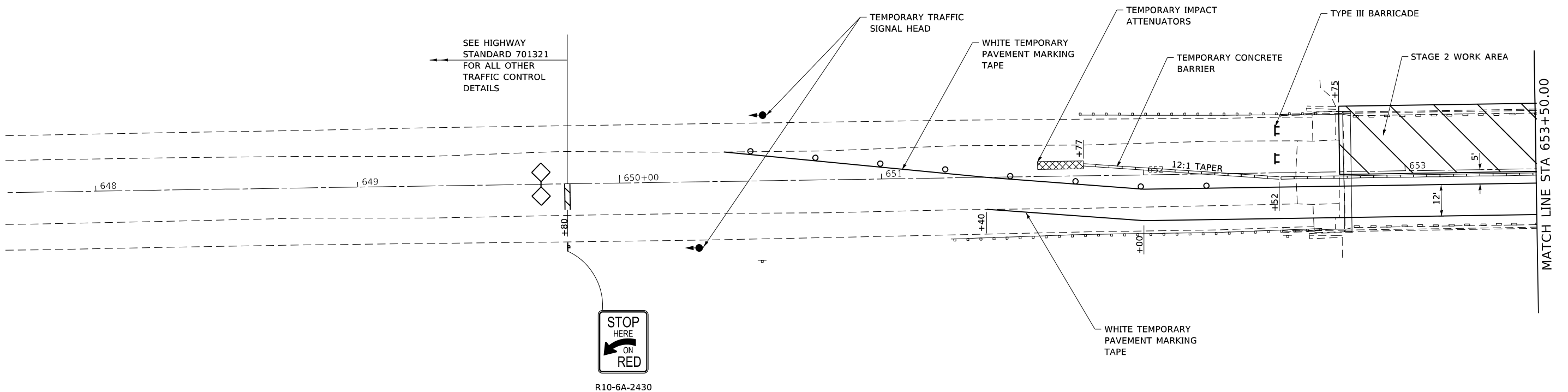
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	11
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				



**ADVANCE WARNING SIGN SEQUENCE DETAIL**



**STAGE 2**



SEE HIGHWAY STANDARD 701321 FOR ALL OTHER TRAFFIC CONTROL DETAILS



R10-6A-2430

**LEGEND**

- WORK AREA
- SIGN
- TYPE III BARRICADE
- TRAFFIC SIGNAL
- DETECTOR LOOPS
- IMPACT ATTENUATOR
- DRUMS
- TEMPORARY CONCRETE BARRIER
- TEMPORARY RUMBLE STRIPS

**NOTES**

1. DRUMS ALONG TAPER SHALL HAVE STEADY BURNING BI-DIRECTIONAL LIGHT AS SHOWN ON HIGHWAY STANDARD 701321.
2. GUARDRAIL AND TEMPORARY CONCRETE BARRIER SHALL HAVE CRYSTAL, BI-DIRECTIONAL WALL REFLECTORS AS SHOWN ON HIGHWAY STANDARD 701321.
3. ANY DETAILS NOT SHOWN SHALL BE ACCORDING TO HIGHWAY STANDARD 701321.



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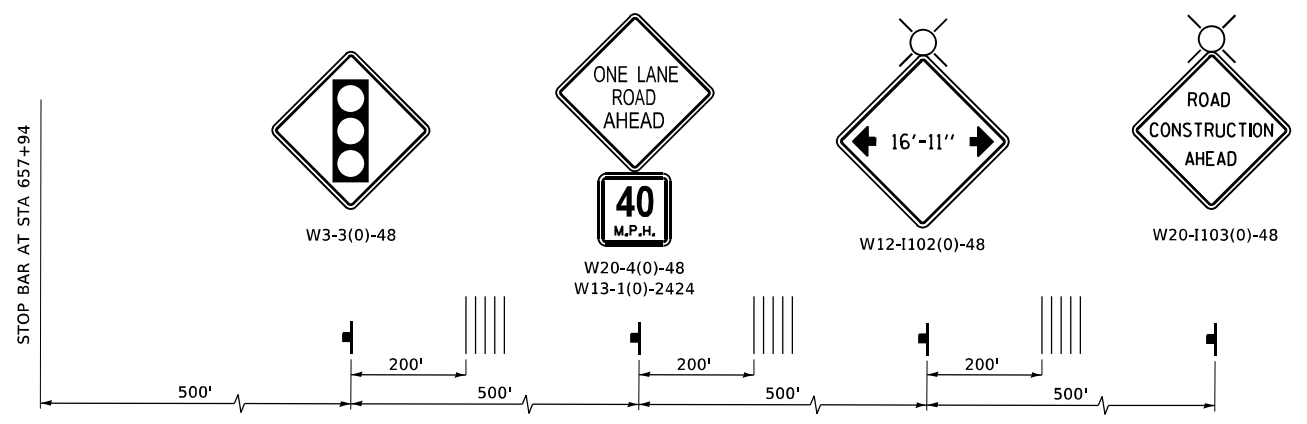
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PLOT DATE	+ 1/7/2022	DATE	- 10/8/2021	REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

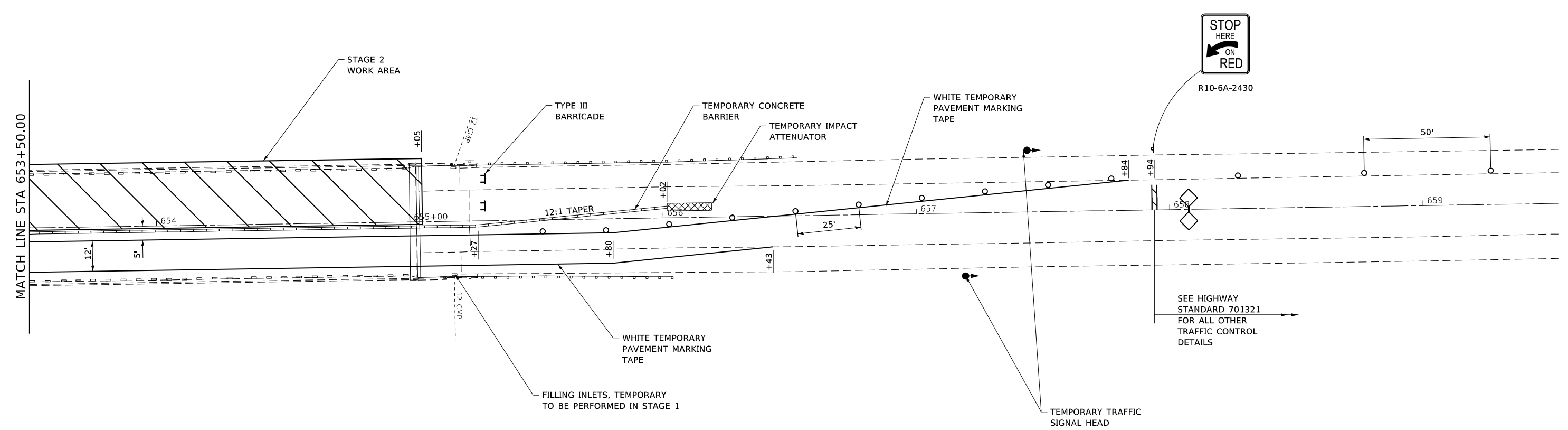
**MAINTENANCE OF TRAFFIC - STAGE 2  
IL ROUTE 127**

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				



**ADVANCE WARNING SIGN SEQUENCE DETAIL**



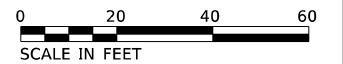
SEE HIGHWAY STANDARD 701321 FOR ALL OTHER TRAFFIC CONTROL DETAILS

**LEGEND**

- WORK AREA
- SIGN
- TYPE III BARRICADE
- TRAFFIC SIGNAL
- DETECTOR LOOPS
- IMPACT ATTENUATOR
- DRUMS
- TEMPORARY CONCRETE BARRIER
- TEMPORARY RUMBLE STRIPS

**NOTES**

1. DRUMS ALONG TAPER SHALL HAVE STEADY BURNING BI-DIRECTIONAL LIGHT AS SHOWN ON HIGHWAY STANDARD 701321.
2. GUARDRAIL AND TEMPORARY CONCRETE BARRIER SHALL HAVE CRYSTAL, BI-DIRECTIONAL WALL REFLECTORS AS SHOWN ON HIGHWAY STANDARD 701321.
3. ANY DETAILS NOT SHOWN SHALL BE ACCORDING TO HIGHWAY STANDARD 701321.



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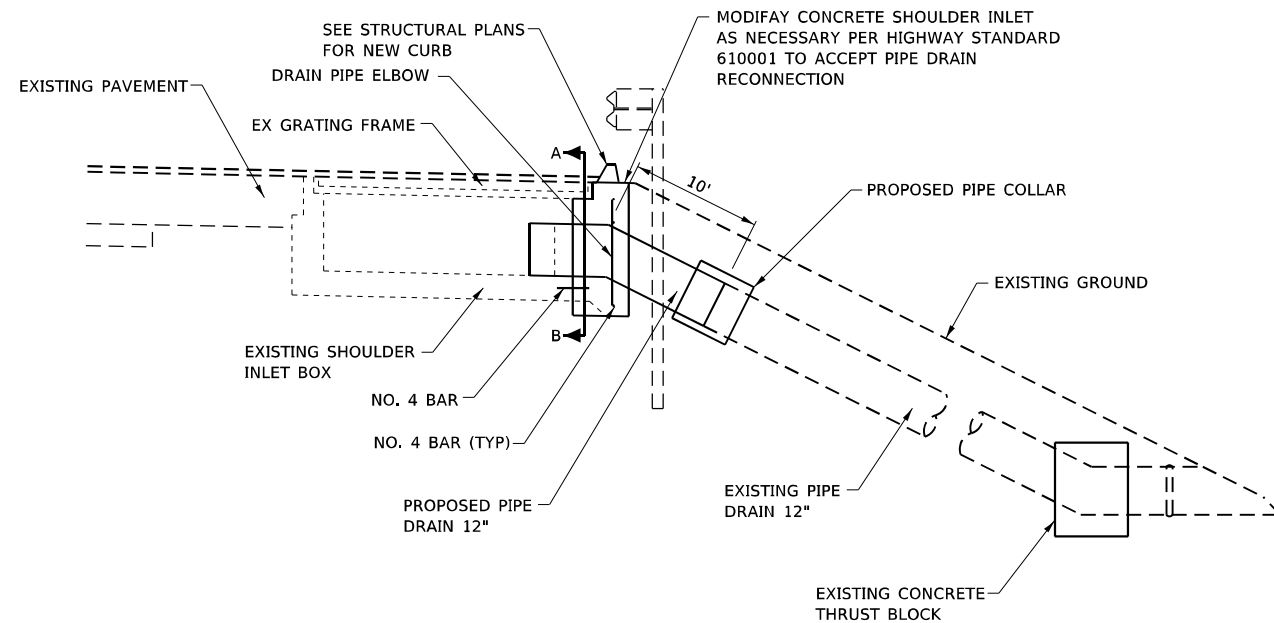
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PLOT DATE	+ 1/7/2022	DATE	- 10/8/2021	REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC - STAGE 2  
IL ROUTE 127**

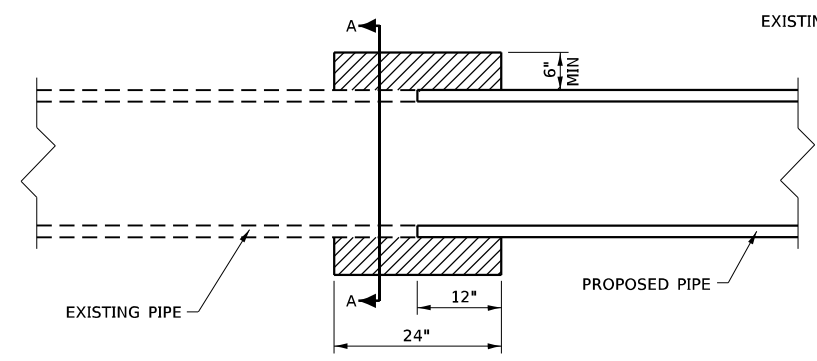
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	13
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				



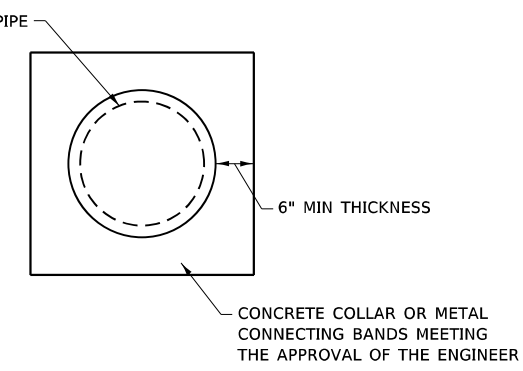
**RECONNECT SHOULDER INLET SPECIAL**

ALL WORK ASSOCIATED WITH RECONNECTONG DRAIN PIPE IS INCLUDED IN THE COST OF RECONNECT SHOULDER INLET (SPECIAL)  
NOT TO SCALE

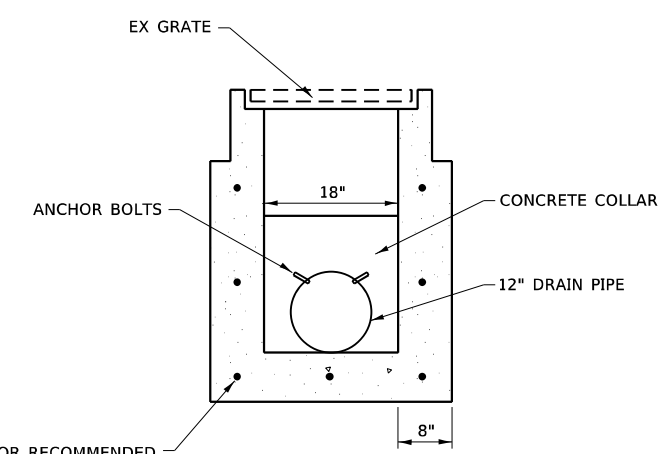


**CONCRETE PIPE COLLAR DETAIL**

NOT TO SCALE



**SECTION A-A**



**SECTION B-B**

NOT TO SCALE

NO. 4 BARS (TYP)  
18\"/>

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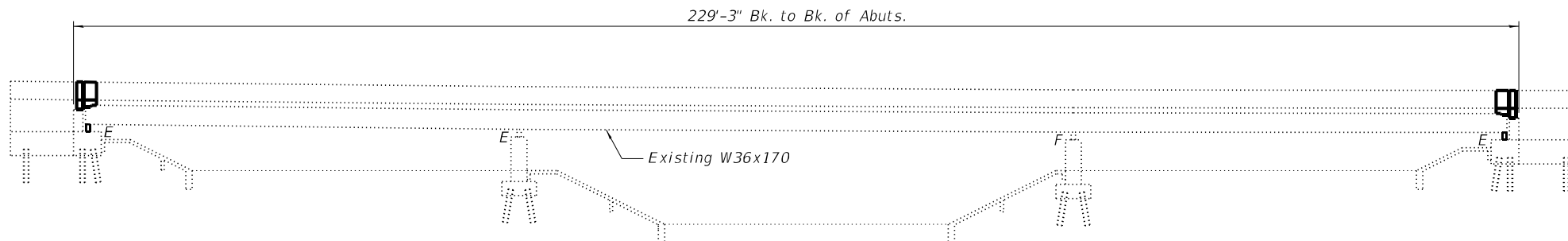
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**MISCELLANEOUS DETAILS  
SHOULDER INLET SPECIAL**

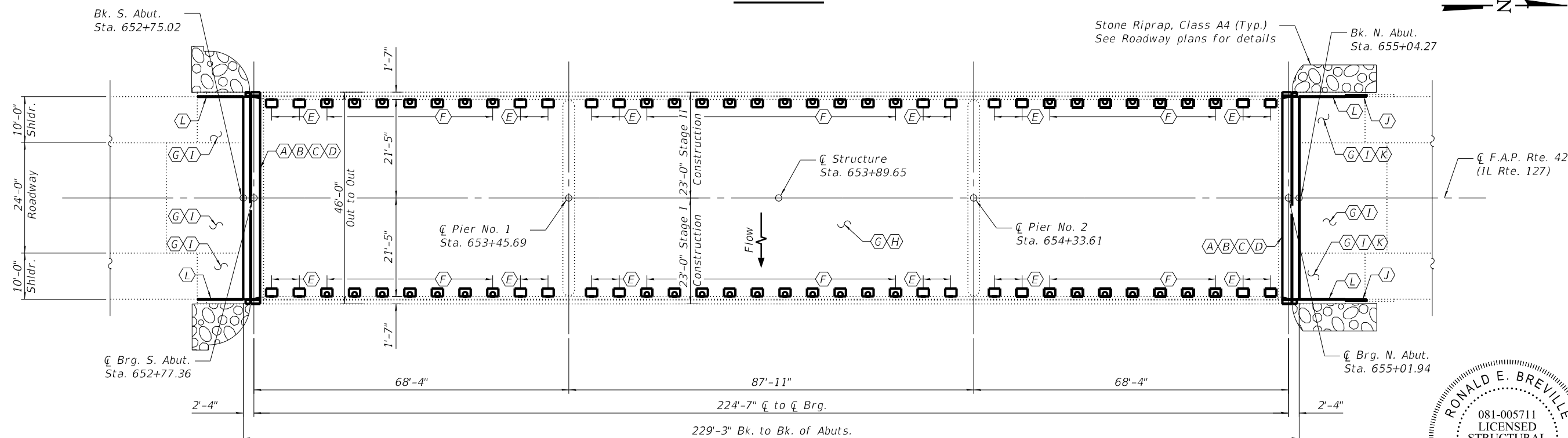
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	14
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				

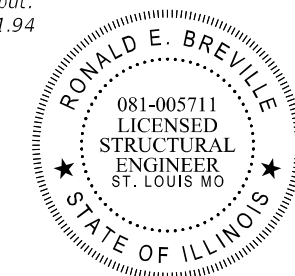
Existing Structure: SN 095-0065, built in 1980, is a 3 span bridge carrying F.A.P. Route 42 (IL Route 127) over Locust Creek. The proposed project consists of the replacement of the expansion joints with new strip seals, replacement of the abutment bearings with new elastomeric bearings, beam repair on all beam ends with galvanized steel bent plates, replacement of the abutment diaphragms with new galvanized steel diaphragms, replacement of the floor drains, both full and partial depth deck patching, deck sealing, approach slab repair, repair of the north approach shoulder curbs, erosion repair under the north approach shoulders and sealing of the gap between the existing wingwalls and approach slabs.



ELEVATION



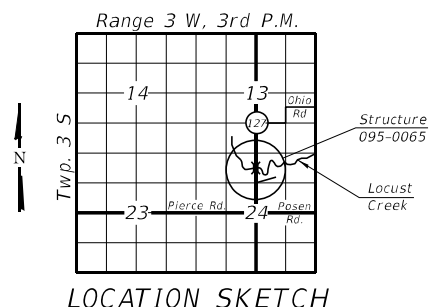
PLAN



7 JAN. 2022  
EXP: 30 NOV. 2022  
APPLIES TO SHEETS 15-26

GENERAL PLAN AND ELEVATION  
F.A.P. RTE. 42 (IL RTE. 127) OVER  
LOCUST CREEK  
SECTION 9BR-1  
WASHINGTON COUNTY  
STA. 653+89.65

- (A) - Removing existing expansion joint and replace with strip seals
- (B) - Remove existing abutment bearings and replace with elastomeric bearings
- (C) - Remove and replace existing abutment diaphragms
- (D) - Repair beam ends with bent L plates
- (E) - Remove floor drains
- (F) - Remove and replace floor drains
- (G) - Deck sealing
- (H) - Partial depth deck repair
- (I) - Partial depth approach slab repair
- (J) - Remove and replace approach shoulder curb
- (K) - Approach slab erosion repair
- (L) - Seal gap between wingwall and approach slab



LOCATION SKETCH

**DESIGN SPECIFICATIONS**

**NEW CONSTRUCTION**  
2002 AASHTO Standard Specification for Highway Bridges  
17th Edition with Interims  
**ORIGINAL CONSTRUCTION**  
1973 AASHTO Specifications  
1974, 1975, and 1976 Interim Specifications

**DESIGN STRESSES**

**NEW CONSTRUCTION**  
f'c = 4,000 psi  
fy = 60,000 psi (Reinforcement)  
fy = 36,000 psi (Structural Steel)  
**ORIGINAL CONSTRUCTION**  
f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)  
fy = 36,000 psi (Structural Steel)

**LOADING**

**NEW CONSTRUCTION**  
Live Load: HS20-44  
Future W.S.: 25#/sq. ft.  
**ORIGINAL CONSTRUCTION**  
Live Load: HS20-44  
Future W.S.: 25#/sq. ft.

MODEL: BRD 01  
FILE NAME: X:\ProductionFiles\2020\420-001\7PPI-02\CAD\CADD Structure Sheets\0950065-76P80-001-General Plan & Elevation.dgn

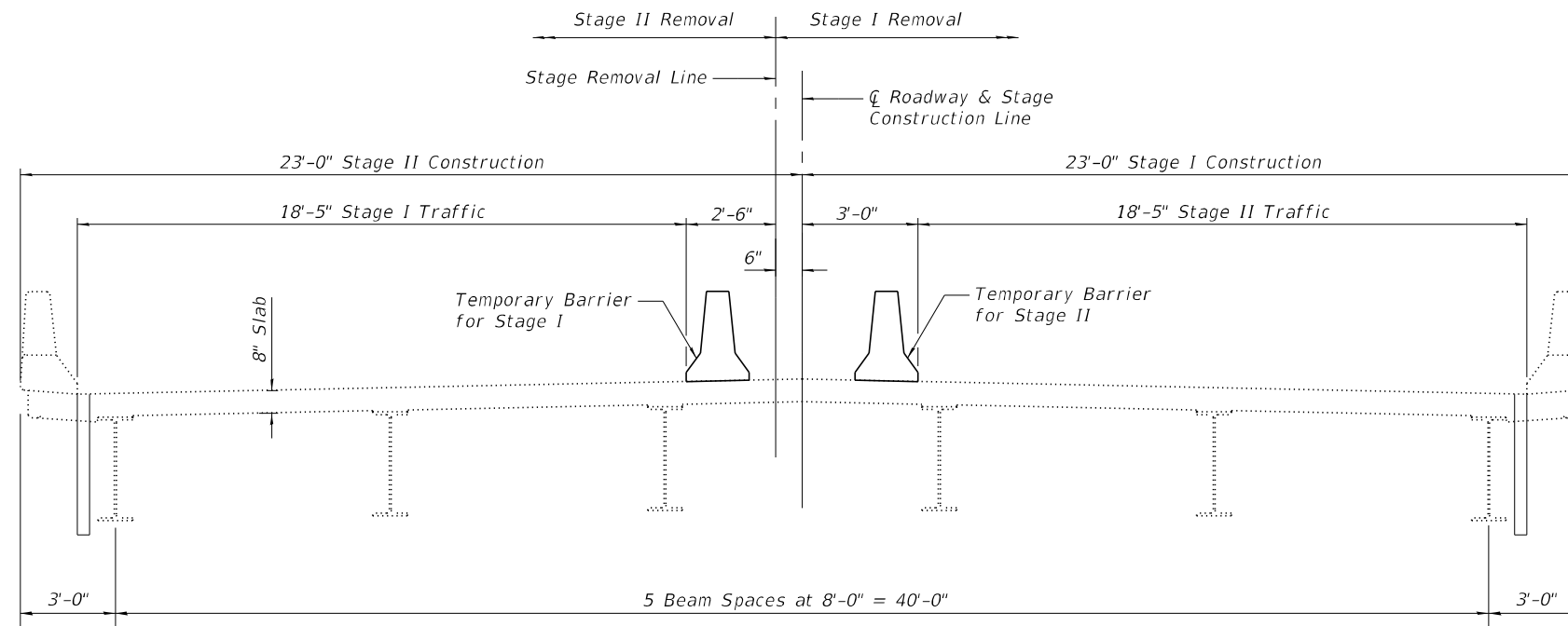


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PLOT SCALE	0.1667' / in.	DRAWN -	WJS	REVISED -	
PLOT DATE	5/5/2022	CHECKED -	ACS	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION  
STRUCTURE NO. 095-0065  
SHEET 1 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	15
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				



**STAGE CONSTRUCTION DETAIL**  
Looking North

**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.

Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

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.

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 to be applied to areas of new concrete only.

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.

Locations of Bridge Deck Concrete Sealer are the deck, inside and top of bridge parapets, inside and top of approach parapets and all approach shoulders and pavement.

It is anticipated that full depth deck slab repair will be necessary at each existing floor drain location. Removal and disposal of existing floor drains shall be included in the contract unit price for Deck Slab Repair (Full Depth, Type I).

Proposed new Floor Drains shall be constructed of 6" diameter fiberglass pipe.

All new fasteners shall be high strength bolts. Holes shall be 1 3/16" dia. for 3/4" dia. bolts and 1 5/16" dia. for 7/8" dia. bolts, unless otherwise noted.

Diaphragm connection holes shall be 1 5/16" dia. for 3/4" dia. bolts. Two hardened washers shall be required at diaphragm connections.

Cleaning and field painting of structural steel shall be done under a separate painting contract.

All new structural steel and bearing assemblies shall be hot dipped galvanized according to the Special Provision for "Hot Dip Galvanizing for Structural Steel".

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision, "Cleaning and Painting Contact Surface Areas of Existing Steel Structures."

Longitudinal gaps between wingwalls and approach shoulders are to be sealed with Silicone Joint Sealer.

Approach slab repair and deck slab repair quantities shown are estimated. The Engineer shall show actual locations of approach slab repairs and deck slab repairs on as-built plans.

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

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

Two 1/2 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

**INDEX OF SHEETS**

1. General Plan and Elevation
2. General Data
3. Approach Shoulder Repairs
4. Approach Repairs
- 5-6. Expansion Joint Replacement Details
7. Preformed Joint Strip Seal Details
8. Floor Drain Details
- 9-10. Structural Steel Repair Details
11. Bearing Details
12. Bar Splicer Assembly and Mechanical Splicer Details

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	11.9
Concrete Superstructure	Cu. Yd.	11.9
Bridge Deck Concrete Sealer	Sq. Ft.	11,347
Reinforcement Bars, Epoxy Coated	Pound	2,150
Preformed Joint Strip Seal	Foot	90.0
Protective Coat	Sq. Yd.	39
Bar Splicers	Each	26
Floor Drains	Each	48
Jack and Remove Existing Bearings	Each	12
Elastomeric Bearing Assembly, Type I	Each	12
Anchor Bolts, 3/4"	Each	24
Furnishing and Erecting Structural Steel	Pound	5,609
Controlled Low-Strength Material, Special	Cu. Yd.	3
Structural Steel Removal	Pound	3,127
Structural Steel Repair	Pound	2,553
Approach Slab Repair (Partial Depth)	Sq. Yd.	13
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	18
Deck Slab Repair (Partial)	Sq. Yd.	5
Silicone Joint Sealer, 1"	Foot	40

MODEL: BRD 02  
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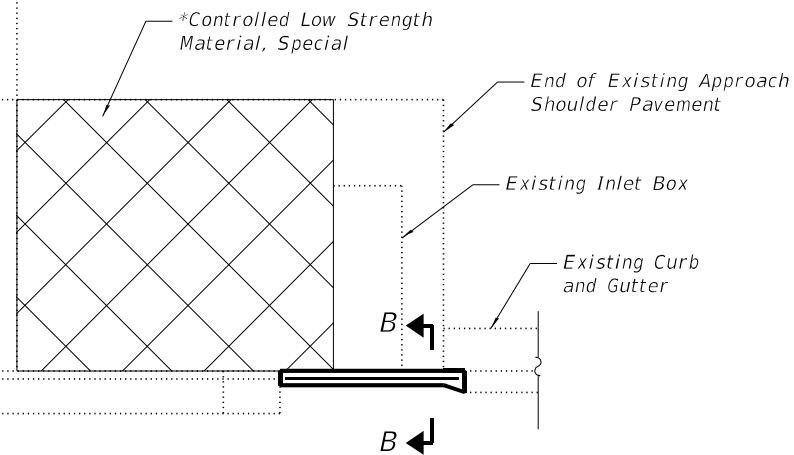
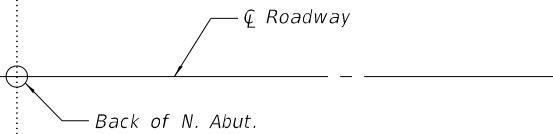
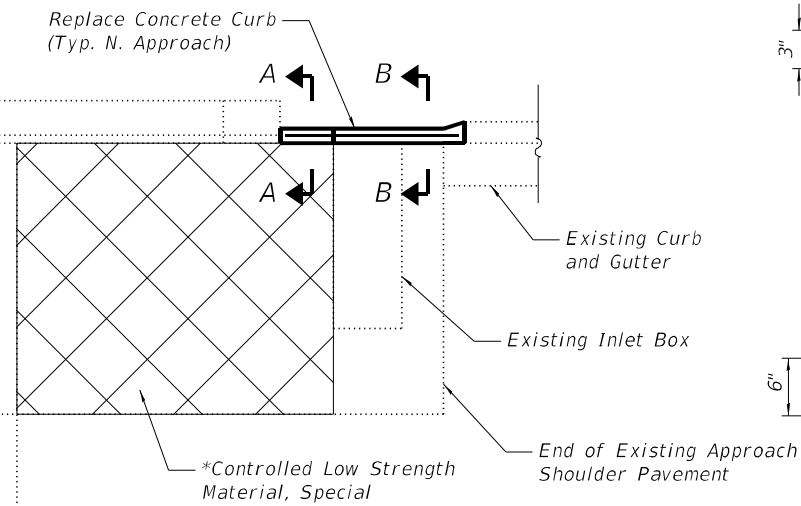
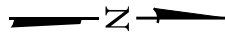
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA  
STRUCTURE NO. 095-0065**

SHEET 2 OF 12 SHEETS

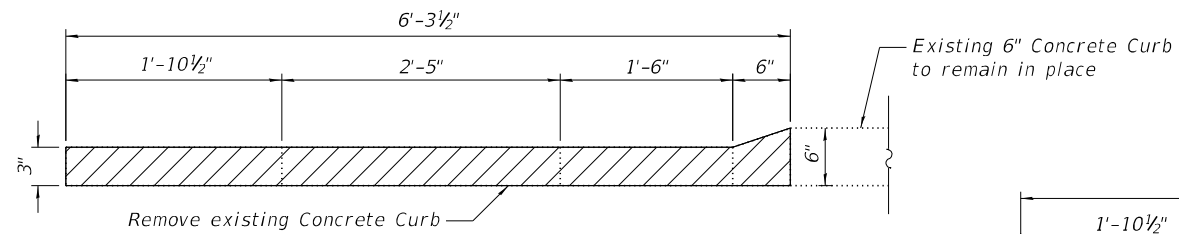
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	16
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				



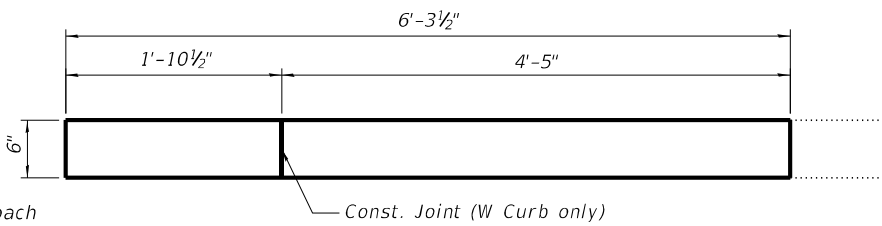


**PLAN OF NORTH APPROACH REPAIRS**

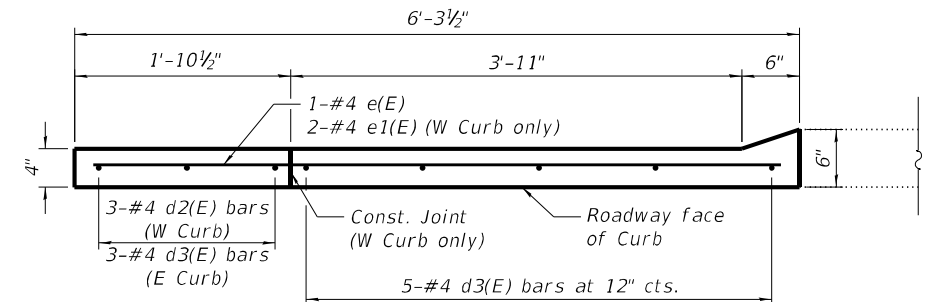
\*Quantity is estimated, field conditions shall be verified prior to ordering materials



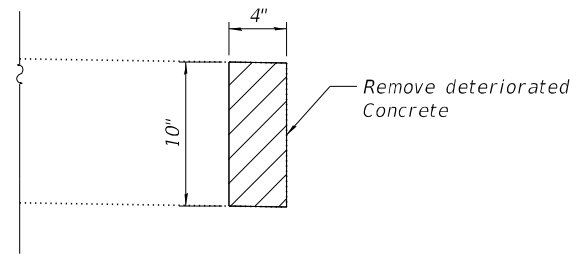
**ELEVATION OF EXISTING CURB**



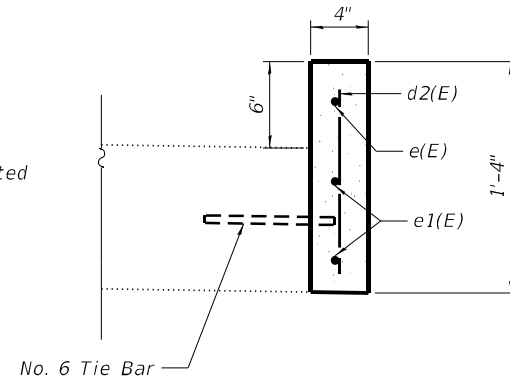
**ELEVATION OF PROPOSED CURB**



**PLAN OF PROPOSED CURB**

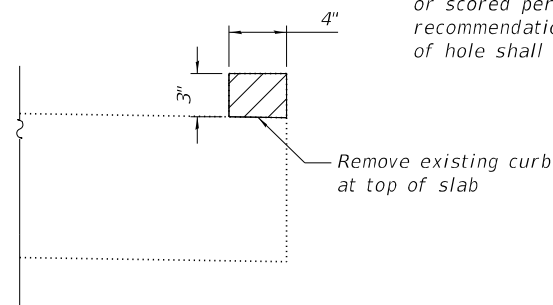


**SECTION A-A - EXISTING**

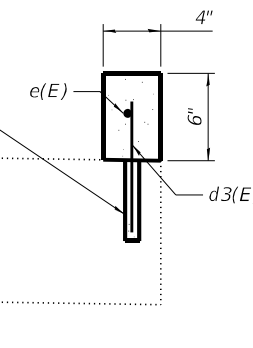


**SECTION A-A - PROPOSED**

Drill and set #4 d3(E) bars according to Article 509.06 of the Standard Specifications. Drilled holes shall be roughened or scored per manufacturer's recommendations. Minimum depth of hole shall be 5"



**SECTION B-B - EXISTING**



**SECTION B-B - PROPOSED**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d2(E)	3	#4	1'-1"	—
d3(E)	13	#4	9"	—
e(E)	2	#4	6'-0"	—
e1(E)	2	#4	1'-7"	—
ITEM		UNIT	QUANTITY	
Concrete Removal		Cu. Yd	0.1	
Concrete Superstructure		Cu. Yd	0.1	
Reinforcement Bars, Epoxy Coated		Pound	20	
Controlled Low-Strength Material, Special		Cu. Yd.	3	

Notes:  
 Fill voids below approach shoulder pavement with Controlled Low-Strength Material, Special prior to Stage I Construction. See roadway plans for traffic staging.  
 Existing core holes in approach shoulders and pavement are to be cleaned and filled prior to installation of Controlled Low-Strength Material, Special. Cost included with Controlled Low-Strength Material, Special.  
 Concrete in new curb shall be paid for as Concrete Superstructure.

MODEL: BRD\_03  
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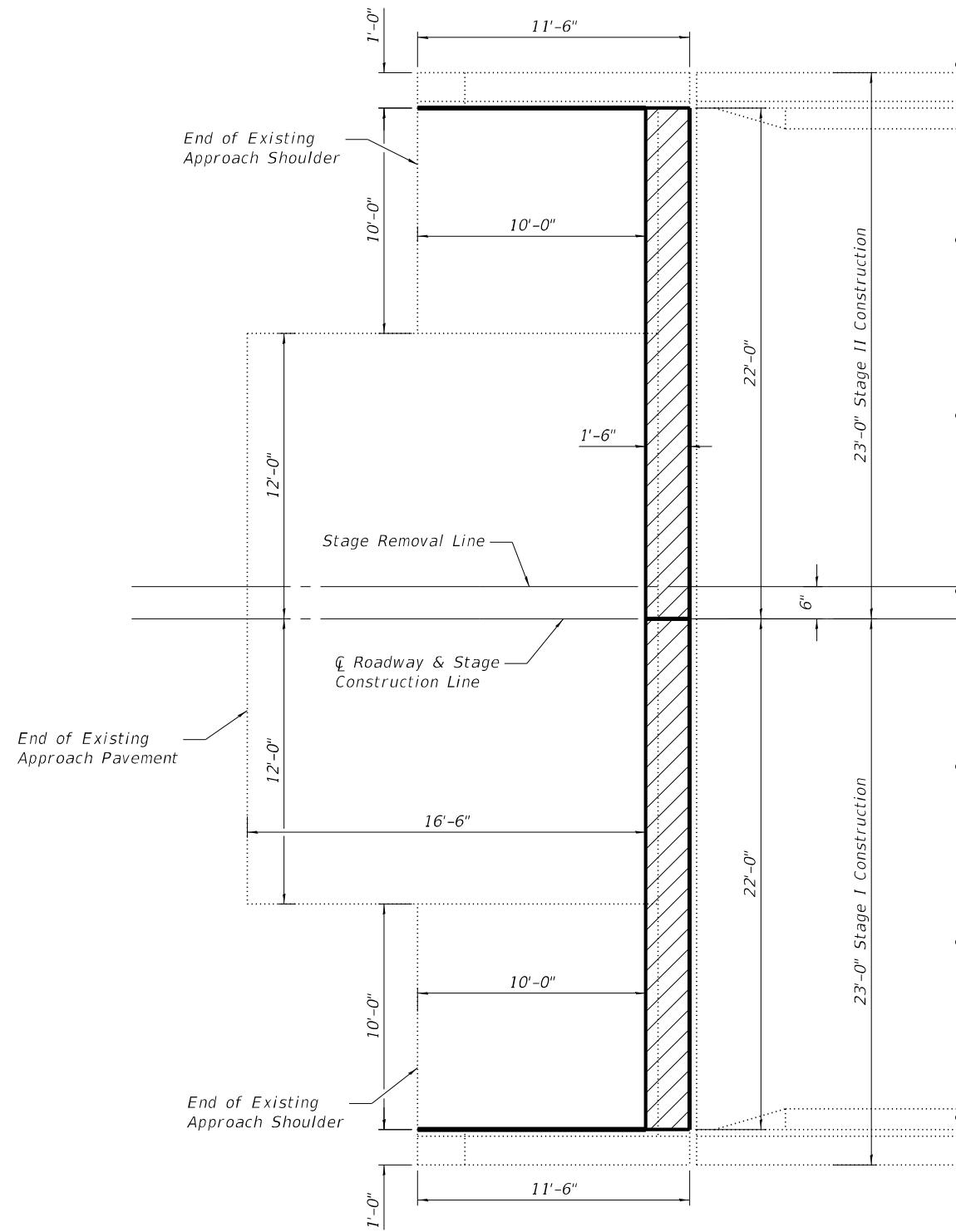
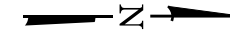
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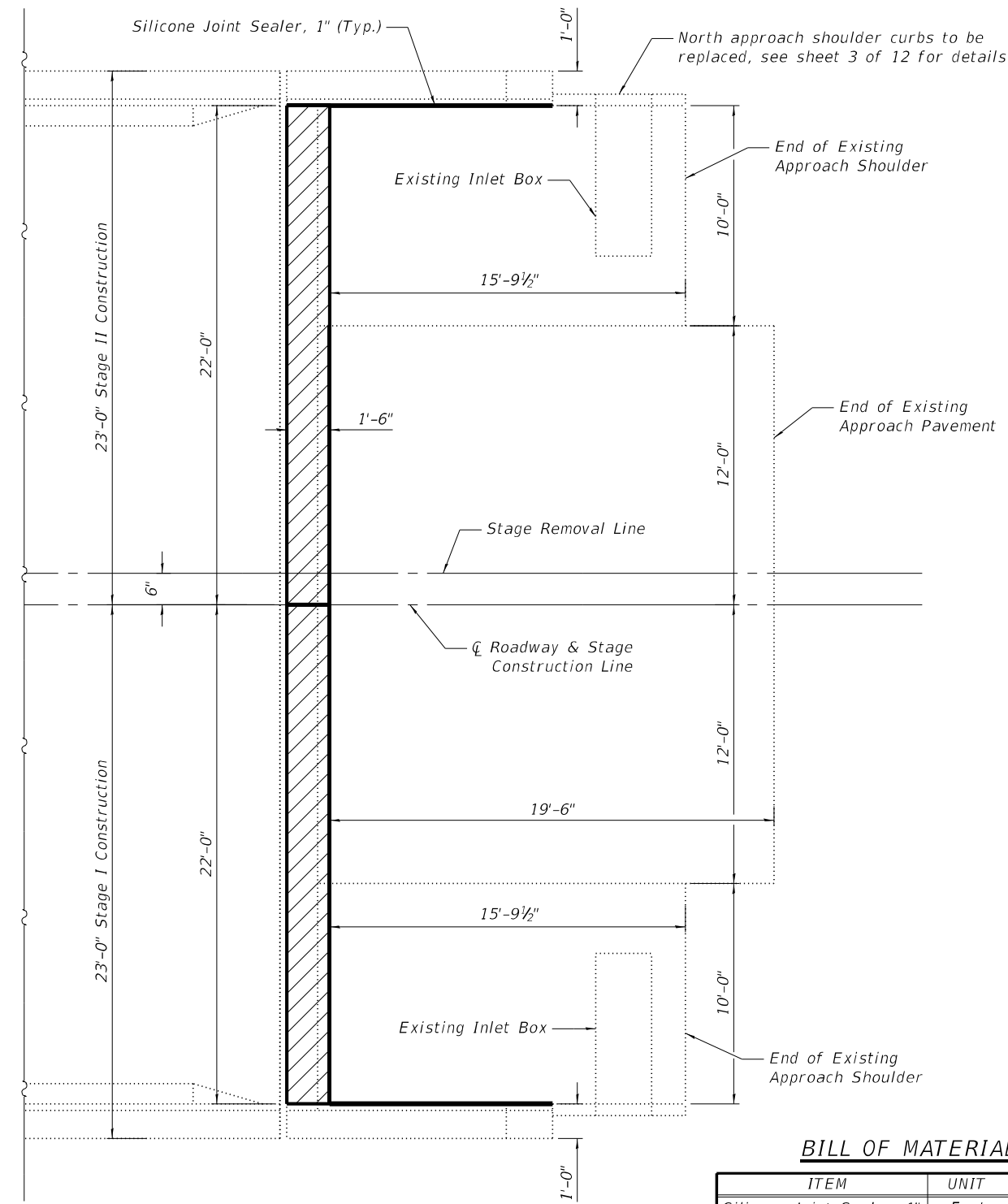
APPROACH SHOULDER REPAIRS  
 STRUCTURE NO. 095-0065

SHEET 3 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	17
			CONTRACT NO. 76P80	
ILLINOIS FED. AID PROJECT				



**SOUTH APPROACH REPAIR PLAN**



**NORTH APPROACH REPAIR PLAN**

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Silicone Joint Sealer, 1"	Foot	40
Approach Slab Repair (Partial Depth)	Sq. Yd.	13

Note:  
For details of Concrete Superstructure, see sheets 5-6 of 12.  
Approach Slab Repair (Partial Depth) quantities shown are estimated, field conditions shall be verified prior to ordering materials.

Note: Hatched area indicates Concrete Superstructure.

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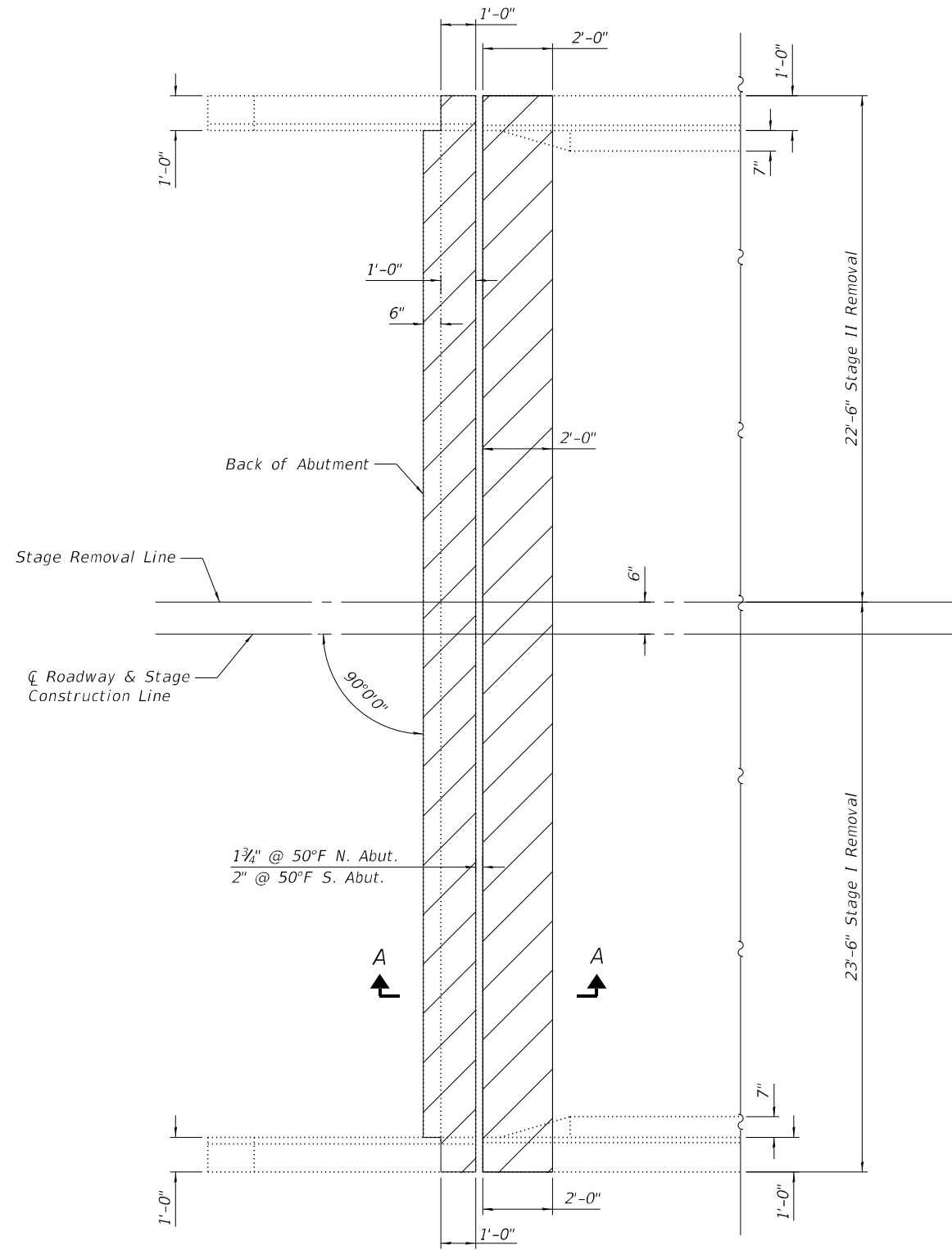
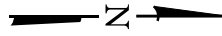
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PLOT DATE	4/22/2022	CHECKED -	ACS	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**APPROACH REPAIRS  
STRUCTURE NO. 095-0065**

SHEET 4 OF 12 SHEETS

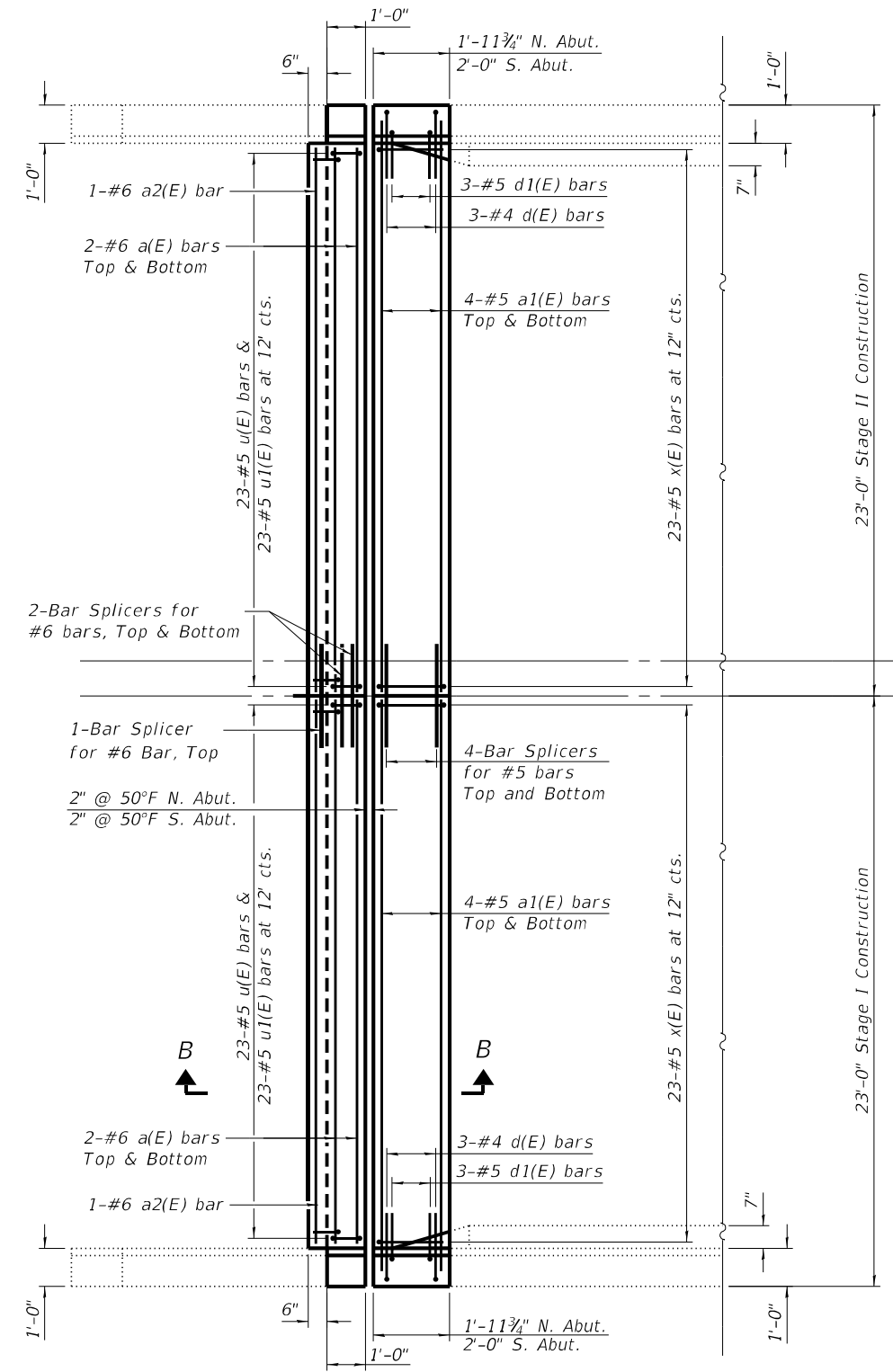
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	18
			CONTRACT NO. 76P80	
ILLINOIS FED. AID PROJECT				



**REMOVAL PLAN**

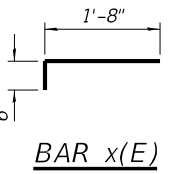
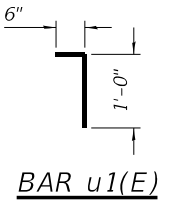
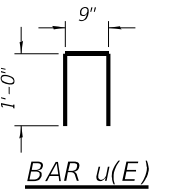
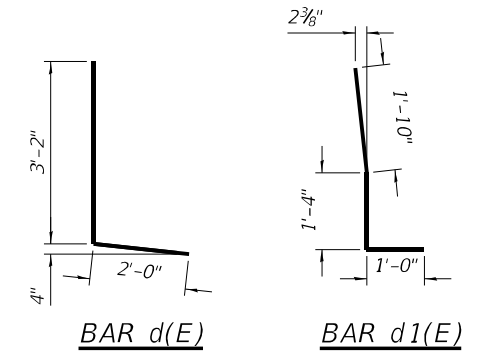
South Abutment shown  
North Abutment similar

Note:  
Hatched area indicates Concrete Removal.  
Construction equipment and materials shall not be stored on the approach shoulders or approach pavement during removal and replacement until after concrete has cured.  
For Section A-A and Section B-B, see sheet 6 of 12.



**REINFORCEMENT PLAN**

South Abutment shown  
North Abutment similar



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	16	#6	21'-9"	—
a1(E)	32	#5	22'-9"	—
a2(E)	4	#6	21'-9"	—
d(E)	12	#4	5'-2"	┌
d1(E)	12	#5	4'-2"	┌
u(E)	92	#5	2'-9"	—
u1(E)	92	#5	1'-6"	—
x(E)	92	#5	2'-2"	┌
ITEM		UNIT	QUANTITY	
Concrete Removal		Cu. Yd	11.8	
Concrete Superstructure		Cu. Yd.	11.8	
Reinforcement Bars, Epoxy Coated		Pound	2,130	
Bar Splicers		Each	26	

MODEL: BRD 03  
FILE NAME: X:\Production\Files\2020\420-0017\PR1-02\CAD\CADD Structure Sheets\0950065-76P80-005-Expansion Joint Replacement Details Ldgn

5/5/2022 10:14:20 AM



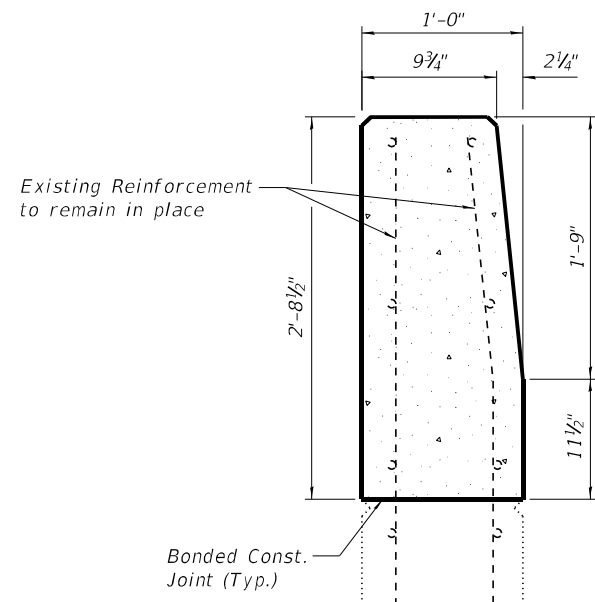
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PLOT DATE	5/5/2022	CHECKED -	ACS	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

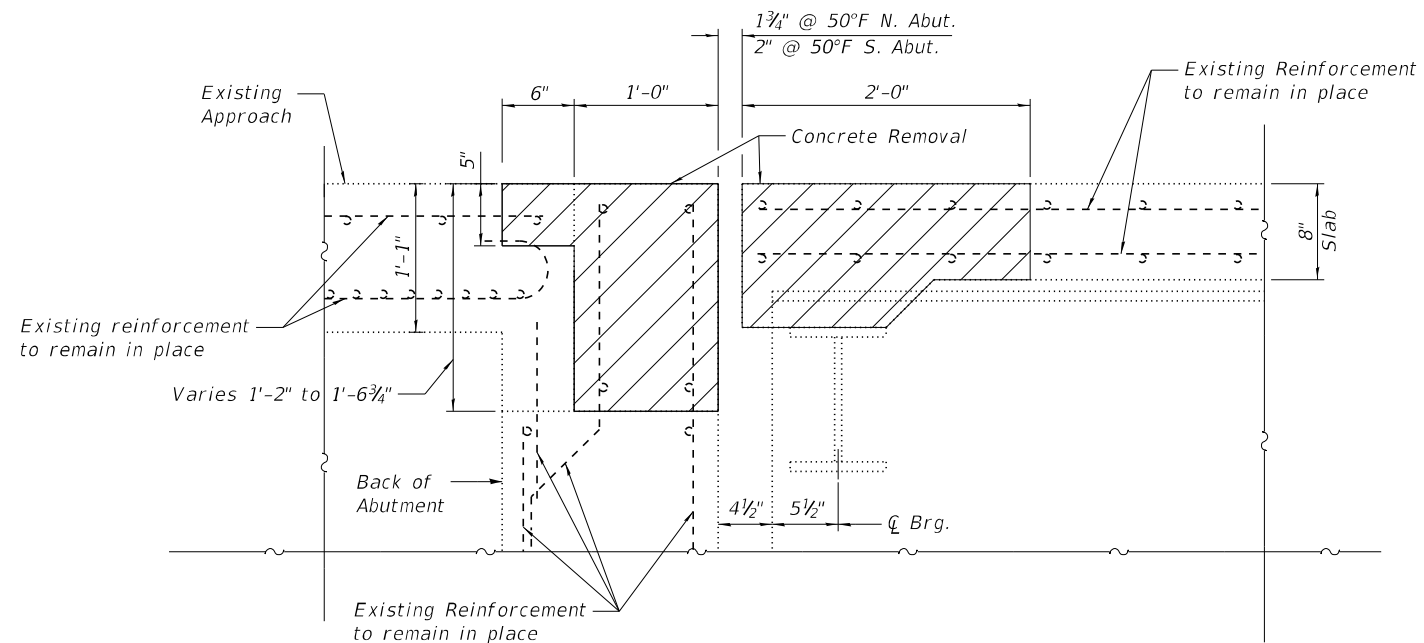
EXPANSION JOINT REPLACEMENT DETAILS  
STRUCTURE NO. 095-0065

SHEET 5 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	19
			CONTRACT NO. 76P80	
ILLINOIS FED. AID PROJECT				

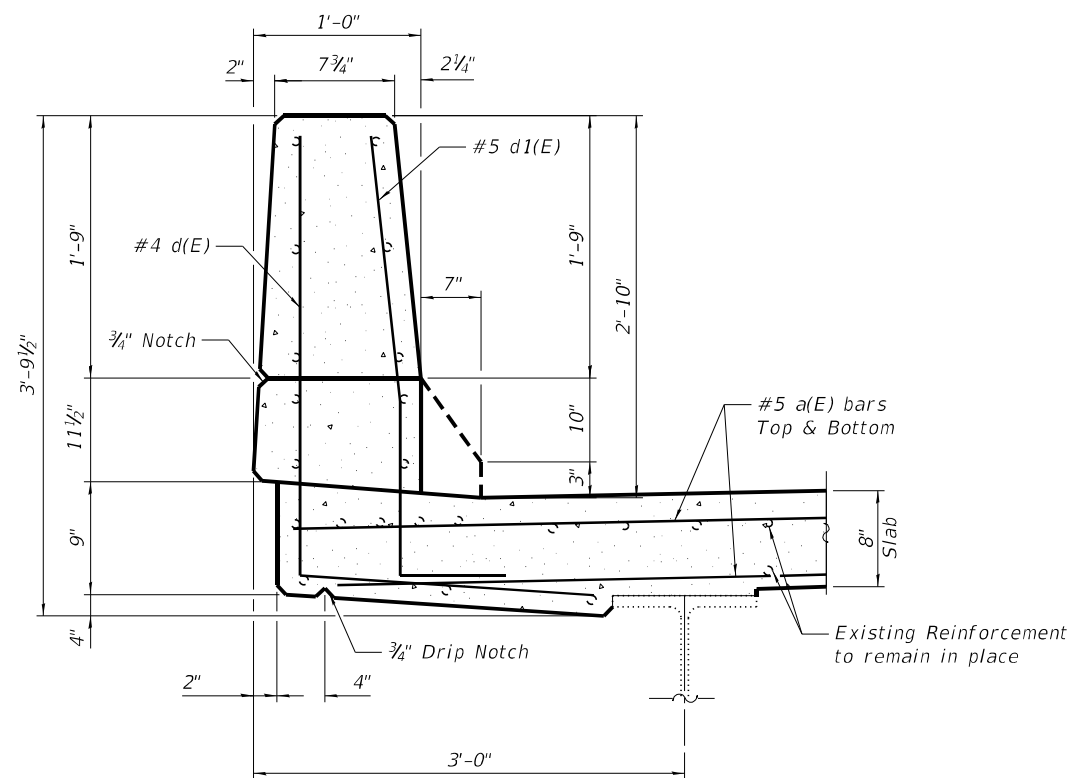


SECTION THRU WINGWALL

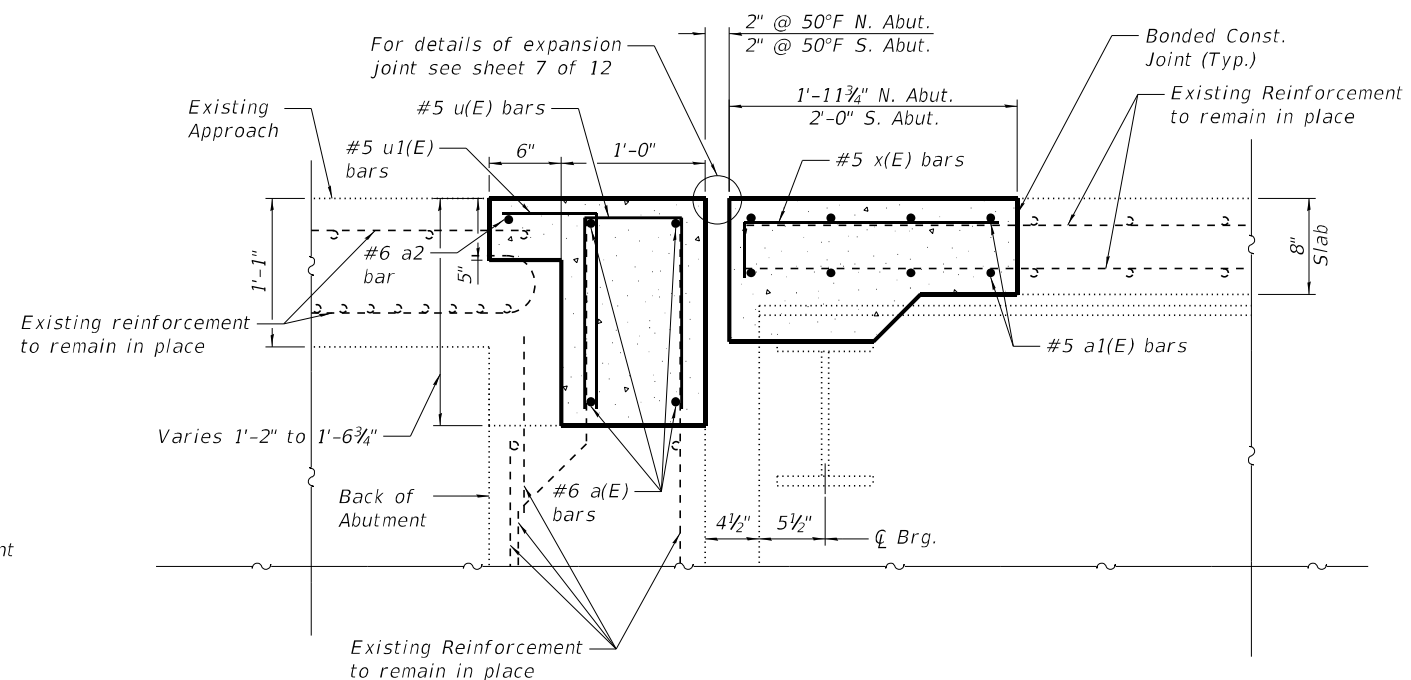


SECTION A-A

Note: Hatched area indicates Concrete Removal.



SECTION THRU PARAPET



SECTION B-B

MODEL: BRD 04  
 FILE NAME: X:\ProductionFiles\2020\420-0017\PR1-02\CAD\CADD Structure Sheets\0950065-76P80-006-Expansion Joint Replacement Details II.dgn  
 1924 S.A. Brantley B., South Drive  
 Troy, IL 62294  
 PHONE: 618.667.1400

4/22/2022 10:31:38 AM



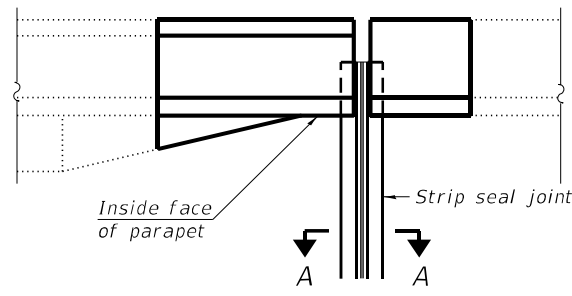
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		CHECKED -	ACS	REVISED -	
PLOT SCALE	0.1667' / in.	DRAWN -	WJS	REVISED -	
PLOT DATE	4/22/2022	CHECKED -	ACS	REVISED -	

STATE OF ILLINOIS  
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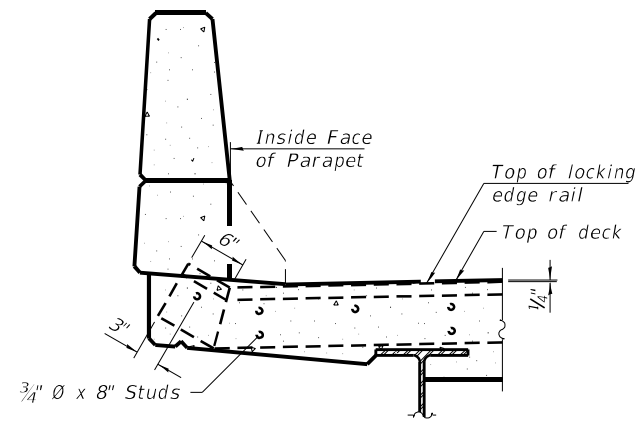
EXPANSION JOINT REPLACEMENT DETAILS  
 STRUCTURE NO. 095-0065

SHEET 6 OF 12 SHEETS

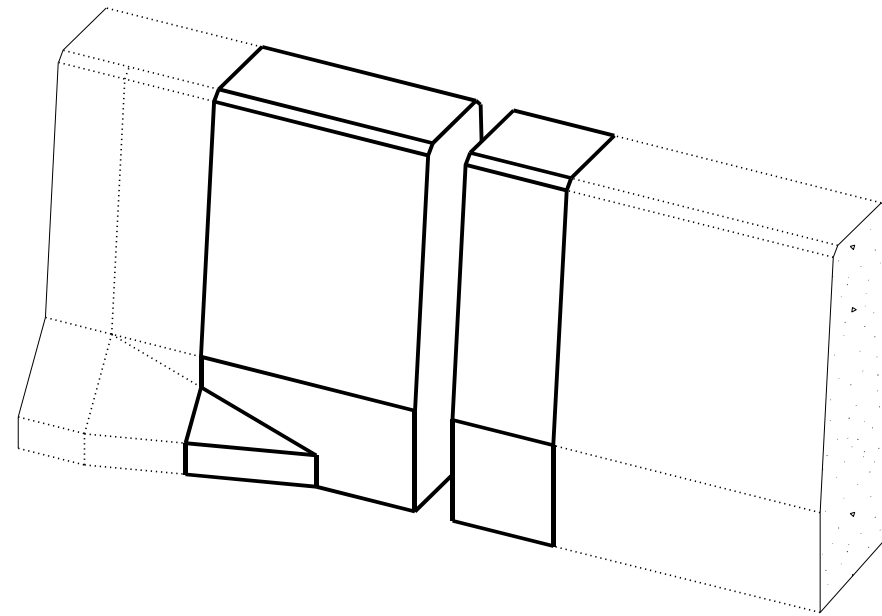
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	20
			CONTRACT NO. 76P80	
ILLINOIS FED. AID PROJECT				



**PLAN AT PARAPET**



**ELEVATION AT PARAPET**



**TRIMETRIC VIEW**  
(Showing parapet only)

**Notes:**

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

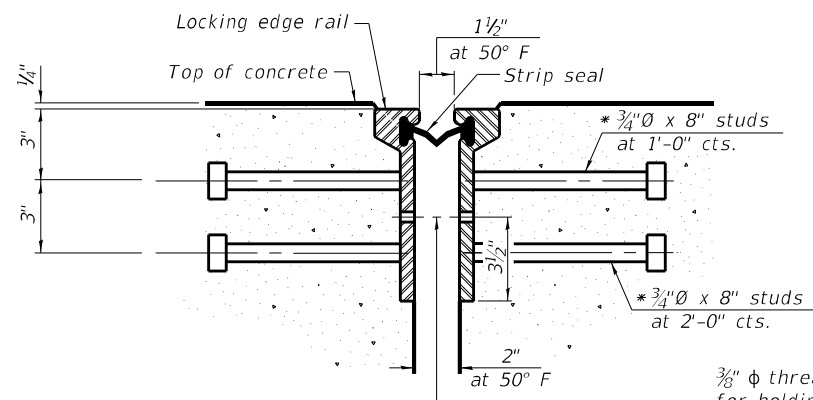
The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed.

The manufacturer's recommended installation methods shall be followed.

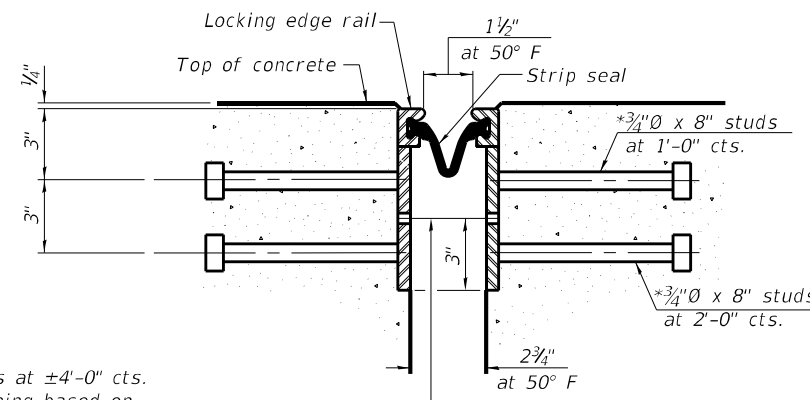
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

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

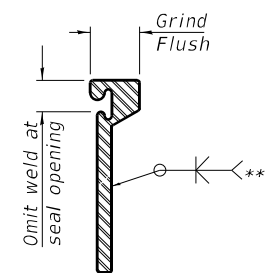
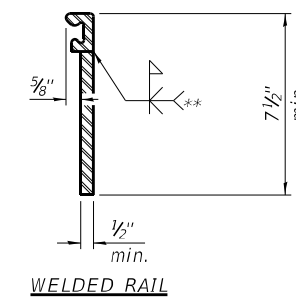
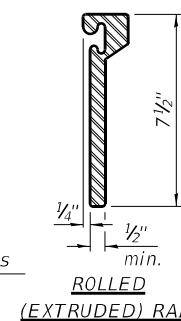
The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.



**SHOWING ROLLED RAIL JOINT**



**SHOWING WELDED RAIL JOINT**



**LOCKING EDGE RAIL SPLICE**

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

**LOCKING EDGE RAILS**

\*\* Back gouge not required if complete joint penetration is verified by mock-up.

3/8"  $\phi$  threaded rods in 7/16"  $\phi$  holes at  $\pm 4'-0"$  cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

**SECTION A-A**

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

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Preformed Joint Strip Seal	Foot	90.0

MODEL: BRD 05  
FILE NAME: X:\Production\Files\2020\420-001\PR1-02\CAD\CADD Structure Sheets\0950065-76P80-007-Preformed Joint Strip Seal Detail.dgn



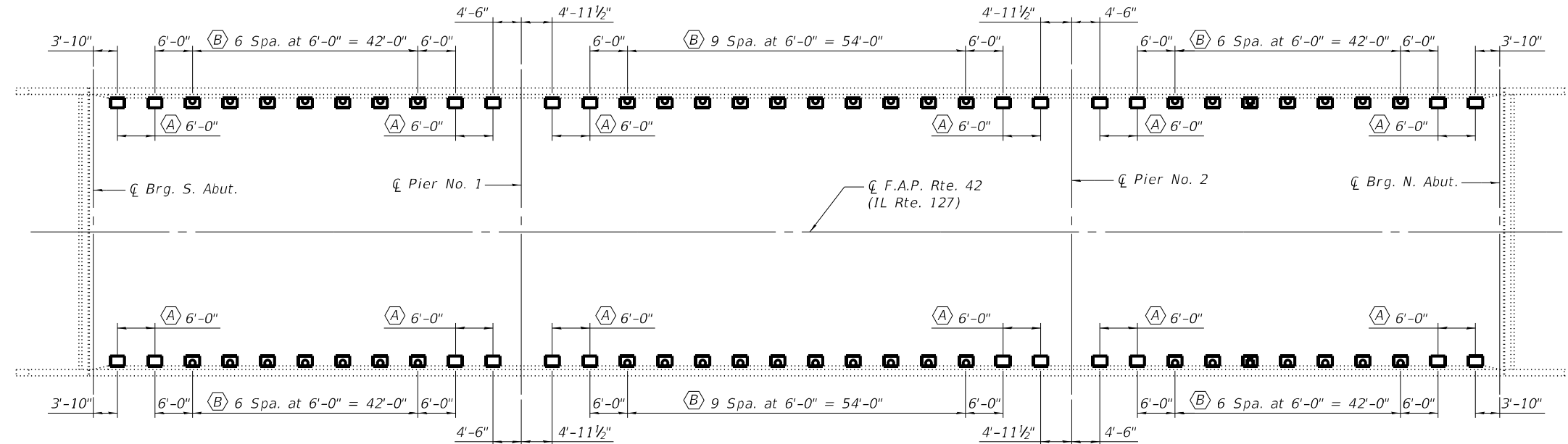
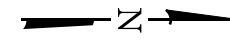
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PLOT SCALE	0.1667' / in.	DRAWN -	WJS	REVISED -	
PLOT DATE	4/22/2022	CHECKED -	ACS	REVISED -	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL DETAILS**  
**STRUCTURE NO. 095-0065**

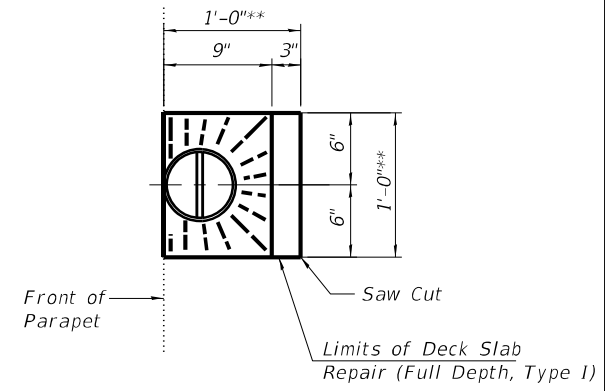
SHEET 7 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 76P80	
ILLINOIS FED. AID PROJECT				

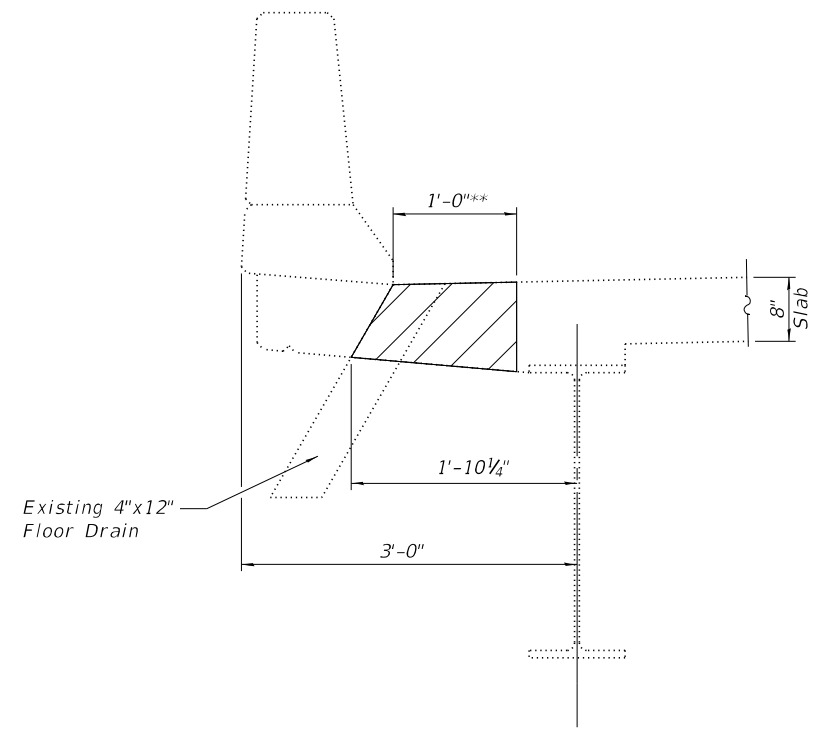


**PLAN**

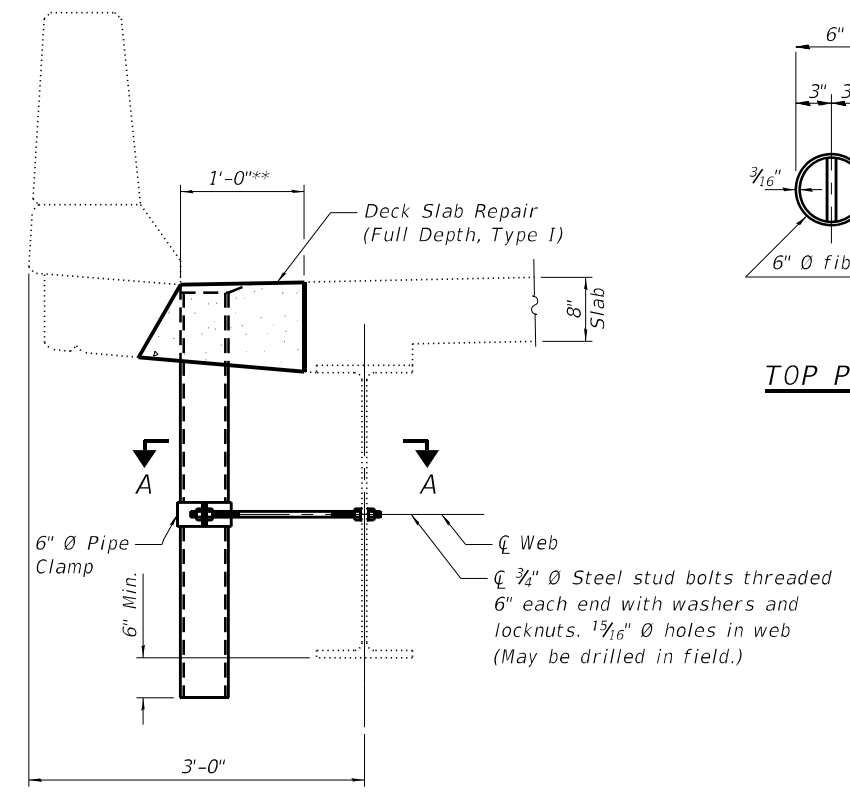
- (A) - Remove Floor Drains
- (B) - Remove and replace Floor Drains



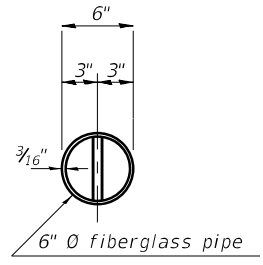
**TOP PLAN DECK REPAIR AT PROPOSED DRAINS**



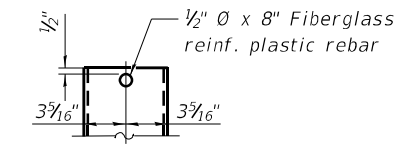
**SECTION THRU EXISTING FLOOR DRAIN**



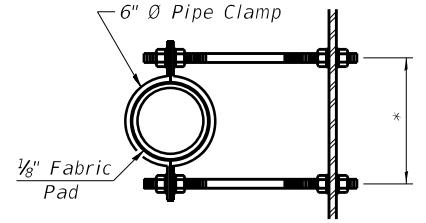
**FLOOR DRAIN REPLACEMENT DETAIL**



**TOP PLAN**



**FIBERGLASS PIPE**



**SECTION A-A**

\*Dimension as required by pipe clamp

**Notes:**  
 Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.  
 The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coatings' Spec. SSPC-SP1 prior to painting.  
 The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.

\*\* Actual dimensions of Deck Slab Repair (Full Depth, Type I) shall be determined by the Engineer

Note: Hatch pattern indicates Concrete Removal.

MODEL: BRD\_06  
 FILE NAME: X:\ProductionFiles\2020\420-0017\PP1-02\CAD\CADD Structure Sheets\0950065-76P80-08-Floor Drain Details.dgn



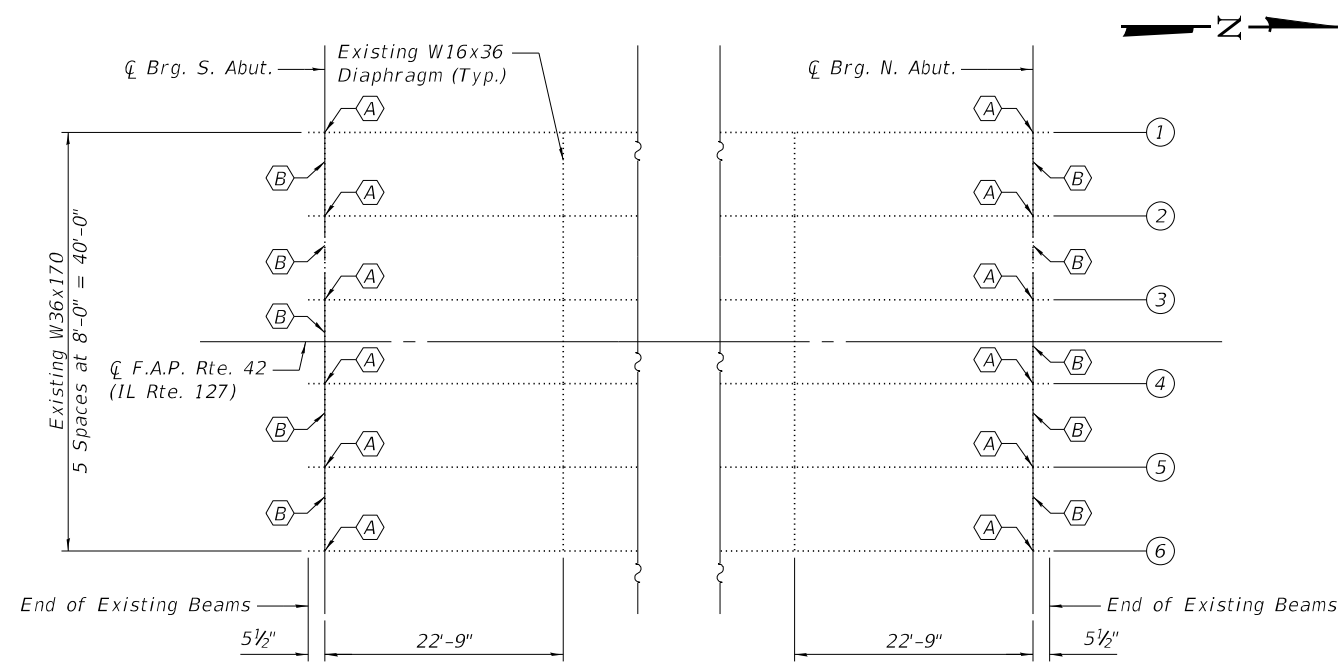
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PLOT DATE	4/22/2022	CHECKED -	ACS	REVISED -	

**STATE OF ILLINOIS  
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**FLOOR DRAIN DETAILS  
 STRUCTURE NO. 095-0065**

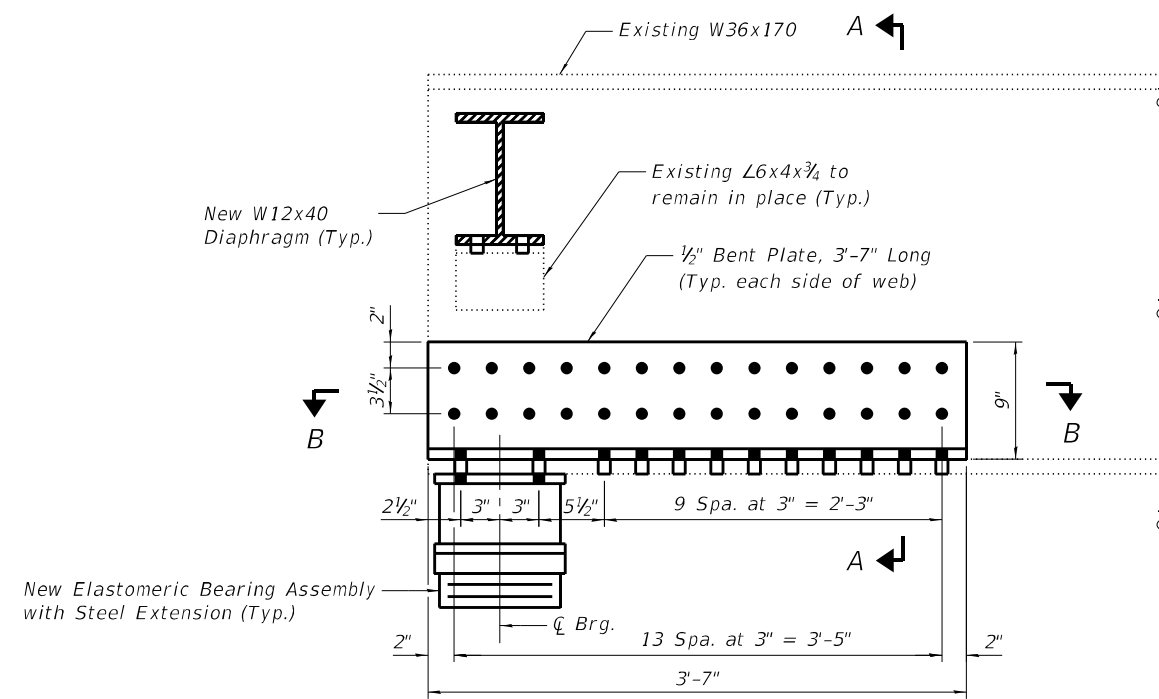
SHEET 8 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 76P80			ILLINOIS FED. AID PROJECT	

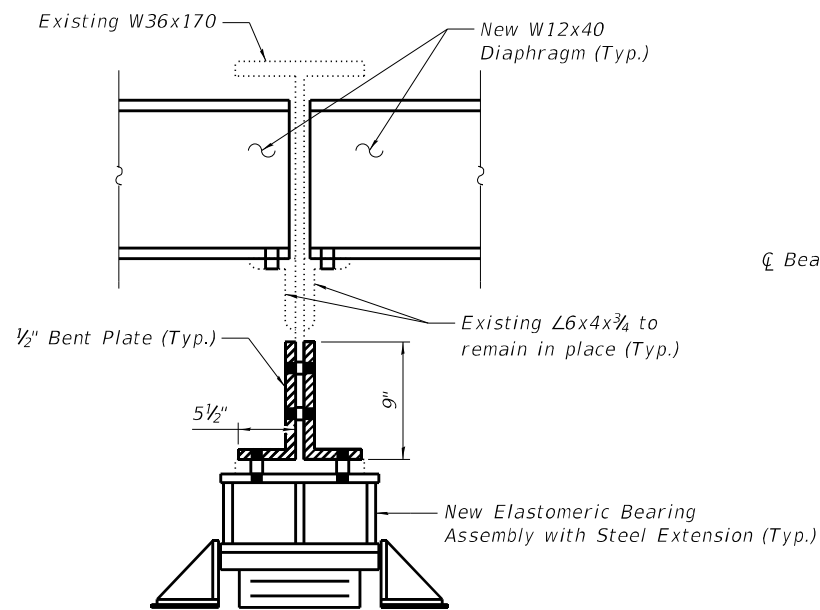


**PARTIAL FRAMING PLAN**

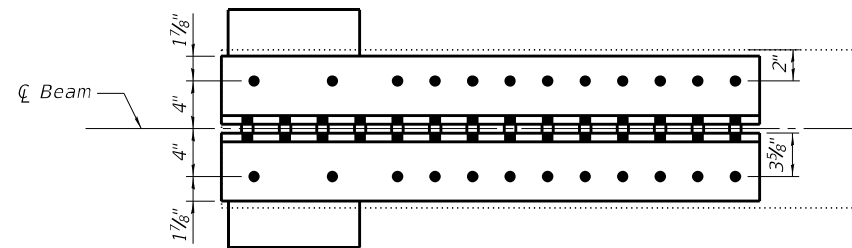
- Ⓐ - Beam End Repair
- Ⓑ - Diaphragm Replacement



**ELEVATION OF BEAM REPAIR**



**SECTION A-A**



**SECTION B-B**

**BOLT HOLE LEGEND**

- Field drill holes
- Shop drill holes

Notes:  
 All structural steel shall be AASHTO M 270 Grade 36, unless otherwise noted.  
 Cost of furnishing and erecting steel diaphragms shall be included with Furnishing and Erecting Structural Steel.  
 Cost of furnishing and erecting steel for beam end repairs shall be included with Structural Steel Repair.  
 Removal of existing diaphragms shall be included in Structural Steel Removal.  
 All holes in existing steel shall be field drilled using shop drilled holes in new steel as a template, except as noted.

**BILL OF MATERIAL**

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	3,127
Structural Steel Removal	Pound	3,127
Structural Steel Repair	Pound	2,553

MODEL: BRD 07  
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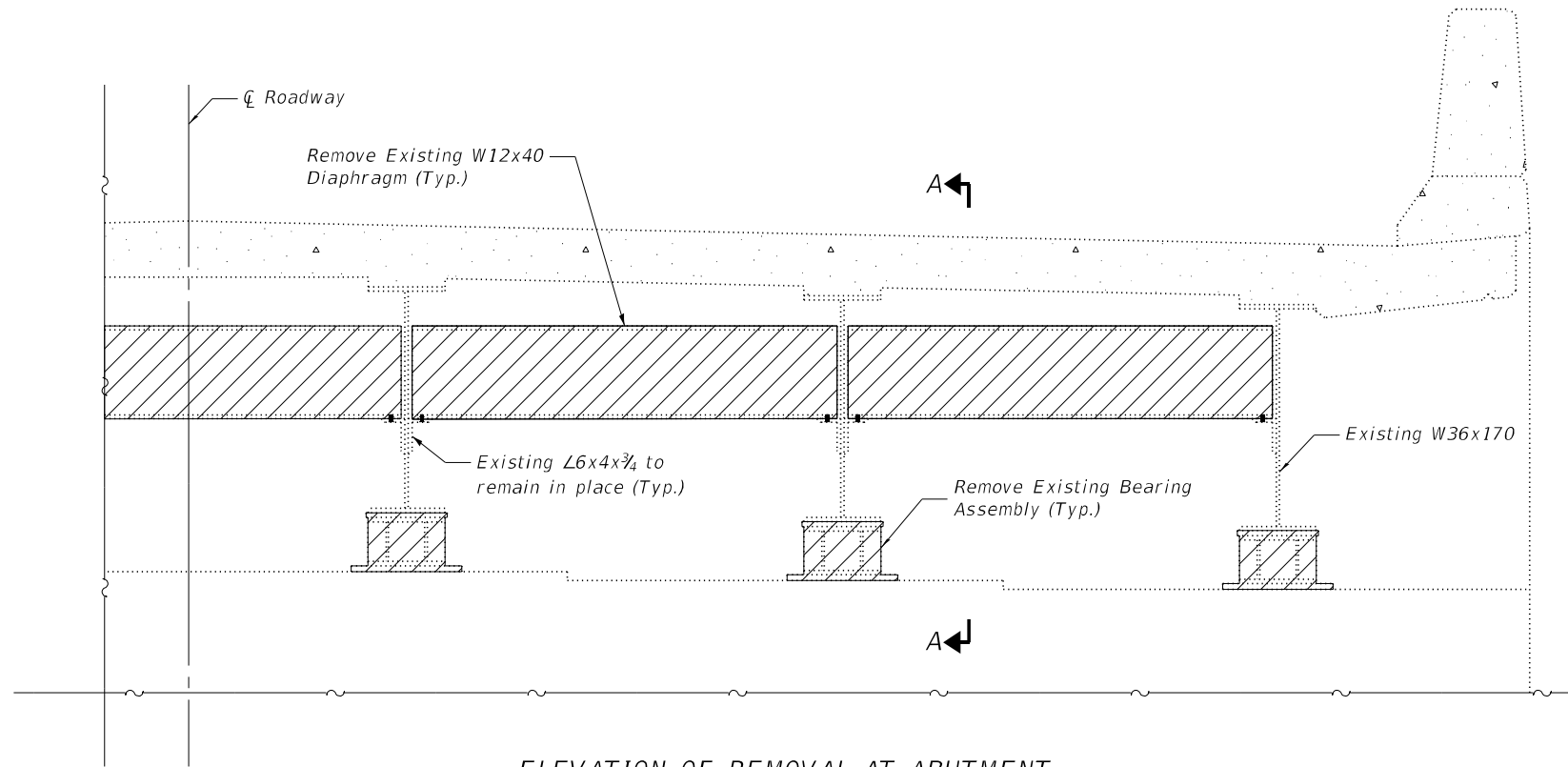
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PLOT SCALE	0.1667' / in.	DRAWN -	WJS	REVISED -	
PLOT DATE	4/22/2022	CHECKED -	ACS	REVISED -	

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STRUCTURAL STEEL REPAIR DETAILS  
 STRUCTURE NO. 095-0065

SHEET 9 OF 12 SHEETS

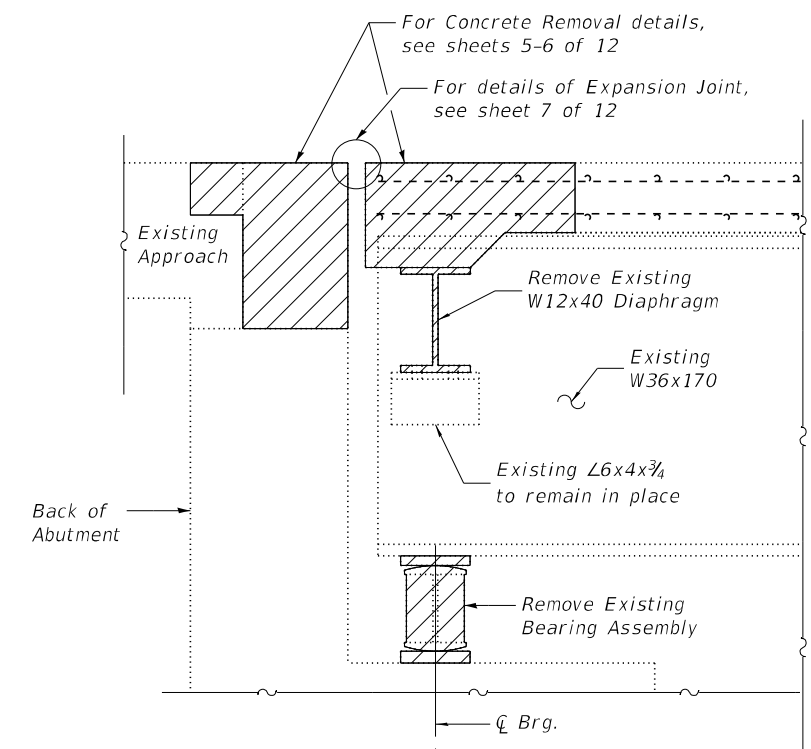
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	23
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				



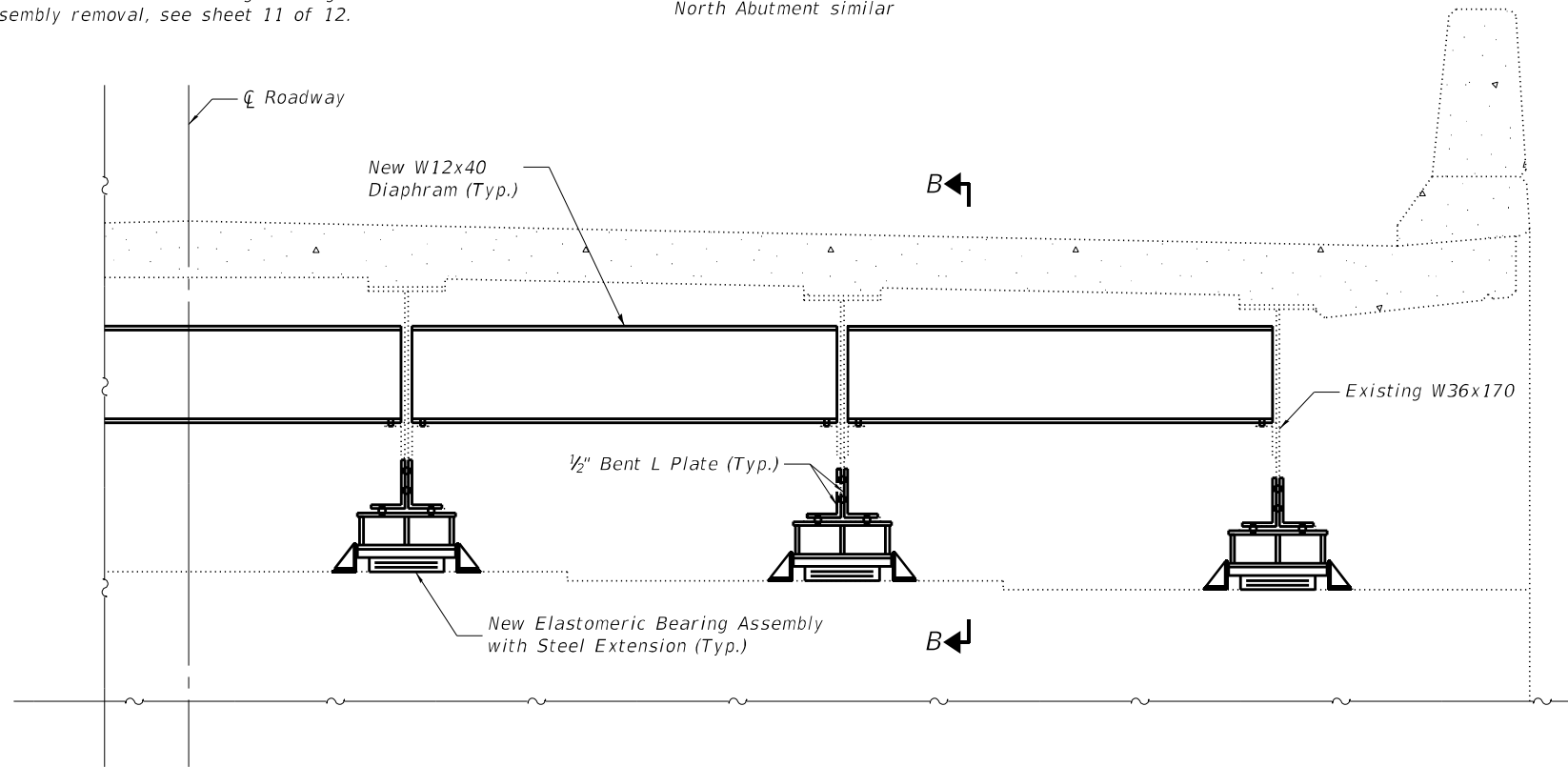
**ELEVATION OF REMOVAL AT ABUTMENT**

Symmetrical about Centerline Roadway  
South Abutment shown  
North Abutment similar

Note: For details of Existing Bearing Assembly removal, see sheet 11 of 12.



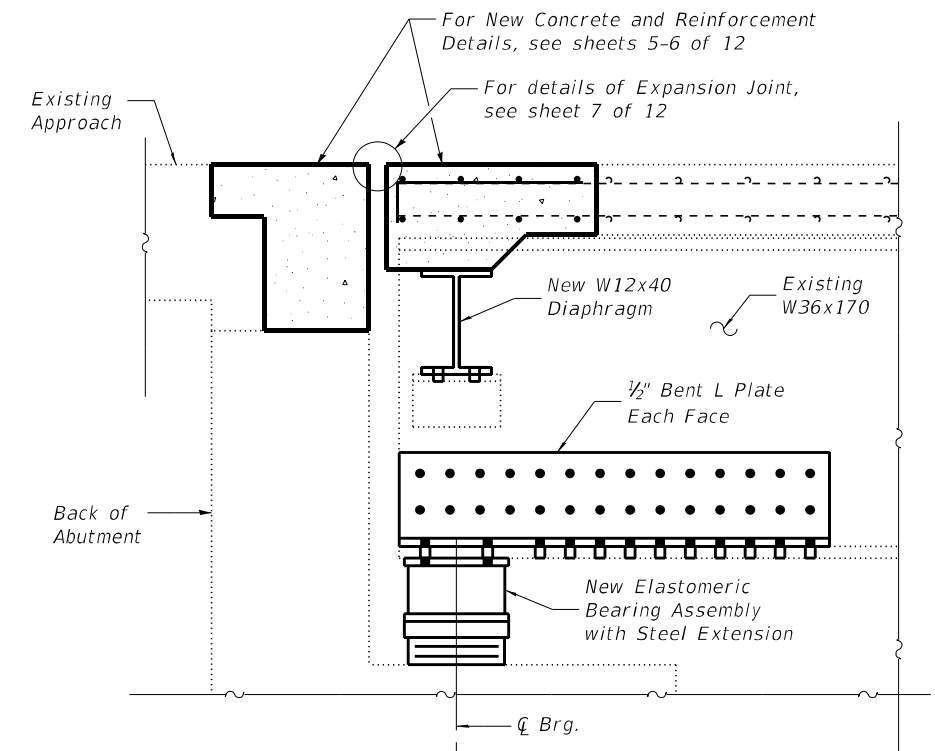
**SECTION A-A**



**ELEVATION OF REPAIRS AT ABUTMENT**

Symmetrical about Centerline Roadway  
South Abutment shown  
North Abutment similar

Note: For details of Elastomeric Bearing Assembly, see sheet 11 of 12.



**SECTION B-B**

Note: For details of Bent L Plate for beam end repair, see sheet 9 of 12.

MODEL: BRD 08  
FILE NAME: X:\ProductionFiles\2020\420-0017\PRJ-02\CAD\CADD Structure Sheets\0950065-76P80-010-Structural Steel Repair Details II.dgn



USER NAME	sspillers	DESIGNED -	SJS	REVISED -	
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PLOT SCALE	0.1667" / in.	DRAWN -	WJS	REVISED -	
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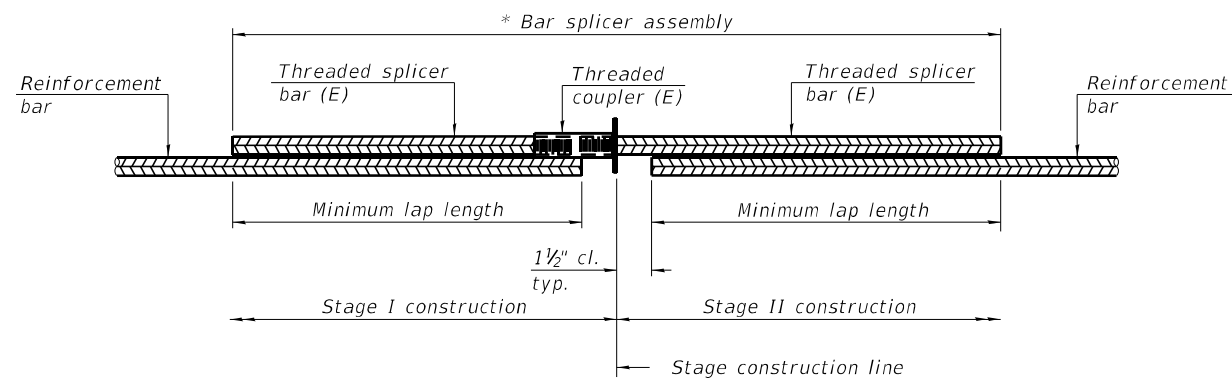
STRUCTURAL STEEL REPAIR DETAILS  
STRUCTURE NO. 095-0065

SHEET 10 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	24
CONTRACT NO. 76P80				
ILLINOIS FED. AID PROJECT				





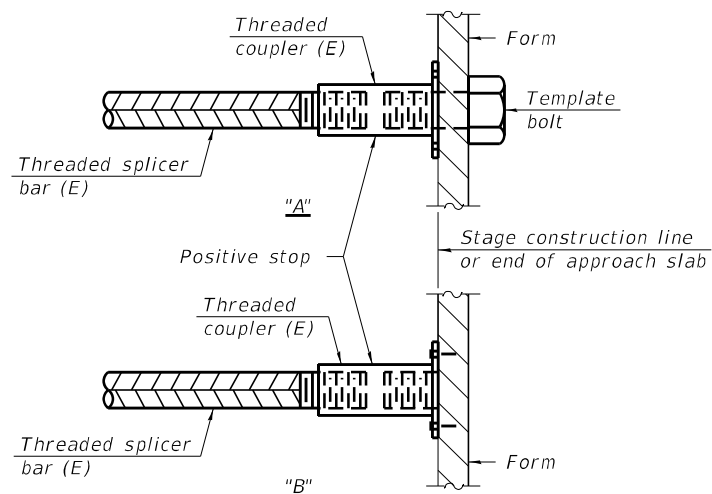


**STANDARD BAR SPLICER ASSEMBLY PLAN**  
 (All components shall be provided from one supplier)

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

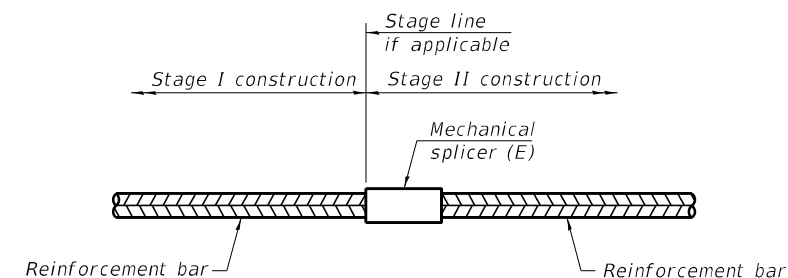
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	16	3'-6"
Abutment	#6	10	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.

MODEL: BRD 10  
 FILE NAME: X:\ProductionFiles\2020\420-0017\PP1-02\CAD\CADD Structure Sheets\0950065-76P80-012-Bar Splicer Assembly & Mech Splicer Details.dgn



USER NAME	sspillers	DESIGNED -	SJS	REVISED -	
		CHECKED -	ACS	REVISED -	
PLOT SCALE	0.1667' / in.	DRAWN -	WJS	REVISED -	
PLOT DATE	4/22/2022	CHECKED -	ACS	REVISED -	

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BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 095-0065

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	9BR-1	WASHINGTON	26	26
			CONTRACT NO. 76P80	
ILLINOIS FED. AID PROJECT				