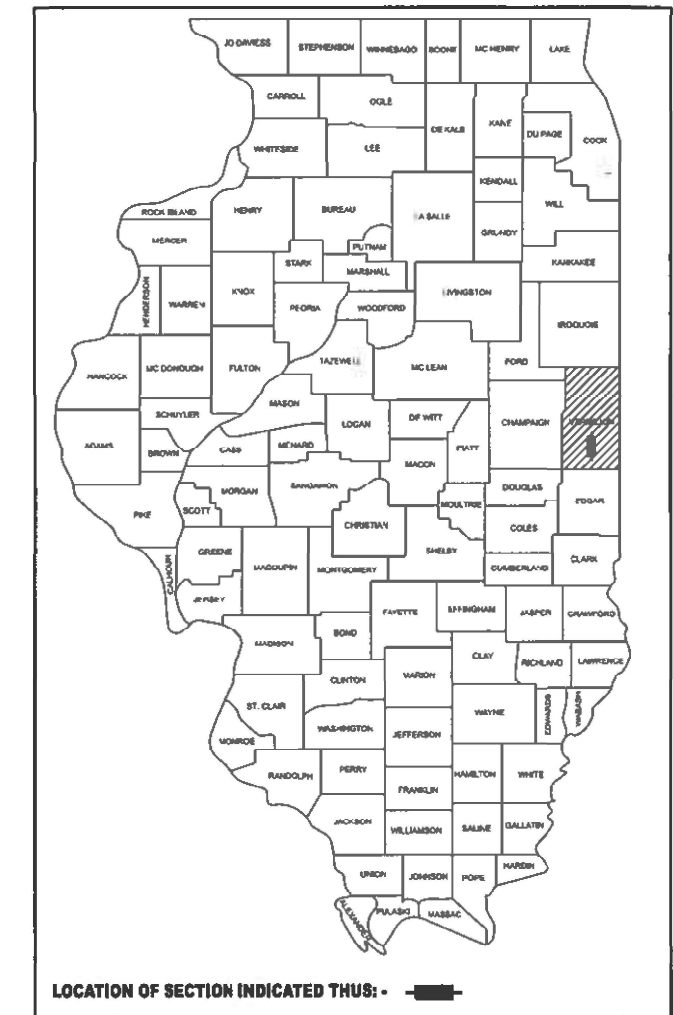


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43*	1
		ILLINOIS	CONTRACT NO. 70E63	

\*43 + 1 = 44 TOTAL SHEETS

D-95-010-24



FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR SUMMARY OF QUANTITIES, SEE SHEET NO.(S) 3-6

# PROPOSED HIGHWAY PLANS

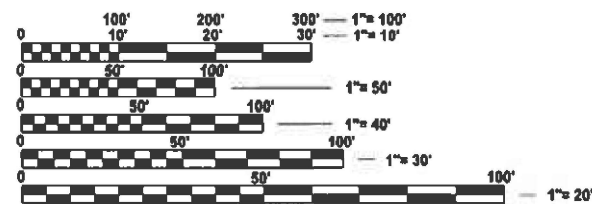
FAS ROUTE (331) CH-10  
SECTION L-BR-1  
PROJECT HIBR-6BB0(796)  
BRIDGE DECK OVERLAY  
VERMILION COUNTY

C-95-075-20

**CURRENT TRAFFIC DATA**

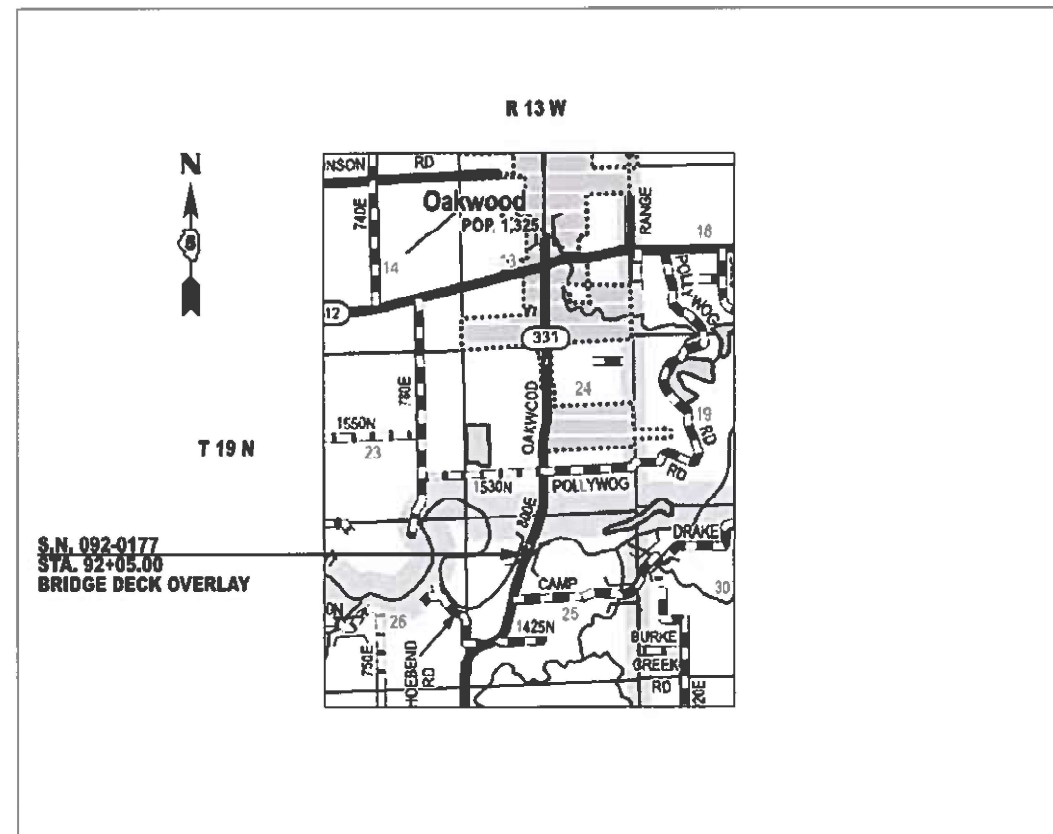
2023 ADT	2,400
2033 ADT	2,500
2043 AM D	190
2043 PM D	290
PV + PC%	87.9
SU%	7.5
MU%	4.6

**DESIGN DESIGNATION**  
MAJOR COLLECTOR



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

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



GROSS LENGTH = 874.95 FT. = 0.166 MILE  
NET LENGTH = 874.95 FT. = 0.166 MILE

PROJECT ENGINEER: TIM BRANDENBURG  
PROJECT MANAGER: JEFF M. SHERER

CONTRACT NO. 70E63

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 8, 2024  
Regional Engineer

October 4, 2024  
Engineer of Design and Environment

October 4, 2024  
Director of Highways Project Implementation

PRINTED BY THE AUTHORITY  
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## INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	INDEX OF SHEETS/ HIGHWAY STANDARDS/ GENERAL NOTES
3-6	SUMMARY OF QUANTITIES
7-8	TYPICAL BRIDGE CROSS-SECTIONS
9-11	TRAFFIC CONTROL STAGING DETAILS
12	DETAIL OF TEMPORARY CONCRETE BARRIER
13	GENERAL PLAN AND ELEVATION
14	DECK END REMOVAL DETAIL
15	DECK END CONSTRUCTION DETAIL
16	DETAIL OF PREFORMED JOINT STRIP SEAL
17-27	DETAIL OF STEEL REPAIR AND BEARING ASSEMBLY
28	DETAIL OF APPROACH SLAB REMOVAL
29-30	DETAIL OF APPROACH SLAB CONSTRUCTION
31	DETAIL OF BAR SPLICER ASSEMBLY
32	DETAIL OF WEARING SURFACE CONSTRUCTION
33	DETAIL OF ABUTMENT DRAIN
34-37	DETAIL OF DECK SLAB REPAIR
38-40	DETAIL OF STRUCTURAL CONCRETE REPAIR
41-43	WIDTH RESTRICTION SIGNING DETAILS

## LIST OF STANDARDS

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420401-13	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB
701001-02	OFF RD OPERATIONS, 2L, 2W, 15' FROM PAVEMENT EDGE
701006-05	OFF RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF RD MOVING OPERATION, 2L, 2W, DAY ONLY
701201-05	LANE CLOSURE, 2L 2W, DAY ONLY FOR SPEEDS 45 MPH OR MORE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATION
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATION
701316-13	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR 45 MPH OR MORE
701321-18	LANE CLOSURE, 2L 2W - BRIDGE REPAIR + BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
701901-09	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER

## GENERAL NOTES

**G.N.-100**

ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

**G.N.-406**

THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

**G.N. -406H**

**MIXTURE REQUIREMENTS**

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

Location	FAS 331	FAS 331
Mixture Use	Shoulder Surface	Shoulder Binder
	(Stage I and Stage II top 1-1/2")	(Stage I and Stage II bottom 6-1/2")
AC/PG	SBS PG 70-22	SBS PG 70-22
Design Air Voids	4.0% @ Ndes=50	4.0% @ Ndes=50
Mix Comp(Gradation)	IL 9.5	IL 19.0
Friction Aggregate	Mix D	N.A.
Mixture Weight	112	112
Quality Management Program	QC/QA	QC/QA
Sublot Size	3000	3000
Material Transfer Device (Required ?)	NO	NO

**G.N. 780**

FINAL PAVEMENT MARKING ON THIS PROJECT WILL BE COMPLETED BY DISTRICT OPERATIONS PERSONNEL. THE CONTRACTOR SHALL BE REQUIRED TO PLACE AND REMOVE SHORT TERM STRIPING AND REMOVE WORK ZONE PAVEMENT MARKING. TO COORDINATE STRIPING, THE CONTRACTOR SHALL NOTIFY THE DISTRICT TRAFFIC OPERATIONS ENGINEER, GARY SIMS, AT 217-251-4859 AS SOON AS ALL WORK HAS BEEN COMPLETED AND THE ROADWAY HAS BEEN REOPENED.

(FOR 2 LANE PROJECTS WITH LESS THAN 1000' BETWEEN STOP BARS THIS IS THE SAME AS THE SPECIAL PROVISION...USE D5 SPECIAL PROVISION.)

**G.N.-1004.01**

COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

THERE ARE NO COMMITMENTS ASSOCIATED WITH THIS PROJECT

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS/ HIGHWAY STANDARDS/ GENERAL NOTES  
S.N. 092-0177**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	2
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

VERMILION COUNTY  
 FAS 331 (CH-10)  
 RURAL  
 BRIDGE DECK OVERLAY  
 S.N. 092-0177  
 80% FED/ 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0059
20200100	EARTH EXCAVATION	CU YD	102.0	102.0
28100707	STONE DUMPED RIPRAP, CLASS A4	SQ YD	39.0	39.0
28200200	FILTER FABRIC	SQ YD	97.0	97.0
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	221.0	221.0
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	456.0	456.0
50102400	CONCRETE REMOVAL	CU YD	17.9	17.9
50200100	STRUCTURE EXCAVATION	CU YD	160.0	160.0
50300225	CONCRETE STRUCTURES	CU YD	29.0	29.0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	22.5	22.5
50300300	PROTECTIVE COAT	SQ YD	1,760.0	1,760.0
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	86.0	86.0
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	14,700	14,700
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	30,270.0	30,270.0
50800515	BAR SPLICERS	EACH	228.0	228.0
52000110	PREFORMED JOINT STRIP SEAL	FOOT	100.0	100.0

\* SPECIALTY ITEM

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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
 S.N. 092-0177

SCALE: NONE SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	3
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				





VERMILION COUNTY  
 FAS 331 (CH-10)  
 RURAL  
 BRIDGE DECK OVERLAY  
 S.N. 092-0177  
 80% FED/ 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0059
70106700	TEMPORARY RUMBLE STRIPS	EACH	12.0	12.0
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	14.0	14.0
70400100	TEMPORARY CONCRETE BARRIER	FOOT	875.0	875.0
70400125	PINNING TEMPORARY CONCRETE BARRIER	EACH	216.0	216.0
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	875.0	875.0
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2.0	2.0
70600340	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 2	EACH	2.0	2.0
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	1,725.0	1,725.0
X5211320	HIGH LOAD MULTI-ROTATIONAL BEARINGS, POT, GUIDED EXPANSION-400K	EACH	4.0	4.0
X5211120	HIGH LOAD MULTI-ROTATIONAL BEARINGS, POT, FIXED-400K	EACH	4.0	4.0
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1.0	1.0
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	16.0	16.0
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	9,870	9,870
Z0001905	STRUCTURAL STEEL REPAIR	POUND	10,560	10,560
Z0004552	APPROACH SLAB REMOVAL	SQ YD	324.0	324.0

\* SPECIALTY ITEM

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	DRAWN -	REVISED -
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PLOT DATE = 8/1/2024	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
 S.N. 092-0177

SCALE: NONE SHEET 3 OF 4 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	5
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

VERMILION COUNTY  
FAS 331 (CH-10)  
RURAL  
BRIDGE DECK OVERLAY  
S.N. 092-0177  
80% FED/ 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0059
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1,282.0	1,282.0
Z0012164	BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/2"	SQ YD	1,282.0	1,282.0
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	85.0	85.0
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.0	1.0
∅ Z0076600	TRAINEES	HOUR	1,000	1,000
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	106.0	106.0
∅ Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	1,000	1,000
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	1,522.0	1,522.0

\* SPECIALTY ITEM  
∅ 0042

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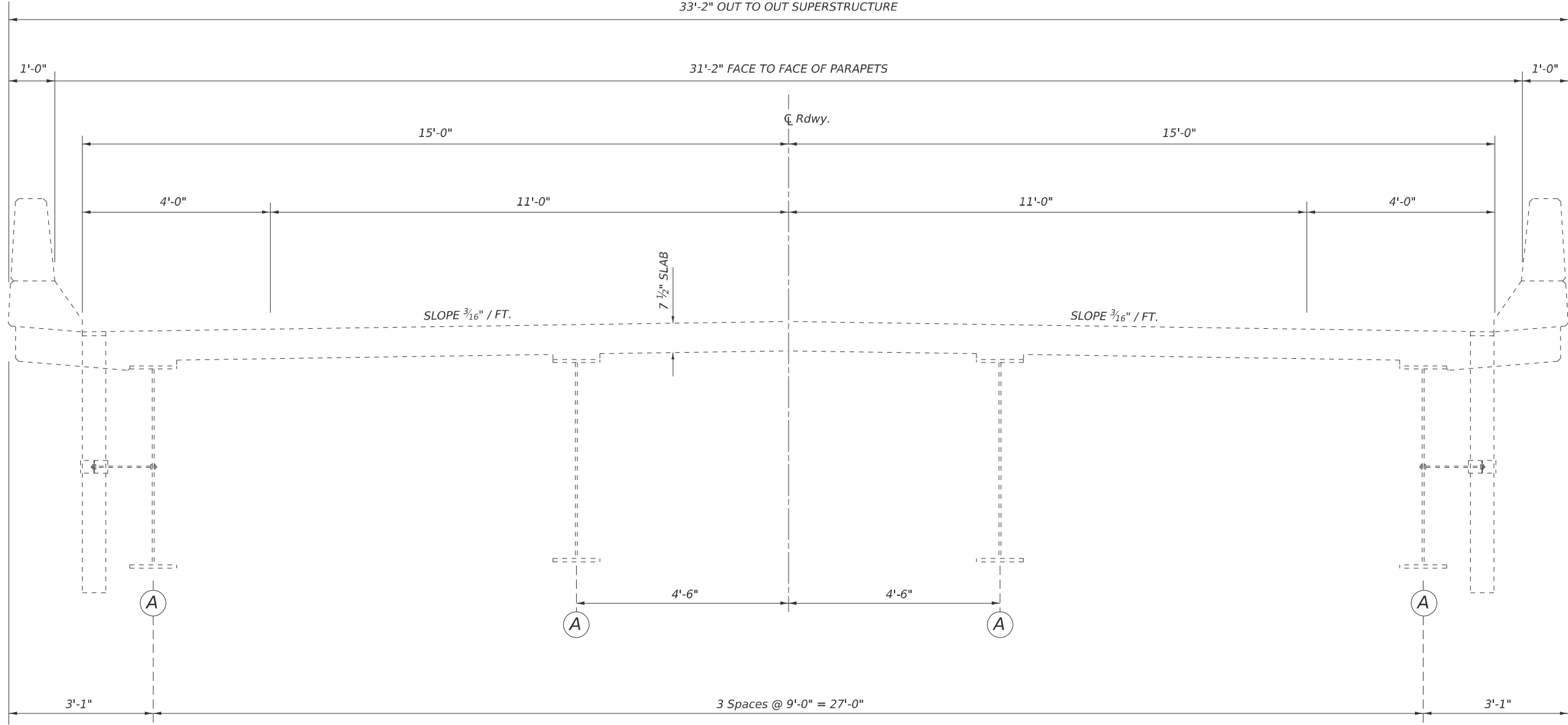
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES  
S.N. 092-0177**

SCALE: NONE    SHEET 4    OF 4    SHEETS    STA.    TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	6
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

# EXISTING TYPICAL CROSS-SECTION (LOOKING SOUTH)



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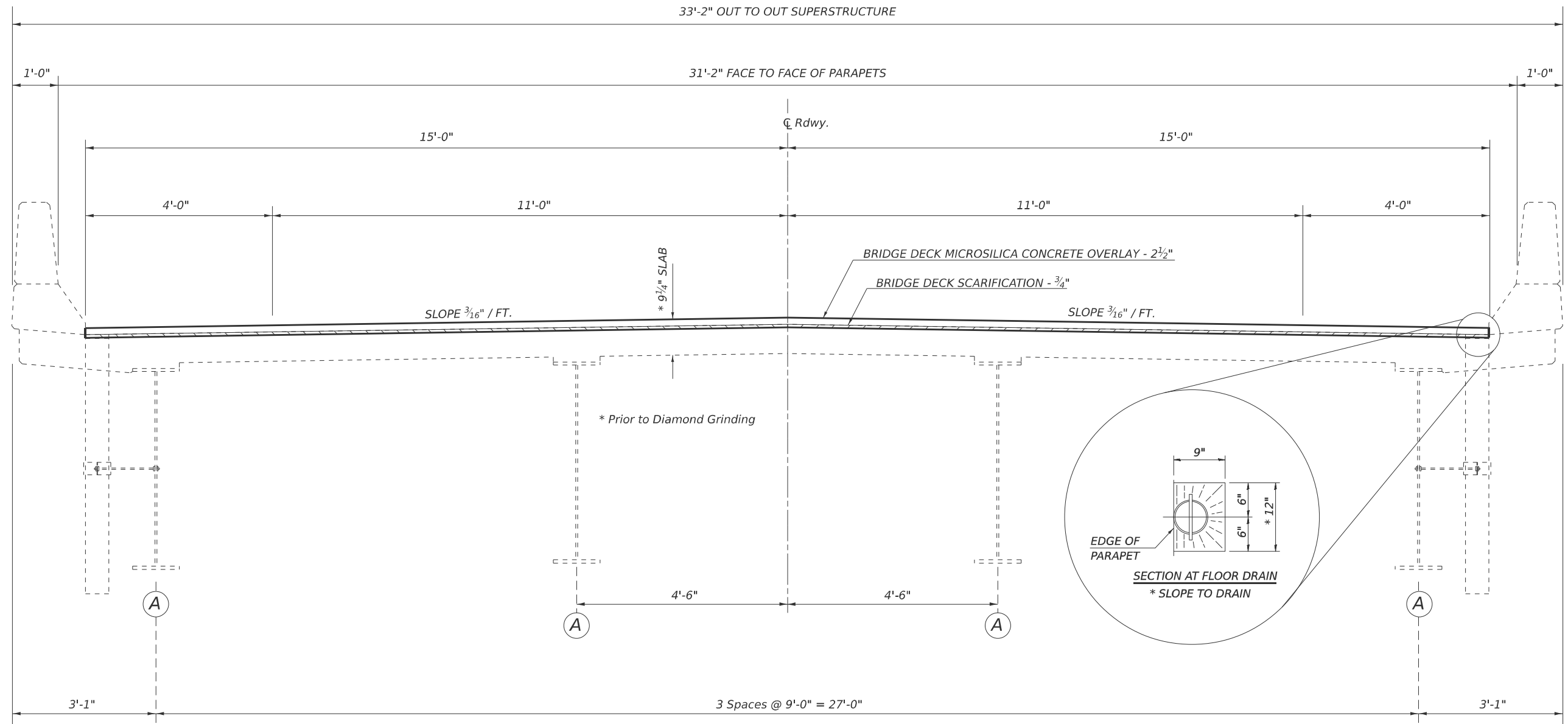
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TYPICAL CROSS-SECTION  
S.N. 092-0177**

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F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	7
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

# PROPOSED TYPICAL CROSS-SECTION (LOOKING SOUTH)



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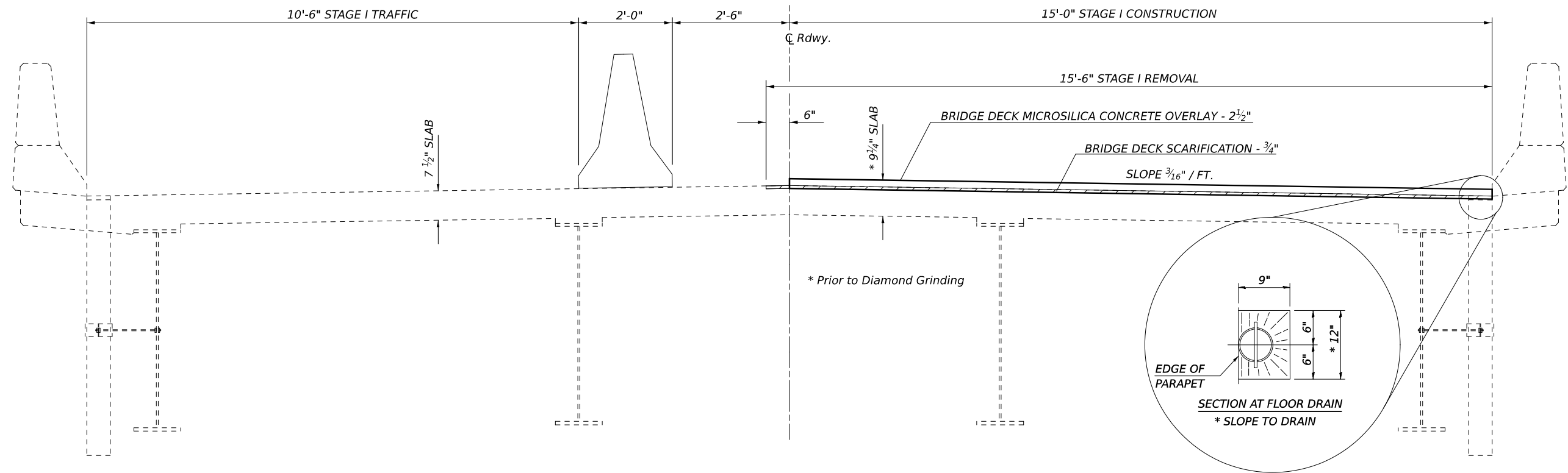
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED TYPICAL CROSS-SECTION  
092-0177**

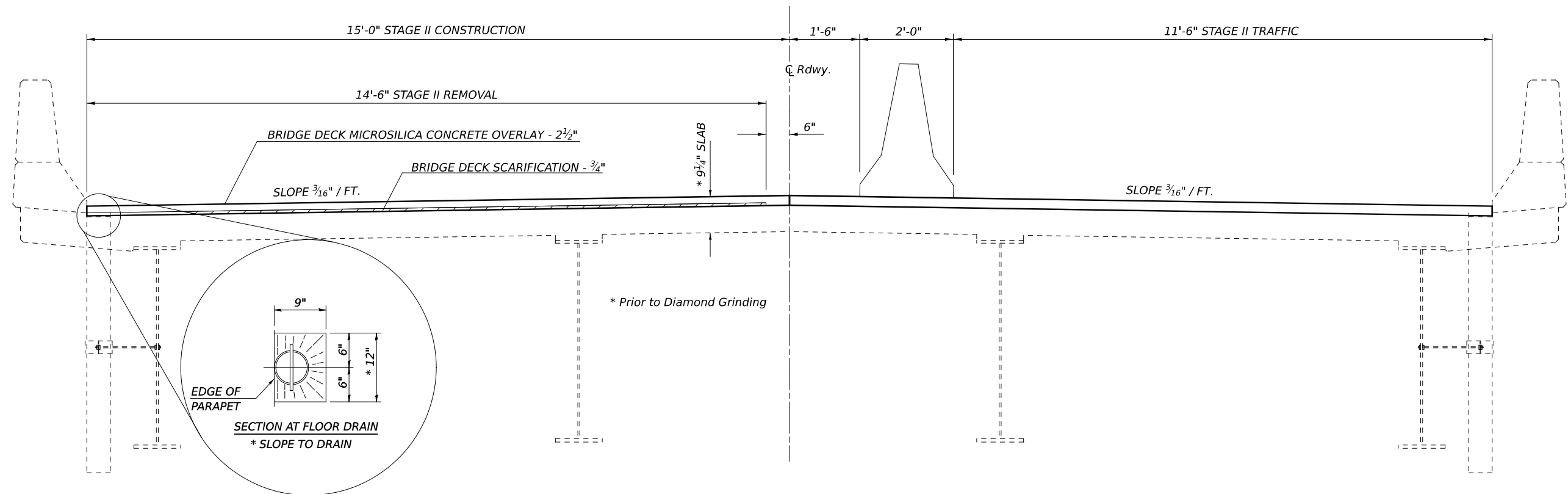
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F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	8
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

## STAGE I TEMPORARY CONCRETE BARRIER LAYOUT (LOOKING SOUTH)



## STAGE II TEMPORARY CONCRETE BARRIER LAYOUT (LOOKING SOUTH)



MODEL: STAGE TYPICAL (Sheet)  
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PLOT DATE = 10/11/2024	DATE -	REVISED -

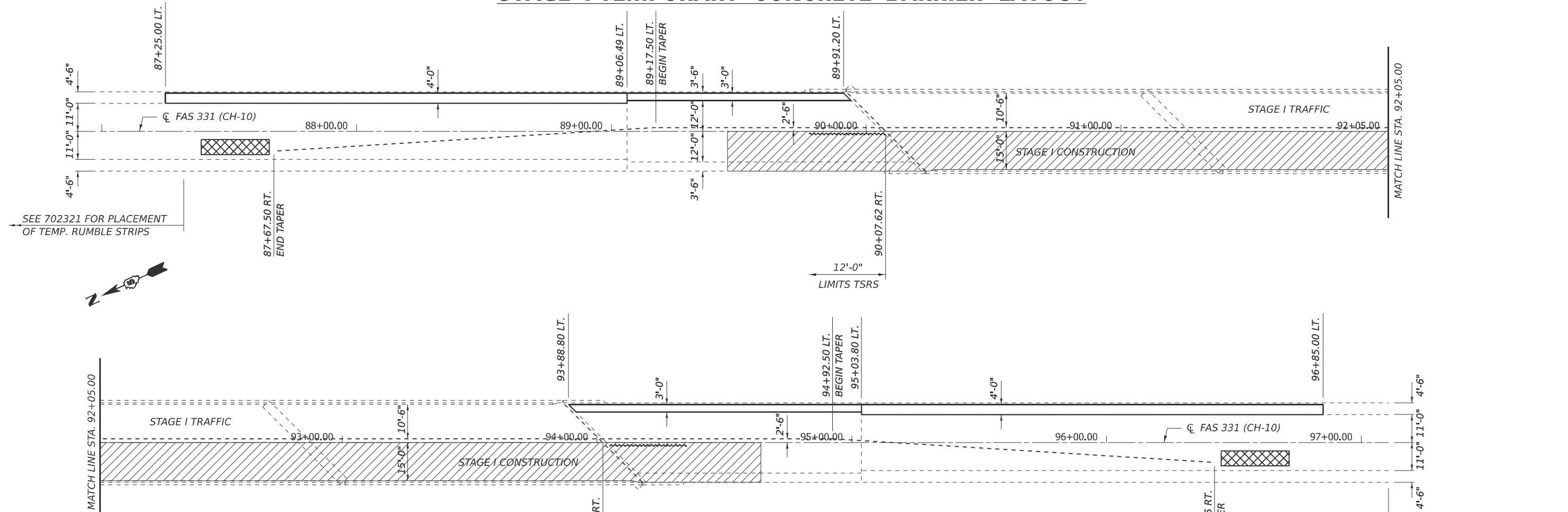
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAIL  
S.N. 092-0177**

SCALE: NONE      SHEET 1      OF 3      SHEETS      STA.      TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	9
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

# STAGE I TEMPORARY CONCRETE BARRIER LAYOUT



## 70400100 TEMPORARY CONCRETE BARRIER

	STATION	TO	STATION	LENGTH
TAPER RT	87+67.50		LT 89+17.50	150.0
LT	89+17.50		LT 94+92.50	575.0
TAPER LT	94+92.50		RT 96+42.45	150.0
<b>SUB-TOTAL =</b>				<b>875.0</b>

## 48203029 HOT-MIX ASPHALT SHOULDERS, 8"

	STATION	TO	STATION	LENGTH	WIDTH	SQ YD
LT	87+25.00		LT 89+06.49	181.5	4.0	80.7
LT	89+06.49		LT 89+91.20	84.7	3.0	28.2
LT	93+88.80		LT 95+03.80	115.0	3.0	38.3
LT	95+03.80		LT 96+85.00	181.2	4.0	80.5
<b>SUB-TOTAL =</b>						<b>227.8</b>

## 20200100 EARTH EXCAVATION

	STATION	TO	STATION	LENGTH	WIDTH	DEPTH	CU YD
LT	87+25.00		LT 89+06.49	181.5	4.0	0.667	17.9
LT	89+06.49		LT 89+91.20	84.7	3.0	0.667	6.3
LT	93+88.80		LT 95+03.80	115.0	3.0	0.667	8.5
LT	95+03.80		LT 96+85.00	181.2	4.0	0.667	17.9
<b>SUB-TOTAL =</b>							<b>50.6</b>

### PLAN NOTES:

ALL STAGING DETAILS SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND PAID FOR THE CONTRACT UNIT PRICE PER EACH LOCATION.




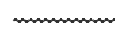
ALL WORK WITHOUT TEMPORARY CONCRETE BARRIER IN PLACE SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARDS 701201, 701301 AND 701316.

FOR ADDITIONAL DETAILS ASSOCIATED WITH TEMPORARY CONCRETE BARRIER, SEE HIGHWAY STANDARD 704001.

VERTICAL PANELS WITH LIGHTS AND REFLECTORS SHALL BE ATTACHED TO THE BARRIER WALL AND GUARDRAIL. COST INCLUDED WITH TRAFFIC CONTROL AND PROTECTION 702321.

TEMPORARY PAVEMENT MARKINGS SHALL BE ON BOTH SIDES OF THE OPEN LANE FROM THE STOP BAR TO STOP BAR. AS SHOWN ON STANDARD 701321. PAVEMENT MARKINGS THAT CONFLICT WITH STAGED TRAFFIC MARKINGS SHALL BE REMOVED. THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

PINNING TEMPORARY CONCRETE BARRIER SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF THE STANDARD SPECIFICATIONS AND SHALL INCLUDE INSTALLATION OF ADDITIONAL ANCHOR PINS ON THE TRAFFIC SIDE OF THE BARRIER WALL WHEN THE DROP-OFF BEHIND THE BARRIER IS LESS THAN 37 INCHES IN DISTANCE FROM THE BARRIER WALL, AS DIRECTED BY THE ENGINEER. REFER TO THE BUREAU OF SAFETY PROGRAMS AND ENGINEERING'S POLICY MEMORANDUM SAFETY 4-21 FOR GUIDANCE ON MITIGATING LONGITUDINAL DROP-OFFS AND PINNING.

- TEMPORARY CONCRETE BARRIER
-  PROPOSED WORK AREA
-  IMPACT ATTENUATOR
-  HMA SHOULDERS, 8"
-  TEMPORARY SOIL RETENTION SYSTEM

## BILL OF MATERIALS STAGE I

ITEM	UNIT	TOTAL
HOT-MIX ASPHALT SHOULDERS, 8"	SQ. YD.	228.0
TEMPORARY RUMBLE STRIP	EACH	6.0
TEMPORARY CONCRETE BARRIER	FOOT	875.0
PINNING TEMPORARY CONCRETE BARRIER	EACH	108.0
IMPACT ATTENUATOR TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3	EACH	2.0

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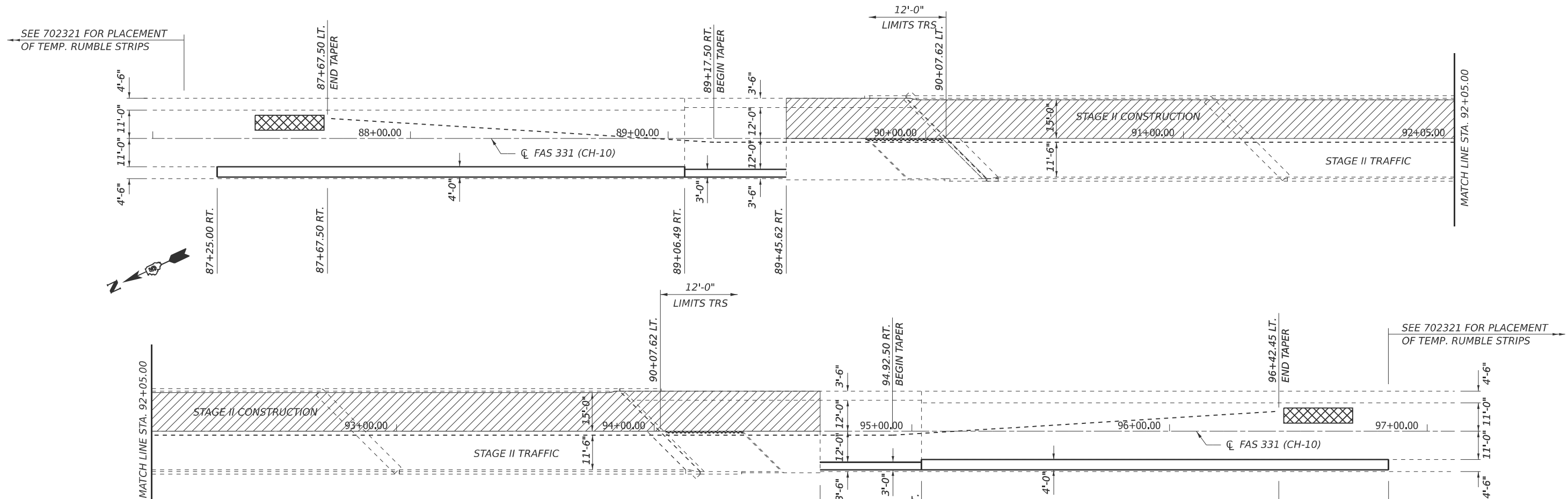
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAIL  
S.N. 092-0177

SCALE: 1" = 20' SHEET 2 OF 3 SHEETS STA. TO STA.

F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 10
CONTRACT NO. 70E63			ILLINOIS FED. AID PROJECT	

# STAGE II TEMPORARY CONCRETE BARRIER LAYOUT



### 70400200 RELOCATE TEMPORARY CONCRETE BARRIER

	STATION	TO	STATION	LENGTH
TAPER LT	87+67.50	RT	89+17.50	150.0
RT	89+17.50	RT	94+92.50	575.0
TAPER RT	94+92.50	LT	96+42.45	150.0
<b>SUB-TOTAL =</b>				<b>875.0</b>

### 48203029 HOT-MIX ASPHALT SHOULDERS, 8"

	STATION	TO	STATION	LENGTH	WIDTH	SQ YD
RT	87+25.00	RT	89+06.49	181.5	4.0	80.7
RT	89+06.49	RT	89+91.20	84.7	3.0	28.2
RT	93+88.80	RT	95+03.80	115.0	3.0	38.3
RT	95+03.80	RT	96+85.00	181.2	4.0	80.5
<b>SUB-TOTAL =</b>						<b>227.8</b>

### 20200100 EARTH EXCAVATION

	STATION	TO	STATION	LENGTH	WIDTH	DEPTH	CU YD
RT	87+25.00	RT	89+06.49	181.5	4.0	0.667	17.9
RT	89+06.49	RT	89+91.20	84.7	3.0	0.667	6.3
RT	93+88.80	RT	95+03.80	115.0	3.0	0.667	8.5
RT	95+03.80	RT	96+85.00	181.2	4.0	0.667	17.9
<b>SUB-TOTAL =</b>							<b>50.6</b>

#### PLAN NOTES:

ALL STAGING DETAILS SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND PAID FOR THE CONTRACT UNIT PRICE PER EACH LOCATION.

ALL WORK WITHOUT TEMPORARY CONCRETE BARRIER IN PLACE SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARDS 701201, 701301 AND 701316.

FOR ADDITIONAL DETAILS ASSOCIATED WITH TEMPORARY CONCRETE BARRIER, SEE HIGHWAY STANDARD 704001.

VERTICAL PANELS WITH LIGHTS AND REFLECTORS SHALL BE ATTACHED TO THE BARRIER WALL AND GUARDRAIL. COST INCLUDED WITH TRAFFIC CONTROL AND PROTECTION 702321.

TEMPORARY PAVEMENT MARKINGS SHALL BE ON BOTH SIDES OF THE OPEN LANE FROM THE STOP BAR TO STOP BAR, AS SHOWN ON STANDARD 701321. PAVEMENT MARKINGS THAT CONFLICT WITH STAGED TRAFFIC MARKINGS SHALL BE REMOVED. THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

PINNING TEMPORARY CONCRETE BARRIER SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF THE STANDARD SPECIFICATIONS AND SHALL INCLUDE INSTALLATION OF ADDITIONAL ANCHOR PINS ON THE TRAFFIC SIDE OF THE BARRIER WALL WHEN THE DROP-OFF BEHIND THE BARRIER IS LESS THAN 37 INCHES IN DISTANCE FROM THE BARRIER WALL, AS DIRECTED BY THE ENGINEER. REFER TO THE BUREAU OF SAFETY PROGRAMS AND ENGINEERING'S POLICY MEMORANDUM SAFETY 4-21 FOR GUIDANCE ON MITIGATING LONGITUDINAL DROP-OFFS AND PINNING.

- TEMPORARY CONCRETE BARRIER
- PROPOSED WORK AREA
- IMPACT ATTENUATOR
- HMA SHOULDERS, 8"
- TEMPORARY SOIL RETENTION SYSTEM

## BILL OF MATERIALS STAGE II

ITEM	UNIT	TOTAL
HOT-MIX ASPHALT SHOULDERS, 8"	SQ. YD.	228.0
TEMPORARY RUMBLE STRIP	EACH	6.0
RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	875.0
PINNING TEMPORARY CONCRETE BARRIER	EACH	108.0
IMPACT ATTENUATOR RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3	EACH	2.0

MODEL: STAGE II DETAIL (Sheet)  
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USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

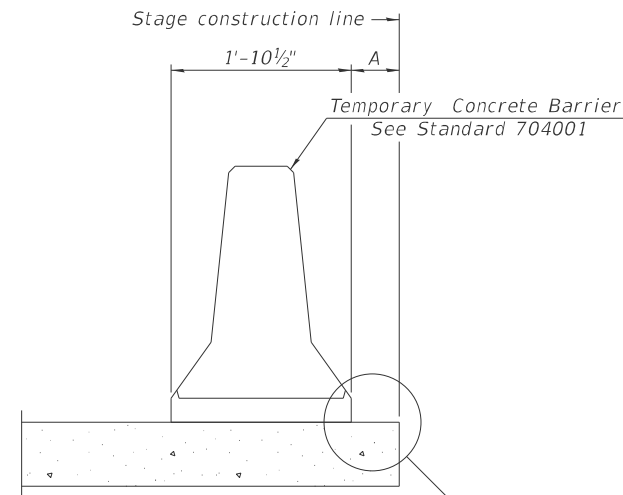
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAIL  
S.N. 092-0177

SCALE: 1" = 20' SHEET 3 OF 3 SHEETS STA. TO STA.

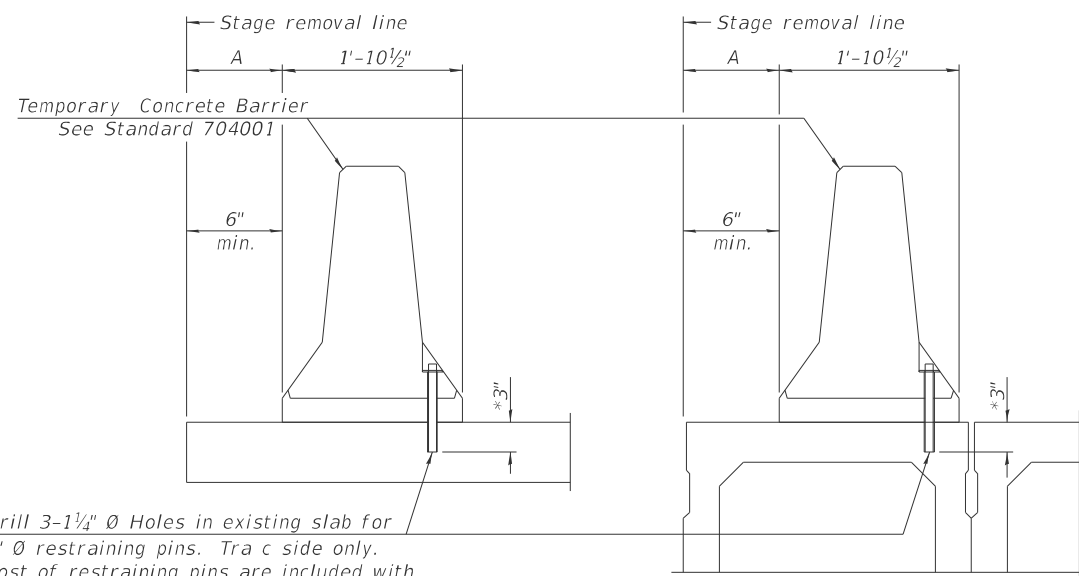
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	11
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				





When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

**NEW SLAB OR NEW DECK BEAM**

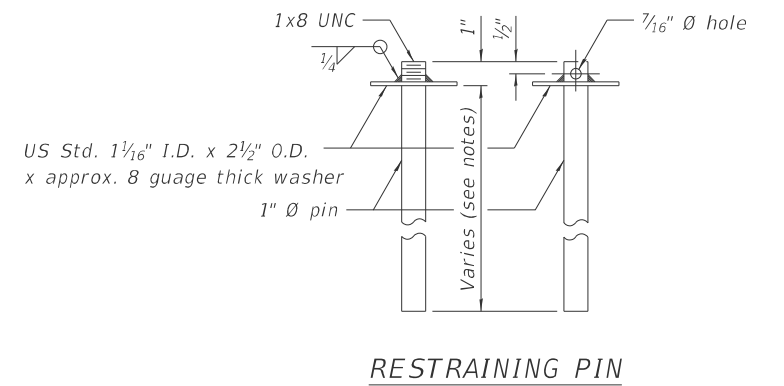


Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Tra c side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

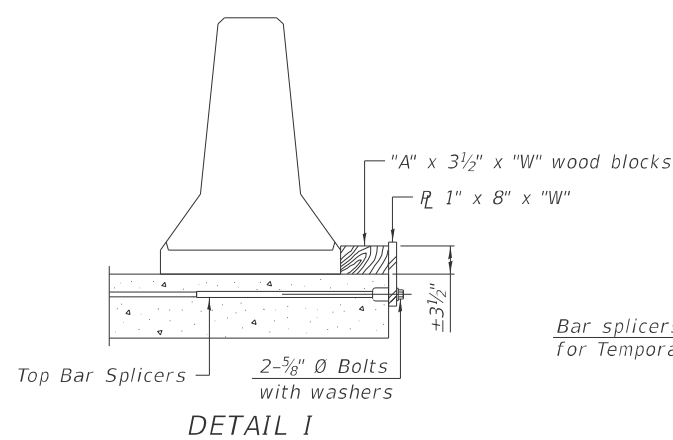
**EXISTING SLAB**

**EXISTING DECK BEAM**

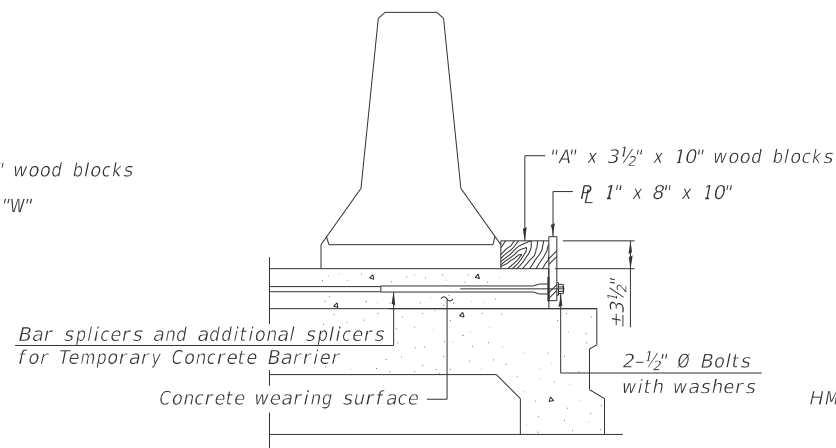
**SECTIONS THRU SLAB OR DECK BEAM**



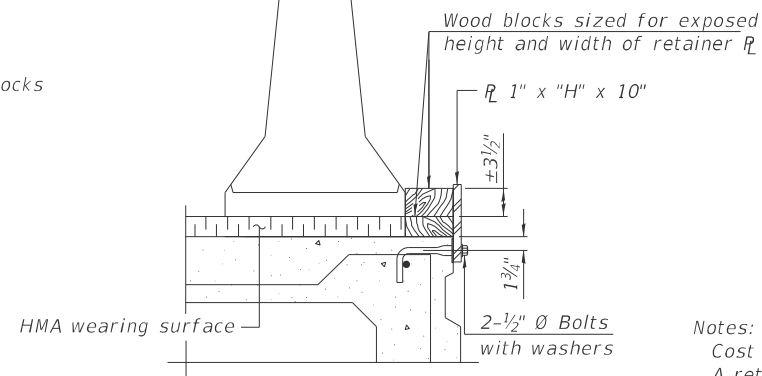
**RESTRAINING PIN**



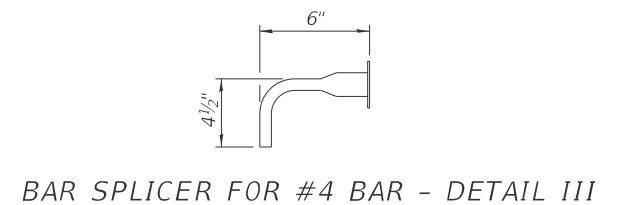
**DETAIL I**



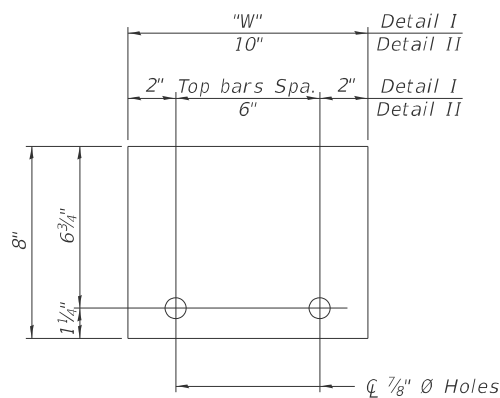
**DETAIL II**



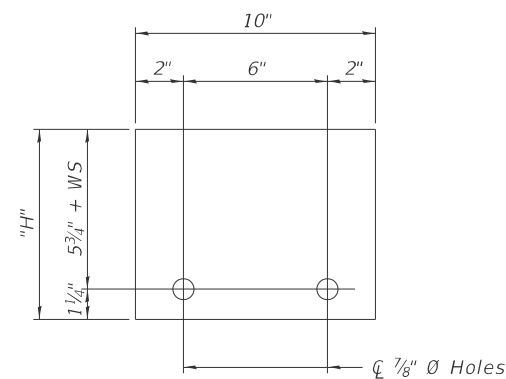
**DETAIL III**



**BAR SPLICER FOR #4 BAR - DETAIL III**



**STEEL RETAINER R 1" x 8" x "W"**  
(Detail I and II)



**STEEL RETAINER R 1" x "H" x 10"**  
(Detail III)

**Notes:**  
 Cost of retainer assembly is included with Temporary Concrete Barrier.  
 A retainer assembly shall be located at the approximate C 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 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.

MODEL: TEMP CONC BARRIER (Sheet)  
FILE NAME: c:\p\work\dwg\sherej\m0868143\070E63-shl-StageingDetails.dwg

R-27

2-17-2017

USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF TEMPORARY CONCRETE BARRIER  
S.N. 092-0177**

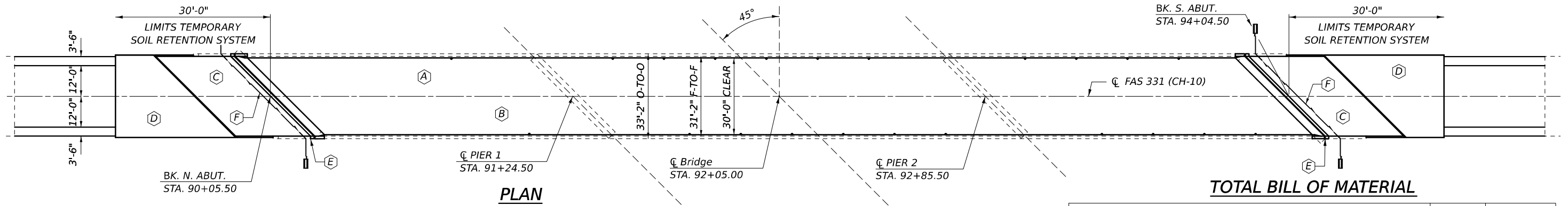
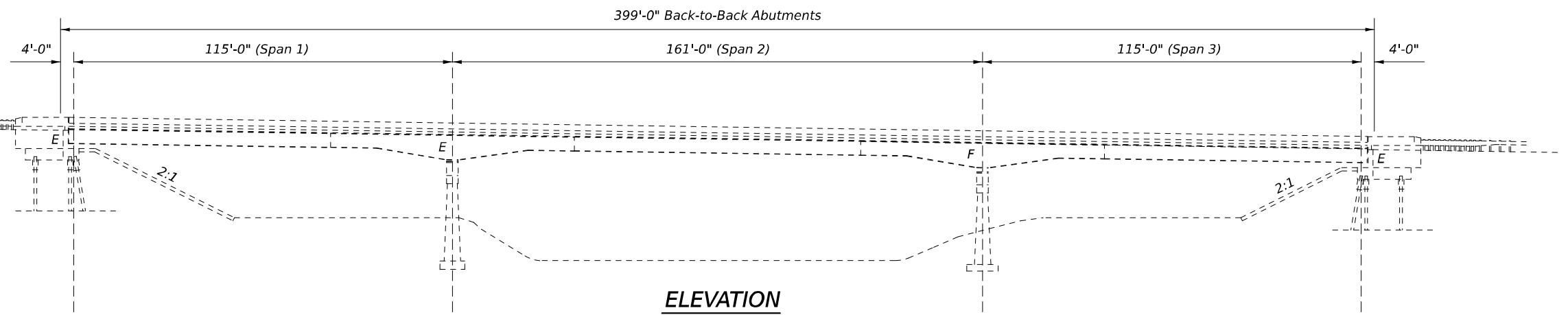
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	12
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

S.N. 092-0177 WAS BUILT IN 1980 AS FAS 331 (CH-10), SECTION L-BR AT STATION 92+05.00 IN VERMILION COUNTY. THE STRUCTURE HAS A BACK-TO-BACK ABUTMENT LENGTH OF 399'-0", OUT-TO-OUT WIDTH OF 33'-2", BRIDGE ROADWAY WIDTH OF 30'-0", AND AN APPROACH ROADWAY WIDTH OF 22'-0".

SEE PROPOSED IMPROVEMENTS ON THIS SHEET

WORK SHALL BE COMPLETED UNDER STAGED CONSTRUCTION



**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 WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

PRIOR TO POURING NEW CONCRETE DECK, ALL HEAVY OR LOOSE RUST, LOOSE MILL SCALE, AND OTHER LOOSE OR POTENTIALLY DETRIMENTAL FOREIGN MATERIAL SHALL BE REMOVED FROM THE SURFACE 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.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM. COST INCLUDED WITH CONCRETE REMOVAL.

PROTECTIVE COAT SHALL BE APPLIED TO ALL NEW CONCRETE SUPERSTRUCTURE AND ALL NEW CONCRETE OVERLAYS AS SPECIFIED IN ARTICLE 503.19 OF THE STANDARD SPECIFICATIONS.

UP TO 1/4" MAY BE GROUND OFF THE BRIDGE DECK AND BRIDGE APPROACH SLABS.

SYNTHETIC FIBERS SHALL BE INCLUDED IN THE BRIDGE DECK CONCRETE OVERLAY SPECIFIED. SEE SPECIAL PROVISIONS.

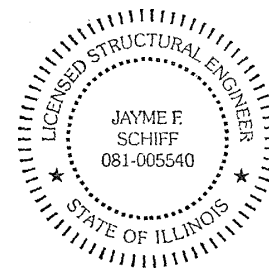
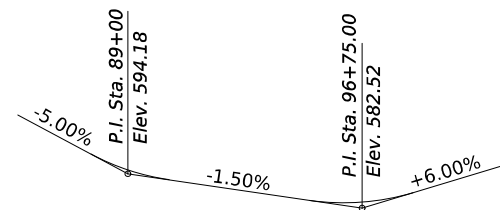
- (A) BRIDGE DECK MICROSILICA CONCRETE OVERLAY - 2 1/2"
- (B) DECK SLAB REPAIR (FULL DEPTH)
- (C) CONCRETE SUPERSTRUCTURE APPROACH SLAB
- (D) PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB (420401-13)
- (E) PREFORMED JOINT STRIP SEAL
- (F) ABUTMENT DRAIN

**PROPOSED IMPROVEMENTS**

1. BRIDGE DECK SCARIFICATION 3/4"
2. DECK SLAB REPAIR (FULL-DEPTH)
3. CONCRETE REMOVAL AT ABUTMENTS, DECK ENDS AND PORTION OF APPROACH PAVEMENT.
4. PLACE NEW ABUTMENTS DRAINS.
5. STRUCTURAL STEEL REPAIR AT SELECT LOCATIONS.
6. REMOVE AND REPLACE BEARINGS AT SELECT LOCATIONS.
7. STRUCTURAL REPAIR OF CONCRETE AT SELECT LOCATIONS.
8. PLACE PREFORMED JOINT STRIP SEAL AT ABUTMENTS.
9. PLACE CONCRETE SUPERSTRUCTURE APPROACH SLAB.
10. PLACE BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/2".
11. BRIDGE DECK GROOVING LONGITUDINAL.
12. DIAMOND GRIND BRIDGE DECK SECTION.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
FILTER FABRIC	SQ. YD.	97.0
PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ. YD.	221.0
CONCRETE REMOVAL	CU. YD.	17.9
STRUCTURE EXCAVATION	CU. YD.	160.0
CONCRETE STRUCTURE	CU. YD.	29.0
CONCRETE SUPERSTRUCTURE	CU. YD.	22.5
PROTECTIVE COAT	SQ. YD.	1,760.0
CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU. YD.	86.0
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1,147,000.0
REINFORCEMENT BARS EPOXY COATED	POUND	30,270.0
BAR SPLICERS	EACH	228.0
PREFORMED JOINT STRIP SEAL	FOOT	92.0
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	4.0
ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	4.0
ANCHOR BOLTS, 1"	EACH	32.0
ANCHOR BOLTS, 1 1/4"	EACH	32.0
TEMPORARY SOIL RETENTION SYSTEM	SQ. FT.	200.0
GRANULAR BACKFILL FOR STRUCTURES	SQ. YD.	160.0
GEOCOMPOSITE WALL DRAIN	SQ. YD.	102.0
CONCRETE HEADWALL FOR PIPE DRAIN	EACH	4.0
PIPE UNDERDRAIN FOR STRUCTURE 4"	SQ. YD.	174.0
BRIDGE DECK GROOVING LONGITUDINAL	SQ. YD.	1,725.0
HIGH LOAD MULTI-ROTATIONAL BEARINGS, POT, GUIDED EXP. 400K	EACH	4.0
HIGH LOAD MULTI-ROTATIONAL BEARINGS, POT, FIXED. 400K	EACH	4.0
JACK AND REMOVE EXISTING BEARINGS	EACH	16.0
STRUCTURAL STEEL REMOVAL	POUND	9,870.0
STRUCTURAL STEEL REPAIR	POUND	10,560.0
APPROACH SLAB REMOVAL	SQ. YD.	324.0
BRIDGE DECK SCARIFICATION 3/4"	SQ. YD.	1,282.0
BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/2"	SQ. YD.	1,282.0
STRUCTURAL REPAIR OF CONCRETE (DEPTH =/< THAN 5 INCHES)	SQ. FT.	85.0
DECK SLAB REPAIR (FULL DEPTH TYPE II)	SQ. YD.	106.0
DIAMOND GRINDING (BRIDGE SECTION)	SQ. YD.	1,523.0



EXPIRES 11-30-2024

Jayme F. Schiff

\* Pier 1  
\*\* Pier 2

MODEL: GPE SHEET (Sheet)  
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	DRAWN -	REVISED -
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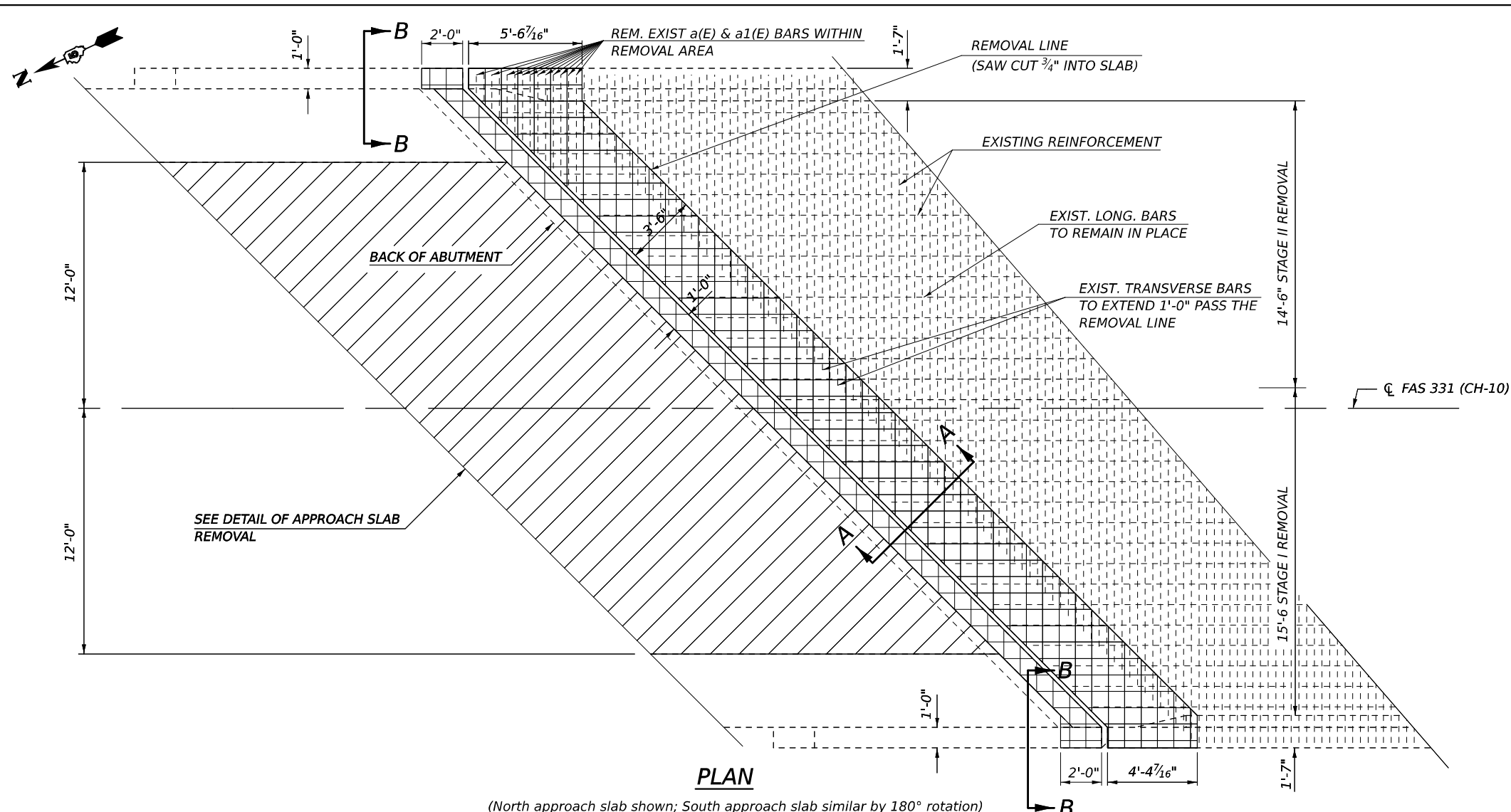
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION  
S.N. 092-0177

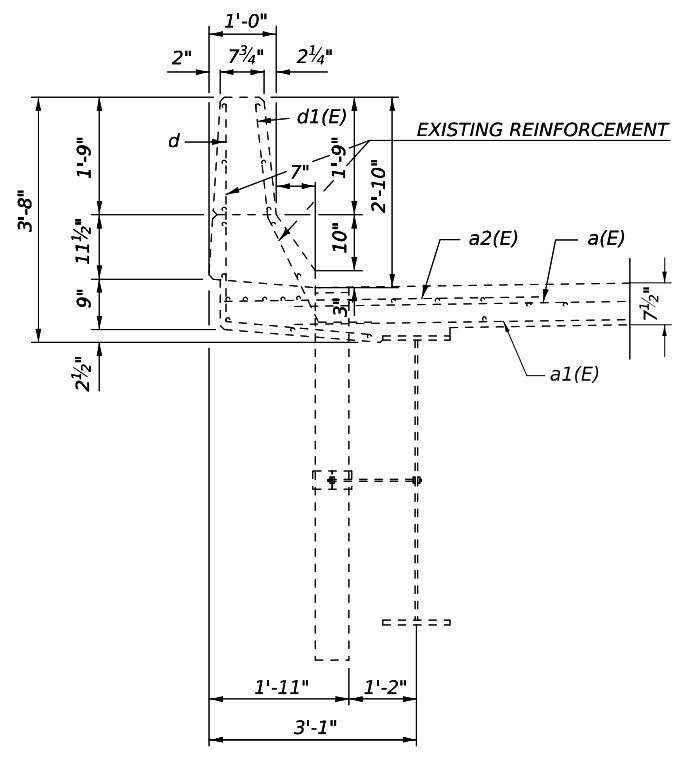
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F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 13
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

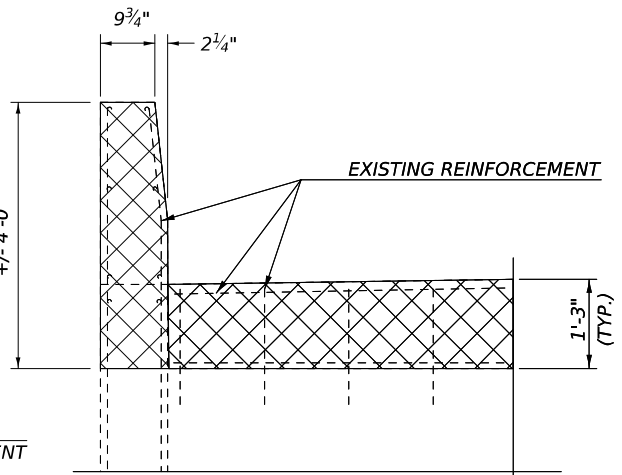
REV. 10/28/24



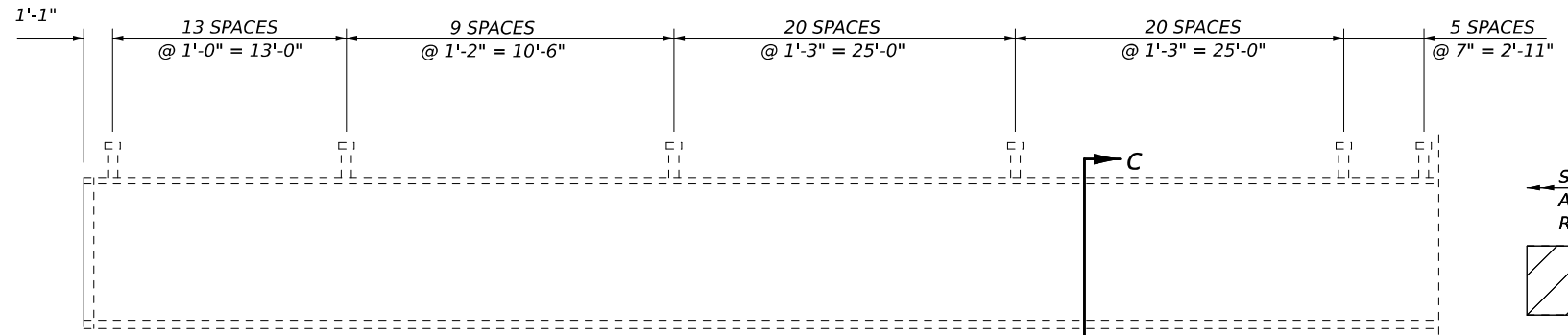
PLAN  
(North approach slab shown; South approach slab similar by 180° rotation)



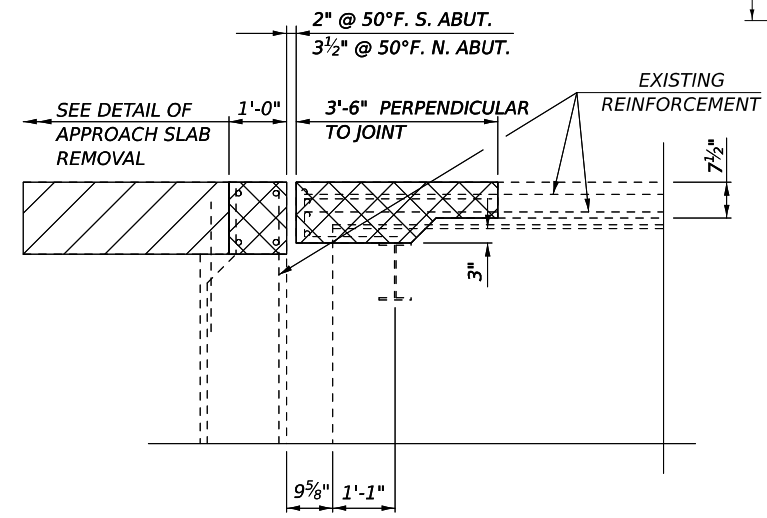
SECTION THRU PARAPET



SECTION B-B



ELEVATION  
Existing Shear Stud Locations



SECTION A-A

- CONCRETE REMOVAL
- APPROACH SLAB REMOVAL

**BILL OF MATERIALS  
TWO ABUTMENTS**

ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU. FT.	17.9

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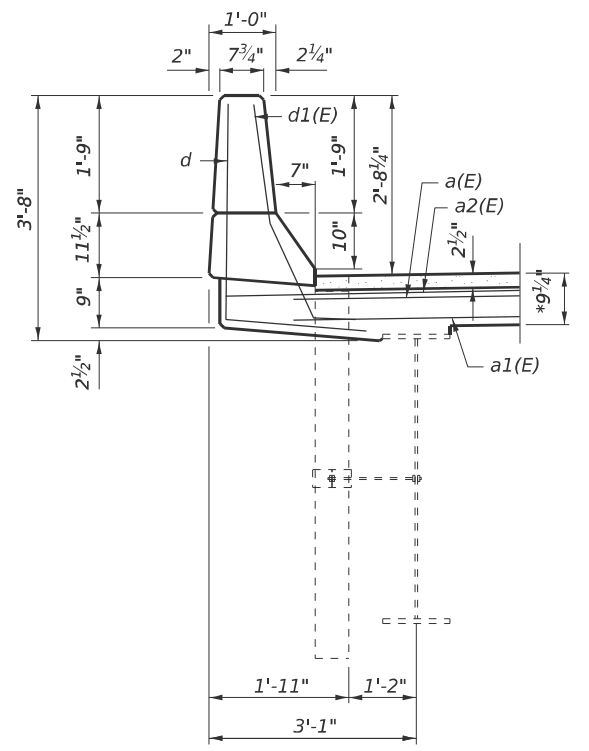
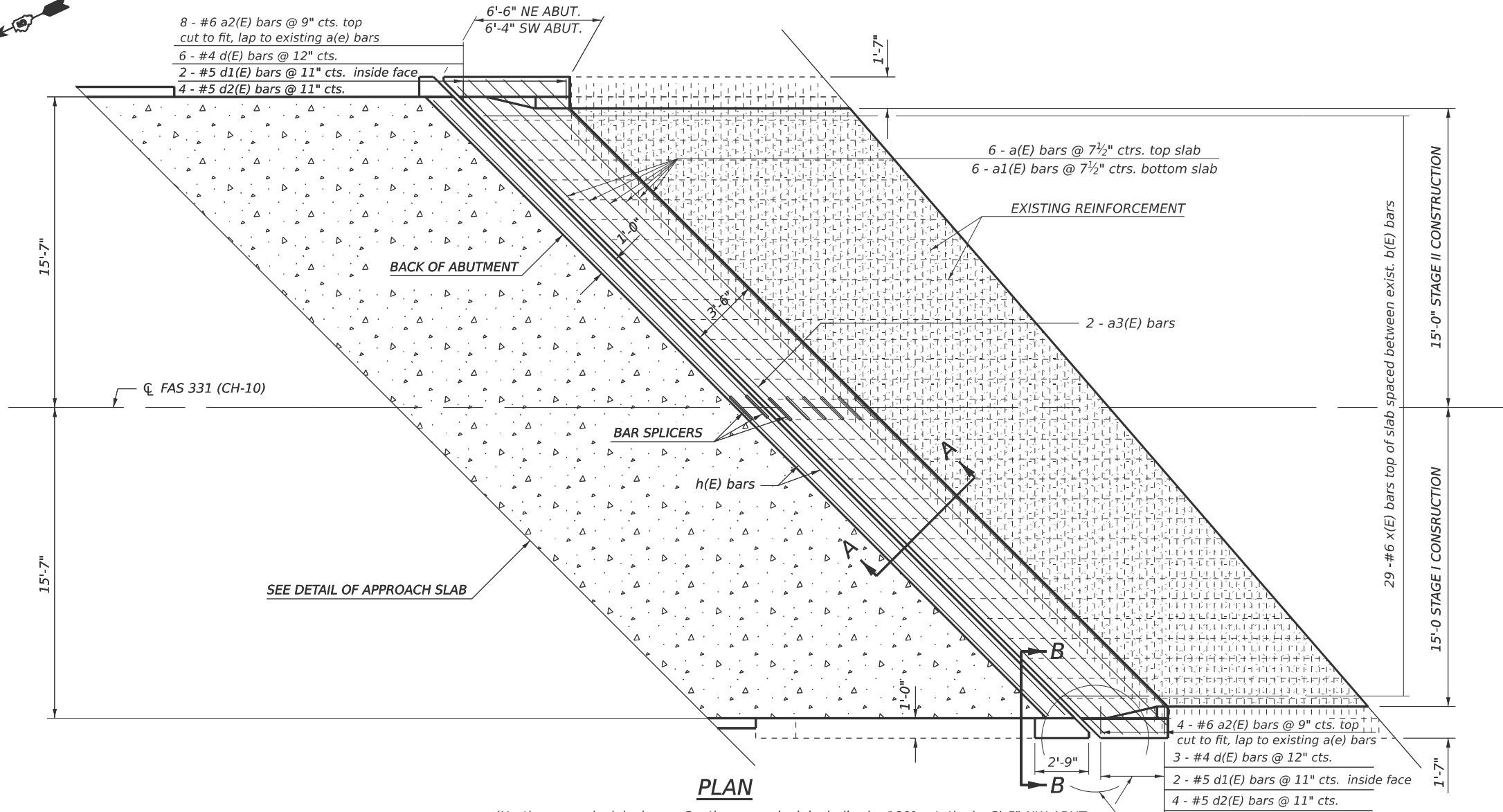
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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 10/11/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DECK END REMOVAL DETAIL  
S.N. 092-0177**

SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 14
CONTRACT NO. 70E63				ILLINOIS FED. AID PROJECT

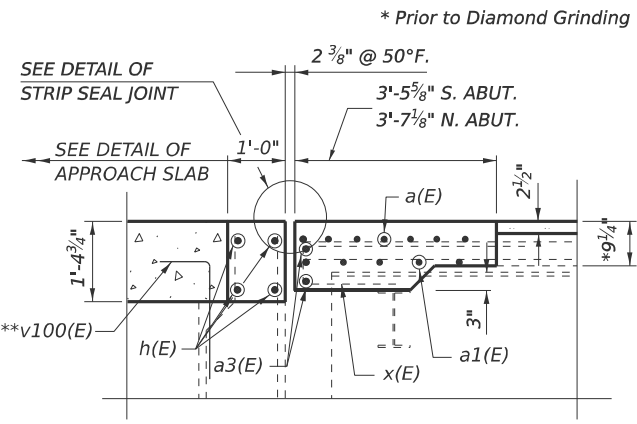


**SECTION THRU PARAPET**  
\* Prior to Diamond Grinding

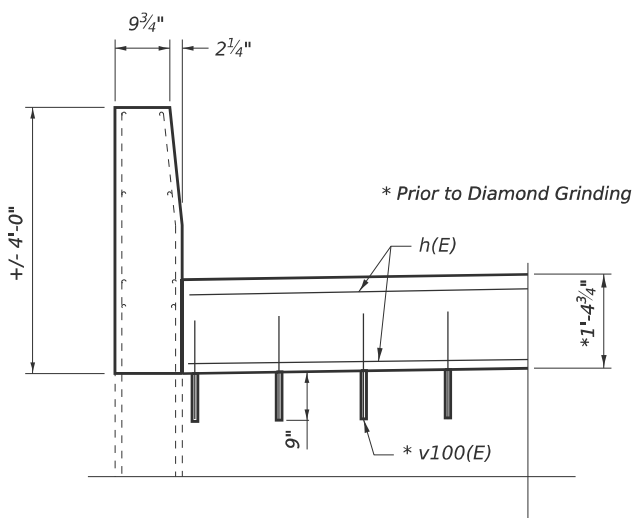
- CONCRETE SUPERSTRUCTURES (APPROACH SLAB)
- BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2 1/2"

**BILL OF MATERIALS**  
**TWO ABUTMENTS**

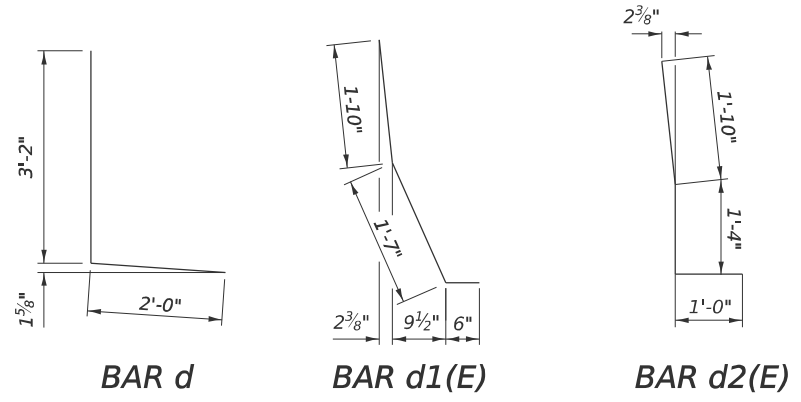
Bar	No.	Size	Length	Shape
a(E)	24	#6	23'-0"	—
a1(E)	24	#5	23'-0"	—
a2(E)	24	#6	4'-0"	—
a3(E)	8	#5	23'-0"	—
d(E)	18	#4	5'-2"	L
d1(E)	8	#5	3'-11"	L
d2(E)	16	#5	4'-2"	L
h(E)	16	#5	22'-6"	—
CONCRETE SUPERSTRUCTURE			CU. YD.	22.5
REINFORCEMENT BARS, EPOXY COATED			POUND	2,300.0
BAR SPLICERS			EACH	48.0



**SECTION A-A**



**SECTION B-B**



**BAR d**      **BAR d1(E)**      **BAR d2(E)**

\*\* Epoxy grout bars in 1'-3" min. holes according to Article 584 of the Standard Specifications. Cost included with Concrete Super Structure (Approach Slab). See Bridge Approach Slab Details.

MODEL: ABUTMENT CONSTR (Sheet) FILE NAME: c:\p\work\wv\shere\proj\m0868143\070E63-shr-DeckEndDetails.dgn

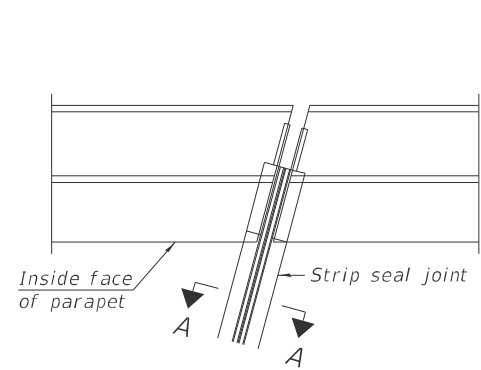
USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 10/10/2024	DATE -	REVISED -

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

**DECK END CONSTRUCTION DETAIL**  
**S.N. 092-0177**

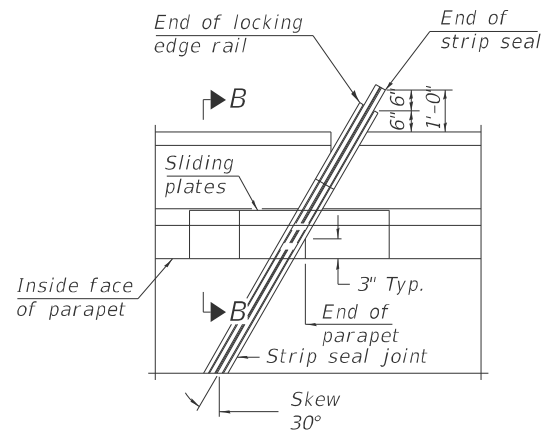
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F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 15
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



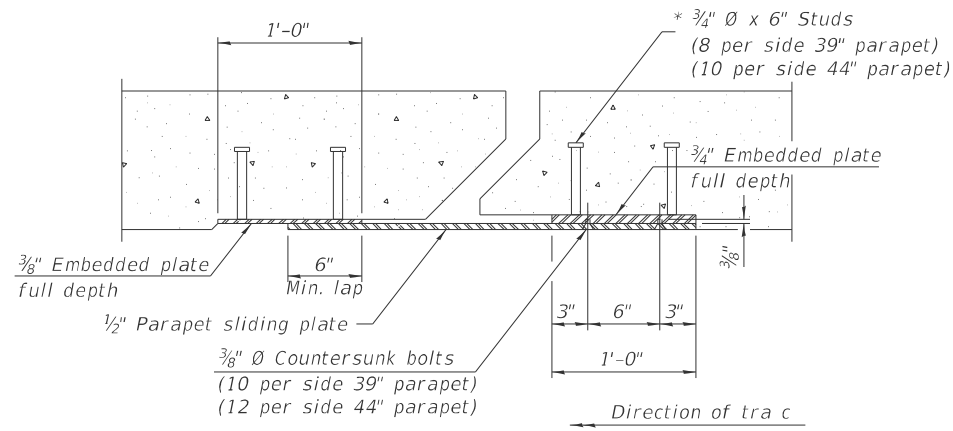
FOR SKEWS  $\leq 30^\circ$

PLAN AT PARAPET

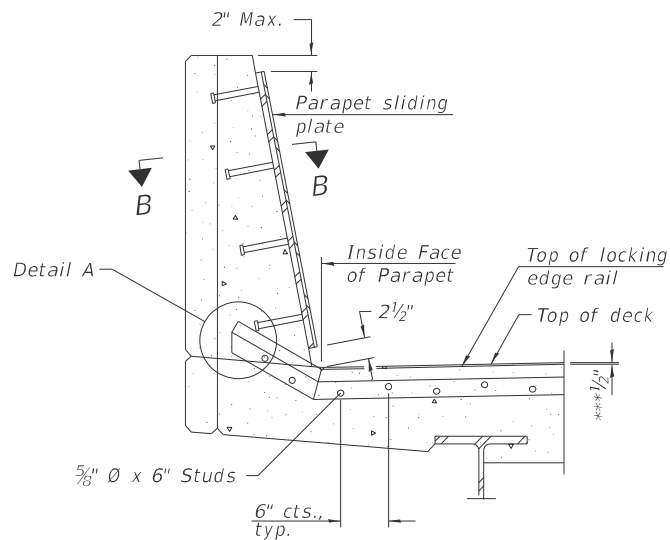


FOR SKEWS  $> 30^\circ$

FOR SKEWS  $> 30^\circ$

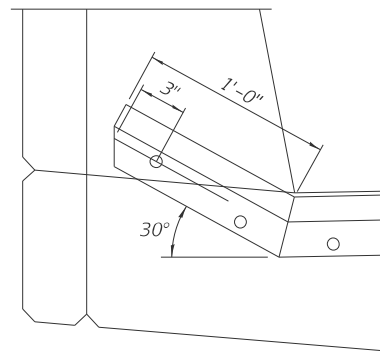


SECTION B-B

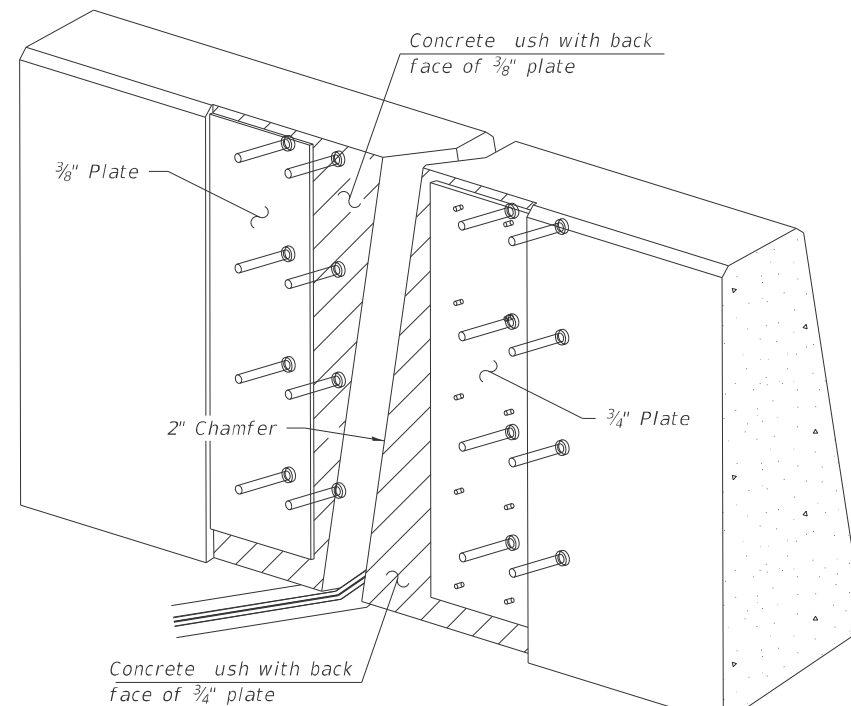


SECTION AT PARAPET

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



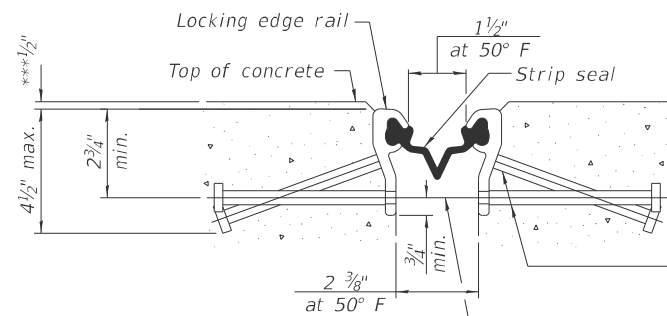
DETAIL A



TRIMETRIC VIEW

(Showing embedded plates only)

\*\*\*Prior to 1/4" Diamond Grinding



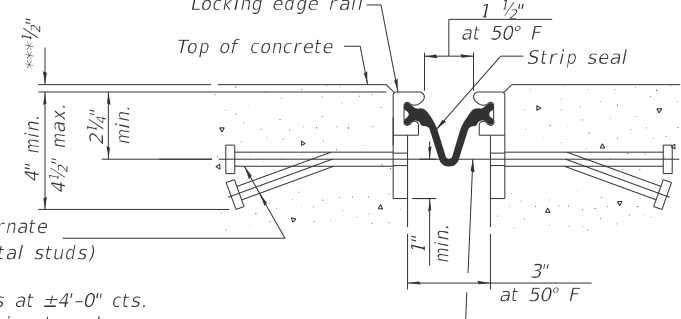
SHOWING ROLLED RAIL JOINT

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

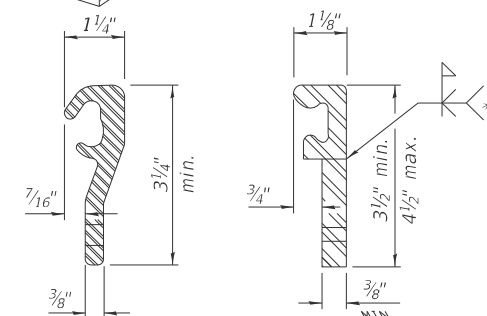
3/8" Ø threaded rods in 7/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed or flush with the plates after concrete is set.

SECTION A-A

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



SHOWING WELDED RAIL JOINT

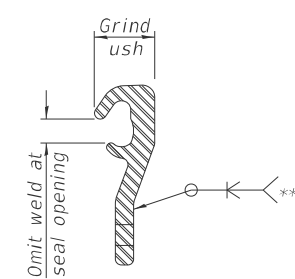


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	92.0

MODEL: STRIP SEAL JOINT DETAIL (Sheet)  
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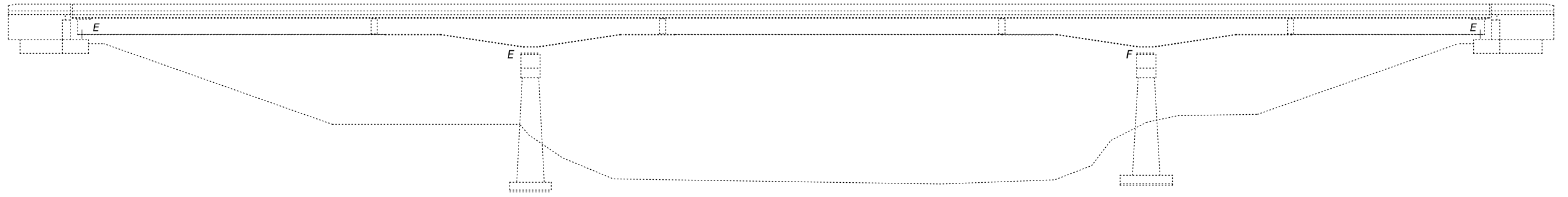
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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 10/10/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

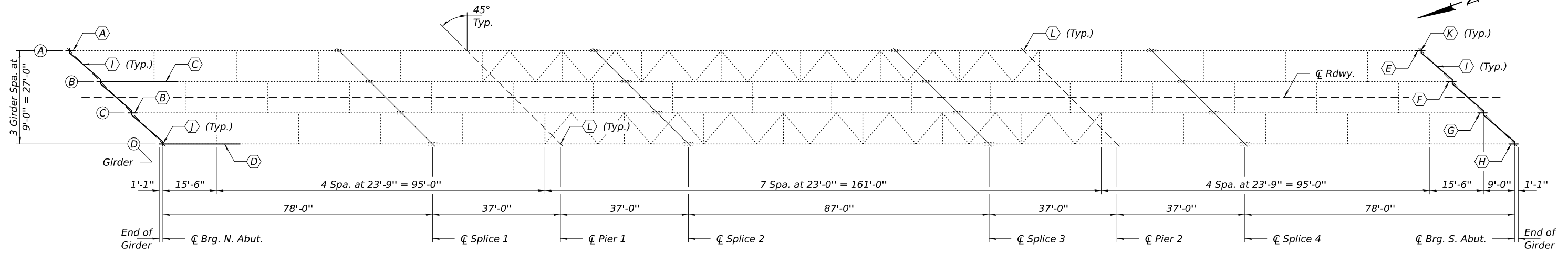
DETAIL OF PREFORMED JOINT STRIP SEAL  
S.N. 092-0177

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	16
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



ELEVATION



FRAMING PLAN

- (A) thru (H) - Beam End Repairs. See sheets 2 thru 6 of 11 for details.
- (I) - Remove and replace Cross Frames. See sheet 7 of 11 for details.
- (J) - Remove and replace with new Elastomeric Bearings, Type II.
- (K) - Remove and replace with new Elastomeric Bearings, Type I.
- (L) - Remove and replace with new HLMR Bearings.

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.  
 Fasteners shall be ASTM F 3125 Grade A325 Type 1 mechanically galvanized bolts. Flange splice holes shall be  $1\frac{5}{16}''\text{Ø}$  for  $\frac{7}{8}''$  bolts. Web splice holes shall be  $1\frac{3}{16}''\text{Ø}$  for  $\frac{3}{4}''\text{Ø}$  bolts.  
 Plan dimensions and details relative to the existing structure have been taken from existing plans and 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.  
 Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel or Structural Steel Repairs.  
 The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat shall be Reddish Brown, Munsell No. 2.5YR 3/4.  
 Diaphragm connection holes shall be  $1\frac{5}{16}''\text{Ø}$  for  $\frac{3}{4}''\text{Ø}$  bolts. Two hardened washers shall be required at diaphragm connections.  
 Two  $\frac{1}{8}''$  in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Removal	Pound	9870
Structural Steel Repair	Pound	10560
Furnishing & Erecting Strutral Steel	Pound	14700
Elastomeric Bearings, Type I	Each	4
Elastomeric Bearings, Type II	Each	4
* High Load Multi-Rotational Bearings, Pot, Guided Expansion-400K	Each	4
** High Load Multi-Rotational Bearings, Pot, Fixed-400K	Each	4
Jack & Remove Existing Bearings	Each	16
Anchor Bolts, 1"	Each	32
Anchor Bolts, 1 $\frac{1}{4}$ "	Each	32

\* Pier 1  
 \*\* Pier 2

MODEL: 70E63-017  
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DESIGNED -	Victor H. Veliz
CHECKED -	Adrian T. Halloway
DRAWN -	daurdell
CHECKED -	VHV ATH

EXAMINED		DATE -	OCTOBER 11, 2024
PASSED		REVISION 1	10/24/2024 VHV
	ENGINEER OF STRUCTURAL SERVICES	REVISION -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

FRAMING PLAN  
 FAS 331 (CH 10) OVER SALT FORK  
 SN 092-0177

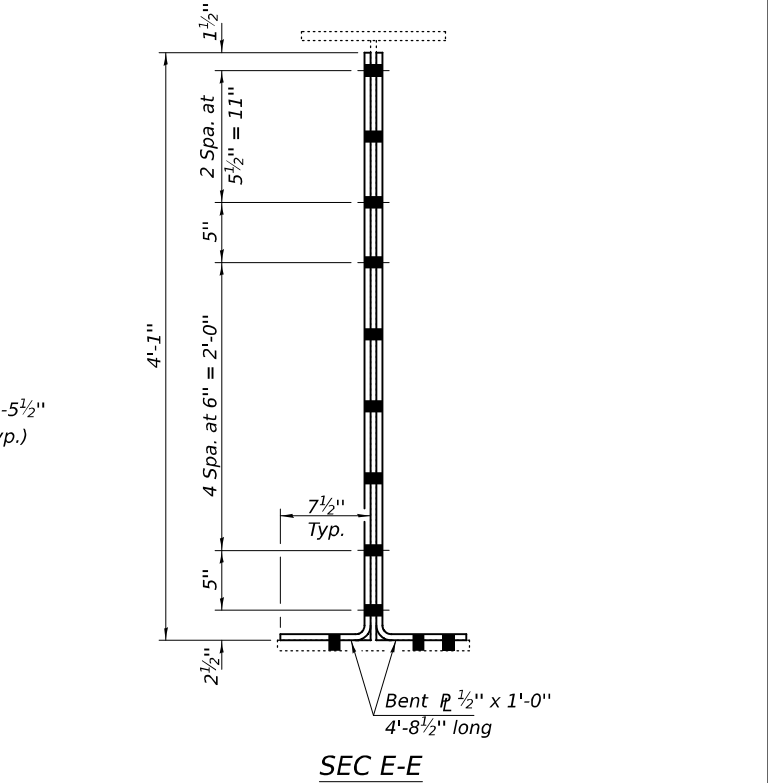
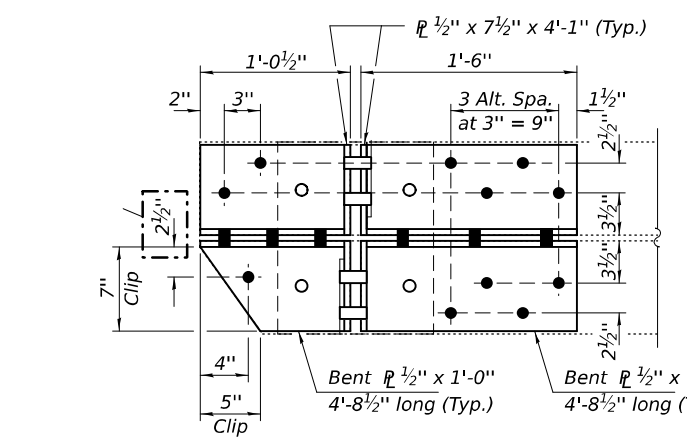
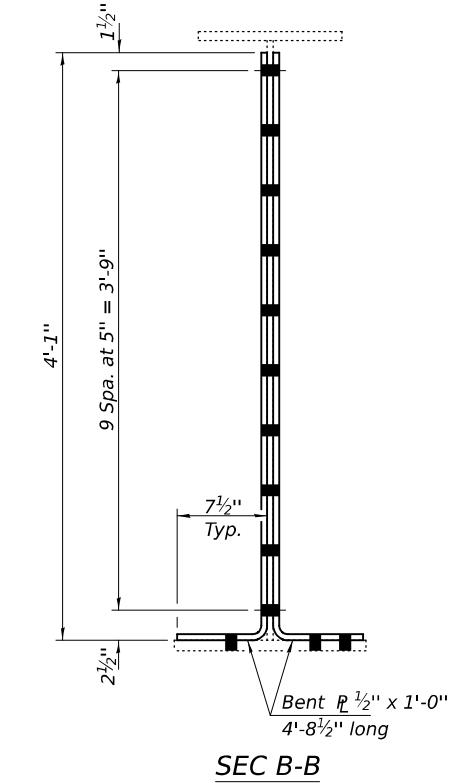
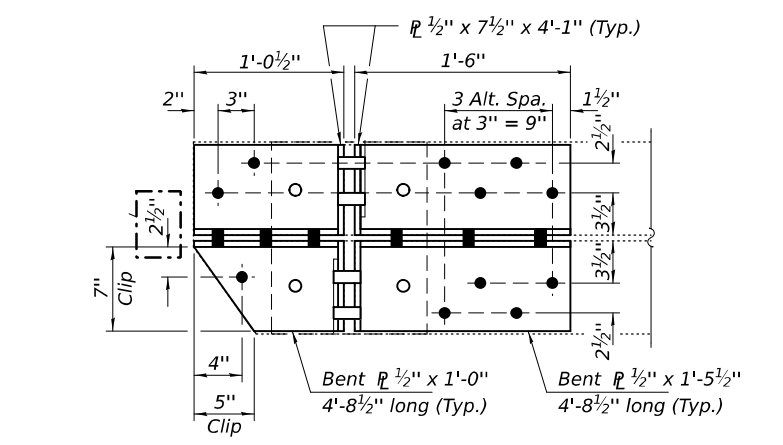
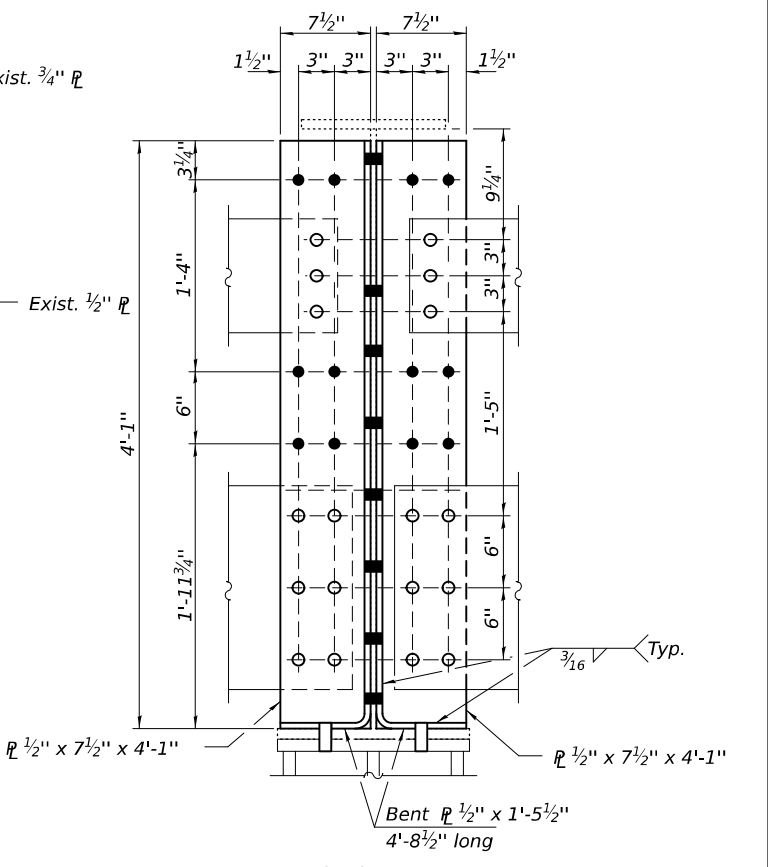
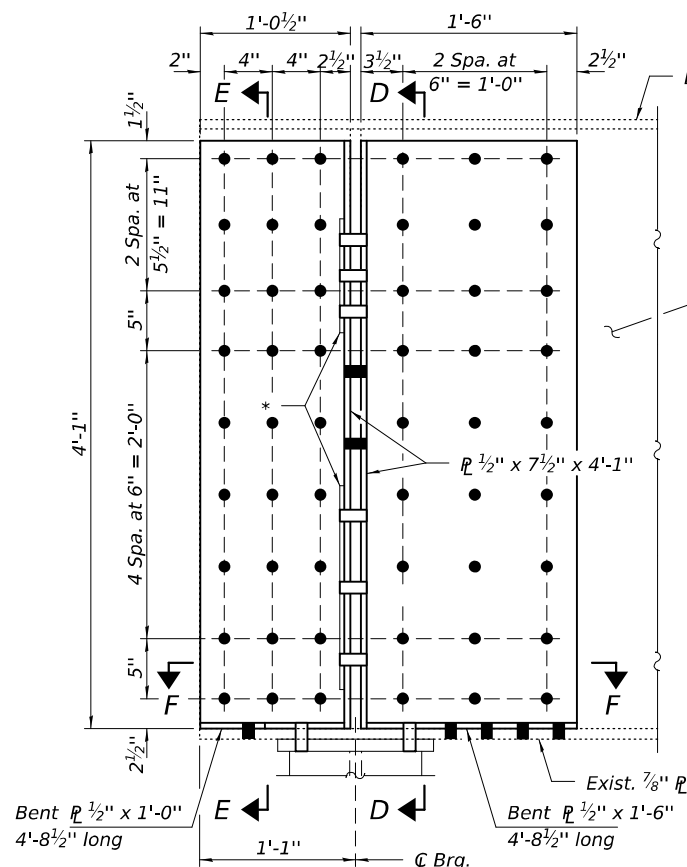
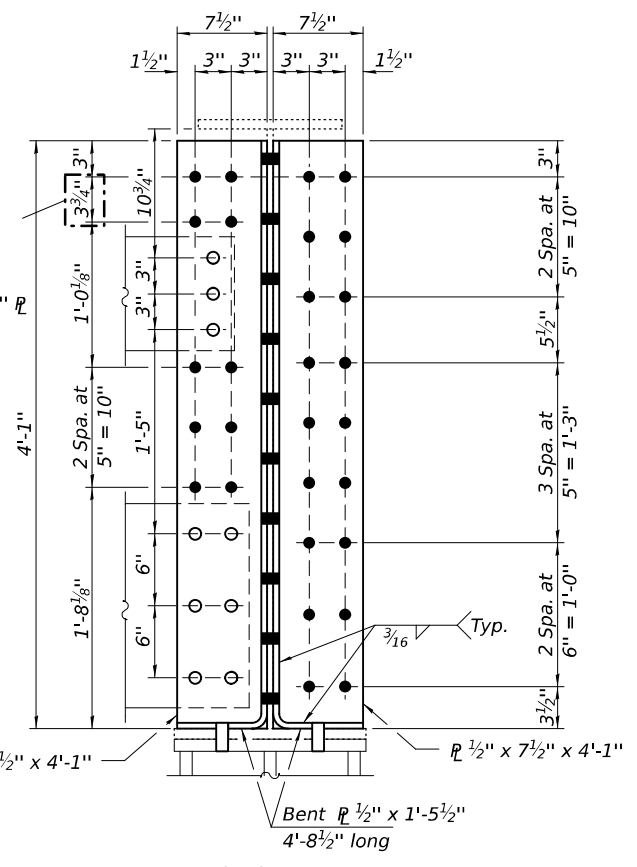
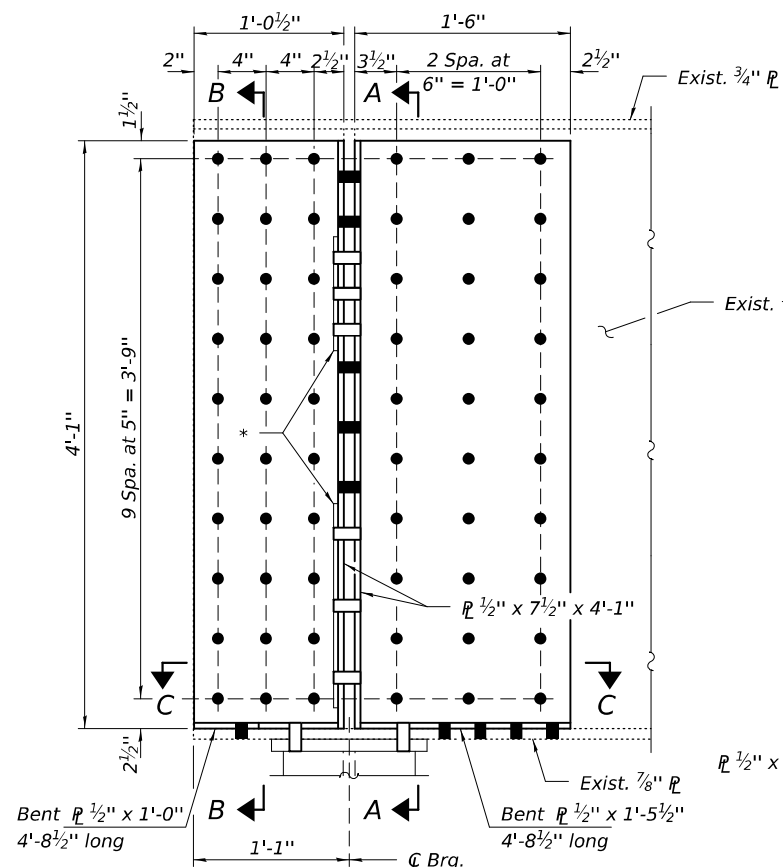
SHEET 1 OF 11 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	17
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

10/25/2024 10:55:25 AM

REV. 10/28/24

MODEL: 70E63-018  
 FILE NAME: p:\i\del-pw\benley.com\FWIDOT\Documents\OBM Projects\0920177\CADData\Bridges\0920177.dgn



\* Cross-frame connecting plate, see sheet 7 of 11.

**BOLT HOLE LEGEND**

- - Shop drill holes.
- - Field drill holes using new cross-frame connecting plates or bearing plate as a template.

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BEAM END REPAIR DETAILS - NORTH ABUTMENT  
 SN 092-0177**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	18
CONTRACT NO. 70E63				

SHEET 2 OF 11 SHEETS

ILLINOIS FED. AID PROJECT

REV. 10/28/24

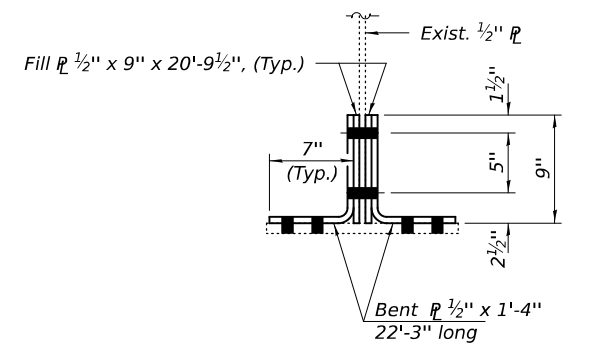
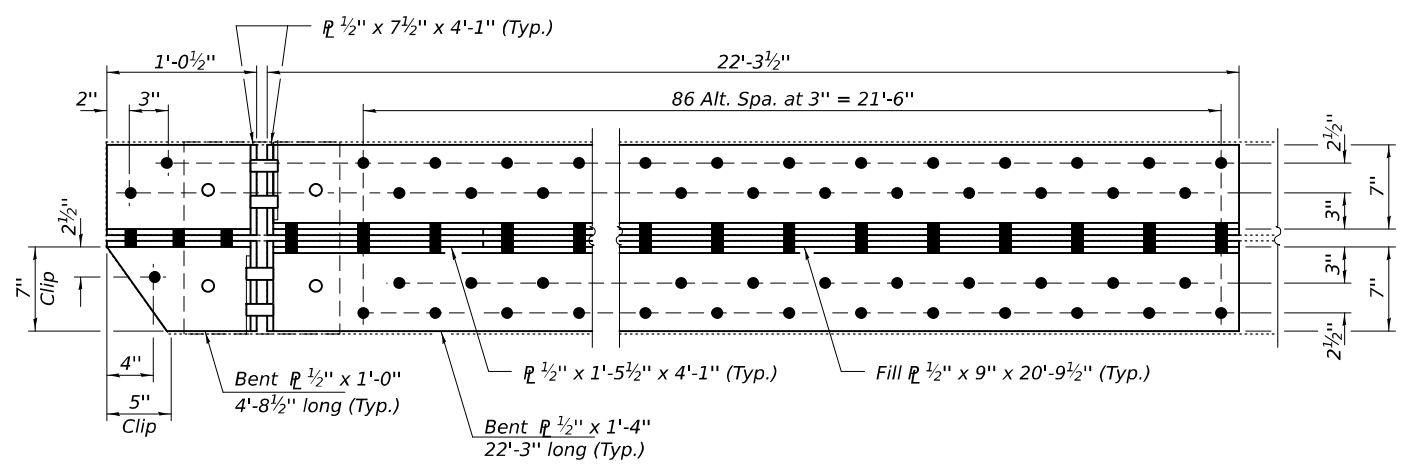
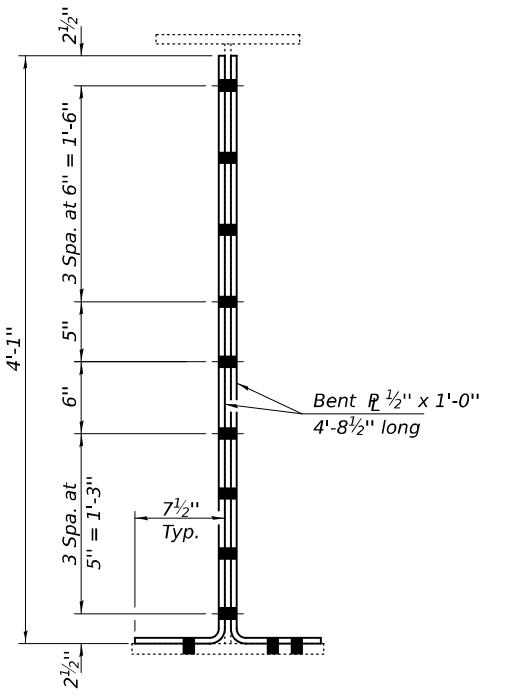
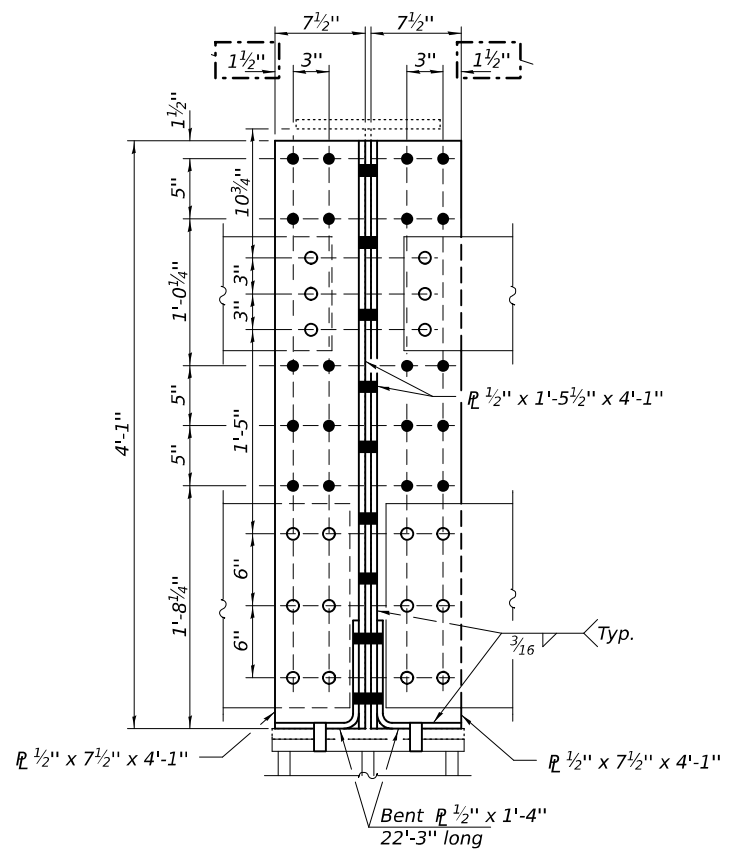
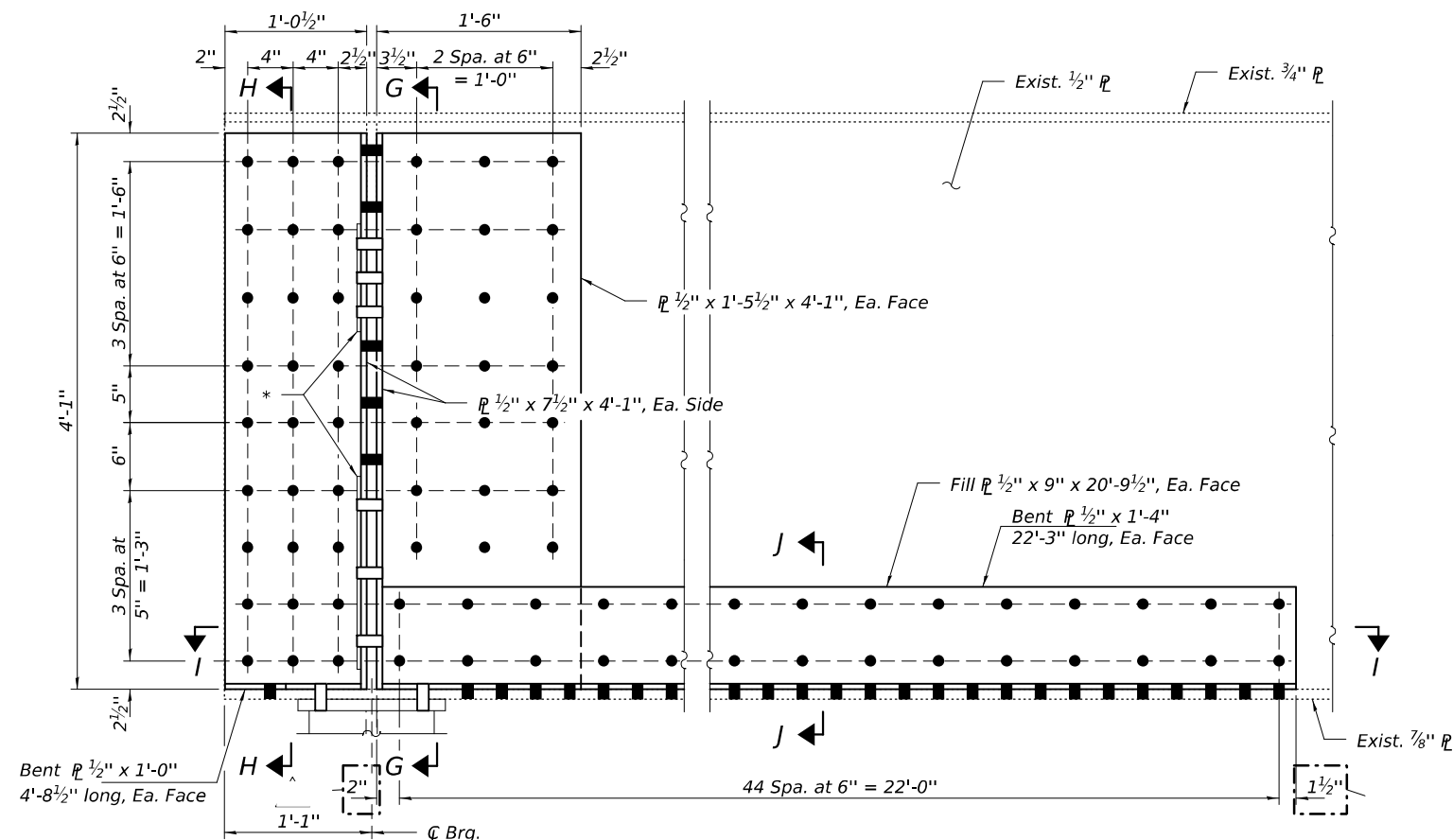
DESIGNED -	VHV
CHECKED -	ATH
DRAWN -	daburdell
CHECKED -	VHV ATH

EXAMINED	ENGINEER OF STRUCTURAL SERVICES	DATE -	OCTOBER 11, 2024
PASSED	<i>James F. J. [Signature]</i>	REVISION 1	10/24/2024 VHV
	ENGINEER OF BRIDGES AND STRUCTURES	REVISION -	

10/25/2024 10:55:27 AM



MODEL: 70E63-019  
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REPAIR C  
(Beam B)

SEC G-G

SEC H-H

SEC I-I

SEC J-J

\* Cross-frame connecting plate, see sheet 7 of 11.

**BOLT HOLE LEGEND**

- - Shop drill holes.
- - Field drill holes using new cross-frame connecting plates or bearing plate as a template.

DESIGNED - VHV	EXAMINED
CHECKED - ATH	PASSED
DRAWN - daburdell	
CHECKED - VHV ATH	

ENGINEER OF STRUCTURAL SERVICES  
 JOYCE F. J. [Signature]  
 ENGINEER OF BRIDGES AND STRUCTURES

DATE - OCTOBER 11, 2024
REVISED 1 10/24/2024 VHV
REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

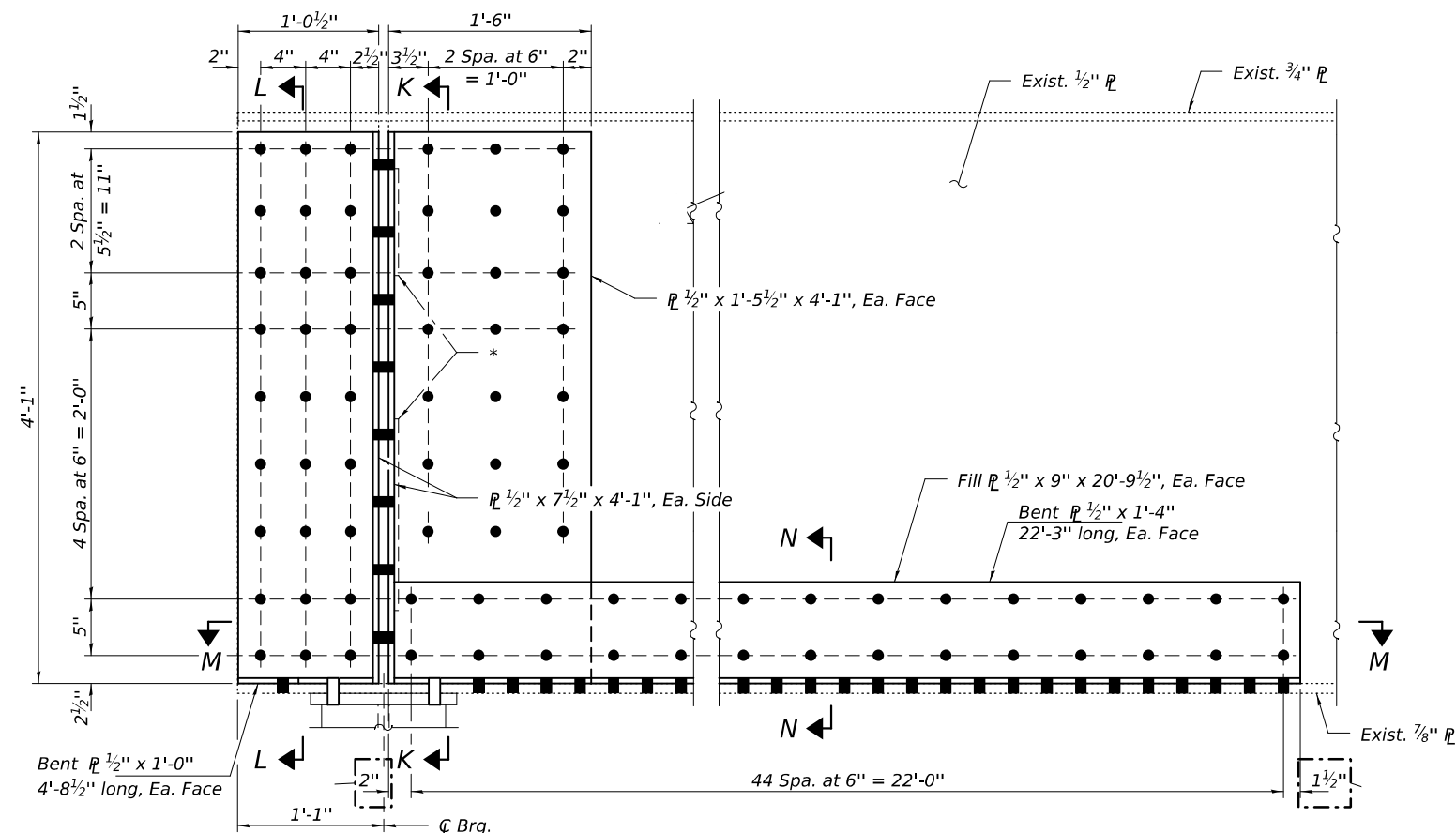
BEAM END REPAIR DETAILS - NORTH ABUTMENT  
 SN 092-0177

SHEET 3 OF 11 SHEETS

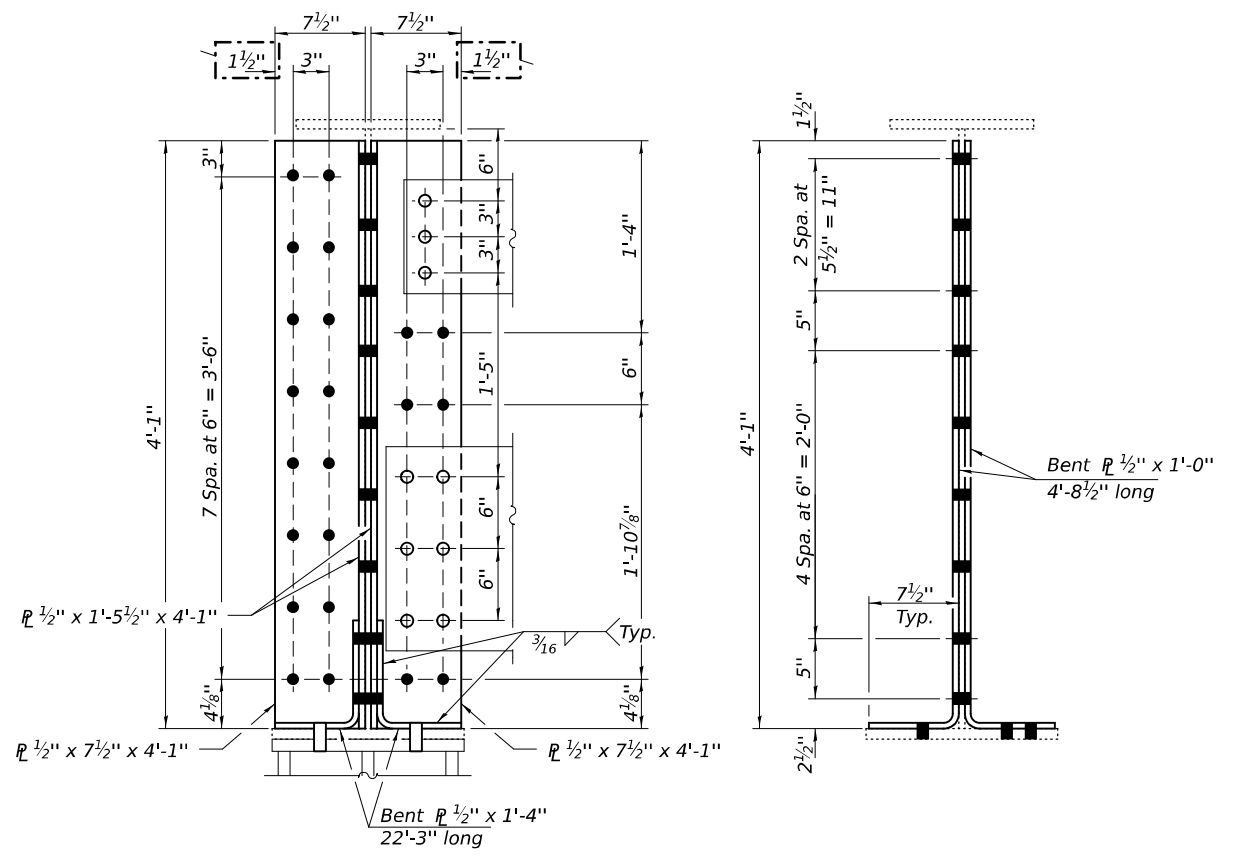
F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 19
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

REV. 10/28/24

MODEL: 70E63-020  
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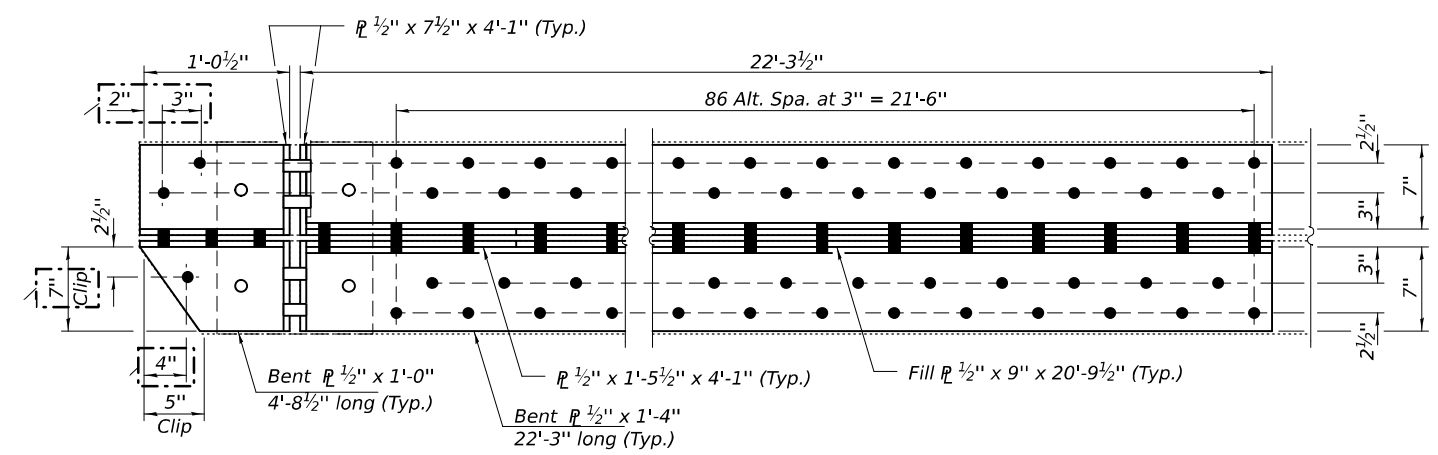


**REPAIR D**  
(Beam D)

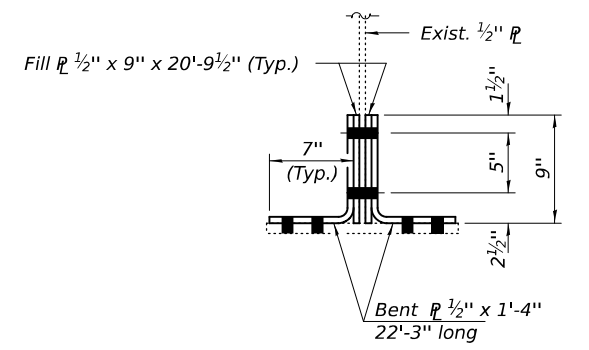


**SEC K-K**

**SEC L-L**



**SEC M-M**



**SEC N-N**

\* Cross-frame connecting plate,  
see sheet 7 of 11.

**BOLT HOLE LEGEND**

- - Shop drill holes.
- - Field drill holes using new cross-frame connecting plates or bearing plate as a template.

DESIGNED - VHV	EXAMINED
CHECKED - ATH	PASSED
DRAWN - daburdell	
CHECKED - VHV ATH	

ENGINEER OF STRUCTURAL SERVICES  
 ENGINEER OF BRIDGES AND STRUCTURES

DATE - OCTOBER 11, 2024
REVISED 1 10/24/2024 VHV
REVISED -

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

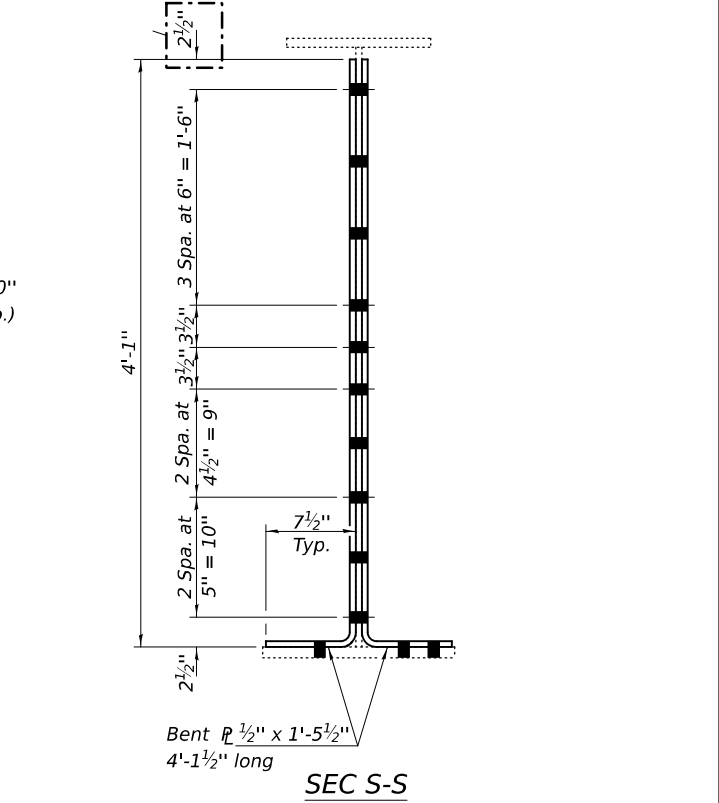
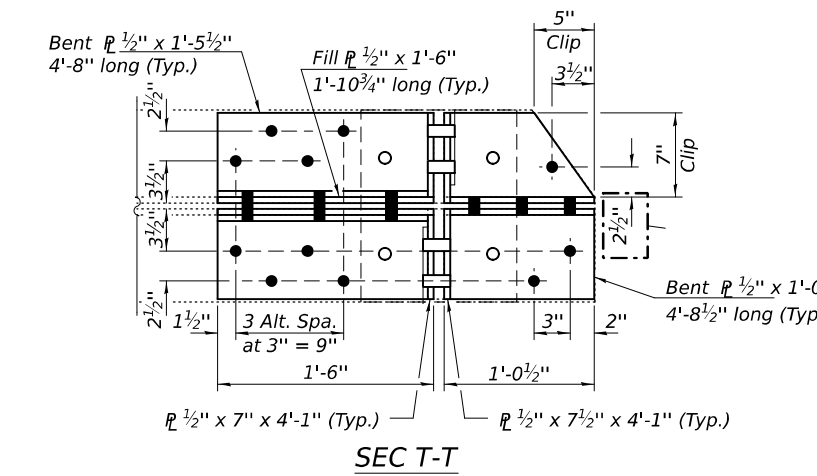
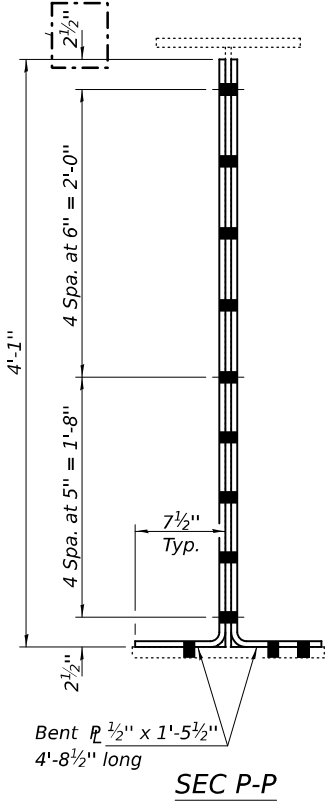
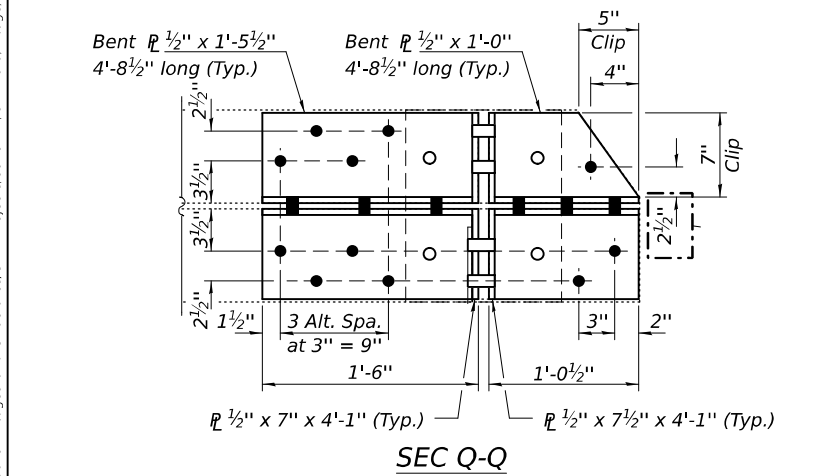
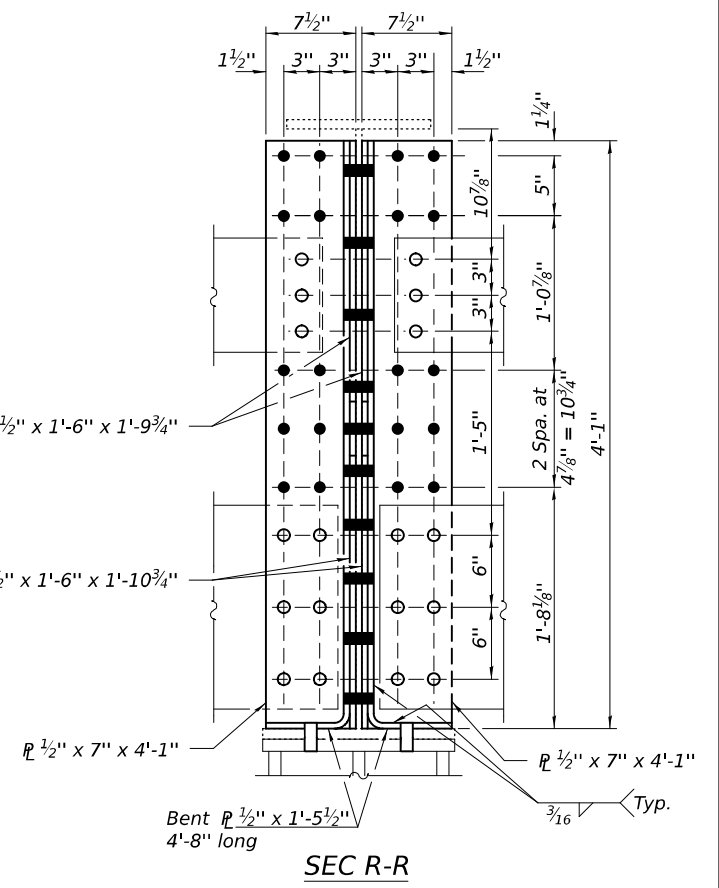
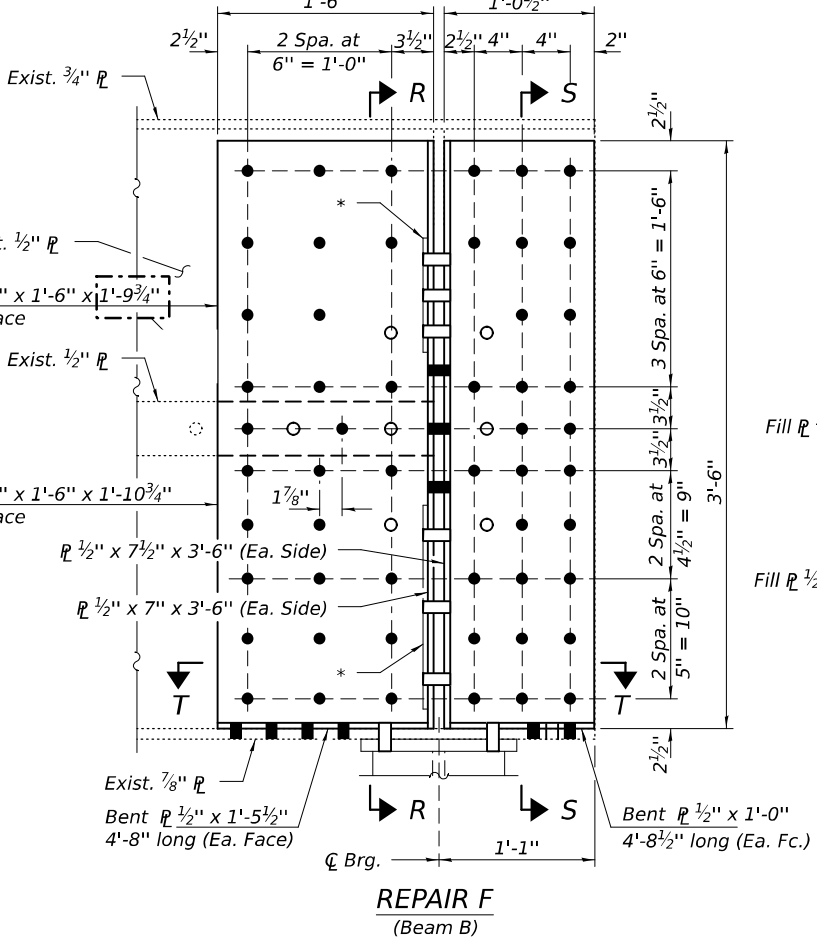
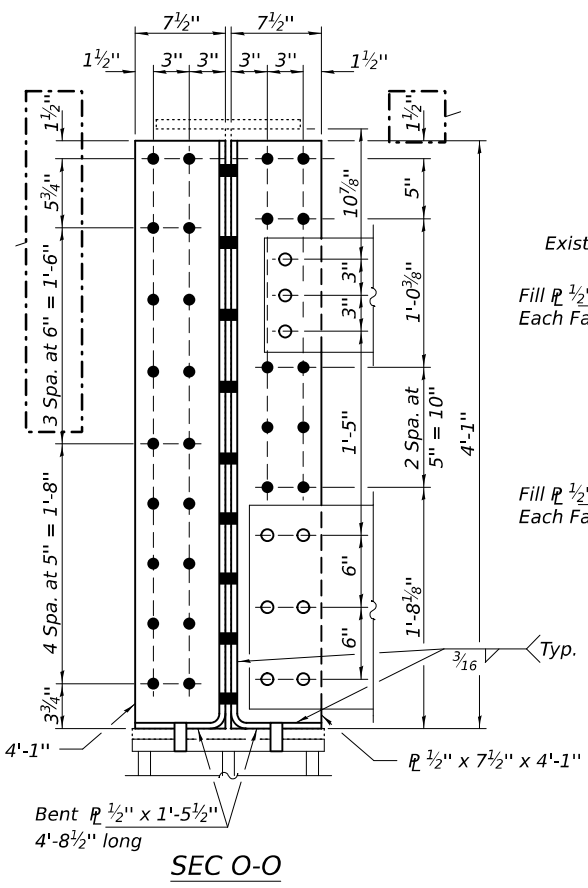
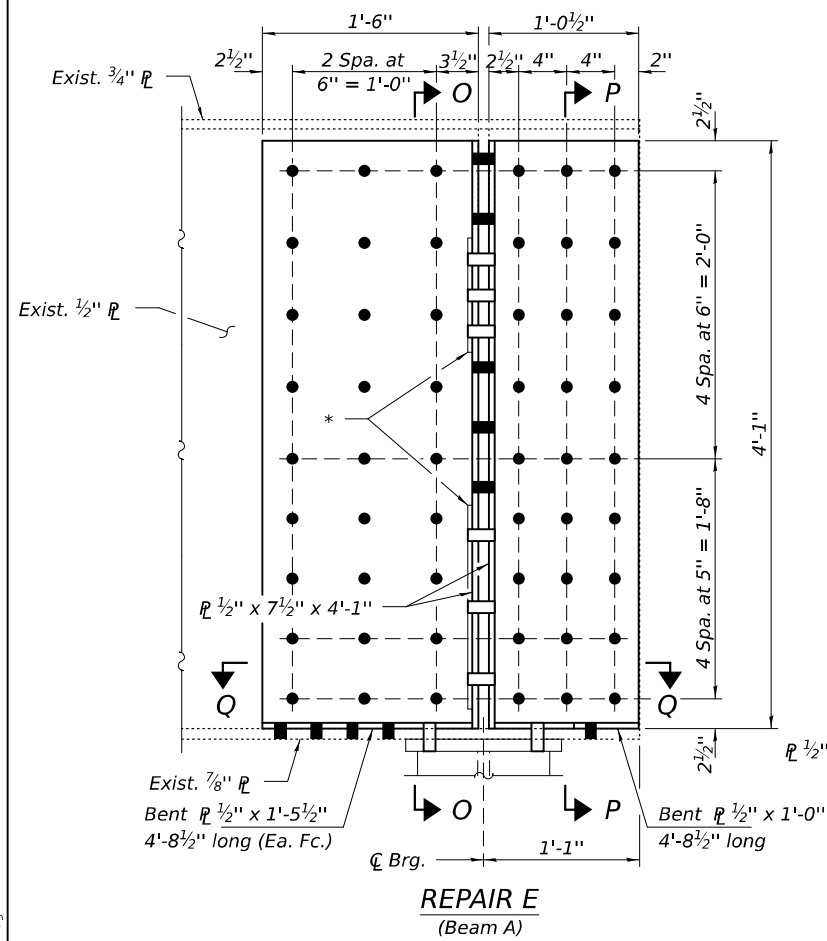
**BEAM END REPAIR DETAILS - NORTH ABUTMENT**  
**SN 092-0177**

SHEET 4 OF 11 SHEETS

F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 20
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

REV. 10/28/24

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\* Cross-frame connecting plate, see sheet 7 of 11.

- BOLT HOLE LEGEND**
- - Shop drill holes.
  - - Field drill holes using new cross-frame connecting plates or bearing plate as a template.

DESIGNED - VHV	EXAMINED
CHECKED - ATH	ENGINEER OF STRUCTURAL SERVICES
DRAWN - daburdell	PASSED
CHECKED - VHV ATH	ENGINEER OF BRIDGES AND STRUCTURES

DATE - OCTOBER 11, 2024  
 REVISION 1 10/24/2024 VHV  
 REVISION -

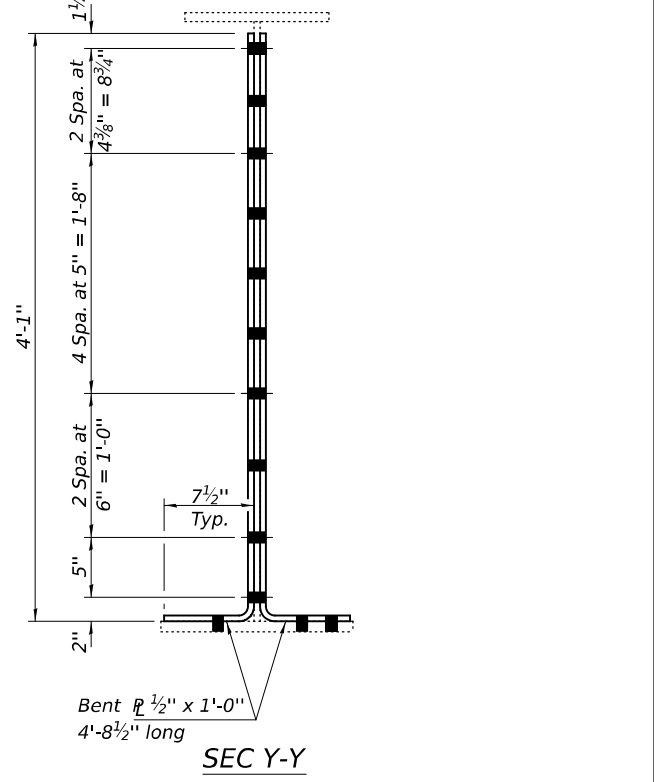
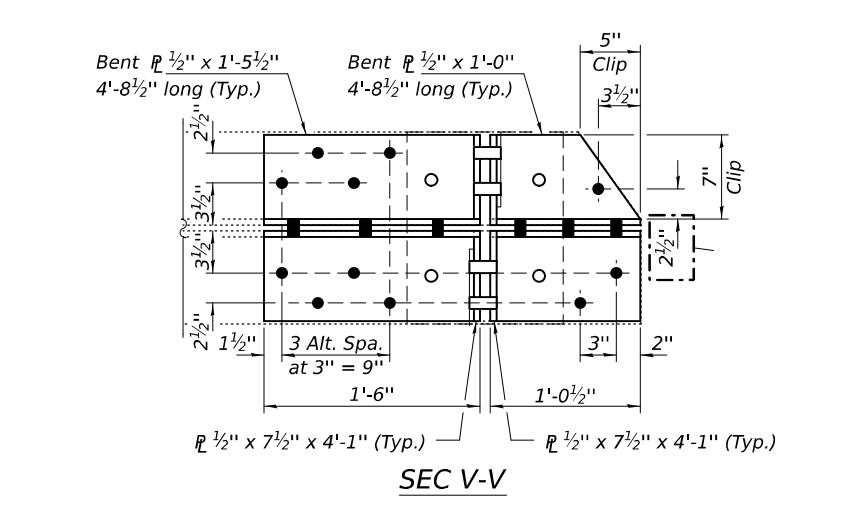
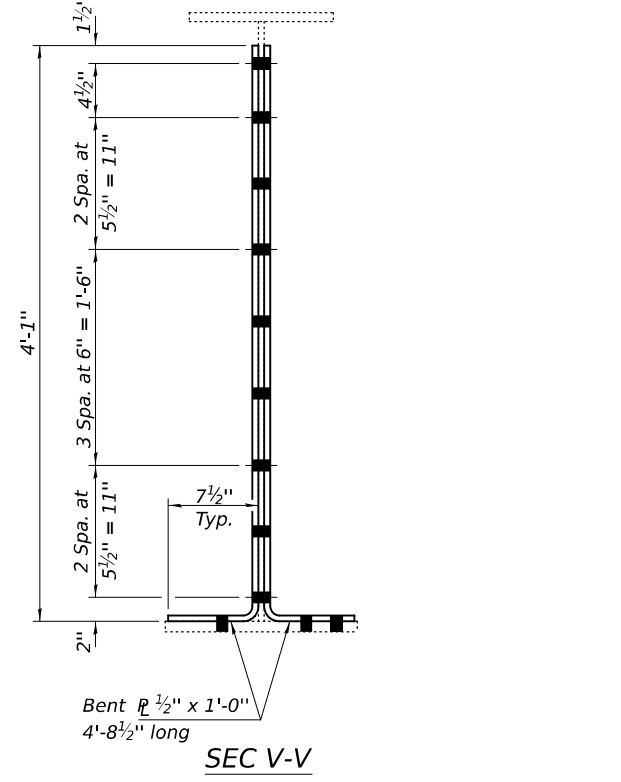
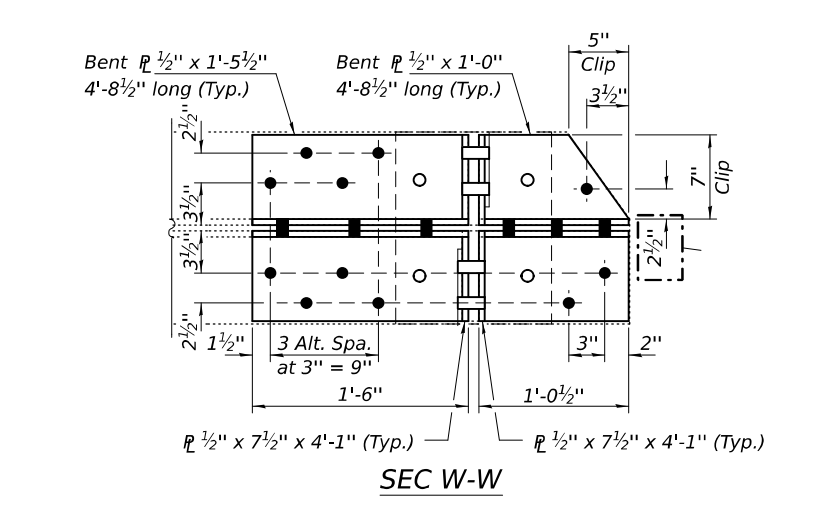
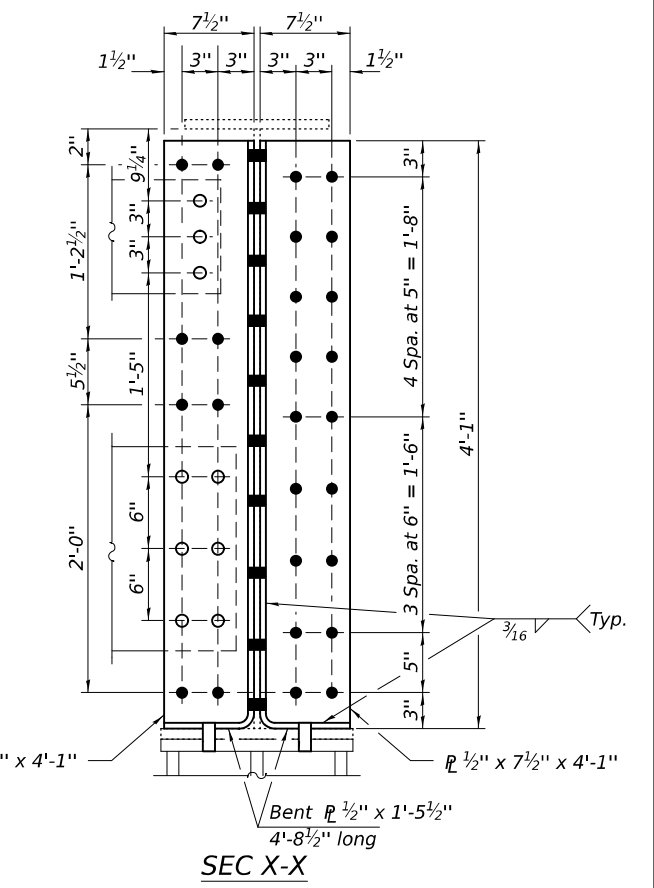
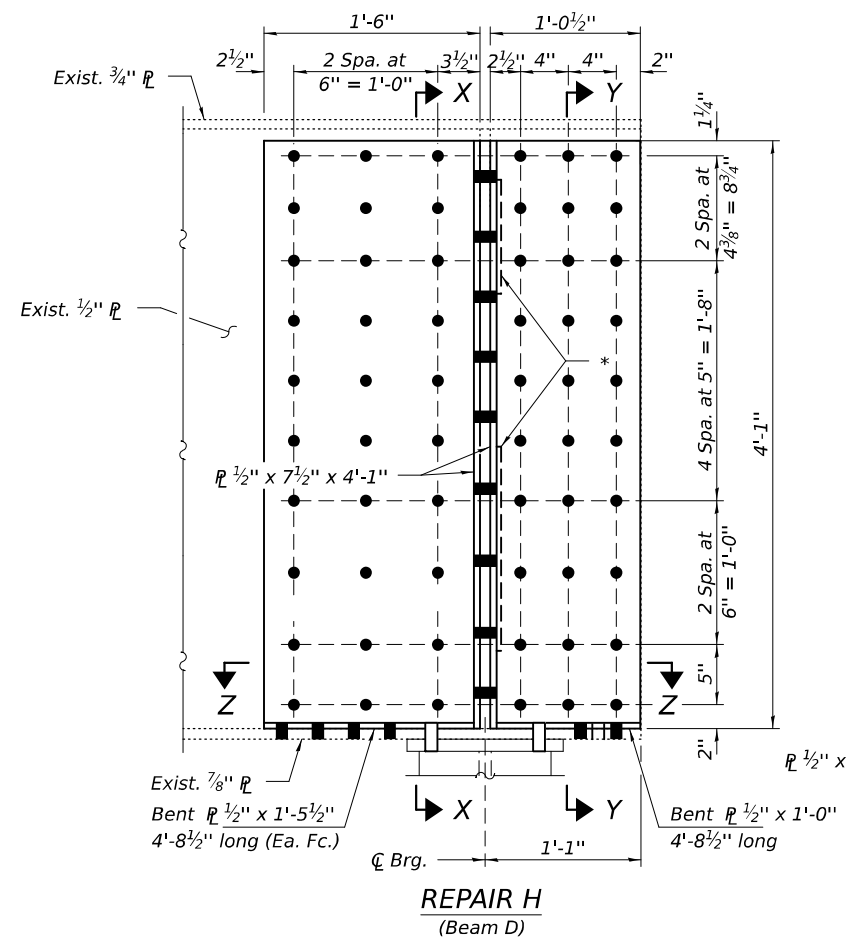
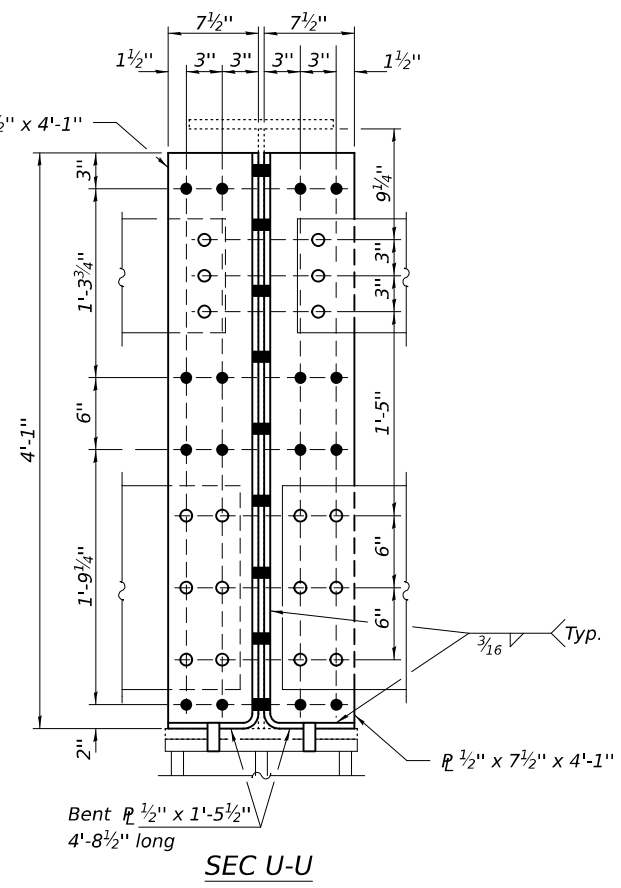
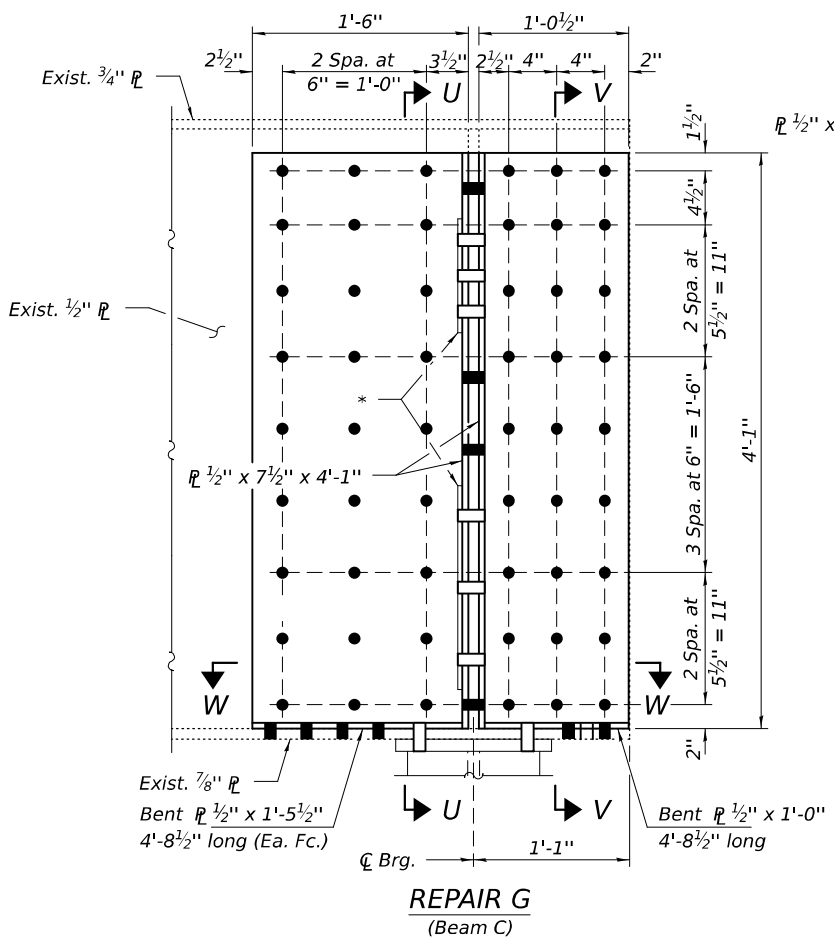
DATE - OCTOBER 11, 2024
REVISION 1 10/24/2024 VHV
REVISION -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BEAM END REPAIR DETAILS - SOUTH ABUTMENT  
 SN 092-0177  
 SHEET 5 OF 11 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	21
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

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 DESIGNED - VHV  
 CHECKED - ATH  
 DRAWN - daburdell  
 CHECKED - VHV ATH  
 10/25/2024 10:55:32 AM



\* Cross-frame connecting plate, see sheet 7 of 11.

**BOLT HOLE LEGEND**

- - Shop drill holes.
- - Field drill holes using new cross-frame connecting plates or bearing plate as a template.

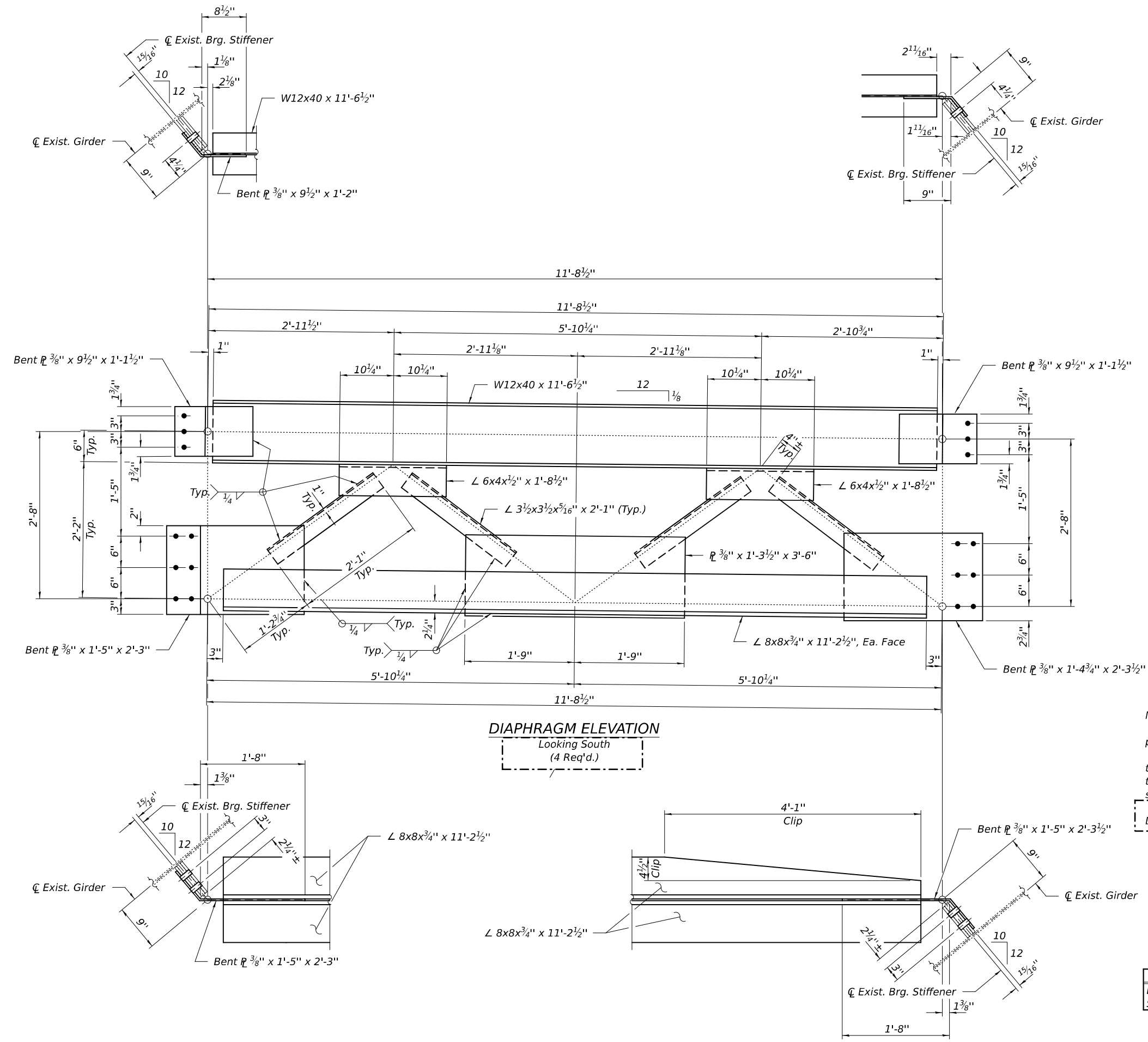
DESIGNED - VHV	EXAMINED	DATE - OCTOBER 11, 2024
CHECKED - ATH	<i>James F. J...</i> ENGINEER OF STRUCTURAL SERVICES	REVISED 10/24/2024 VHV
DRAWN - daburdell	PASSED	REVISIONS
CHECKED - VHV ATH	ENGINEER OF BRIDGES AND STRUCTURES	

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

<b>BEAM END REPAIR DETAILS - SOUTH ABUTMENT</b>			
<b>SN 092-0177</b>			
SHEET 6 OF 11 SHEETS			

F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 22
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

MODEL: 70E63-023  
 FILE NAME: p:\i\del-pw\benley.com\FWIDOT\Documents\OBM Projects\0920177\CADData\Bridges\0920177.dgn



Notes:  
 New cross-frames to be installed after repair plates for the beam ends are in place.  
 Prior to the removal of the existing cross-frames the Contractor shall mark their location to ensure that the new cross-frames are installed at the same location.  
 For details of cross-frames at Stage Construction Line, see sheet 7A of 11.

**BILL OF MATERIAL**

Item	Unit	Total
Furnishing & Erecting Structural Steel	Pound	6580

DESIGNED - VHV	EXAMINED
CHECKED - ATH	PASSED
DRAWN - daburdell	
CHECKED - VHV ATH	

ENGINEER OF STRUCTURAL SERVICES  
 ENGINEER OF BRIDGES AND STRUCTURES

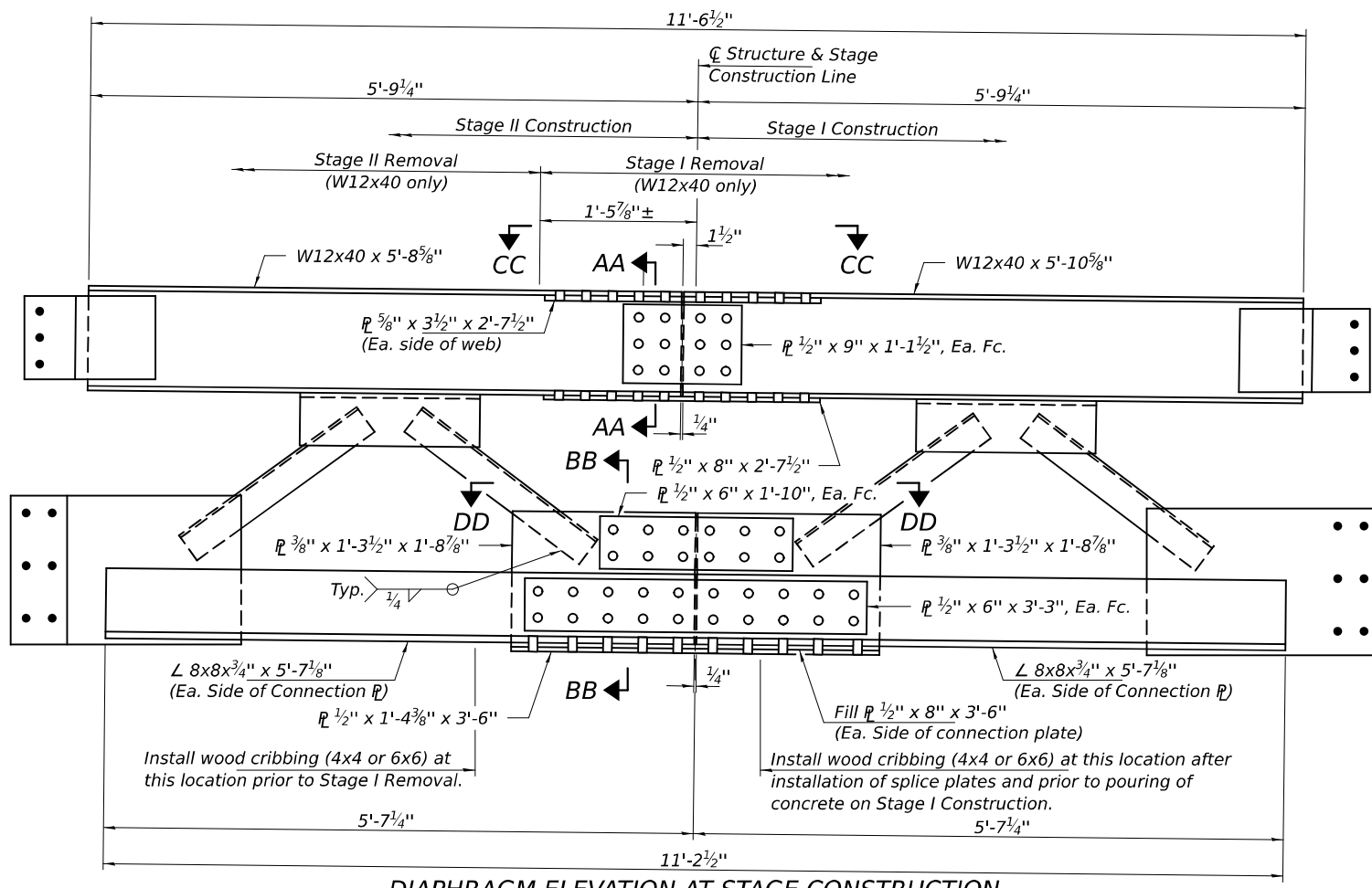
*Jaime F. [Signature]*

DATE - OCTOBER 11, 2024
REVISED 1 10/24/2024 VHV
REVISED -

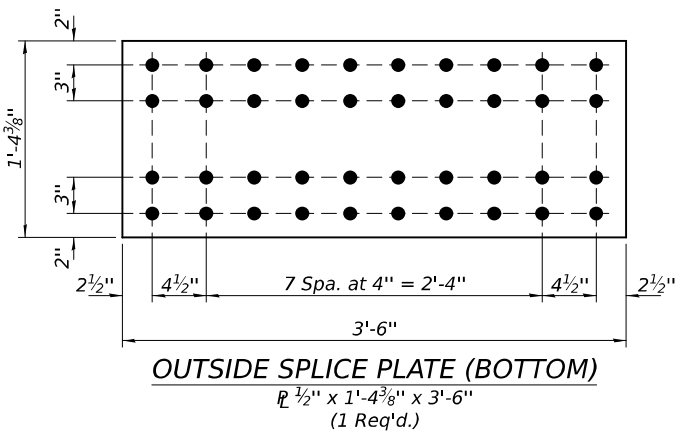
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS  
 SN 092-0177  
 SHEET 7 OF 11 SHEETS

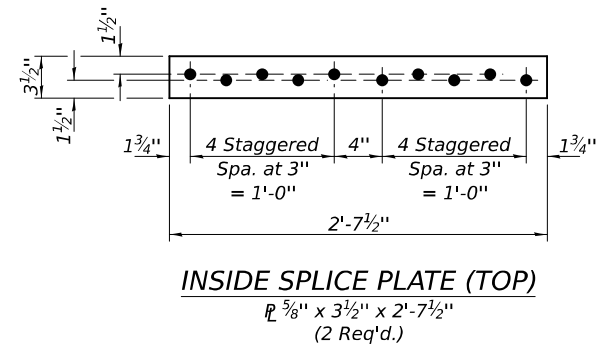
F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 23
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



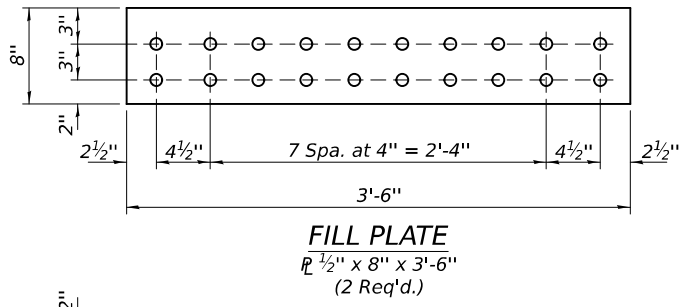
**DIAPHRAGM ELEVATION AT STAGE CONSTRUCTION**  
Looking South  
(2 Req'd.)



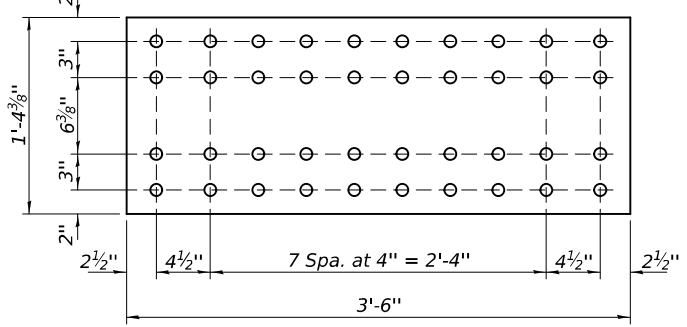
**OUTSIDE SPLICE PLATE (BOTTOM)**  
P 1/2" x 1'-4 3/8" x 3'-6"  
(1 Req'd.)



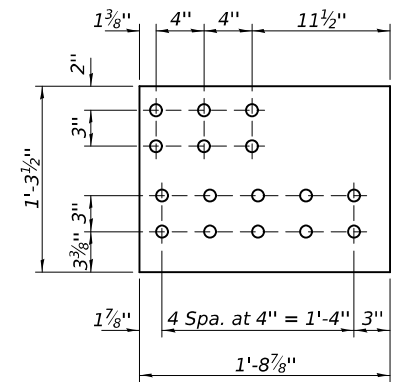
**INSIDE SPLICE PLATE (TOP)**  
P 5/8" x 3 1/2" x 2'-7 1/2"  
(2 Req'd.)



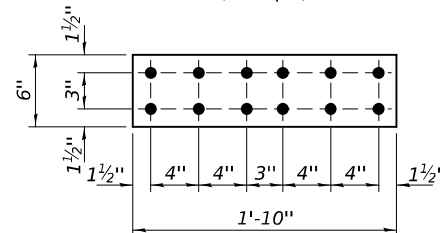
**FILL PLATE**  
P 1/2" x 8" x 3'-6"  
(2 Req'd.)



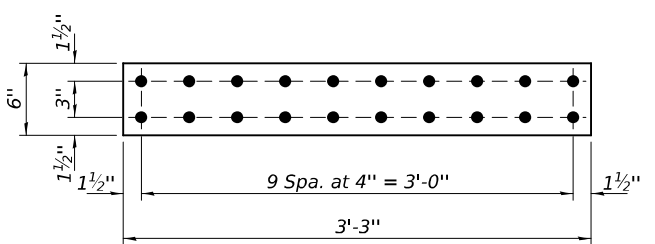
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P 1/2" x 4 3/8" x 3'-6"  
(1 Req'd.)



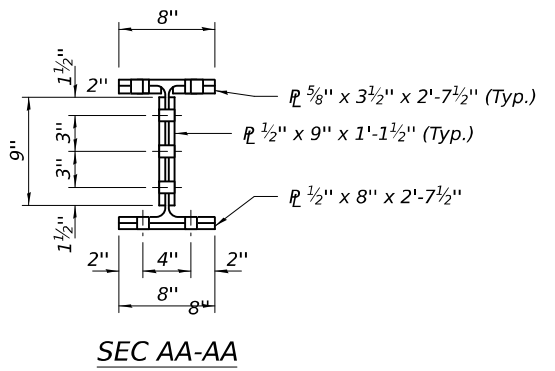
**CONNECTION PLATE**  
P 3/8" x 1'-3 1/2" x 1'-8 7/8"  
(2 Req'd.)



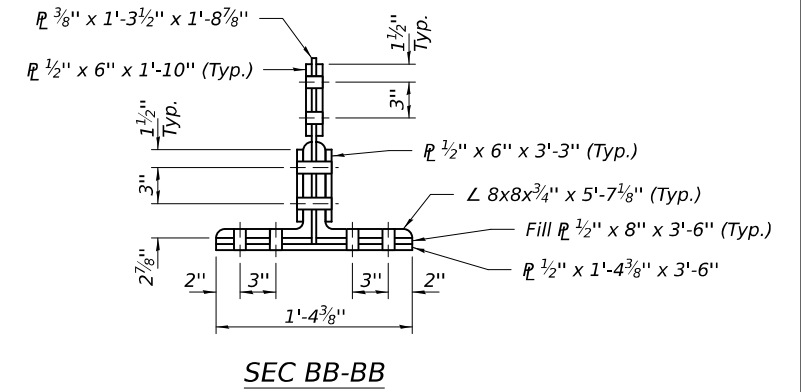
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(2 Req'd.)



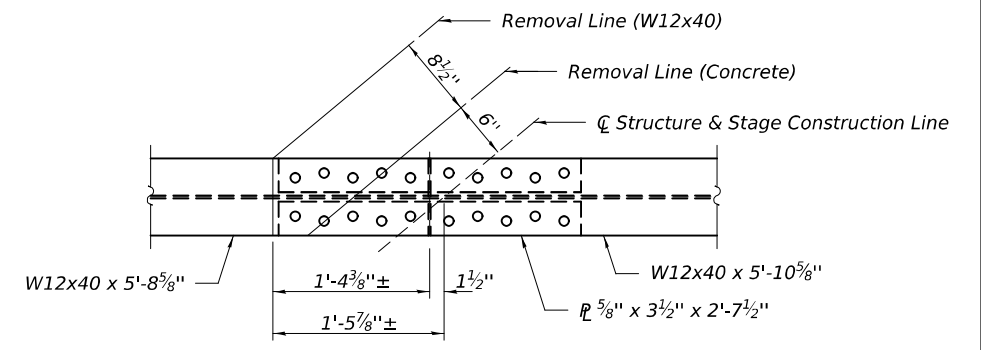
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(2 Req'd.)



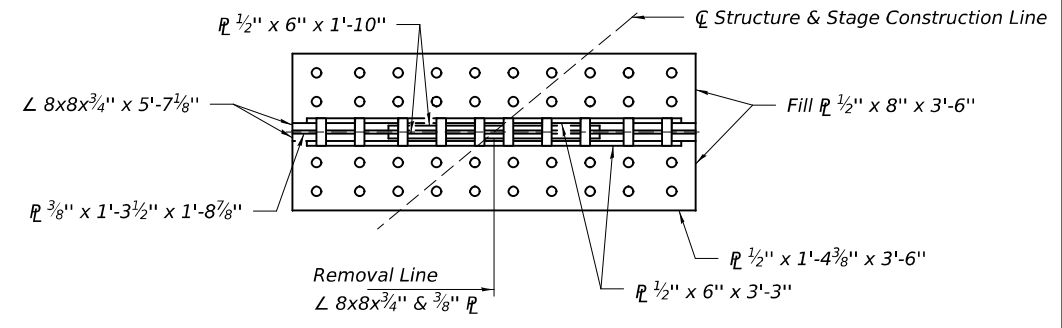
**SEC AA-AA**



**SEC BB-BB**



**VIEW CC-CC**



**VIEW DD-DD**

Note:  
Some information not shown for clarity.  
See sheet 7 of 11 for additional details.



**BILL OF MATERIAL**

Item	Unit	Total
Furnishing & Erecting Structural Steel	Pound	4050

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DESIGNED - VHV  
CHECKED - ATH  
DRAWN - daburdell  
CHECKED - VHV ATH  
10/25/2024 10:55:35 AM

DESIGNED - VHV	EXAMINED	DATE - OCTOBER 11, 2024
CHECKED - ATH	ENGINEER OF STRUCTURAL SERVICES	
DRAWN - daburdell	PASSED	REVISOR 1 10/24/2024 VHV
CHECKED - VHV ATH	ENGINEER OF BRIDGES AND STRUCTURES	REVISOR -

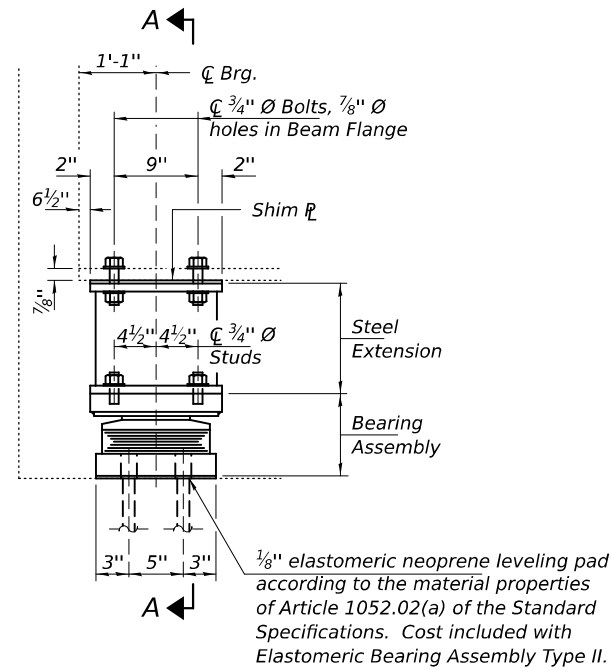
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CROSS FRAME DETAILS AT STAGE CONSTRUCTION LINE**  
**SN 092-0177**

SHEET 7A OF 11 SHEETS

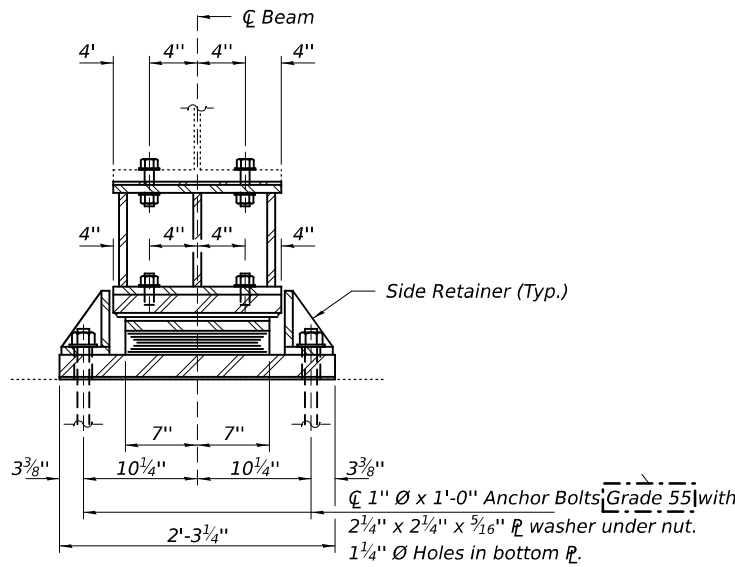
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	23A
CONTRACT NO. 70E63				
ILLINOIS		FED. AID PROJECT		

REV. 10/28/24



ELEVATION AT ABUTMENT

TYPE II TFE ELASTOMERIC EXP. BRG.



SECTION A-A

BEAM REACTIONS

R <sub>P</sub>	(K)	54.9
R <sub>L</sub>	(K)	52.9
Imp.	(K)	11.0
R (Total)	(K)	118.8

Notes:

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. jack capacity = 66 Tons.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (F<sub>y</sub>=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

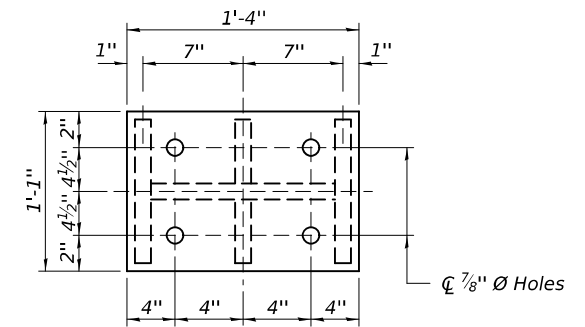
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.

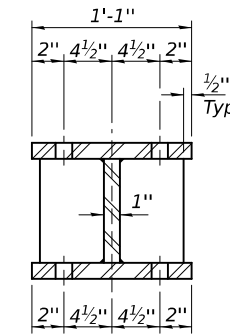
The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

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

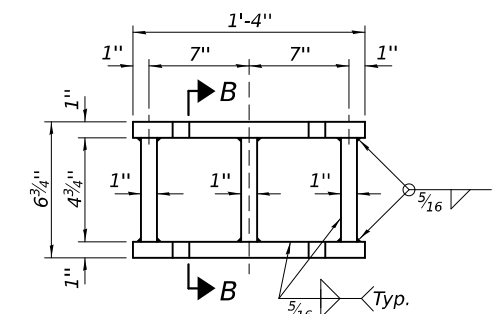
Bearing plates AASHTO M-270 Grade 50.



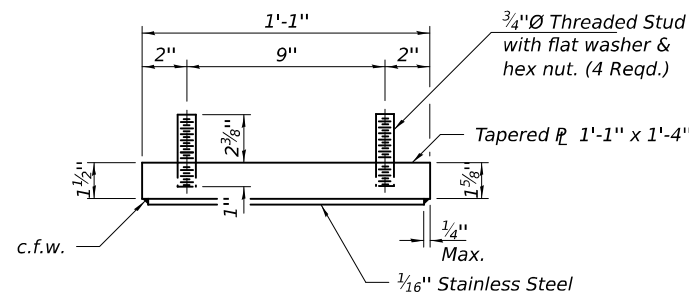
PLAN TOP AND BOTTOM PLATE



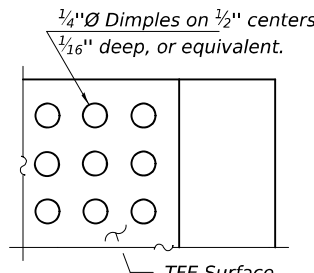
SECTION B-B



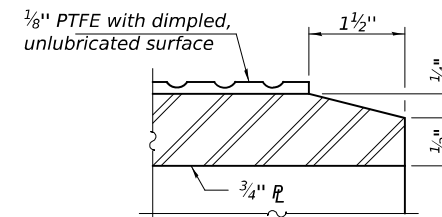
STEEL EXTENSION DETAIL



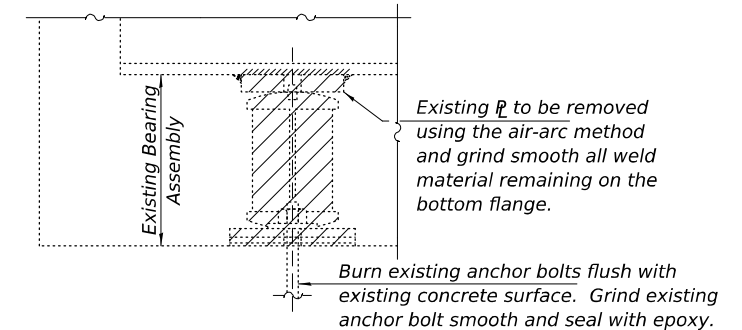
TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE

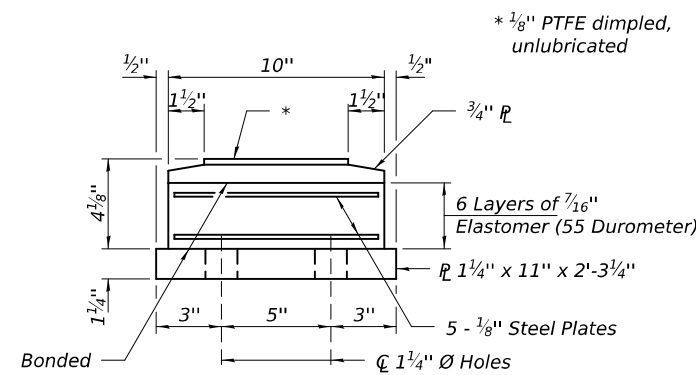


SECTION THRU PTFE

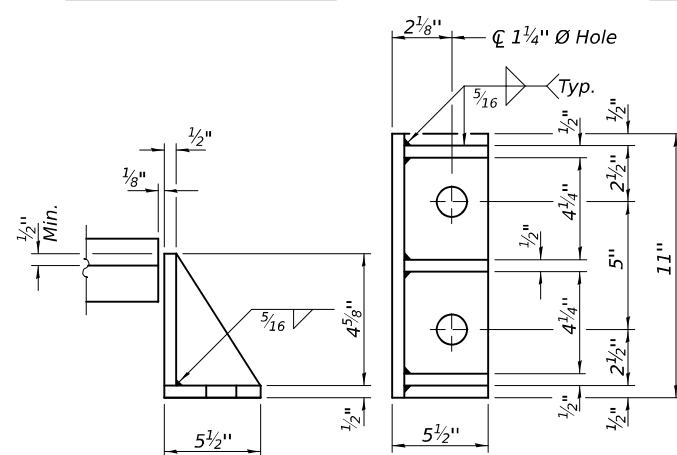


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

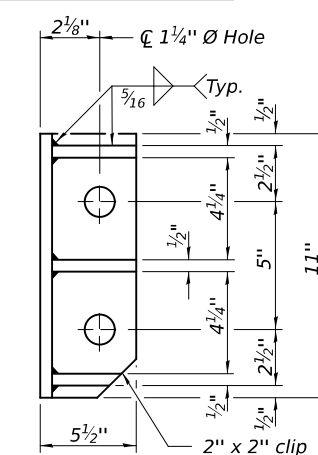


BOTTOM BEARING ASSEMBLY

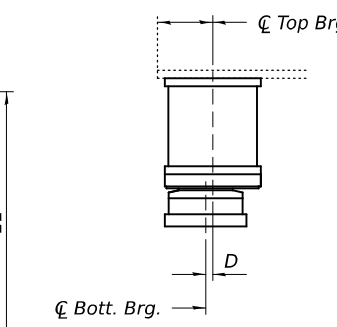


SIDE RETAINER

(4 Req'd.)  
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

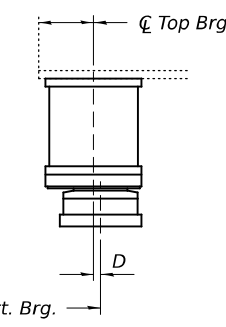


(4 Req'd.)



BELOW 50° F.

(Move bott. brg. away from fixed brg.)



ABOVE 50° F.

(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

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

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	4
Jack and Remove Existing Bearings	Each	4
Furnishing and Erecting Structural Steel	Pound	1220
Anchor Bolts, 1"Ø	Each	16

MODEL: 70E63-024  
FILE NAME: p:\i\del-pw\benley.com\FWIDOT\Documents\OBM Projects\0920177\CADData\Bridg\0920177.dgn

REP-TY II 7/2/2024

DESIGNED - VHV	EXAMINED
CHECKED - ATH	PASSED
DRAWN - daburdell	
CHECKED - VHV ATH	

ENGINEER OF STRUCTURAL SERVICES <i>James F. Joffe</i>	DATE - OCTOBER 11, 2024
ENGINEER OF BRIDGES AND STRUCTURES	REVISED 10/24/2024 VHV

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BEARING REPLACEMENT DETAILS - NORTH ABUTMENT  
SN 092-0177

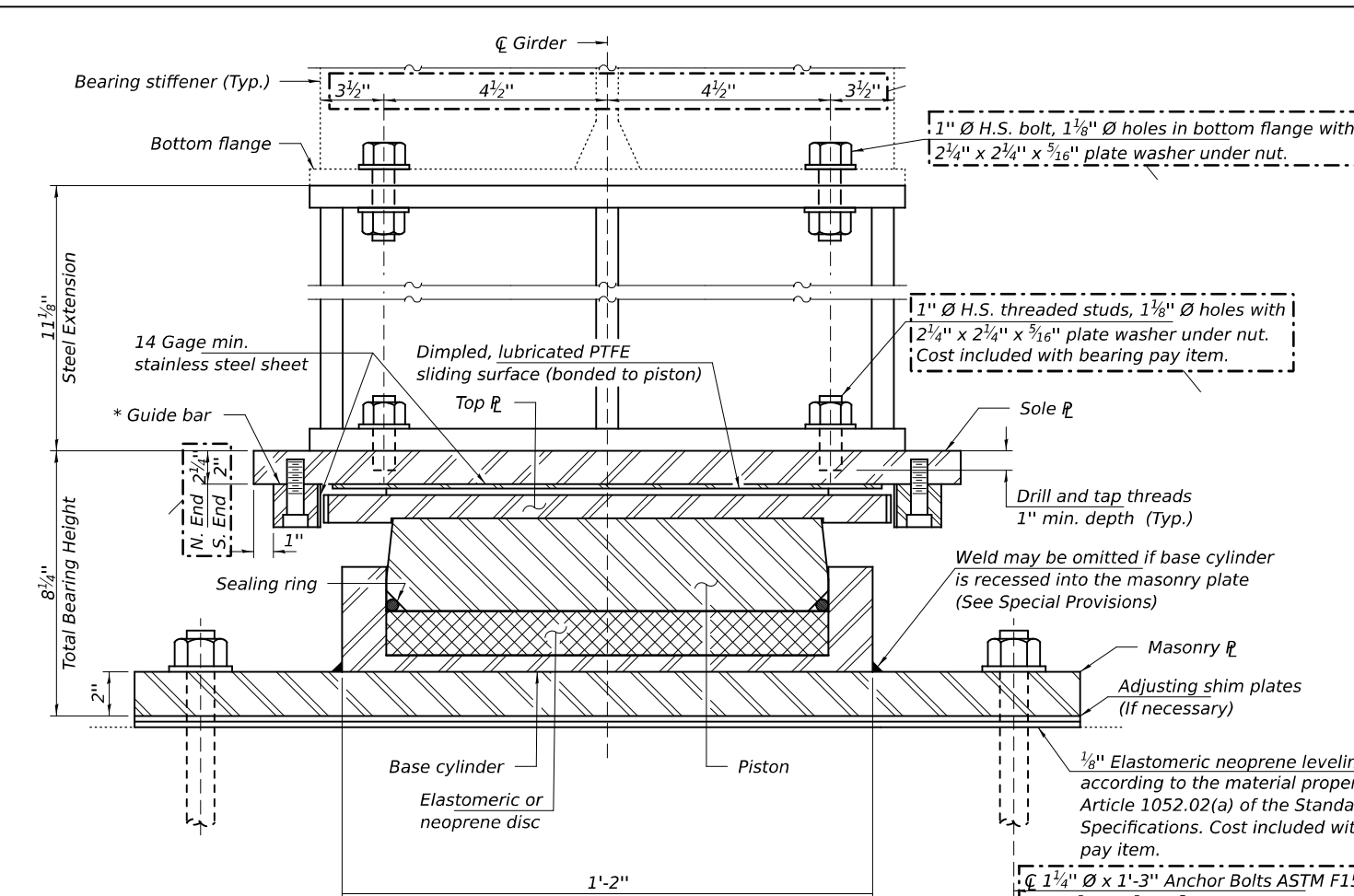
SHEET 8 OF 11 SHEETS

F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 24
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

REV. 10/28/24



MODEL: 70E63-025  
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 10/25/2024 10:55:37 AM



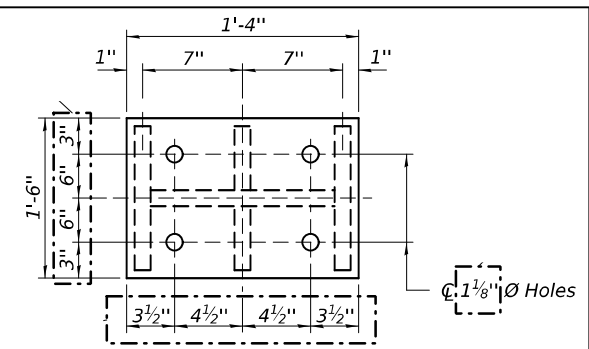
**SECTION THRU BEARING**

\* As alternates to the bolted connection shown, the guide bars may be connected to the sole plate by groove welds or the guide bars and sole plate may be fabricated as a single piece.

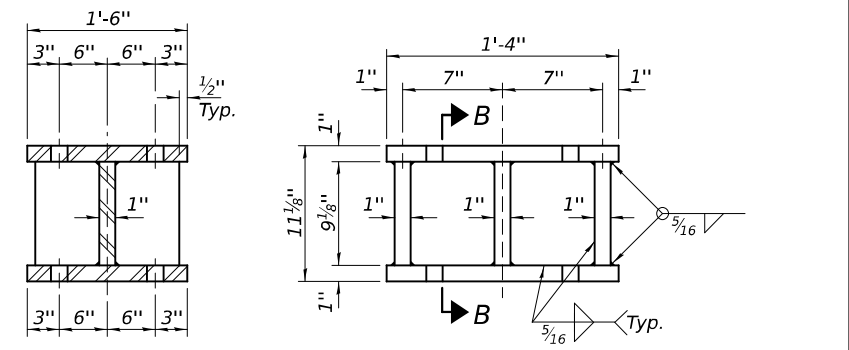
**DESIGN DATA**

Unfactored Vertical Dead Load Reaction ( $R_{DC}$ )	170 kips
Unfactored Vertical Wearing Surface Reaction ( $R_{DW}$ )	67 kips
Unfactored Vertical Live Load without Impact Reaction ( $R_{LL}$ )	108 kips
Maximum Strength or Extreme Event Lateral Reaction ( $H_{L}$ )	47 kips
Maximum Strength Limit State Rotation ( $\theta_{L}$ according to Article 14.4.2.2)	0.02 rad
Unfactored Design Thermal Movement from 50° F ( $\Delta T$ )	0.9 in.
Service I Factored Lateral Reaction	8 kips
Service I Rotation	0.01 rad
Strength I Factored Longitudinal Movement	1.08 in.
Service I Factored Vertical Reaction	345 kips
Strength I Factored Vertical Reaction	502 kips

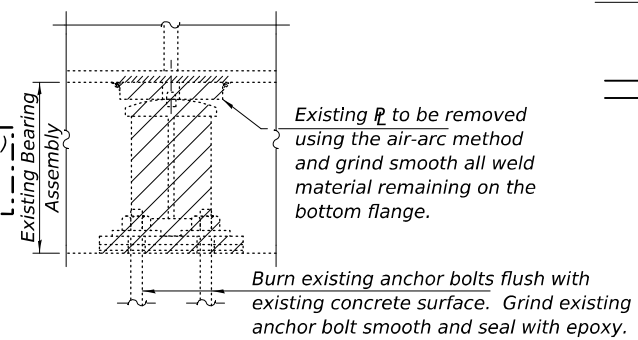
Service I Load Factors = 1.0DC + 1.0DW + 1.0LL  
 Strength I Load Factors = 1.25DC + 1.5DW + 1.75LL + 1.2TU  
 Extreme Event Load Factors = 1.0EQ



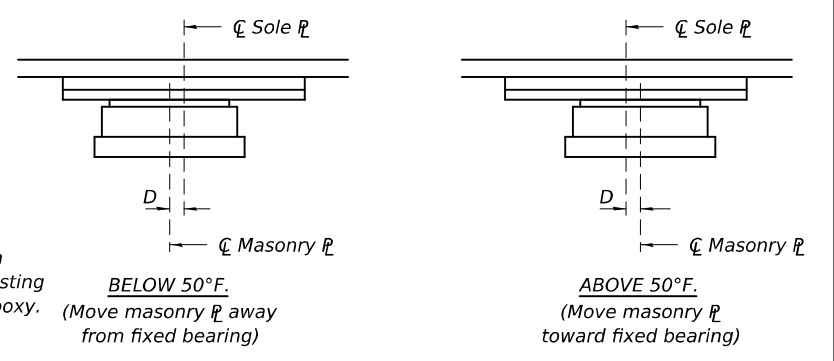
**PLAN TOP AND BOTTOM PLATE**



**SECTION B-B STEEL EXTENSION DETAIL**

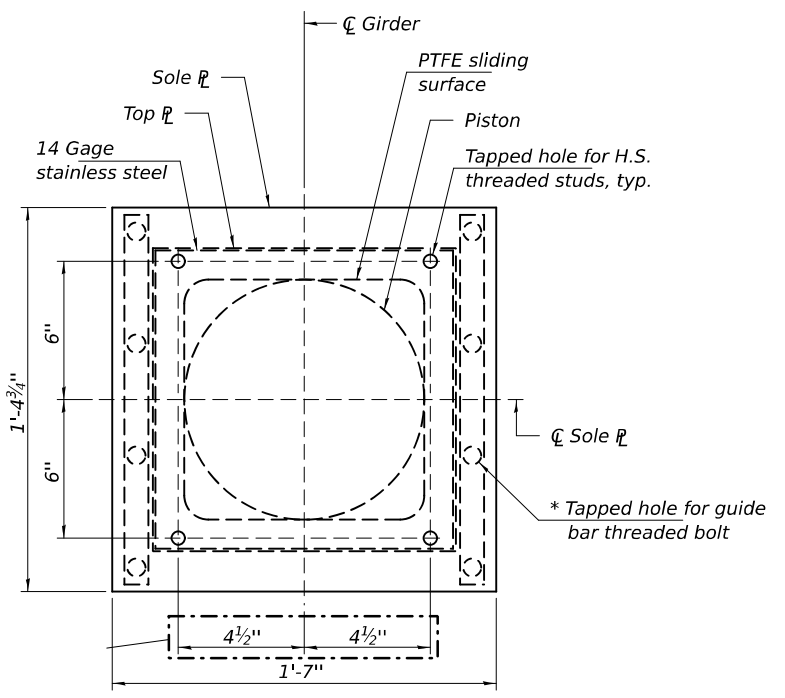


**EXISTING BEARING REMOVAL DETAIL**  
 Cost included with Jack and Remove Existing Bearings.

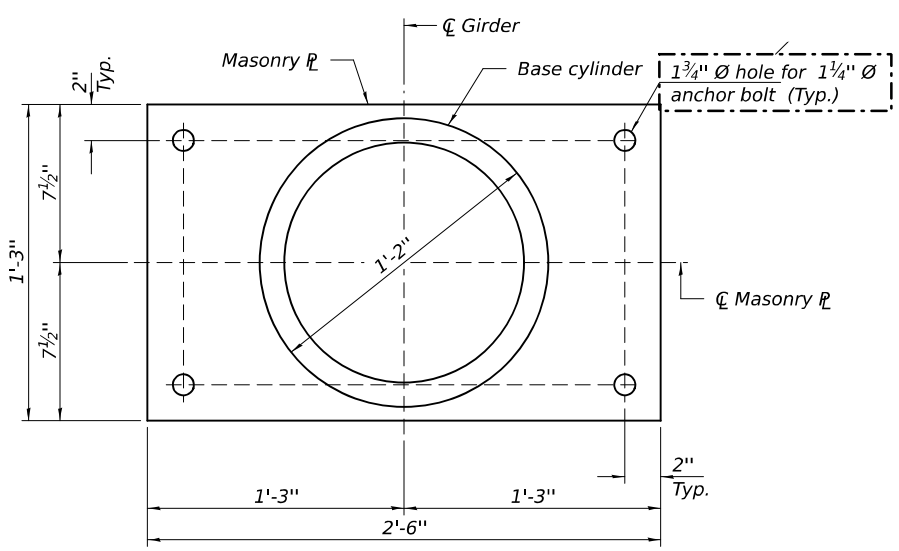


**SETTING ANCHOR BOLTS AT EXPANSION BEARING**  
 $D = 1/8$  inch per each 100 feet of expansion for every 15 degrees temperature change from the normal temperature of 50 degrees Fahrenheit.

Notes:  
 Two 1/8 inch adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Shim plates not included in total bearing height. Cost included with bearing pay item.  
 Total bearing height is estimated based on manufacturer data. Actual bearing height may differ from contract plans. The Contractor shall be responsible for verifying bearing heights and adjusting seat elevations, if required, prior to placing pier or abutment concrete. Min. Jack Capacity = 220 Tons.  
 Bearing plates AASHTO M-270 Grade 50.  
 Cost of steel extension is included with Furnishing and Erecting Structural Steel.



**SOLE PLATE AND PISTON PLAN**



**MASONRY PLATE AND BASE CYLINDER PLAN**

**BILL OF MATERIAL**

Item	Unit	Total
** High Load Multi-Rotational Bearings, Pot, Guided Expansion-400k	Each	4
Anchor Bolts, 1 1/4 inch diameter	Each	16
Jack and Remove Existing Bearings	Each	4
Furnishing and Erecting Structural Steel	Pound	1220

\*\* The value specified in the pay item name is an approximate vertical load capacity that is used for letting and bidding purposes only. Exact bearing capacity will vary subject to final design.

DESIGNED - VHV	EXAMINED	DATE - OCTOBER 11, 2024
CHECKED - ATH	ENGINEER OF STRUCTURAL SERVICES	
DRAWN - daburdell	PASSED	REVISOR 1 10/24/2024 VHV
CHECKED - VHV ATH	ENGINEER OF BRIDGES AND STRUCTURES	REVISOR -

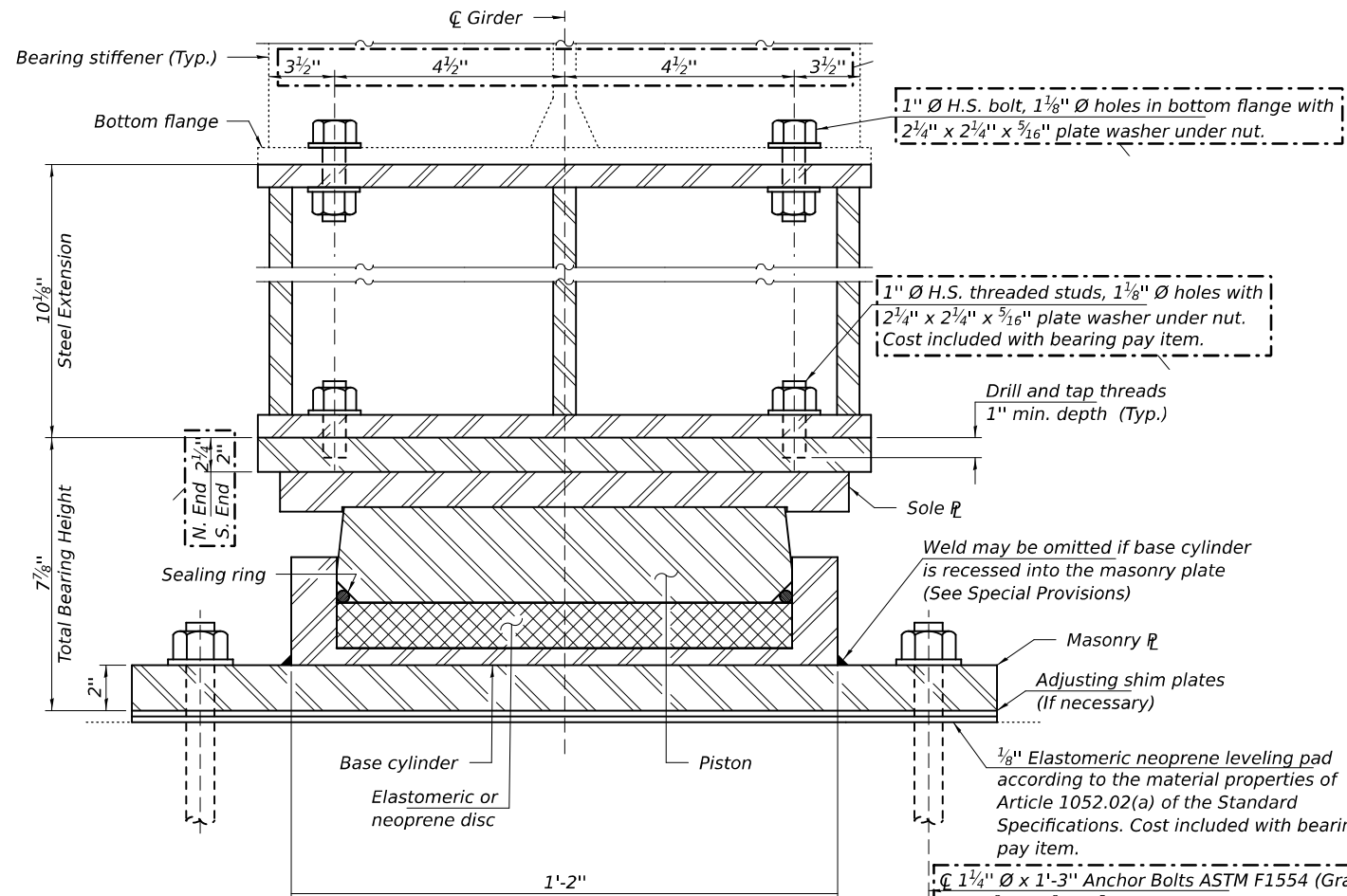
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**GUIDED EXPANSION HLMR POT BEARING DETAILS - PIER 1**  
 SN 092-0177

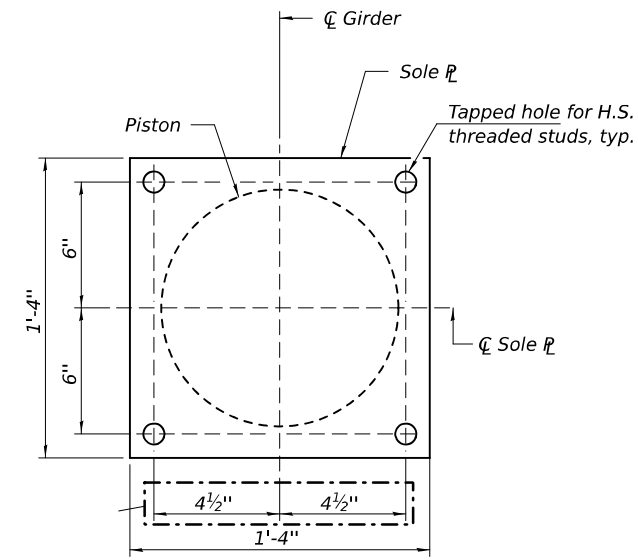
SHEET 9 OF 11 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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				CONTRACT NO. 70E63
				ILLINOIS FED. AID PROJECT

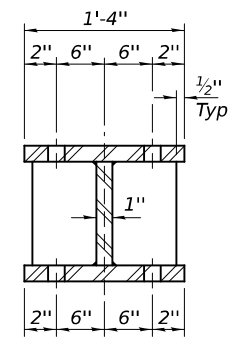
REV. 10/28/24



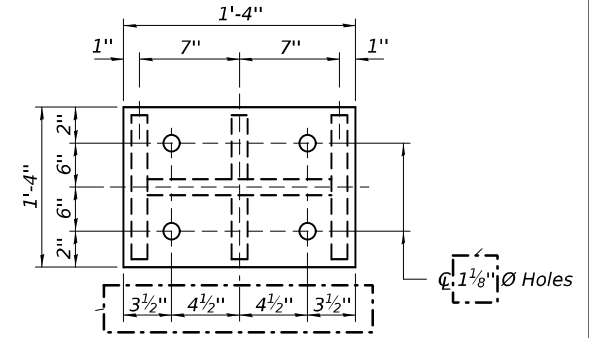
**SECTION THRU BEARING**



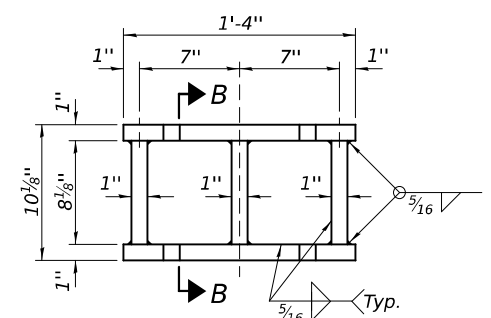
**SOLE PLATE AND PISTON PLAN**



**SECTION B-B**



**PLAN TOP AND BOTTOM PLATE**



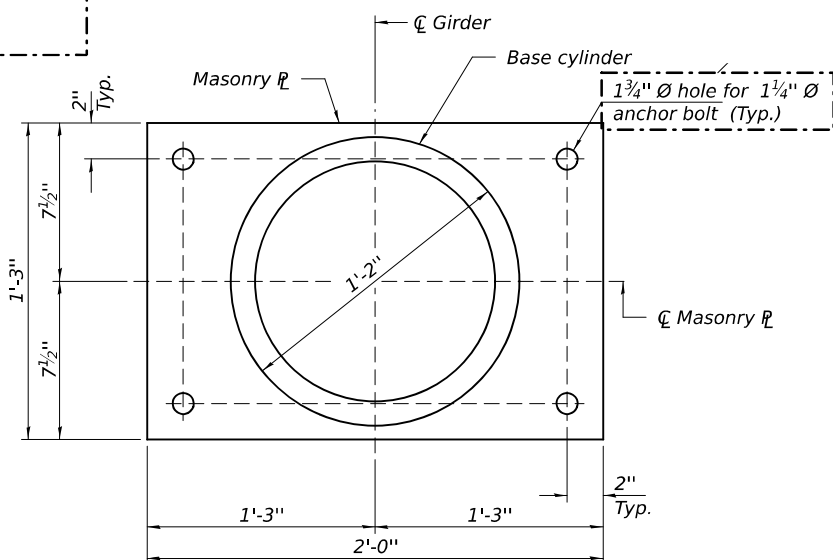
**STEEL EXTENSION DETAIL**

**DESIGN DATA**

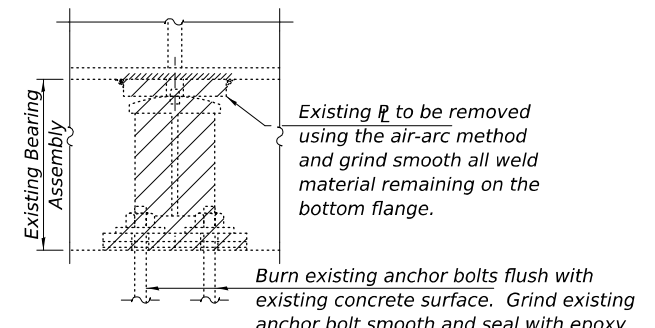
Unfactored Vertical Dead Load Reaction ( $R_{DC}$ )	170 kips
Unfactored Vertical Wearing Surface Reaction ( $R_{DW}$ )	67 kips
Unfactored Vertical Live Load without Impact Reaction ( $R_{LL}$ )	108 kips
Maximum Strength or Extreme Event Lateral Reaction ( $H_u$ )	47 kips
Maximum Strength Limit State Rotation ( $\theta_u$ according to Article 14.4.2.2)	0.02 rad
Service I Factored Lateral Reaction	8 kips
Service I Rotation	0.01 rad
Service I Factored Vertical Reaction	345 kips
Strength I Factored Vertical Reaction	502 kips

Service I Load Factors = 1.0DC + 1.0DW + 1.00LL  
 Strength I Load Factors = 1.25DC + 1.5DW + 1.75LL + 1.2TU  
 Extreme Event Load Factors = 1.0EQ

**Notes:**  
 Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Shim plates not included in total bearing height. Cost included with bearing pay item.  
 Total bearing height is estimated based on manufacturer data. Actual bearing height may differ from contract plans. The Contractor shall be responsible for verifying bearing heights and adjusting seat elevations, if required, prior to placing pier or abutment concrete. Min. Jack Capacity = 220 Tons.  
 Bearing plates AASHTO M-270 Grade 50.  
 Cost of steel extension is included with Furnishing and Erecting Structural Steel.



**MASONRY PLATE AND BASE CYLINDER PLAN**



**EXISTING BEARING REMOVAL DETAIL**  
 Cost included with Jack and Remove Existing Bearings.

**BILL OF MATERIAL**

Item	Unit	Total
** High Load Multi-Rotational Bearings, Pot. Fixed-400k	Each	4
-1 Anchor Bolts, 1 1/4" Ø	Each	16
Jack and Remove Existing Bearings	Each	4
Furnishing and Erecting Structural Steel	Pound	1300

\*\* The value specified in the pay item name is an approximate vertical load capacity that is used for letting and bidding purposes only. Exact bearing capacity will vary subject to final design.

MODEL: 70E63-026  
 FILE NAME: p:\i\dot-pw\benley.com\p\w\dot\Documents\OBM Projects\0920177\CADDData\Bridges\0920177.dgn

DESIGNED - VHV	EXAMINED
CHECKED - ATH	PASSED
DRAWN - daburdell	
CHECKED - VHV ATH	

ENGINEER OF STRUCTURAL SERVICES  
 ENGINEER OF BRIDGES AND STRUCTURES

DATE - OCTOBER 11, 2024
REVISED 1 10/24/2024 VHV
REVISED -

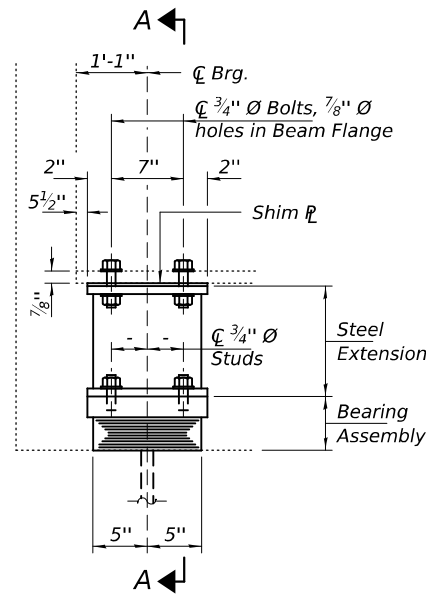
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**FIXED HLRM POT BEARING DETAILS - PIER 2  
 SN 092-0177**

SHEET 10 OF 11 SHEETS

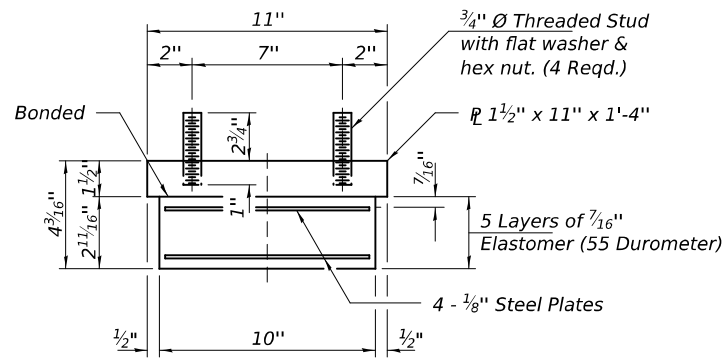
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	26
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

REV. 10/28/24



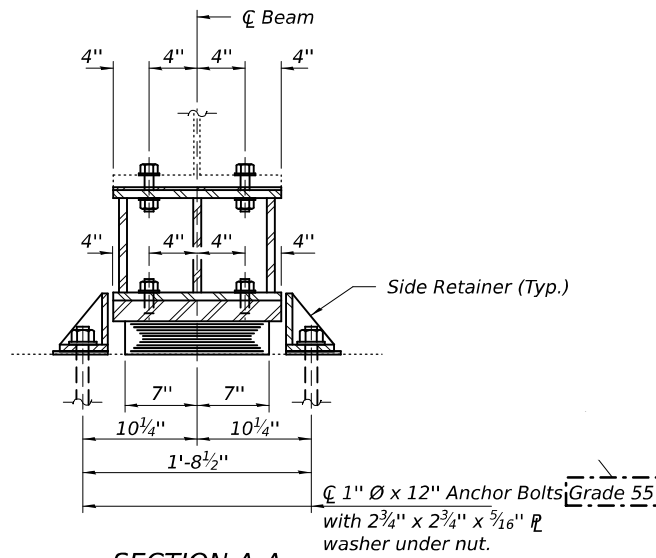
ELEVATION AT ABUTMENT

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

Note:  
Shim plates shall not be placed under Bearing Assembly.



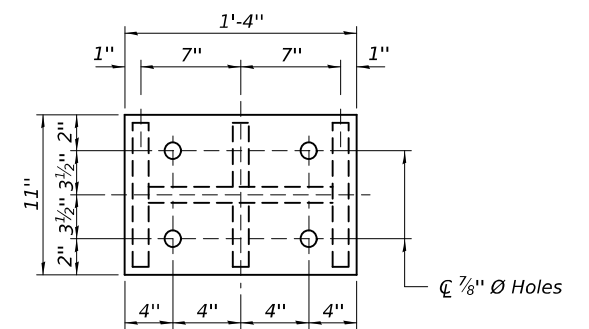
SECTION A-A

**BEAM REACTIONS**

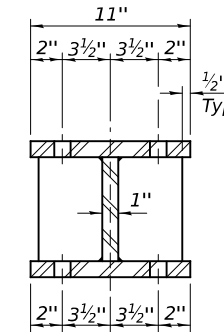
R P	(K)	54.9
R L	(K)	52.9
Imp.	(K)	11.0
R (Total)	(K)	118.8

Notes:  
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.  
New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.  
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

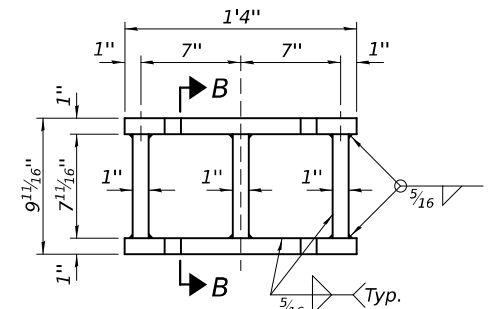
Min. jack capacity = 66 Tons.  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.  
Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I. Bearing plates AASHTO M-270 Grade 50.



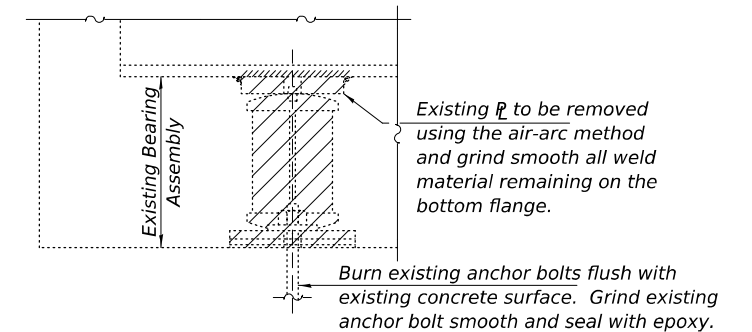
PLAN TOP AND BOTTOM PLATE



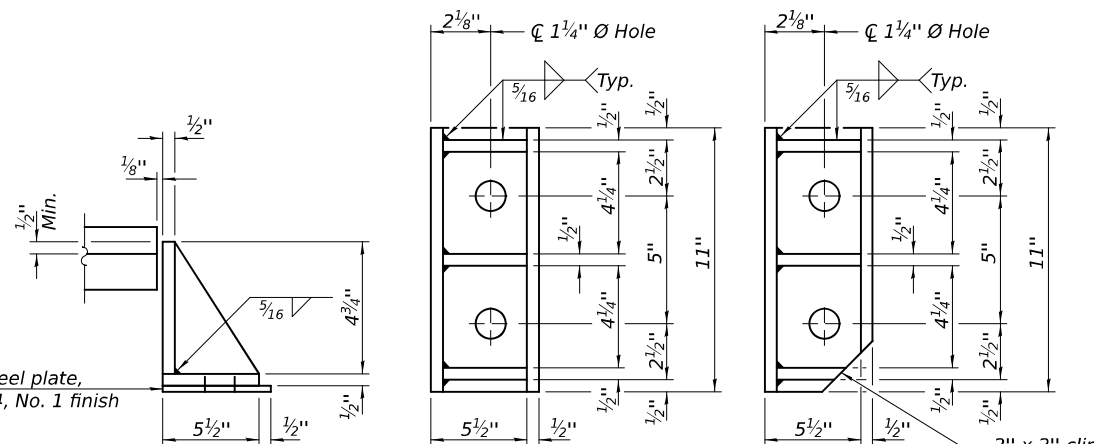
SECTION B-B



STEEL EXTENSION DETAIL



EXISTING BEARING REMOVAL DETAIL  
Cost included with Jack and Remove Existing Bearings.



SIDE RETAINER (4 Req'd.)

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

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	4
Jack and Remove Existing Bearings	Each	4
Furnishing and Erecting Structural Steel	Pound	790
Anchor Bolts, 1"Ø	Each	16

MODEL: 70E63-027  
FILE NAME: p:\i\del-pw\benley.com\FWIDOT\Documents\OBM Projects\0920177\CADData\Bridges\0920177.dgn

REP-TY I

5/16/2024

DESIGNED - VHV	EXAMINED
CHECKED - ATH	PASSED
DRAWN - daburdell	
CHECKED - VHV ATH	

ENGINEER OF STRUCTURAL SERVICES  
*Joanne F. Joffe*  
ENGINEER OF BRIDGES AND STRUCTURES

DATE - OCTOBER 11, 2024
REVISED 10/24/2024 VHV
REVISED -

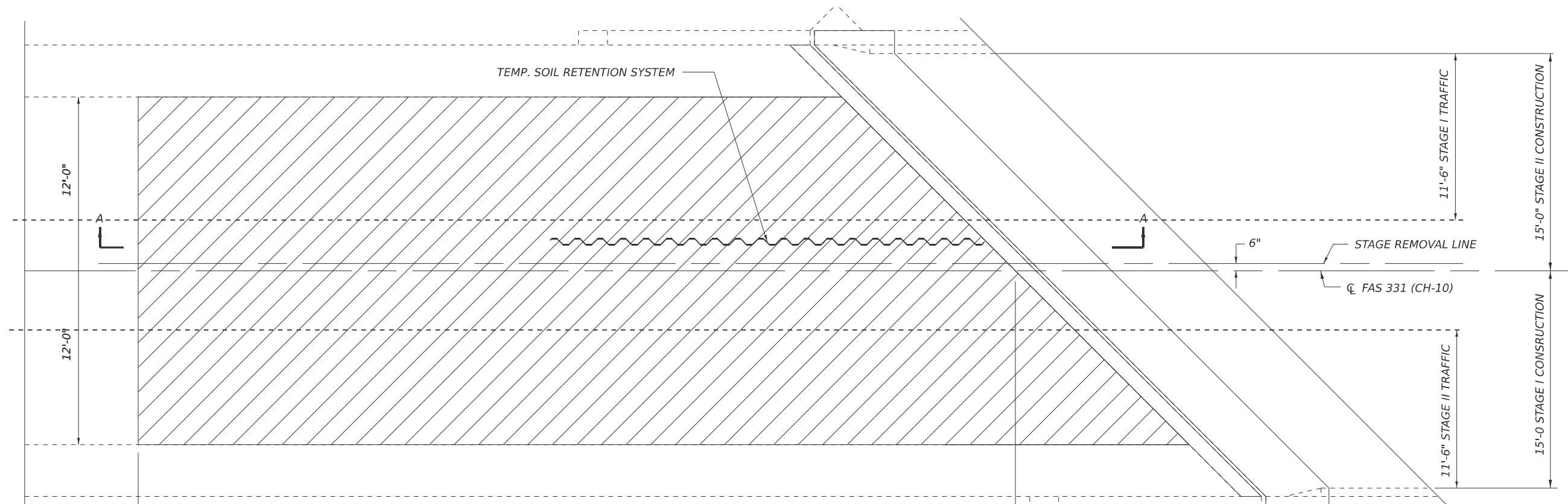
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BEARING REPLACEMENT DETAILS - SOUTH ABUTMENT  
SN 092-0177

SHEET 11 OF 11 SHEETS

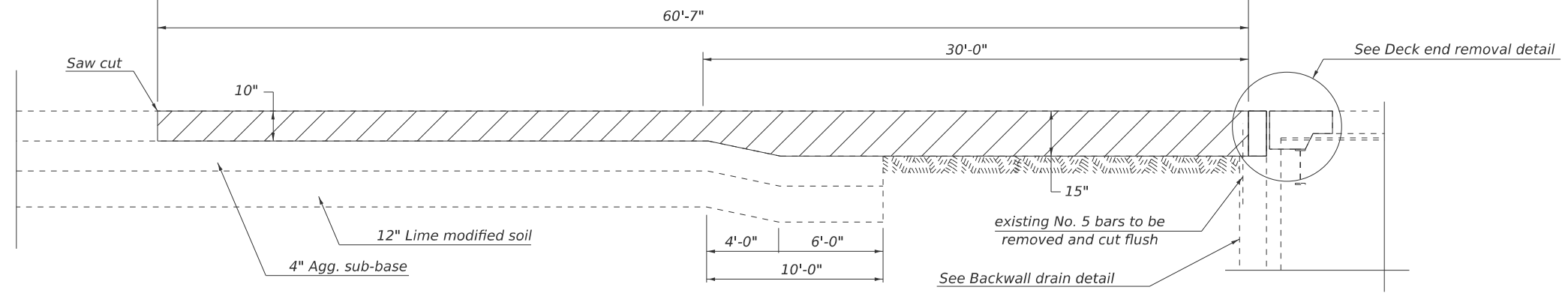
F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 27
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

REV. 10/28/24

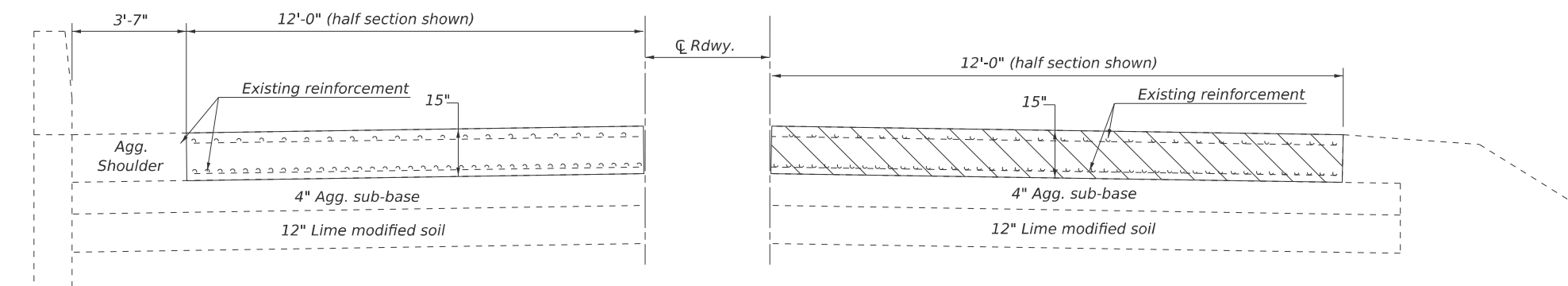


**PLAN**

(North approach slab shown; South approach slab similar by 180° rotation)



**SECTION A-A**



**NEAR ABUTMENT**

**CROSS SECTION**  
(Looking South)

**AT APPROACH FOOTING**

APPROACH SLAB REMOVAL

**BILL OF MATERIALS**  
**TWO APPROACHES**

ITEM	UNIT	TOTAL
APPROACH SLAB REMOVAL	SQ. YD.	324.0

MODEL: APPROACH REMOVAL-1 (Sheet)  
FILE NAME: c:\p\work\1\shered\143\1570E63-shr-ApproachDetails.dgn

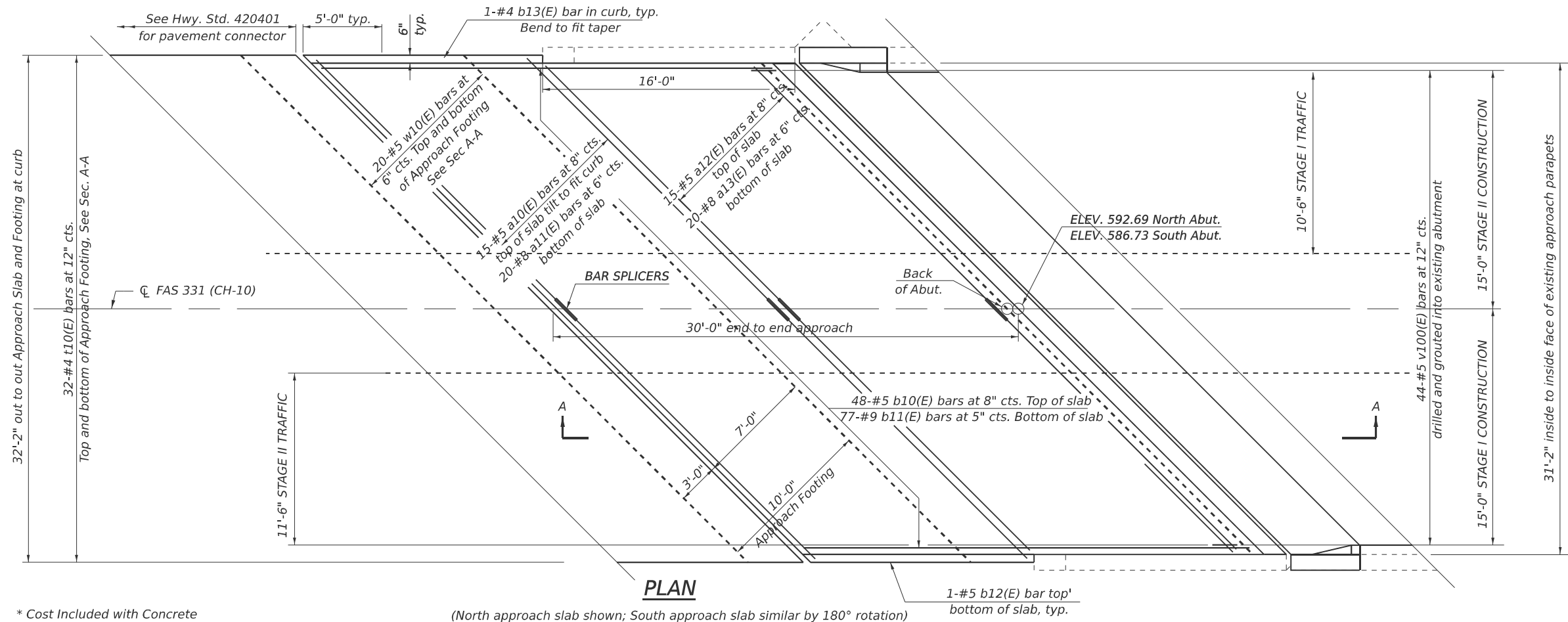
USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

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

**DETAIL OF APPROACH SLAB REMOVAL**  
**S.N. 092-0177**

SCALE: NONE SHEET 1 OF 3 SHEETS STA. TO STA.

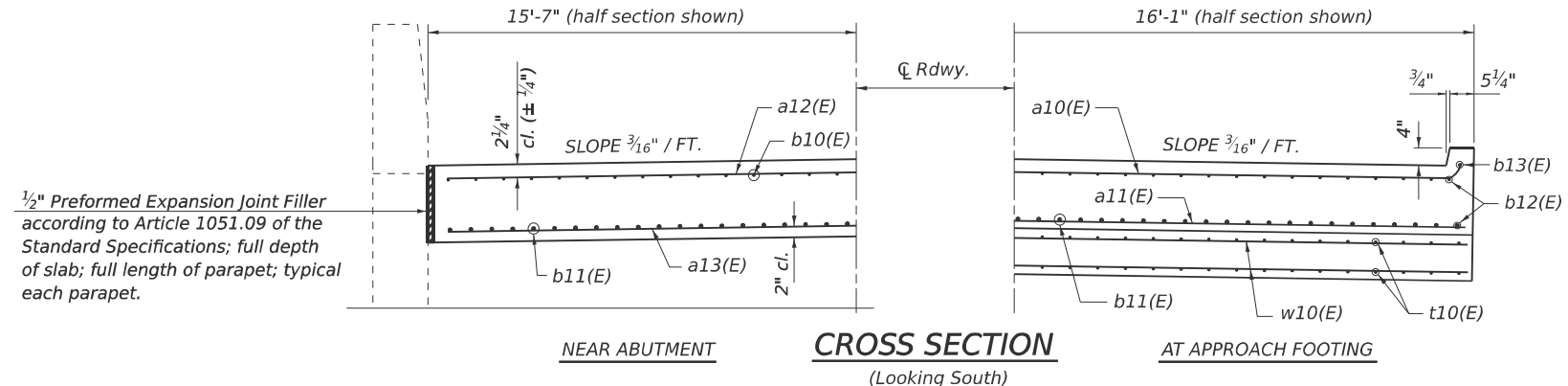
F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 28
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



\* Cost Included with Concrete Superstructure (Approach Slab.)

\*\* Per manufacturer recommendations.

**PLAN**  
(North approach slab shown; South approach slab similar by 180° rotation)



BASA-CIP-3944CS-0 - MODIFIED RF (> 30°)

MODEL: APPROACH CONSTRUCTION (Sheet) FILE NAME: c:\p\work\101\shereproj\m0868143\0570E63-shr-ApproachDetails.dgn

USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

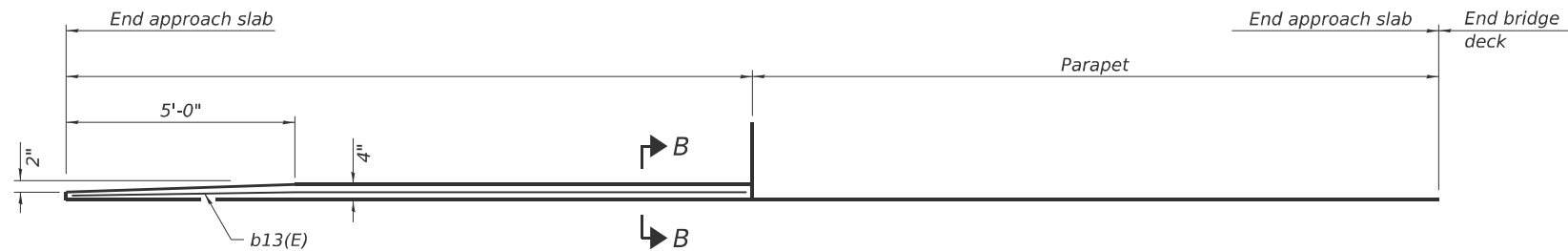
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DETAIL OF APPROACH SLAB CONSTRUCTION**  
**S.N. 092-0177**

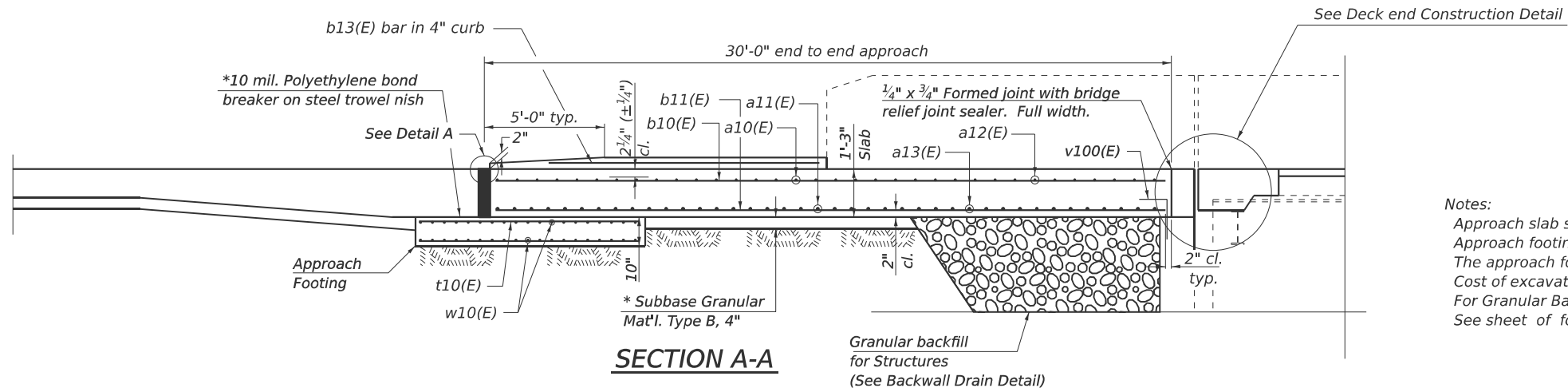
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F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	29
CONTRACT NO. 70E63				

ILLINOIS FED. AID PROJECT



**INSIDE ELEVATION OF PARAPET AND CURB**

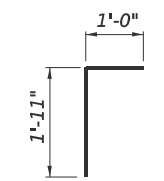


Notes:  
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 The approach footing maximum applied service bearing pressure ( $Q_{max}$ ) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet of .  
 See sheet of for hatched block details.

\* Cost Included with Concrete Superstructure (Approach Slab.)  
 \*\* Per manufacturer recommendations.

**BILL OF MATERIALS  
TWO APPROACHES**

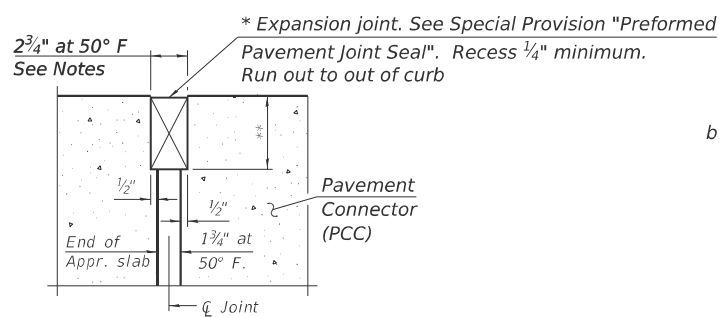
Bar	No.	Size	Length	Shape
a10(E)	30.0	#5	22'-4"	—
a11(E)	40.0	#8	22'-4"	—
a12(E)	30.0	#5	21'-8"	—
a13(E)	40.0	#8	21'-8"	—
b10(E)	96.0	#5	29'-8"	—
b11(E)	154.0	#9	29'-8"	—
b12(E)	8.0	#5	14'-4"	—
b13(E)	4.0	#4	14'-4"	—
t10(E)	128.0	#4	9'-8"	—
w10(E)	80.0	#5	22'-6"	—
v100(E)	88.0	#5	2'-11"	┌
Bar Splicers			Each	180.0
Concrete Superstructure (Approach Slab)			Cu. Yd.	86.0
Concrete Structures			Cu. Yd.	29.0
Reinforcement Bars, Epoxy Coated			Pound	27,970.0



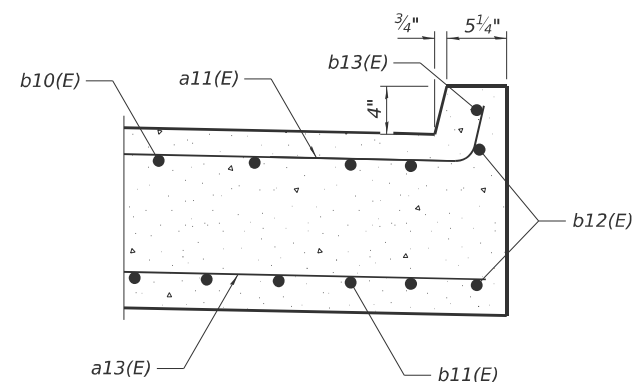
BAR v100(E)  
 Epoxy grout bars in 1'-3" min. holes according to Article 584 of the Standard Specifications.  
 Cost Included with Concrete Superstructure (Approach Slab)



BAR a10(E)



**DETAIL A**  
(at Rt. L's)



**SECTION B-B**

BASA-CIP-3944CS-0 - MODIFIED RF (> 30°)

MODEL: APPROACH 4 (Sheet)  
FILE NAME: c:\p\work\p\details\approach\approachDetails.dgn

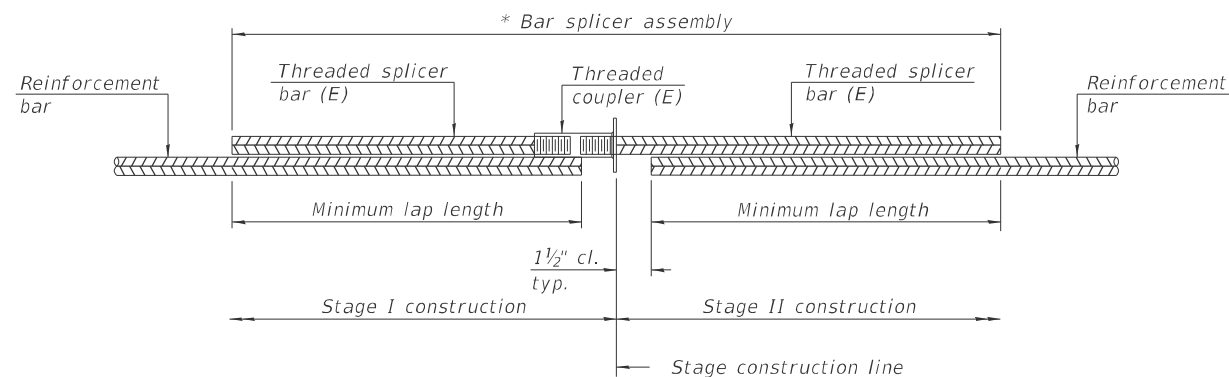
USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF APPROACH SLAB CONSTRUCTION  
S.N. 092-0177**

SCALE: NONE SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	30
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



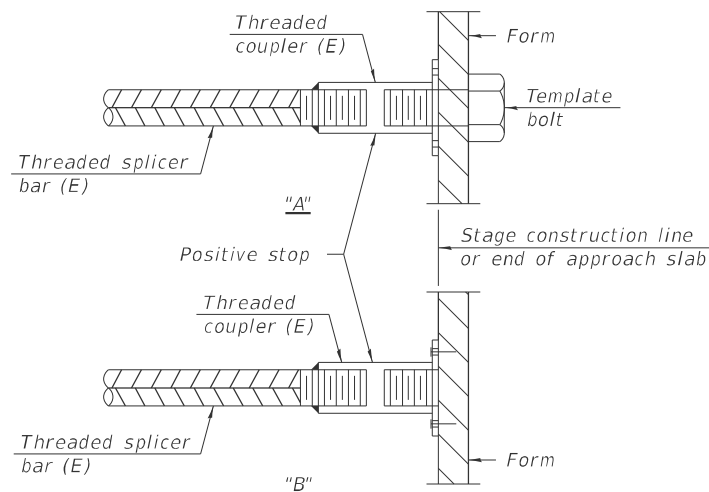
### STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

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	Bar size	No. assemblies required	Minimum lap length
N. Abutment/a(E)	#6	6	3'-6"
N. Abutment/a1(E)	#5	6	3'-6"
N. Abutment/h(E)	#5	8	3'-6"
S. Abutment/a(E)	#6	6	3'-6"
S. Abutment/a1(E)	#5	6	3'-6"
S. Abutment/h(E)	#5	8	3'-6"
N. Appr. a10(E)	#5	15	3'-10"
N. Appr. a11(E)	#8	20	5'-11"
N. Appr. a12(E)	#5	15	3'-0"
N. Appr. a13(E)	#8	20	5'-11"
N. Appr. w10(E)	#5	20	3'-0"
S. Appr. a10(E)	#5	15	3'-0"
S. Appr. a11(E)	#8	20	5'-11"
S. Appr. a12(E)	#5	15	3'-0"
S. Appr. a13(E)	#8	20	5'-11"
S. Appr. w10(E)	#5	20	3'-0"

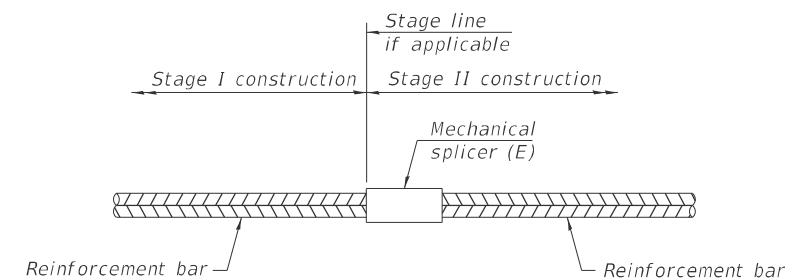


### INSTALLATION AND SETTING METHODS

"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	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: BAR SPLICER ASSEMBLY (Sheet)  
 FILE NAME: c:\p\work\wis\is\sherser\m\0888143\0570E63-shl-Bar SplicerDetail.dgn

BSD-1

2-1-2023

USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 10/10/2024	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

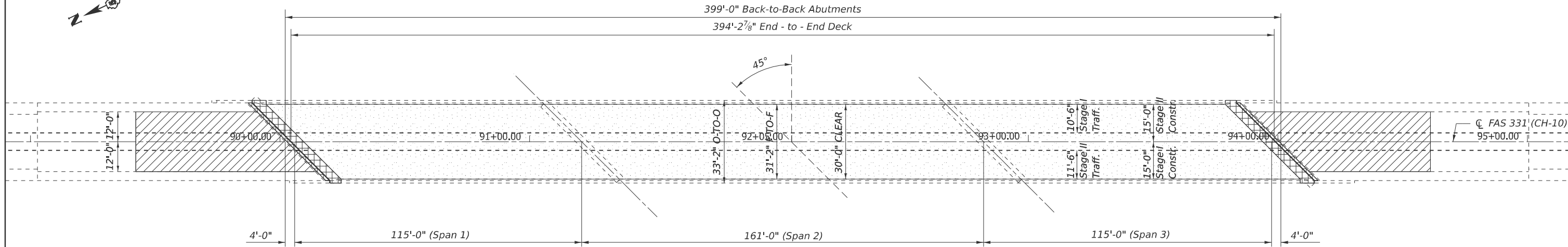
BAR SPLICER AND MECHANICAL SPLICER DETAILS  
 S.N. 092-0177

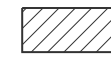


SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	31
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



# PLAN OF SCARIFICATION/REMOVAL

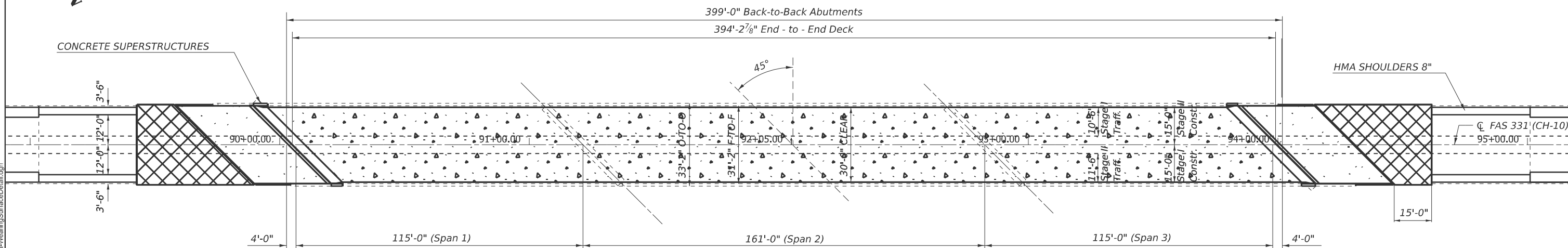



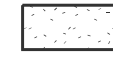

-  APPROACH SLAB REMOVAL (SEE BRIDGE APPROACH SLAB DETAILS)
-  BRIDGE DECK SCARIFICATION 3/4"
-  CONCRETE REMOVAL (SEE BRIDGE ABUTMENTS DETAILS)

## BILL OF MATERIALS

ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU. YD.	17.9
APPROACH SLAB REMOVAL	SQ. YD.	324.0
BRIDGE DECK SCARIFICATION 3/4"	SQ. YD.	1,282.0

# PLAN OF WEARING SURFACE/CONSTRUCTION



-  BRIDGE DECK MICROSILICA CONCRETE OVERLAY - 2 1/2"
-  CONCRETE SUPERSTRUCTURE APPROACH SLAB
-  PAVEMENT CONNECTOR PCC BRIDGE APPROACH SLAB

## BILL OF MATERIALS

ITEM	UNIT	TOTAL
PVT CONNECTOR PCC BRIDGE APPROACH (SPL)	SQ. YD.	221.0
PROTECTIVE COAT	SQ. YD.	1,760.0
BRIDGE DECK GROOVING (LONGITUDINAL)	SQ. YD.	1,725.0
BRIDGE DECK MICROSILICA CONCRETE OVERLAY - 2 1/2"	SQ. YD.	1,282.0
DIAMOND GRINDING (BRIDGE SECTION)	SQ. YD.	1,522.0

MODEL: WEARING SURFACE DETAIL (Sheet)  
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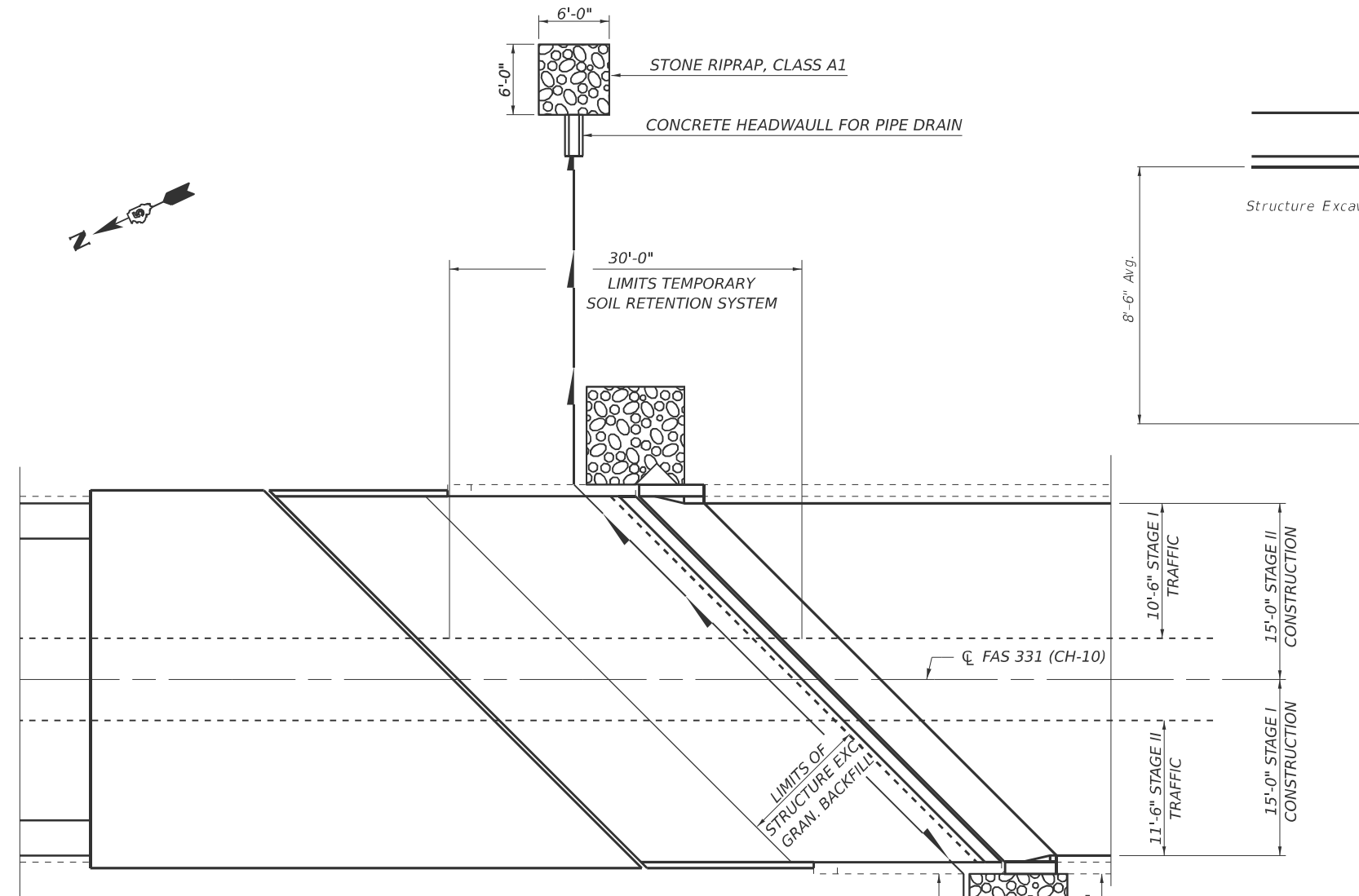
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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

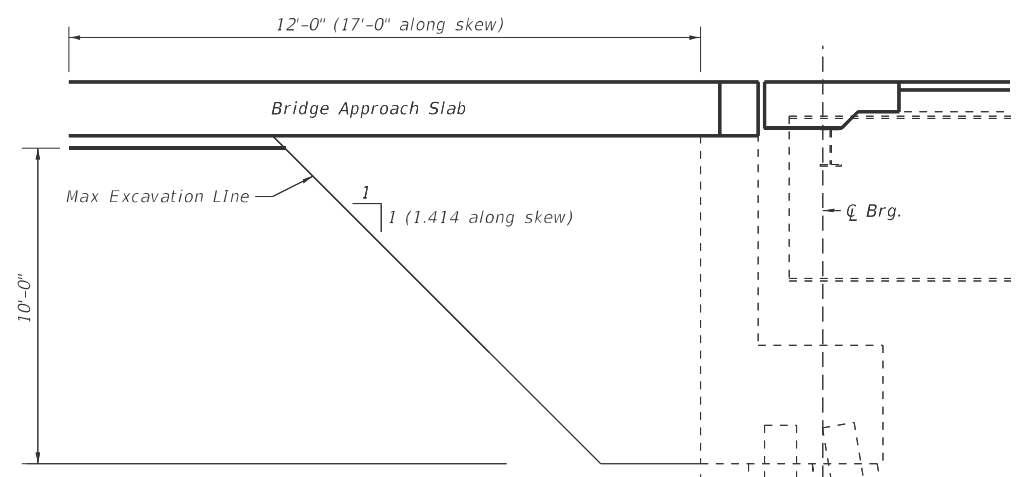
DETAIL OF WEARING SURFACE CONSTRUCTION  
S.N. 092-0177

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

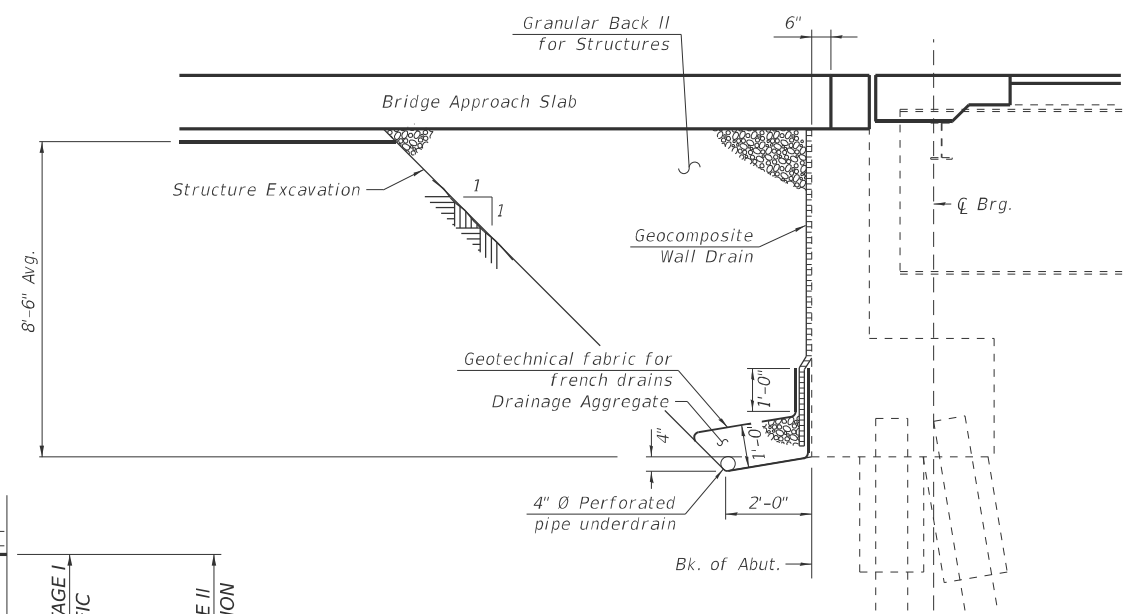
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	32
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



**PLAN**  
(North approach slab shown; South approach slab similar by 180° rotation)



**TEMPORARY SOIL RETENTION SYSTEM**  
(North approach slab shown; South approach slab similar by 180° rotation)



**SECTION THRU PILE SUPPORTED STUB ABUTMENT**  
(Horiz. dim. at Rt. L's)

\* Included in the cost of Pipe Underdrains for Structures.  
(See Special Provisions)

**Note:**  
All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

**NOTE:**  
A CANTILEVERED SHEET PILING DESIGN DOES NOT APPEAR FEASIBLE AND ADDITIONAL MEMBERS OR OTHER RETENTION SYSTEMS MAY BE NECESSARY. THE CONTRACTOR SHALL SUBMIT A TEMPORARY SOIL RETENTION SYSTEM DESIGN INCLUDING PLAN DETAILS AND CALCULATIONS FOR REVIEW AND ACCEPTANCE BY THE ENGINEER.

**BILL OF MATERIALS  
TWO ABUTMENTS**

ITEM	UNIT	TOTAL
STONE RIPRAP, CLASS A4	SQ. YD.	39.0
FILTER FABRIC	SQ. YD.	97.0
STRUCTURE EXCAVATION	CU. YD.	160.0
TEMP SOIL RETENTION SYSTEM	SQ. FT.	200.0
GRANULAR BACKFILL FOR STRUCTURES	CU. YD.	160.0
GEOCOMPOSITE WALL DRAIN	SQ. YD.	102.0
CONCRETE HEADWALL FOR PIPE DRAIN	EACH	4.0
PIPE UNDERDRAIN FOR STRUCTURES 4"	FOOT	174.0

MODEL: ABUTMENT (Sheet)  
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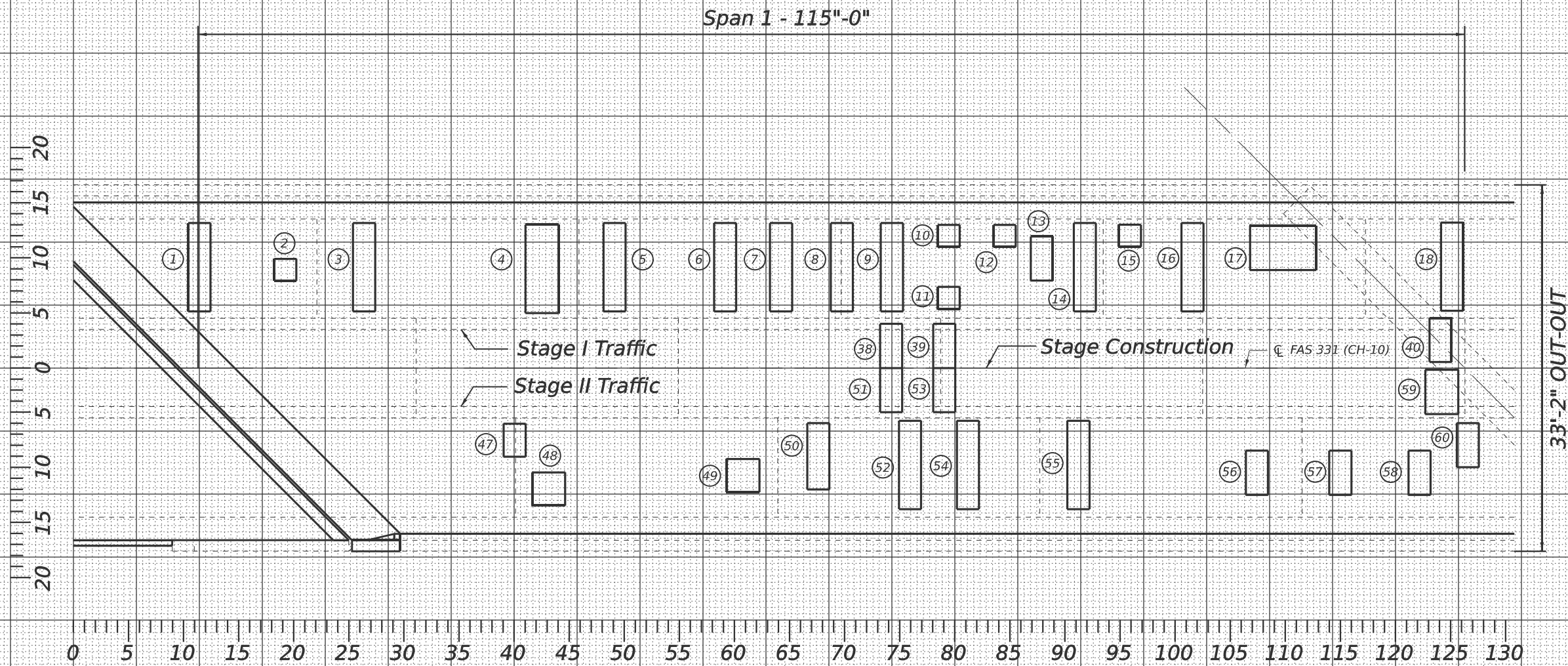
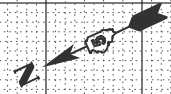
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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF ABUTMENT DRAIN  
S.N. 092-0177**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE. 331	SECTION L-BR-1	COUNTY VERMILION	TOTAL SHEETS 43	SHEET NO. 33
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



MODEL: DECK SLAB REPAIR\_1 (Sheet)  
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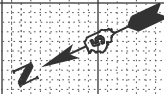
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PLOT DATE = 7/25/2024	DATE -	REVISED -

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

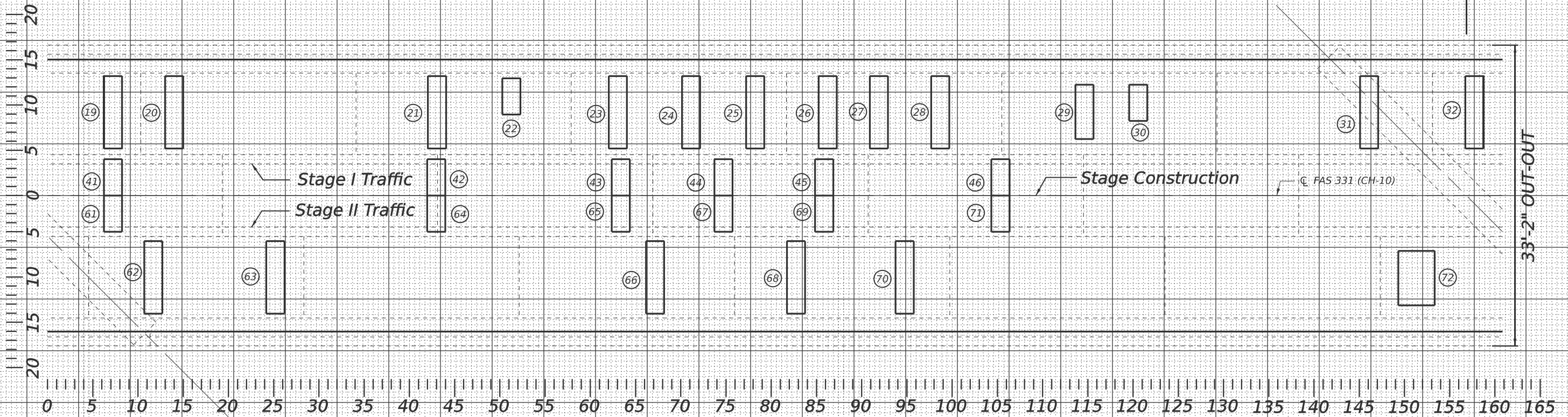
**DETAIL OF DECK SLAB REPAIR**  
**S.N. 092-0177**

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	34
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



Span 2 - 161'0"



MODEL: DECK SLAB REPAIR 2 (Sheet)  
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DESIGNED -
DRAWN -
CHECKED -
DATE - 8/1/2024

DESIGNED -
DRAWN -
CHECKED -
DATE -

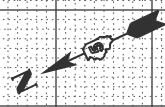
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

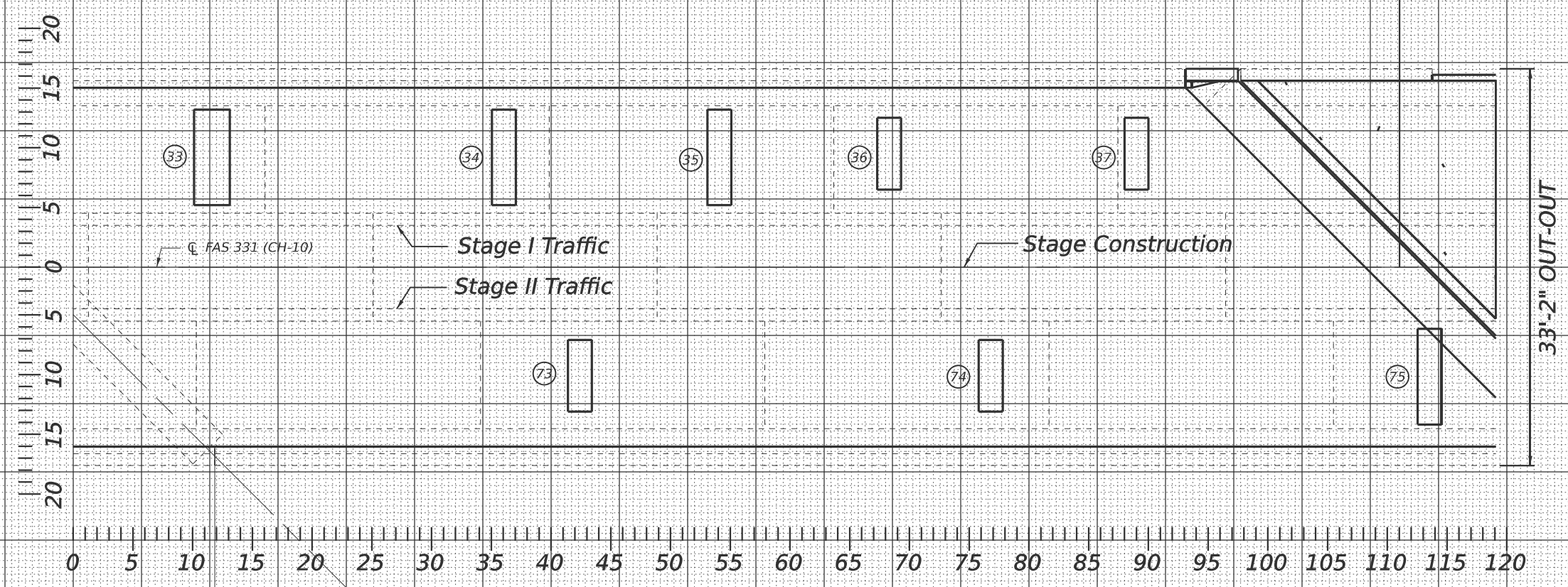
DETAIL OF DECK SLAB REPAIR  
 S.N. 092-0177

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	35
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



Span 3 - 115'-0"



33'-2" OUT-OUT

MODEL: DECK SLAB REPAIR 3 (Sheet)  
 FILE NAME: c:\pwworking\jsherer\mtd0868143\0570E63-shl-DeckSlabRepair.dgn

USER NAME = Jeff.Sherer  
 PLOT DATE = 8/1/2024

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DETAIL OF DECK SLAB REPAIR  
 S.N. 092-0177

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	36
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

MODEL: DECK SLAB REPAIR 4 (Sheet)  
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PATCH NO.	SIZE		DECK SLAB REPAIR (FULL DEPTH T1) SQ YD	DECK SLAB REPAIR (FULL DEPTH T2) SQ YD
	LENGTH (FT)	WIDTH (FT)		
1	8	2		1.8
2	3	2		0.7
3	8	2		1.8
4	8	3		2.7
5	8	2		1.8
6	8	2		1.8
7	8	2		1.8
8	8	2		1.8
9	8	2		1.8
10	3	2		0.7
11	3	2		0.7
12	3	2		0.7
13	4	2		0.9
14	8	2		1.8
15	3	2		0.7
16	8	2		1.8
17	4	6		2.7
SUB-TOTAL =				25.6

PATCH NO.	SIZE		DECK SLAB REPAIR (FULL DEPTH T1) SQ YD	DECK SLAB REPAIR (FULL DEPTH T2) SQ YD
	LENGTH (FT)	WIDTH (FT)		
18	8	2		1.8
19	8	2		1.8
20	8	3		2.7
21	8	2		1.8
22	4	2		0.9
23	8	2		1.8
24	8	2		1.8
25	8	2		1.8
26	8	2		1.8
27	8	2		1.8
28	8	2		1.8
29	6	2		1.3
30	4	2		0.9
31	8	2		1.8
32	8	2		1.8
33	8	2		1.8
34	8	2		1.8
SUB-TOTAL =				28.9

PATCH NO.	SIZE		DECK SLAB REPAIR (FULL DEPTH T1) SQ YD	DECK SLAB REPAIR (FULL DEPTH T2) SQ YD
	LENGTH (FT)	WIDTH (FT)		
35	8	2		1.8
36	6	2		1.3
37	6	2		1.3
38	4	2		0.9
39	4	2		0.9
40	4	2		0.9
41	4	2		0.9
42	4	2		0.9
43	4	2		0.9
44	4	2		0.9
45	4	2		0.9
46	4	2		0.9
47	3	2		0.7
48	3	3		1.0
49	3	3		1.0
50	6	2		1.3
51	4	2		0.9
SUB-TOTAL =				17.3

PATCH NO.	SIZE		DECK SLAB REPAIR (FULL DEPTH T1) SQ YD	DECK SLAB REPAIR (FULL DEPTH T2) SQ YD
	LENGTH (FT)	WIDTH (FT)		
52	8	2		1.8
53	4	2		0.9
54	8	2		1.8
55	8	2		1.8
56	4	2		0.9
57	4	2		0.9
58	4	4		1.8
59	4	3		1.3
60	4	2		0.9
61	4	2		0.9
62	8	2		1.8
63	8	2		1.8
64	4	2		0.9
65	4	2		0.9
66	8	2		1.8
67	4	2		0.9
68	8	2	1.8	1.8
SUB-TOTAL =			1.8	22.7

PATCH NO.	SIZE		DECK SLAB REPAIR (FULL DEPTH T1) SQ YD	DECK SLAB REPAIR (FULL DEPTH T2) SQ YD
	LENGTH (FT)	WIDTH (FT)		
69	4	2		0.9
70	8	2		1.8
71	4	2		0.9
72	6	4		2.7
73	8	2		1.8
74	8	2		1.8
75	8	2		1.8
SUB-TOTAL =				11.6
TOTAL =				106.0
USE =				106.0

**NOTES:**

Deck survey performed in March, 2023. Locations and sizes shown in the plans are approximate.

See Special Provision "Deck Slab Repair" for additional requirements pertaining to deckslab repair.

Longitudinal removal for deck slab repair (full-depth, type II) must be done in alternating sections of no more than 10 feet. Adjacent sections must not be removed until both of the following requirements are met:

at least 72 hours shall have elapsed from the end of the previous pour, and...

the concrete shall have attained a minimum modulus of rupture of 650 psi or a minimum compressive strength of 3500 psi.

**BILL OF MATERIALS**

ITEM	UNIT	TOTAL
DECK SLAB REPAIR (FULL DEPTH) TYPE II	SQ. YD.	106.0

USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

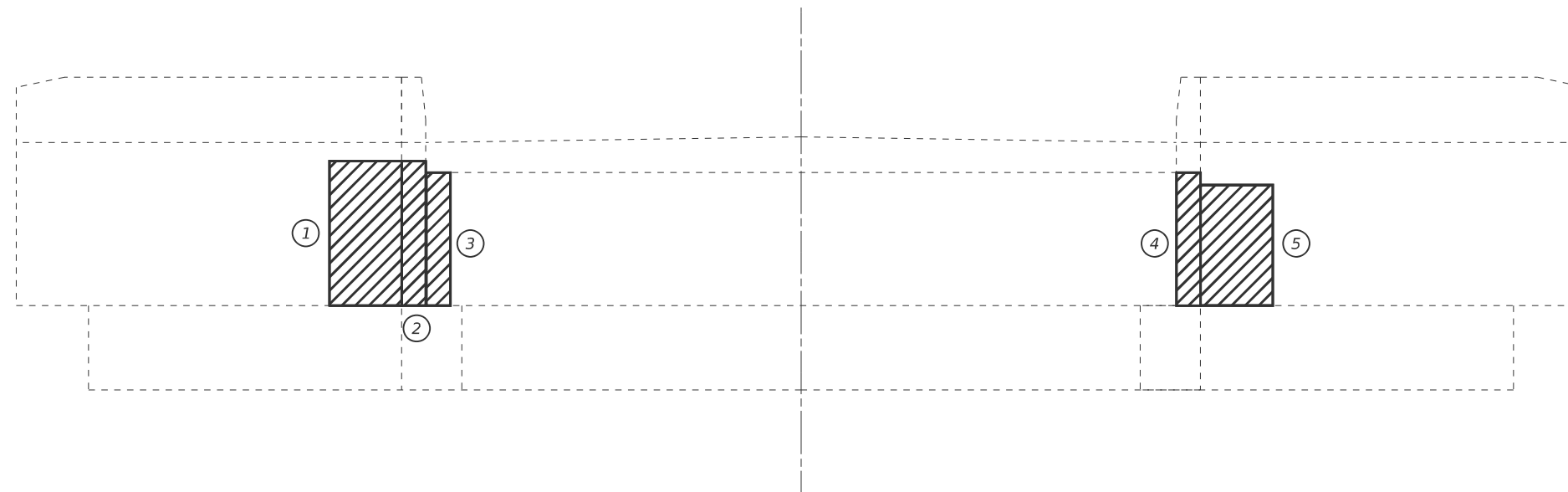
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF DECK SLAB REPAIR  
 S.N. 092-0177**

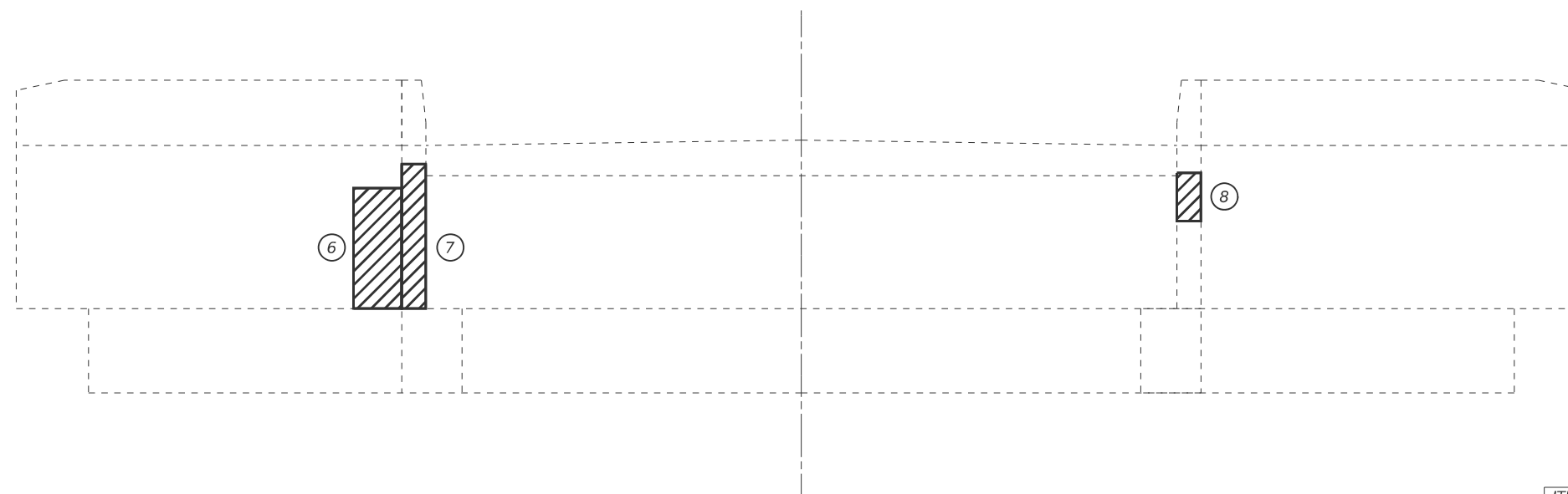
SCALE: NONE SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	37
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

## NORTH ABUTMENT (LOOKING NORTH)



## SOUTH ABUTMENT (LOOKING SOUTH)



PATCH NO.	SIZE		STRUCTURAL REPAIR OF CONC <math>\leq 5''</math>
	LENGTH (FT)	WIDTH (FT)	
1	6	3	18.0
2	6	1	6.0
3	5.5	1	5.5
4	6	1	6.0
5	5	3	15.0
6	5	2	10.0
7	6	1	6.0
8	2	1	2.0

SUB-TOTAL =	68.5
USE =	69.0

### BILL OF MATERIALS

ITEM	UNIT	TOTAL
STRUCTURAL REPAIR OF CONCRETE <math>\leq 5''</math>	SQ. FT.	69.0

MODEL: SRC 1 (Sheet)  
FILE NAME: c:\p\work\wv\shsherj\m\0868143\070E63-shh-SCRPDdetail.dgn

USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 7/25/2024	DATE -	REVISED -

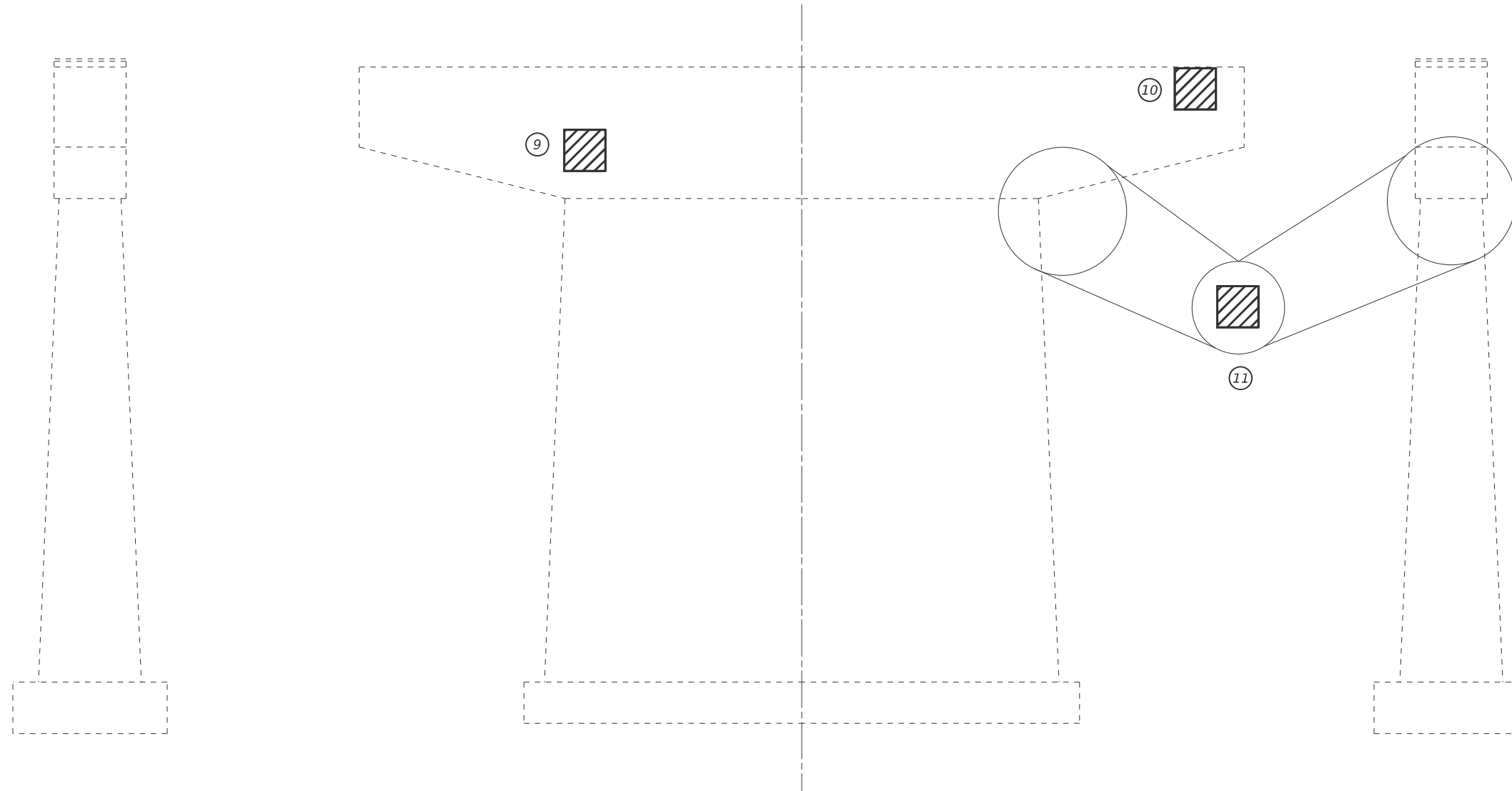
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF STRUCTURAL CONCRETE REPAIR  
S.N. 092-0177**

SCALE: NONE      SHEET 1 OF 3 SHEETS      STA.      TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	38
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

# PIER 2 (LOOKING NORTH)



PATCH NO.	SIZE		STRUCTURAL REPAIR OF CONC $\leq 5'$
	LENGTH (FT)	WIDTH (FT)	
9	2	2	4.0
10	2	2	4.0
11	2	2	4.0
SUB-TOTAL =			12.0

## BILL OF MATERIALS

ITEM	UNIT	TOTAL
STRUCTURAL REPAIR OF CONCRETE $\leq 5'$	SQ. FT.	12.0

MODEL: SRC 2 (Sheet)  
FILE NAME: c:\p\work\wv\shirer\m\0868143\070E63-shr-SCRPTDetail.dgn

USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

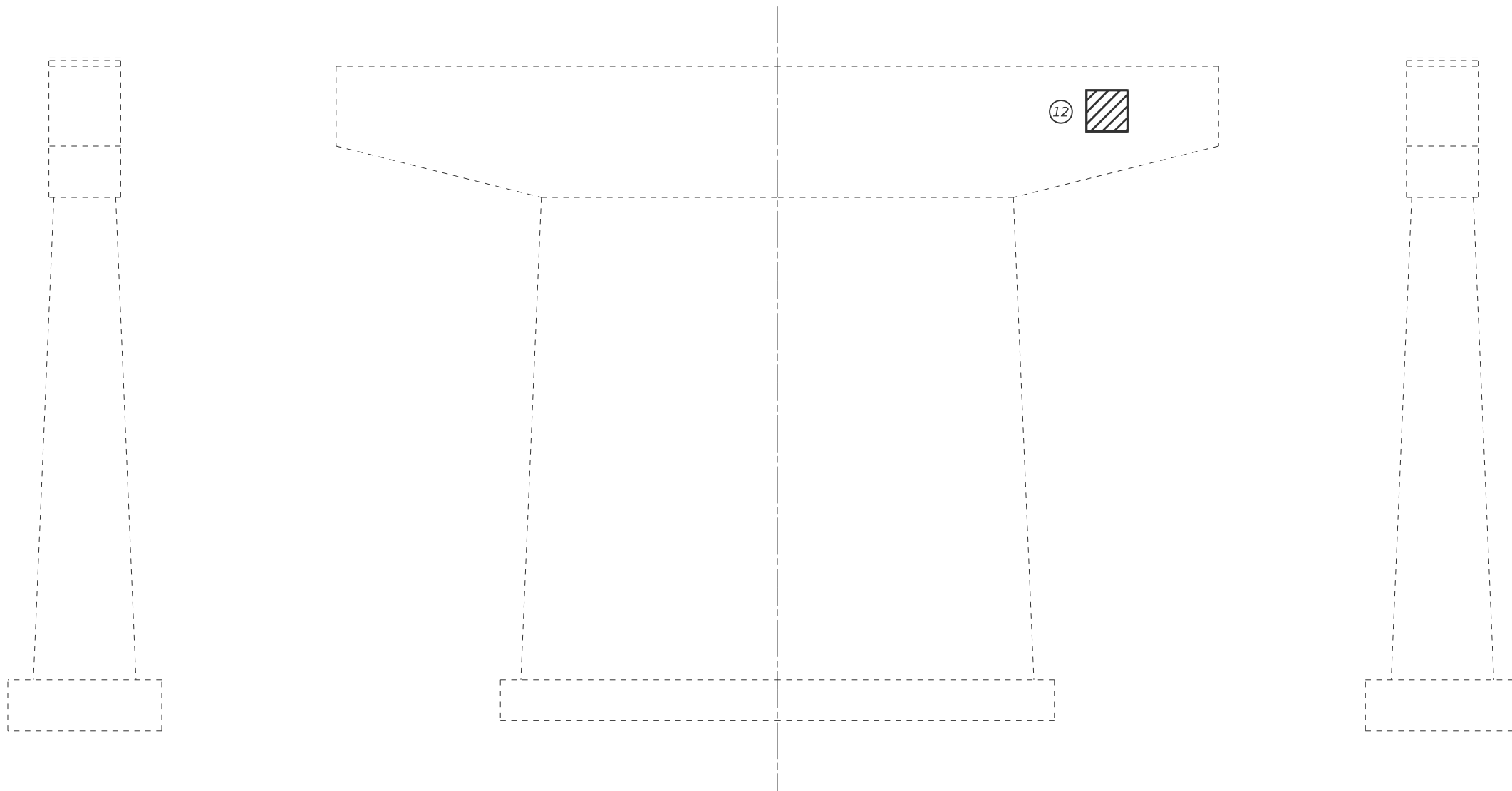
**DETAIL OF STRUCTURAL CONCRETE REPAIR  
S.N. 092-0177**

SCALE: NONE    SHEET 2 OF 3 SHEETS    STA.    TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	39
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



# PIER 2 (LOOKING SOUTH)



PATCH NO.	SIZE		STRUCTURAL REPAIR OF CONC <= 5"
	LENGTH (FT)	WIDTH (FT)	
12	2	2	4.0
SUB-TOTAL =			4.0

## BILL OF MATERIALS

ITEM	UNIT	TOTAL
STRUCTURAL REPAIR OF CONCRETE <= 5"	SQ. FT.	4.0

MODEL: SRC 3 (Sheet)  
FILE NAME: c:\p\work\wv\shsherj\m\0868143\0570E63-shh-SCRPDetail.dgn

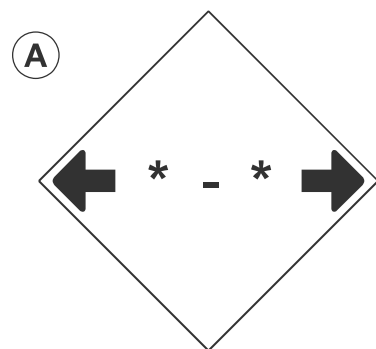
USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF STRUCTURAL CONCRETE REPAIR  
S.N. 092-0177**

SCALE: NONE      SHEET 3    OF   3    SHEETS    STA.                    TO STA.

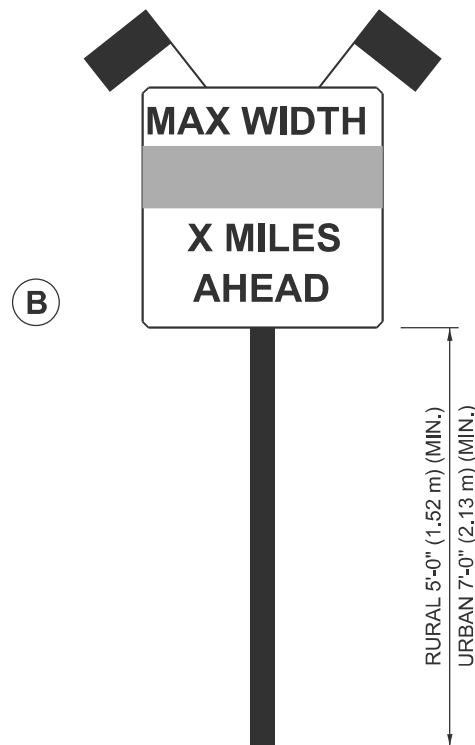
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	40
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



**W12-2(O)-48"x48"(1200x1200)**

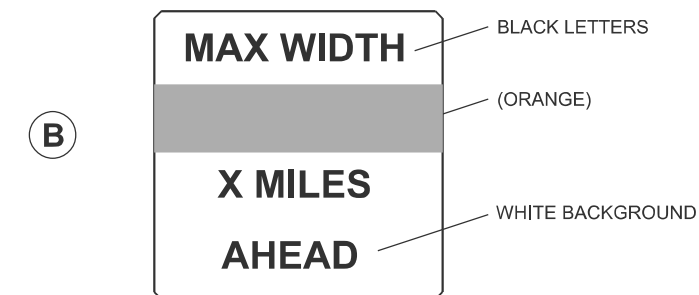
SIGN (A) 2 SIGNS - W12-2(O)-48"x48"(1200x1200) ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

SIGN (B) 2 SIGNS - (SIGN PANEL, TYPE II) AS SHOWN ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.



**SIGN PANEL, TYPE II**

\* STAGE I = 9'-0"  
STAGE II = 10'-0"



**W12-I103(O)-48"x48"(1200x1200)**  
**"D" LETTERS/NUMBERS**

**GENERAL NOTES**

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
2. ALL (B) SIGNS SHALL HAVE FLAGS INSTALLED UNLESS OTHERWISE DIRECTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR WIDTH RESTRICTION SIGNING.
5. ALL SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE DIRECTED.
6. ALL SIGNS SHOWN ORANGE (O) SHALL BE FLUORESCENT ORANGE.
7. ALL SIGNS SHOWN SHALL CONSIST OF THE CURRENT RETROREFLECTIVE SHEETING REQUIREMENTS AS OUTLINED IN SECTION 1106.01 OF THE STANDARD SPECIFICATIONS BOOK.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

MODEL: SHT\_PLAN  
FILE NAME: C:\Bentley\CONNECT1011\Organization\Civil\DOT\_Standards\Ceil\DOT\_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED - 05-08/
	DRAWN -	REVISED - 10-08 KJT
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED - 07-09 KJT
PLOT DATE = 12/7/2022	DATE -	REVISED - 03-11 KJT

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

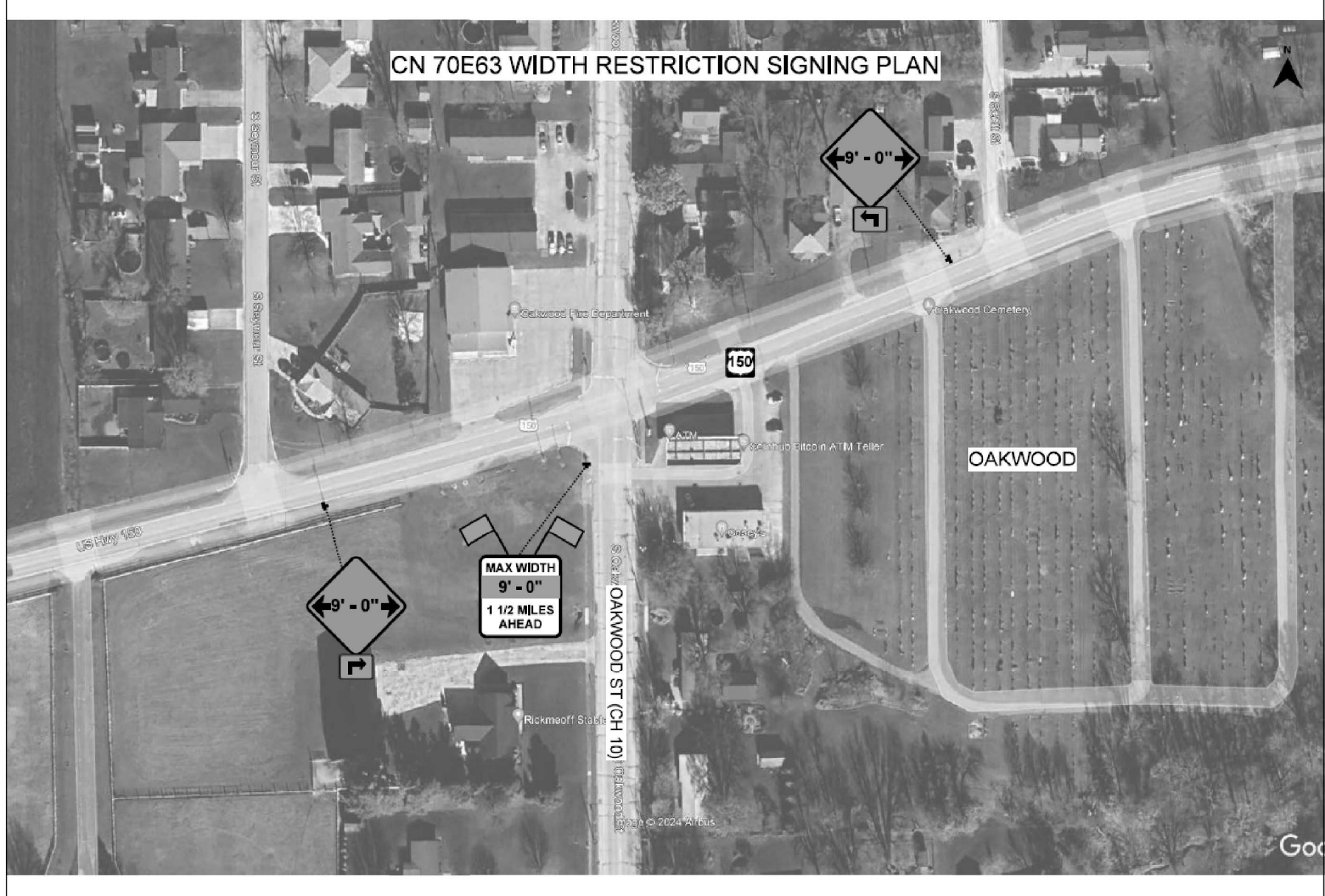
**WIDTH RESTRICTION SIGNING**

SCALE: NONE SHEET 1 OF 3 SHEETS STA. TO STA.

**DISTRICT 5 DETAIL NO. X7200201**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(L-BR-1)	VERMILION	43	41
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				

MODEL: WIDTH SIGN\_1 [Sheet]  
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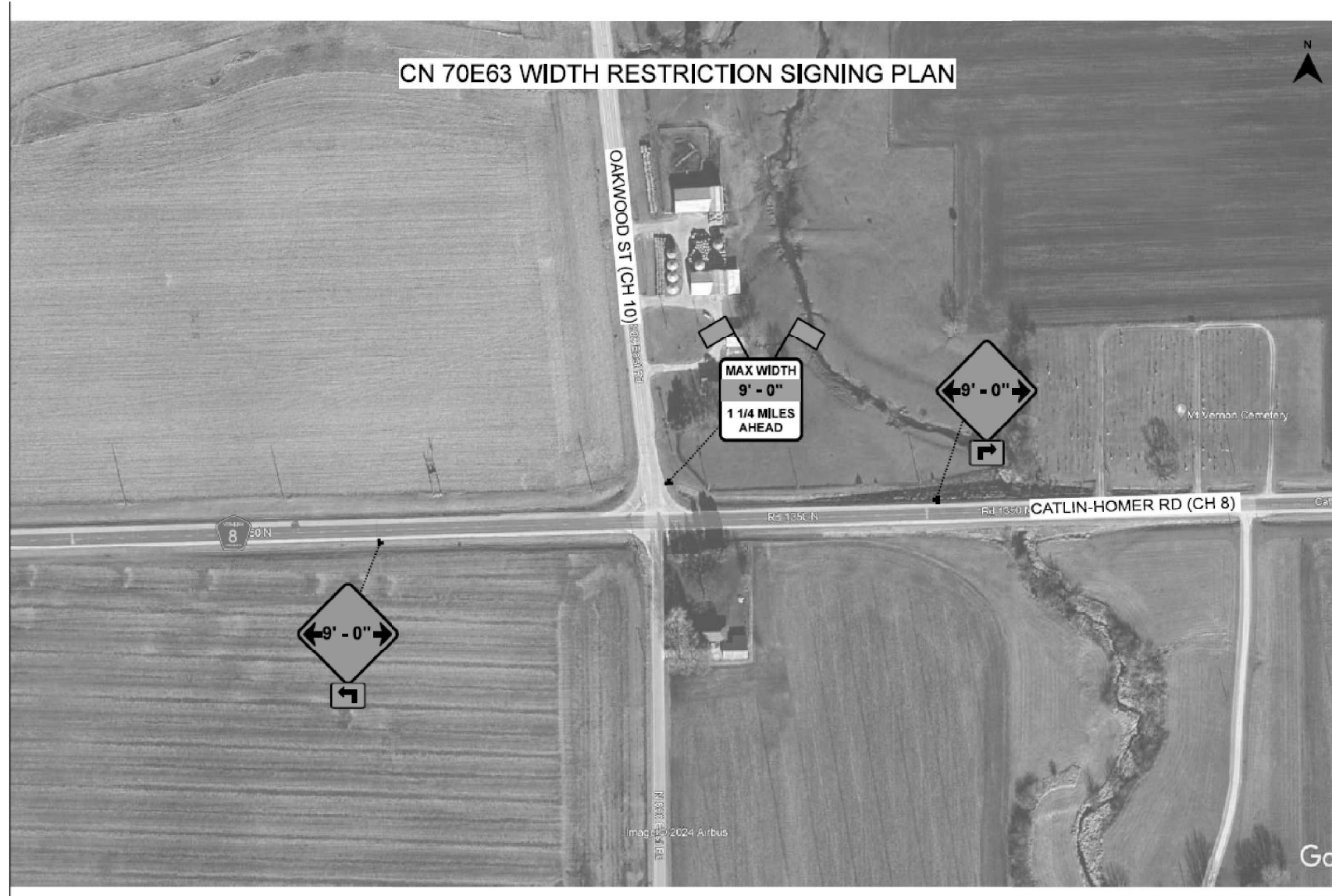
USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 7/25/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**LOCATION OF WIDTH RESTRICTION SIGNING  
 S.N. 092-0177**

SCALE: NONE    SHEET 2    OF 3    SHEETS    STA.    TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	42
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				



MODEL: WIDTH SIGN 2 [Sheet]  
 FILE NAME: c:\p\work\width\sherer\md0868143\70E63-shr-WidthRestrictionSigningDetail.dgn

USER NAME = Jeff.Sherer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/1/2024	DATE -	REVISED -

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

**LOCATION OF WIDTH RESTRICTION SIGNING**  
**S.N. 092-0177**

SCALE: NONE    SHEET 3    OF 3    SHEETS    STA.    TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	L-BR-1	VERMILION	43	43
CONTRACT NO. 70E63				
ILLINOIS FED. AID PROJECT				