

RTE.	PROJECT NO.	COUNTY	TOTAL SHEETS	SHEET NO.
•	16-0352-00-BR	VERMILION	13	01
*OREGON OVER CSX RAILROAD				

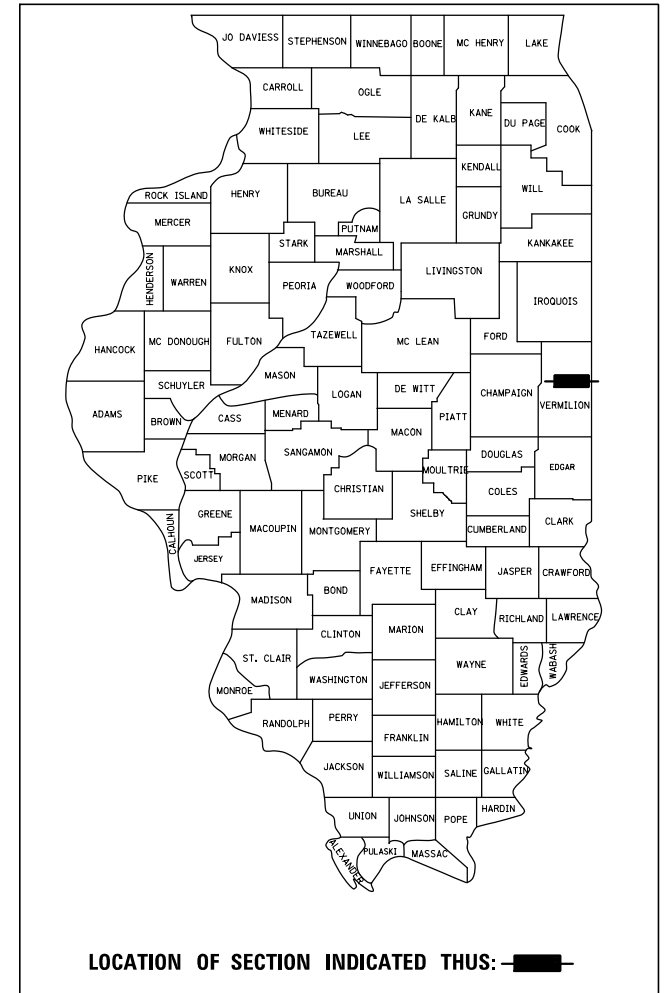
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

# PROPOSED HIGHWAY PLANS

## OREGON STREET OVER THE CSX TRANSPORTATION SECTION 16-00353-00-BR

### BRIDGE JOINT AND APPROACH PAVEMENT REPAIRS STRUCTURE NUMBER 092-6017 CITY OF DANVILLE

### FUNDING MFT



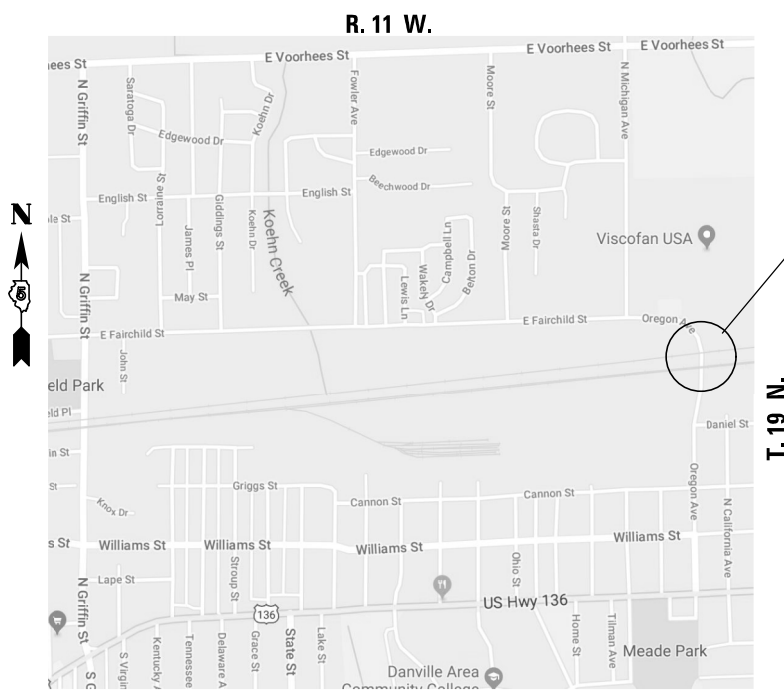
**INDEX OF SHEETS**

01	COVER & INDEX OF SHEETS
02	GENERAL NOTES & SUMMARY OF QUANTITIES
03 - 05	TRAFFIC CONTROL PLANS
06	REMOVAL PLAN AND DETAILS
07	DECK PLAN
08	DETAILS
09 - 11	PREFORMED JOINT SEAL
12	BAR SPLICER DETAILS
13	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION

**HIGHWAY STANDARDS**

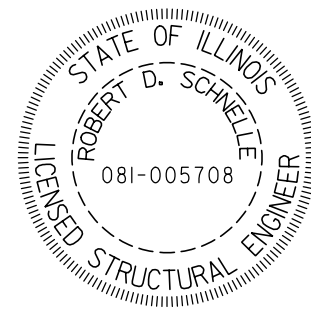
000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001002-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
606001-01	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701321-07	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
704001-08	TEMPORARY CONCRETE BARRIER
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-07	TRAFFIC CONTROL DEVICES

**DESIGN DESIGNATION:**  
**OREGON STREET: MAJOR COLLECTOR (URBAN)**  
**2014 ADT = 3,200**



EXISTING S.N. 092-6017  
OREGON STREET OVER  
CSX TRANSPORTATION  
PROPOSED BRIDGE JOINT  
REPAIRS

### LOCATION MAP



*R. David Schnelle*

1/3/2018

CITY OF DANVILLE

APPROVED Feb. 1 2018

*R. David Schnelle*  
CITY OF DANVILLE, CITY ENGINEER

---

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PASSED \_\_\_\_\_ 2018

DISTRICT 5 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID  
BASED ON LIMITED  
REVIEW \_\_\_\_\_ 2018

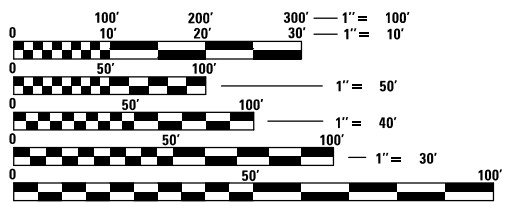
REGION 3 ENGINEER

*R. David Schnelle*

CITY ENGINEER, ILLINOIS STRUCTURAL NO. 081-005708  
LICENSE EXPIRES: 11-30-2018

DEPARTMENT OF ENGINEERING  
DANVILLE, ILL.  
R. DAVID SCHNELLE, CITY ENGINEER  
OREGON ST BRIDGE REPAIRS

REVISIONS	DATE



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

**GENERAL NOTES**

1. All construction shall be done in accordance with the State of Illinois "Standard Specifications for Road And Bridge Construction adopted April 1, 2016", these plans, and the special provisions included in the contract documents
2. The revision numbers of the standards listed in the plans are to be used for constructing of this section.
3. The location of existing utilities are not shown. It shall be the contractor's responsibility to ascertain their exact location from the individual utility companies and by field inspection.
4. Any time the concrete barriers are not in the proper position, flaggers shall be in place to control traffic and the temporary traffic signals shall be turned off or covered.
5. Commitments: None as of >date
6. Reinforcement bars designated (E) shall be epoxy coated.
7. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.  
 As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.  
 Any cracks that cannot be removed by grinding 1#4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
8. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
9. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
10. Combination concrete curb and gutter abutting existing pavement shall be constructed and paid for according to Section 606 of the Standard Specifications.

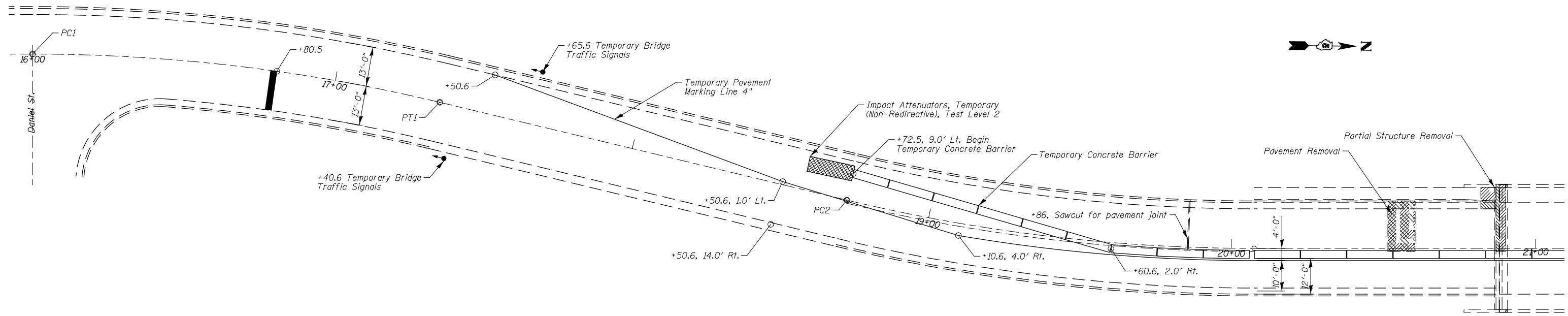
**SUMMARY OF QUANTITIES**

PAY ITEM NO.	DESCRIPTION	UNIT	TOTAL
44002100	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REMOVAL	SQ YD	62.9
50102400	CONCRETE REMOVAL	CU YD	15.1
50300255	CONCRETE SUPERSTRUCTURE	CU YD	14.9
50300300	PROTECTIVE COAT	SQ YD	50
50800206	REINFORCEMENT BARS, EPOXY COATED	POUND	6110
50800515	BAR SPLICERS	EACH	100
52000050	PREFORMED JOINT SEAL 4"	FOOT	65
52000110	PREFORMED JOINT STRIP SEAL	FOOT	80
67100100	MOBILIZATION	L SUM	1
70100405	TRAFFIC CONTROL AND PROTECTION STANDARD 701321	EACH	1
70102640	TRAFFIC CONTROL AND PROTECTION STANDARD 701801	L SUM	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70300220	TEMPORARY PAVEMENT MARKING LINE 4"	FOOT	2083
70400100	TEMPORARY CONCRETE BARRIER	FOOT	737
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	723
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	50
44000500	COMBINATION CURB AND GUTTER REMOVAL	FT	13
44000600	SIDEWALK REMOVAL	SQ FT	50
60605100	COMBINATION CONCRETE CURB AND GUTTER TYPE B6.24 (AEP)	FT	13
70600240	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 2	EACH	2
70600340	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 2	EACH	2
78200020	CURB REFLECTORS	EACH	14
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	740

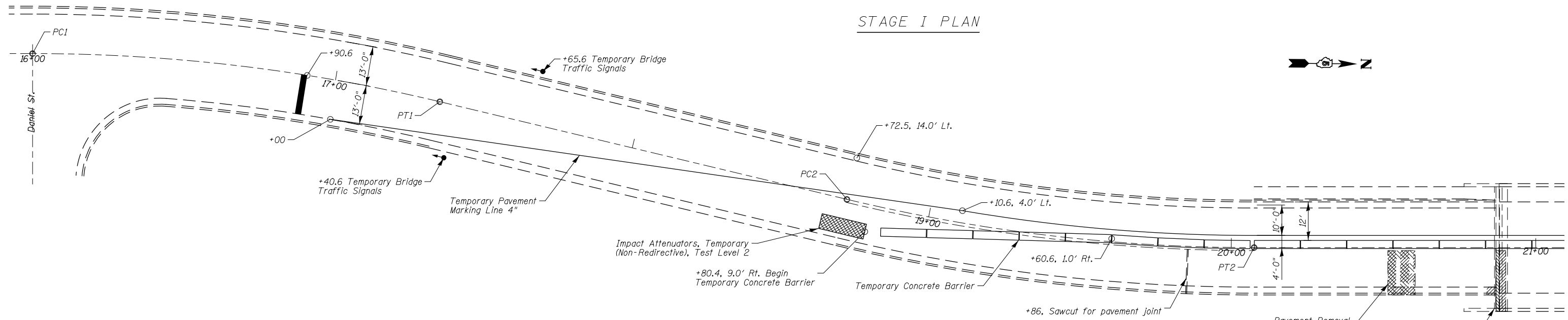
DESIGNED - ---	REVISED -
DRAWN - ---	REVISED -
CHECKED - ---	REVISED -
DATE - 1/3/2018	REVISED -



RT#	PROJECT NUMBER	COUNTY	TOTAL SHEETS	SHEET NO.
*	16-00352-00-BR	VERMILION	13	02
OREGON			SHT. S-02 OF	S-13
2017 BRIDGE REPAIRS			STRUCTURE NO.	092-6017



STAGE I PLAN



STAGE II PLAN

CURVE 1	CURVE 2
P.I. Station 16+67.9	P.I. Station 19+40.40
Delta = 15°30'	Delta = 15°30'
R = 572.96'	R = 572.96'
T = 67.8'	T = 67.8'
L = 135.00'	L = 135.00'
E = 4.0'	E = 4.0'
D = 10°00'	D = 10°00'

- Notes:
1. Work this sheet with Sheets S-04, S-06, S-13, and Highway Standard 701321.
  2. Cost of sawcuts for Prefomed Joint Seal included in the cost of Prefomed Joint Seal. See Sheet S-08.

FILE LOCATION: \\PROJECTS\CITY\CURRENT\16-00353-00BR-BRIDGE REPAIRS\STRUC\OREGON\_BRIDGE.DGN

DESIGNED - ---	REVISED -
DRAWN - ---	REVISED -
CHECKED - ---	REVISED -
DATE - 1/3/2018	REVISED -

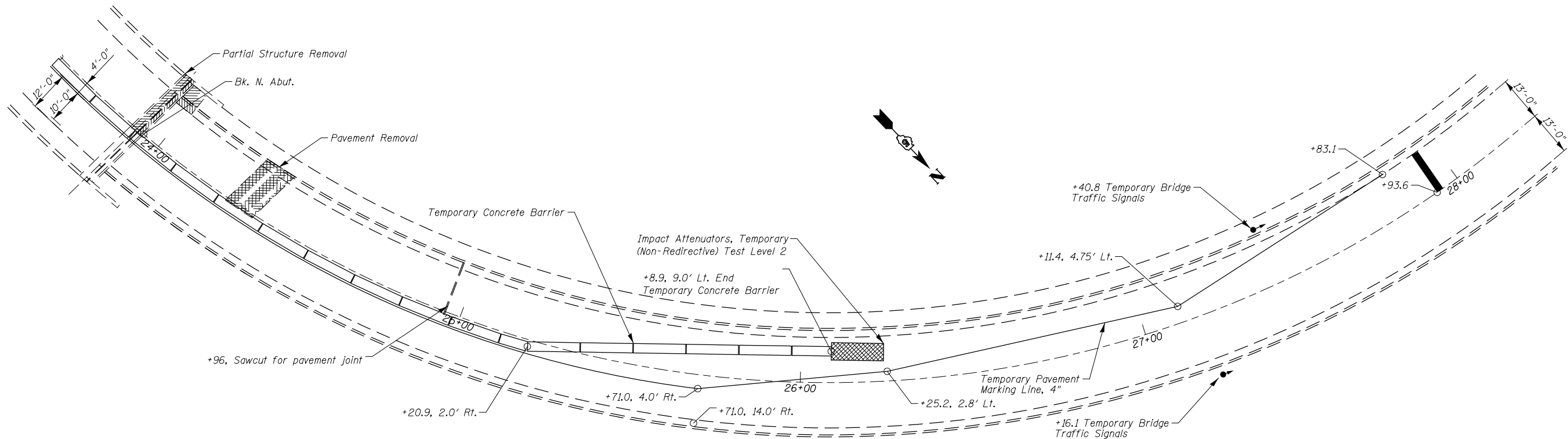


DEPARTMENT OF ENGINEERING  
 DANVILLE, IL R. DAVID SCHNELLE, CITY ENGINEER  
 Scale: 1/16" = 1'-0"

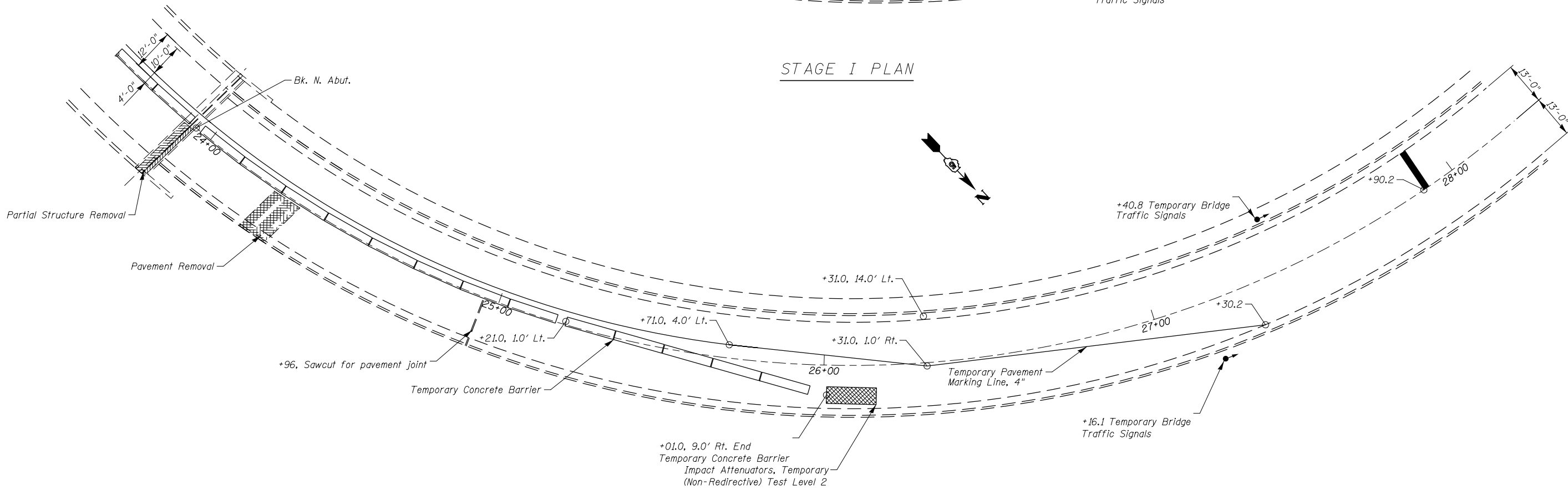
OREGON ST BRIDGE REPAIRS  
 TRAFFIC CONTROL PLAN I

16+00 TO 20+00

ROUTE	PROJECT NUMBER	COUNTY	TOTAL SHEETS	SHEET NO.
•	16-00352-00-BR	VERMILION	13	03
•	OREGON	SHT. S-03 OF S-13		
	2017 BRIDGE REPAIRS	STRUCTURE NO. 092-6017		



STAGE I PLAN



STAGE II PLAN

CURVE 3

PI Station 26+50.45  
 Delta = 86°30'  
 R = 306.94'  
 T = 288.74'  
 L = 463.39'  
 E = 114.45'  
 D = 18°40'

Notes:

1. Work this Sheet with Sheets S-03, S-05, S-13, and Highway Standard 701321.
2. Cost of sawcuts for Preformed Joint Seal included in the cost of Preformed Joint Seal. See Sheet S-08.

FILE LOCATION = X:\PROJECTS\CITY\CURRENT\16-00353-00BR-BRIDGE REPAIRS\STRUC\OREGON\_BRIDGE.DGN

DESIGNED - ---  
 DRAWN - ---  
 CHECKED - ---  
 DATE - 1/3/2018

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

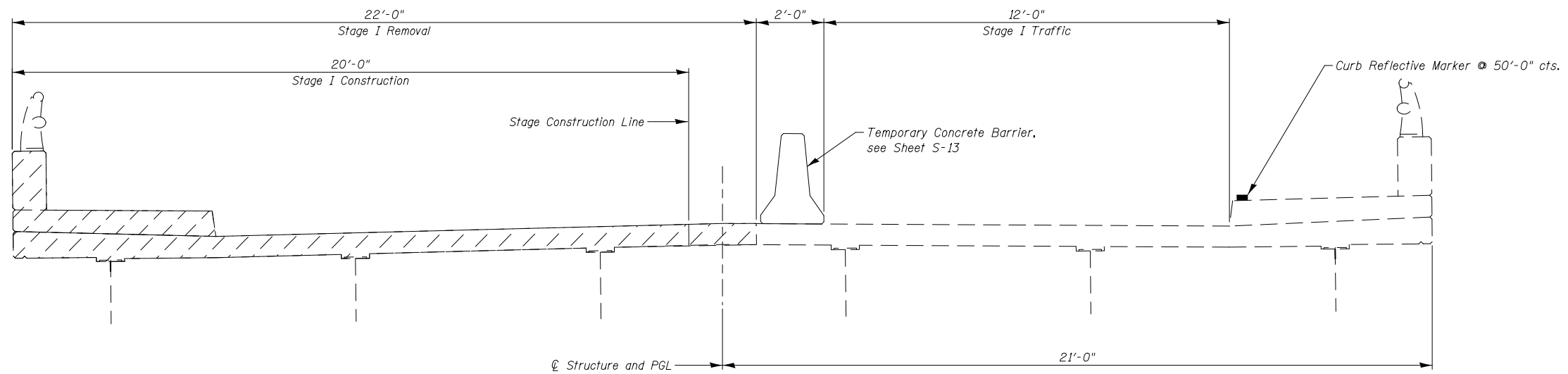


DEPARTMENT OF ENGINEERING  
 DANVILLE, IL R. DAVID SCHNELLE, CITY ENGINEER  
 Scale: 1/16" = 1'-0"

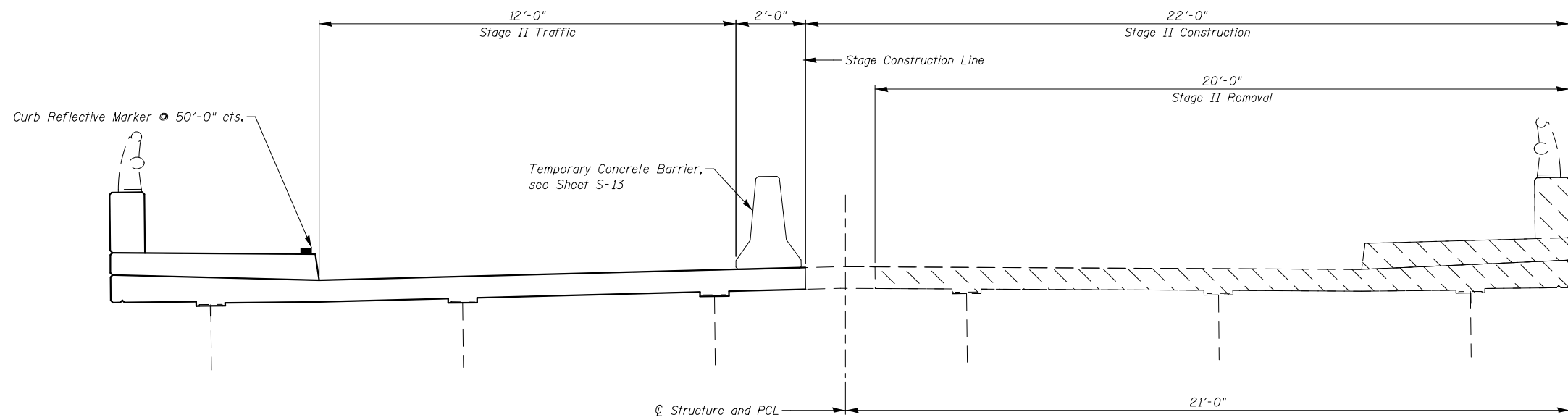
OREGON ST BRIDGE REPAIRS  
 TRAFFIC CONTROL PLAN II

25+00 TO 30+00

RT.	PROJECT NUMBER	COUNTY	TOTAL SHEETS	SHEET NO.
*	16-00352-00-BR	VERMILION	13	04
*	OREGON	SHT. S-04 OF S-13		
	2017 BRIDGE REPAIRS	STRUCTURE NO. 092-6017		



STAGE I CONSTRUCTION



STAGE II CONSTRUCTION

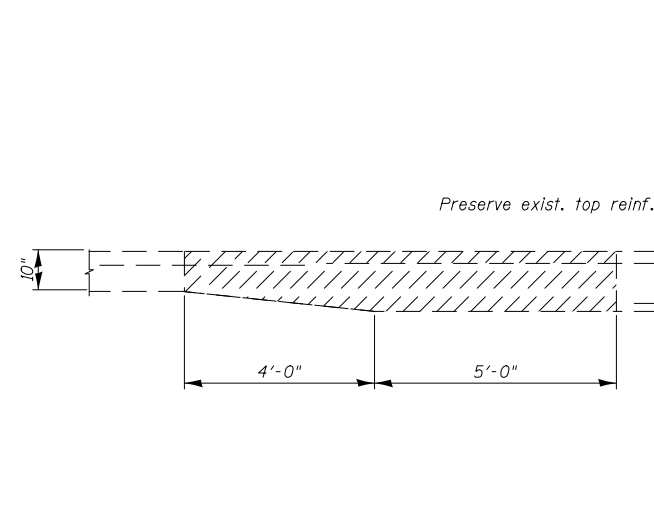
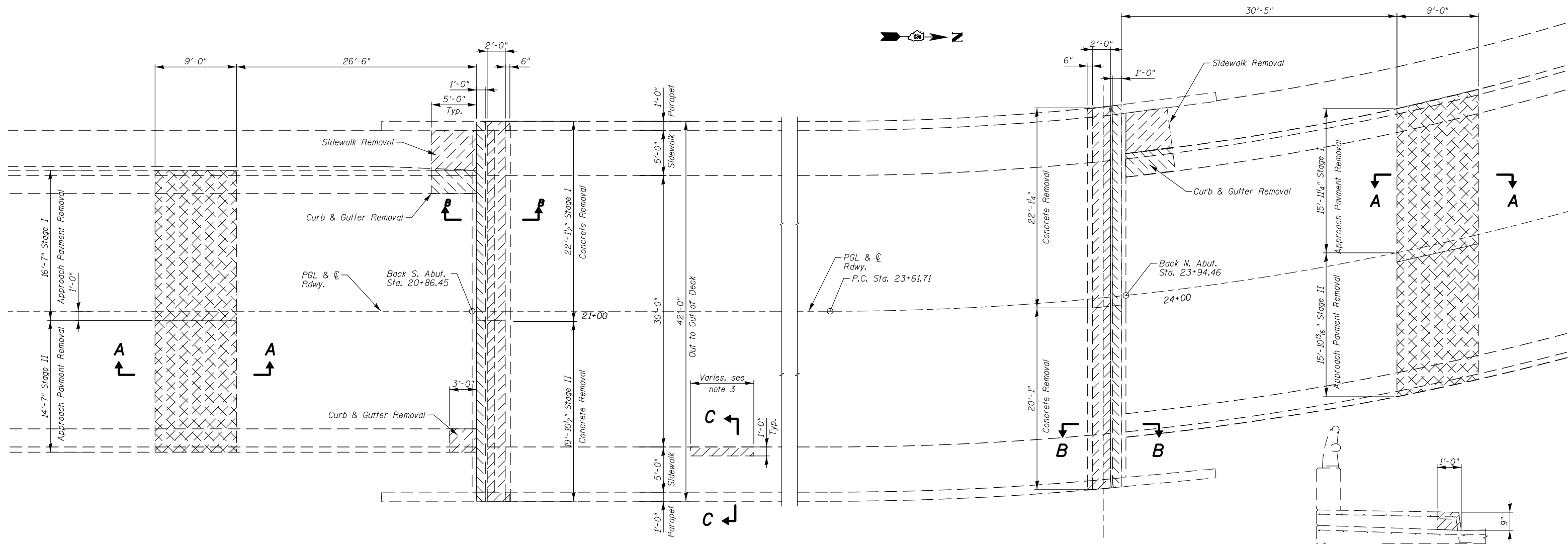
FILE LOCATION =	DESIGNED - ---	REVISED -
	DRAWN - ---	REVISED -
	CHECKED - ---	REVISED -
	DATE - 1/3/2018	REVISED -



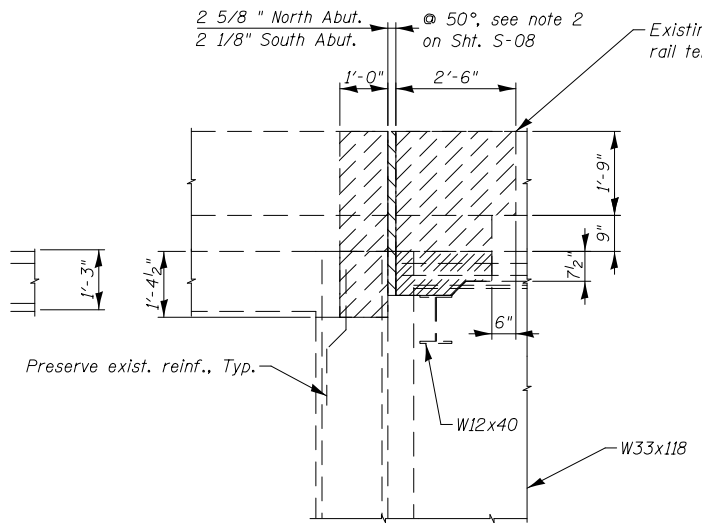
DEPARTMENT OF ENGINEERING  
DANVILLE, IL R. DAVID SCHNELLE, CITY ENGINEER

OREGON ST BRIDGE REPAIRS

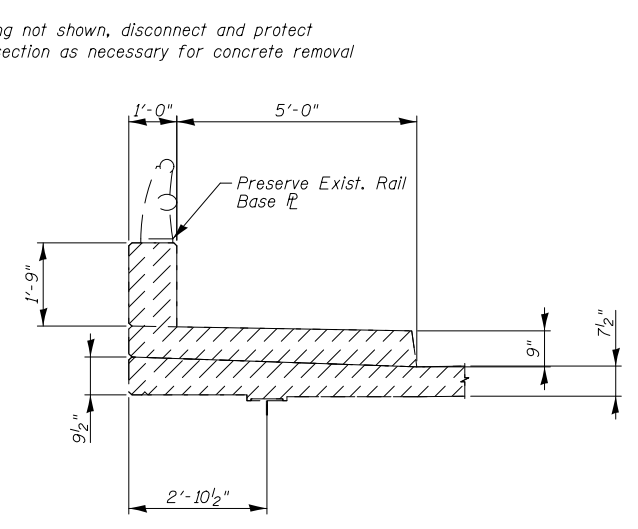
RT.	PROJECT NUMBER	COUNTY	TOTAL SHEETS	SHEET NO.
*	16-00352-00-BR	VERMILION	13	
OREGON		SHT. OF S-13		
2017 BRIDGE REPAIRS		STRUCTURE NO. 092-6017		



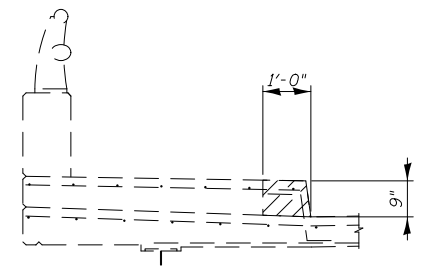
SECTION A-A



SECTION B-B



SECTION THRU SIDEWALK



SECTION C-C

- Notes:
- Existing reinforcement extending into the removal area shall be cleaned, straightened and incorporated into the new construction unless noted otherwise. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system the cost of which shall be included in Concrete Removal or Pavement Removal.
  - See Sheets S-03 & S-04 for removals for Preformed Joint Seal.
  - Partial bridge sidewalk removal paid for as Concrete Removal, see schedule on Sheet S-08 for locations.

**BILL OF MATERIAL**

DESCRIPTION	UNIT	TOTAL
Continuously Reinforced Concrete Pavement Removal	Sq. Yd.	62.9
Concrete Removal	Cu. Yd.	15.1
Sidewalk Removal	Sq. Ft.	50
Combination Curb & Gutter Removal	Ft.	13

FILE LOCATION = X:\PROJECTS\CITY\CURRENT\16-00353-00BR-BRIDGE REPAIRS\STRUC\OREGON BRIDGE.DGN

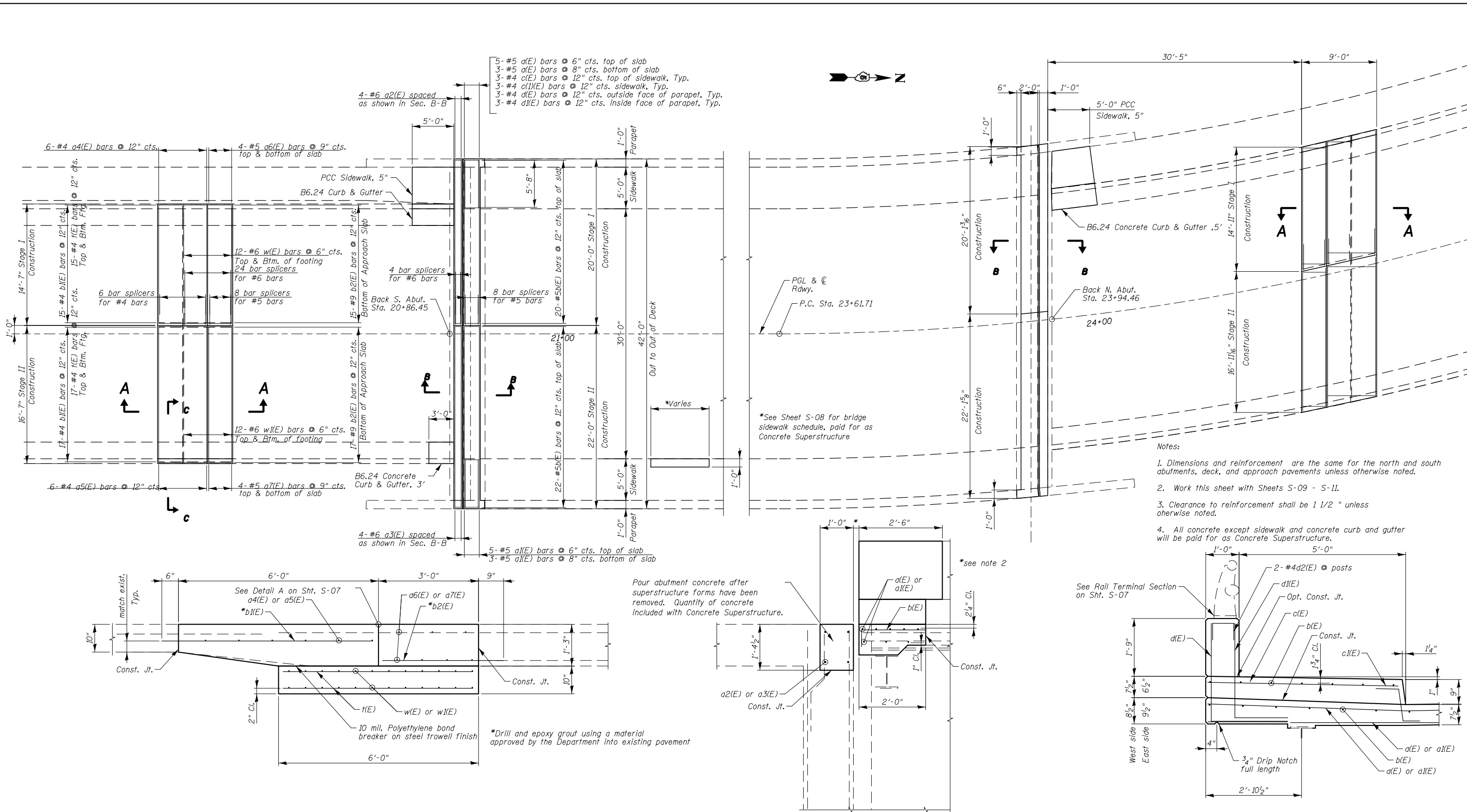
DESIGNED - ---	REVISED -
DRAWN - ---	REVISED -
CHECKED - ---	REVISED -
DATE - 1/3/2018	REVISED -



DEPARTMENT OF ENGINEERING  
 DANVILLE, IL R. DAVID SCHNELLE, CITY ENGINEER  
 Scale: 3/32" = 1'-0"

OREGON ST BRIDGE REPAIRS  
 REMOVAL PLAN AND DETAILS

RTE.	PROJECT NUMBER	COUNTY	TOTAL SHEETS	SHEET NO.
•	16-00352-00-BR	VERMILION	13	06
•	OREGON		SHT. S-06 OF S-13	
	2017 BRIDGE REPAIRS	STRUCTURE NO. 092-6017		



SECTION A-A

SECTION B-B

SECTION THRU SIDEWALK

- Notes:
1. Dimensions and reinforcement are the same for the north and south abutments, deck, and approach pavements unless otherwise noted.
  2. Work this sheet with Sheets S-09 - S-11.
  3. Clearance to reinforcement shall be 1 1/2" unless otherwise noted.
  4. All concrete except sidewalk and concrete curb and gutter will be paid for as Concrete Superstructure.

Pour abutment concrete after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.

\*Drill and epoxy grout using a material approved by the Department into existing pavement

FILE LOCATION = \\PROJECTS\CITY\CURRENT\16-00353-00BR-BRIDGE REPAIRS\STRUC\OREGON BRIDGE.DGN

DESIGNED -	---	REVISED -	---
DRAWN -	---	REVISED -	---
CHECKED -	---	REVISED -	---
DATE -	1/3/2018	REVISED -	---



DEPARTMENT OF ENGINEERING  
 DANVILLE, IL R. DAVID SCHNELLE, CITY ENGINEER  
 Scale: 3/32" = 1'-0"

OREGON ST BRIDGE REPAIRS  
 DECK PLAN

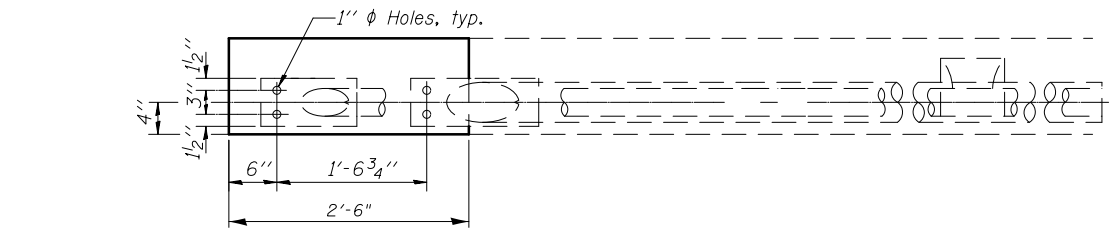
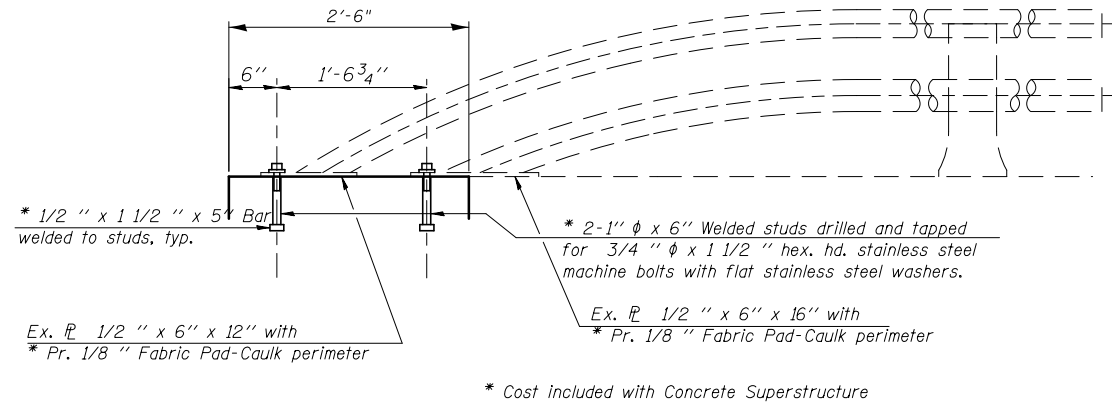
RT.	PROJECT NUMBER	COUNTY	TOTAL SHEETS	SHEET NO.
*	16-00352-00-BR	VERMILION	13	07
*OREGON		SHT. S-07 OF S-13		
2017 BRIDGE REPAIRS		STRUCTURE NO. 092-6017		

**JOINT SETTING TABLE**

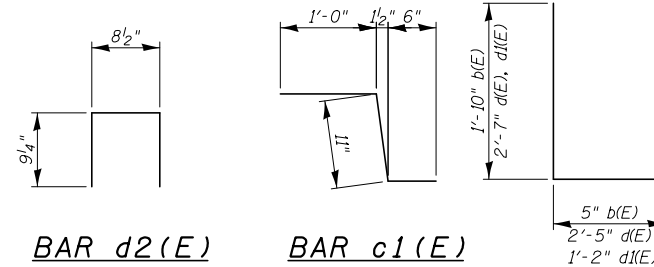
Air Temp. (F)	North Abut. Joint (Inch)	South Abut. Joint (Inch)	Approach Pmnt. Joints (Inch)
15	2.25	1.75	3.75
20	2.25	1.50	3.75
25	2.25	1.50	3.50
30	2.00	1.50	3.50
35	2.00	1.50	3.25
40	2.00	1.50	3.25
45	1.75	1.50	3.00
50	1.75	1.50	2.75
55	1.75	1.50	2.75
60	1.75	1.50	2.50
65	1.50	1.50	2.50
70	1.50	1.50	2.25
75	1.50	1.50	2.25
80	1.50	1.50	2.00
85	1.50	1.50	2.00
90	1.50	1.50	1.75
95	1.50	1.50	1.50
100	1.50	1.50	1.50

**Notes:**

- The joint opening shall be determined per Article 520.04. The minimum dimension shall be 1 1/2" for installation purposes.
- Preformed Joint Seal installed in existing pavement will be measured and paid for according to Article 520 of the Standard Specifications. Preformed Joint Seal installed in new concrete shall be included in the cost of Concrete Superstructure.



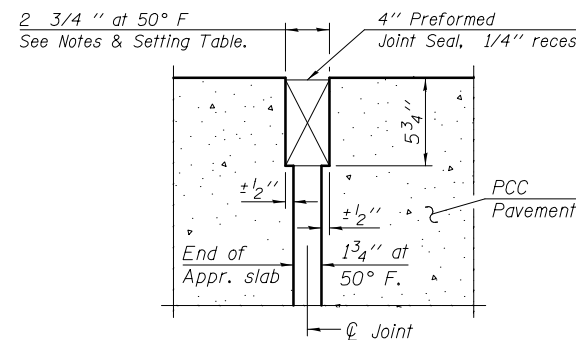
**RAIL TERMINAL SECTION**



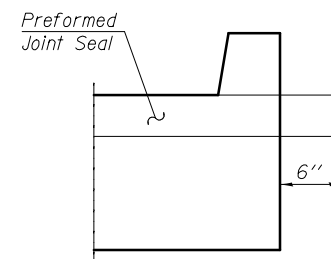
**BRIDGE SIDEWALK SCHEDULE**

Start Station	End Station	Location	*Length
22+19	22+33	Lt.	14'-0"
21+11	21+18	Rt.	7'-0"
21+68	21+72	Rt.	4'-0"
21+93	22+00	Rt.	7'-0"
22+17	22+30	Rt.	13'-0"
22+55	22+61	Rt.	6'-0"
22+71	22+81	Rt.	10'-0"
23+00	23+37	Rt.	37'-0"

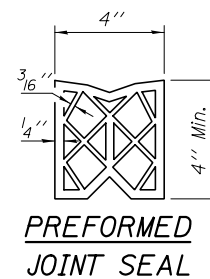
\*The Engineer shall field verify locations and lengths of repairs. See Section C-C on Sheet S-06 for removal limits



**DETAIL A**



**SECTION VIEW**



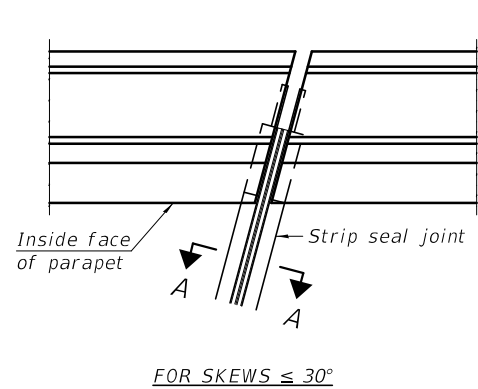
**PREFORMED JOINT SEAL**

**BILL OF MATERIAL**

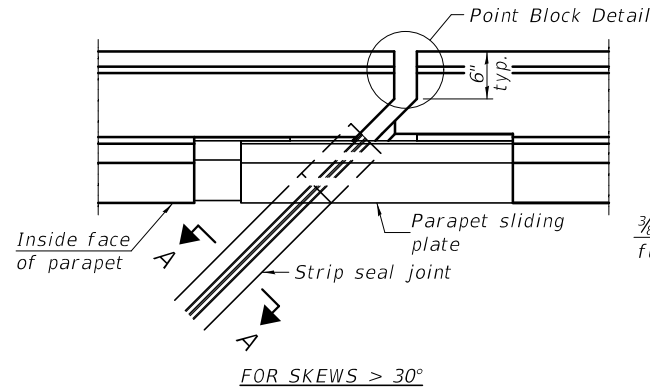
Bar	No.	Size	Length	Shape
a(E)	16	#5	19'-9"	—
a1(E)	16	#5	21'-9"	—
a2(E)	8	#6	19'-9"	—
a3(E)	8	#6	21'-9"	—
a4(E)	12	#4	14'-8"	—
a5(E)	12	#4	16'-8"	—
a6(E)	16	#5	14'-3"	—
a7(E)	16	#5	16'-3"	—
b(E)	112	#5	2'-3"	┌
b1(E)	64	#4	6'-4"	—
b2(E)	64	#9	3'-7"	—
c(E)	12	#4	5'-9"	┌
c1(E)	12	#4	2'-5"	┌
d(E)	12	#4	5'-0"	┌
d1(E)	12	#4	3'-9"	┌
d2(E)	16	#4	2'-3"	┌
f(E)	128	#4	5'-9"	—
w(E)	48	#6	14'-3"	—
w1(E)	48	#6	16'-3"	—
Concrete Superstructure			Cu. Yd.	14.9
Protective Coat			Sq. Yd.	50
Reinforcement Bars, Epoxy Coated			Pound	6110
Bar Splicers			Each	100
Preformed Joint Seal 4"			Foot	65
PCC Sidewalk 5"			Sq. Ft.	50
*Combination Concrete Curb & Gutter B6.24			Ft.	13

\*See General Note 10 on Sheet S-02



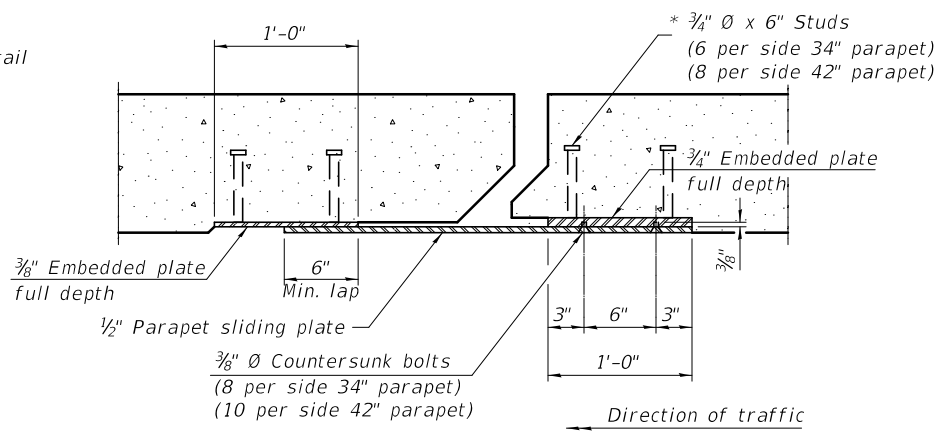


FOR SKEWS  $\leq 30^\circ$

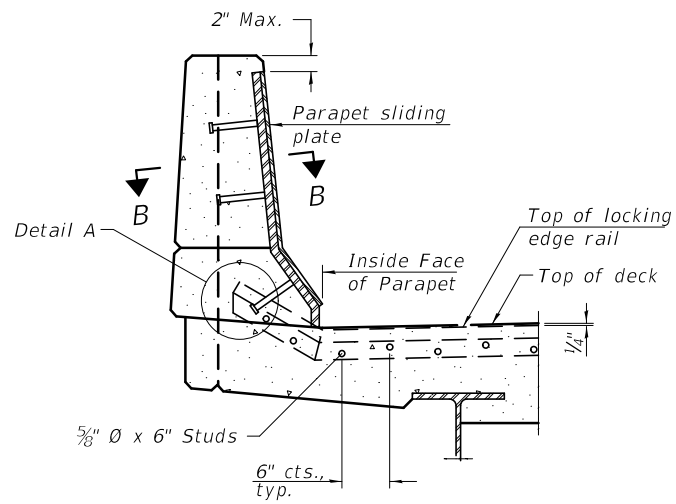


FOR SKEWS  $> 30^\circ$

**PLAN AT PARAPET**

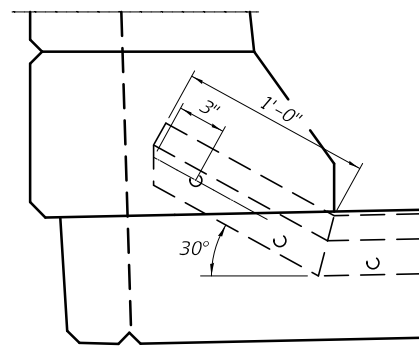


**SECTION B-B**

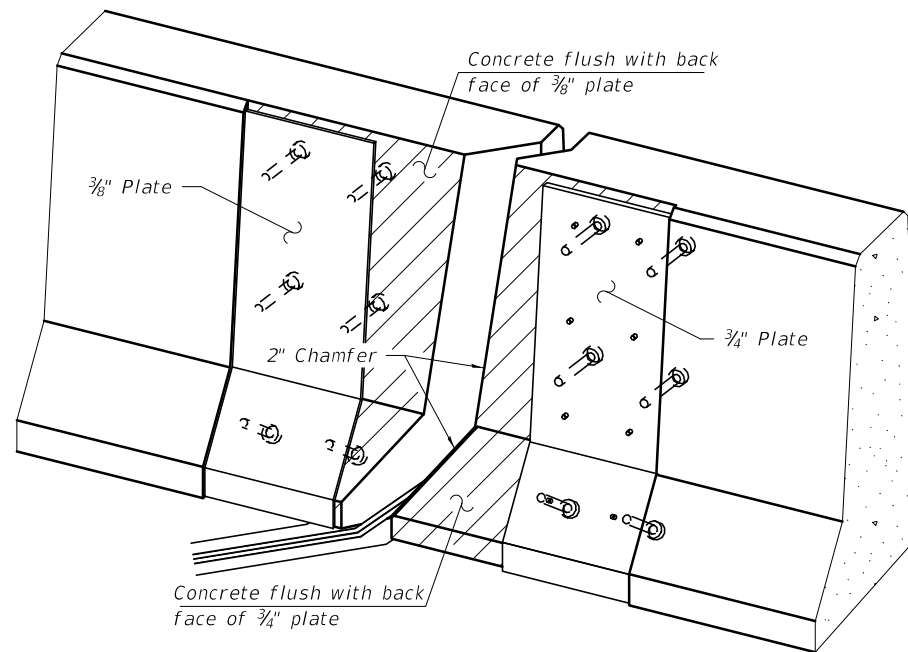


**ELEVATION AT PARAPET**

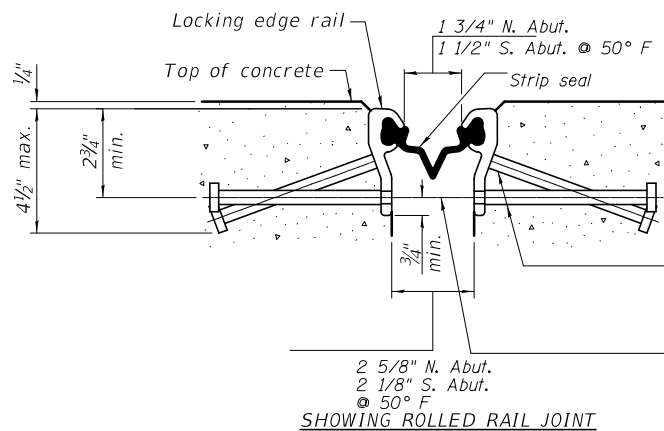
(Skews  $> 30^\circ$  shown. Skews =  $30^\circ$  similar except as shown in plan view.)



**DETAIL A**



**TRIMETRIC VIEW**  
(Showing embedded plates only)



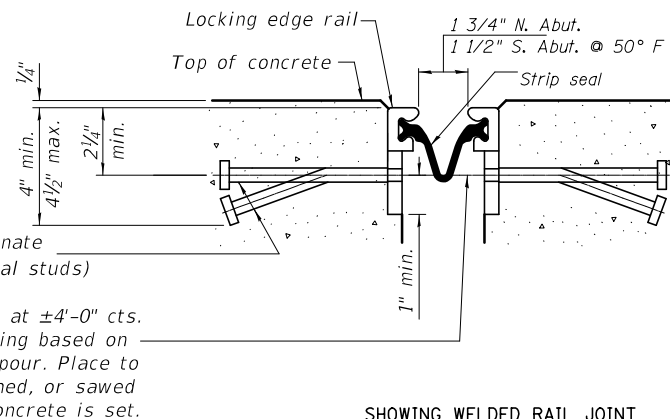
SHOWING ROLLED RAIL JOINT

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

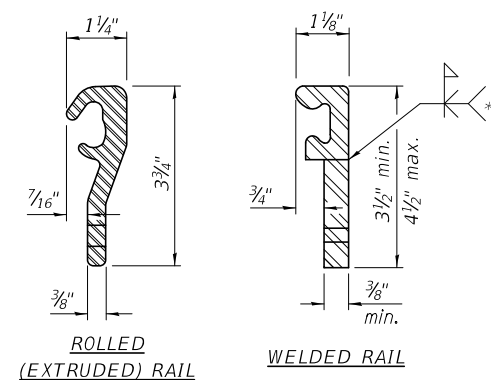
3/8"  $\phi$  threaded rods in 7/16"  $\phi$  holes at  $\pm 4'-0"$  cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

**SECTION A-A**

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

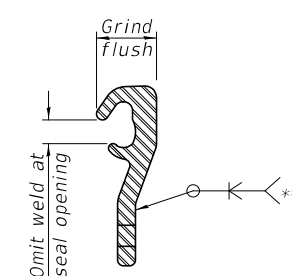


SHOWING WELDED RAIL JOINT



**LOCKING EDGE RAILS**

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



**LOCKING EDGE RAIL SPLICE**

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

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	80

**Notes:**

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

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

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

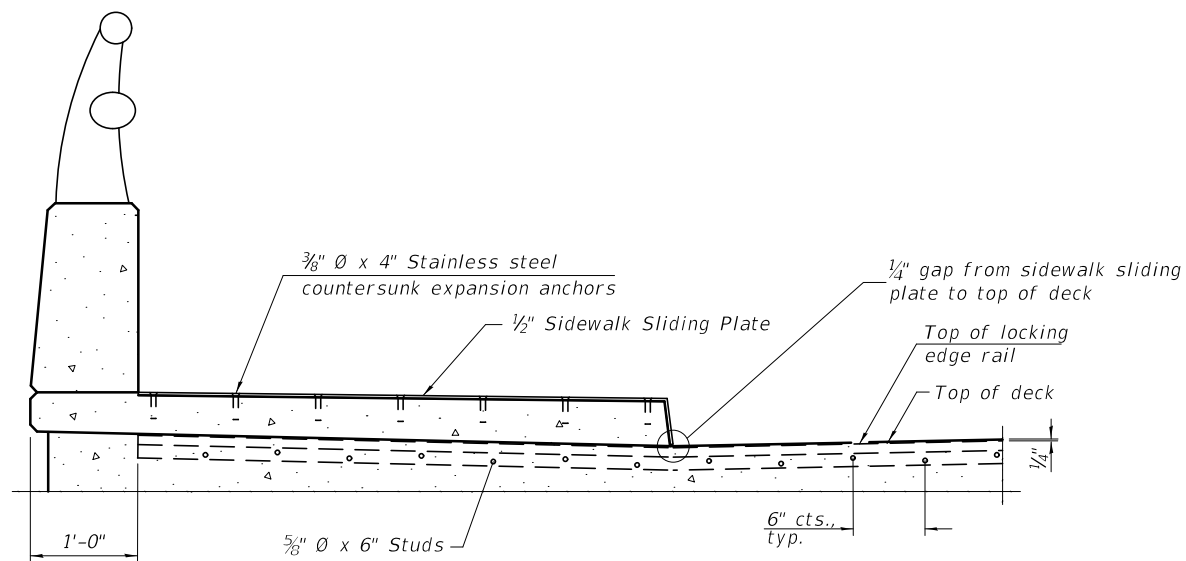
The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

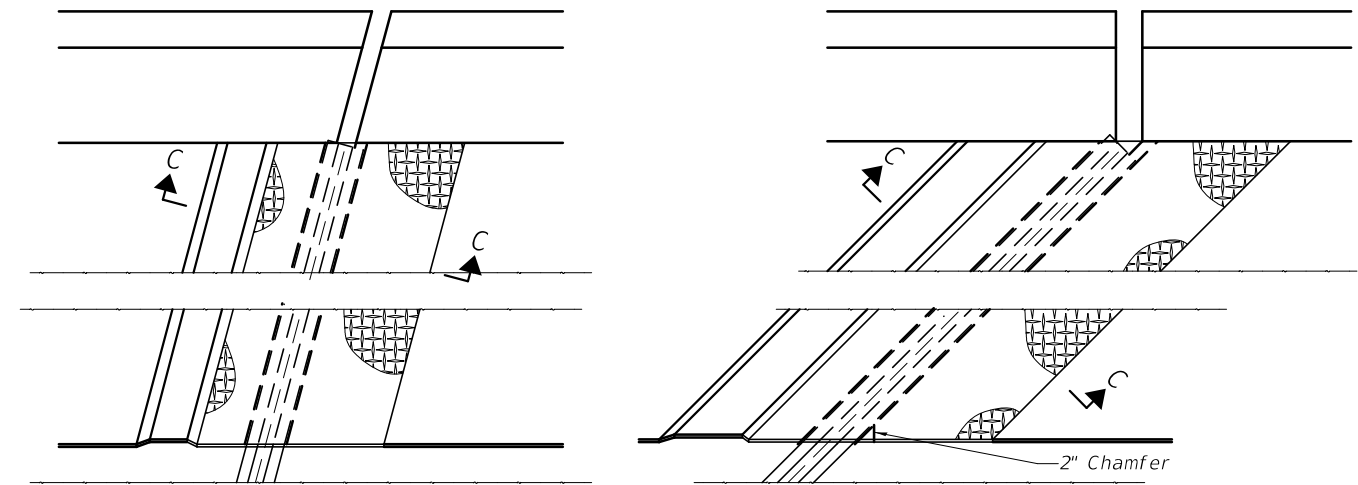
Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted.

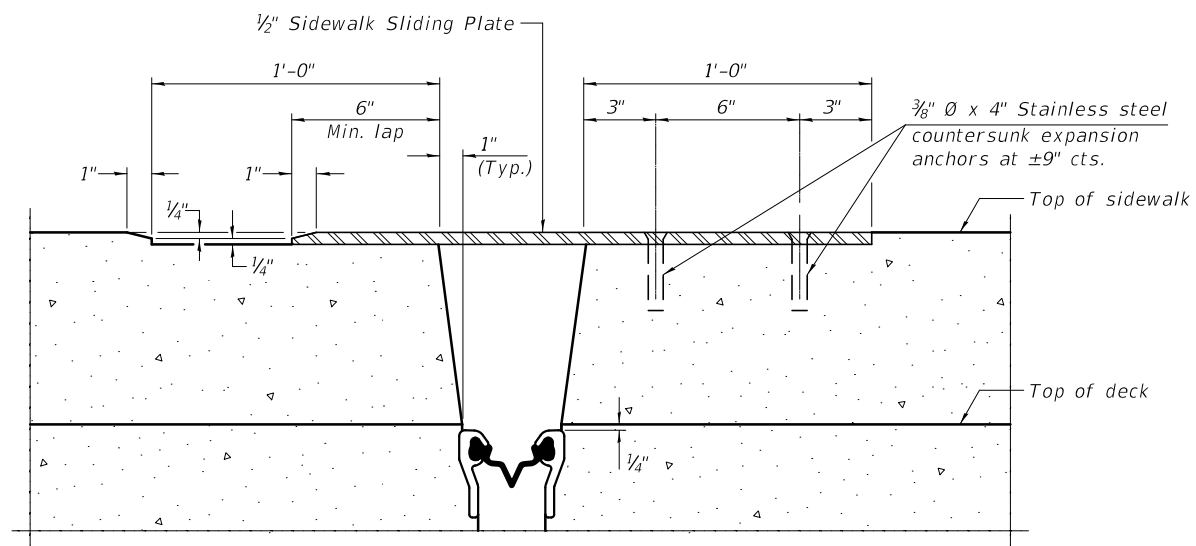
The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to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



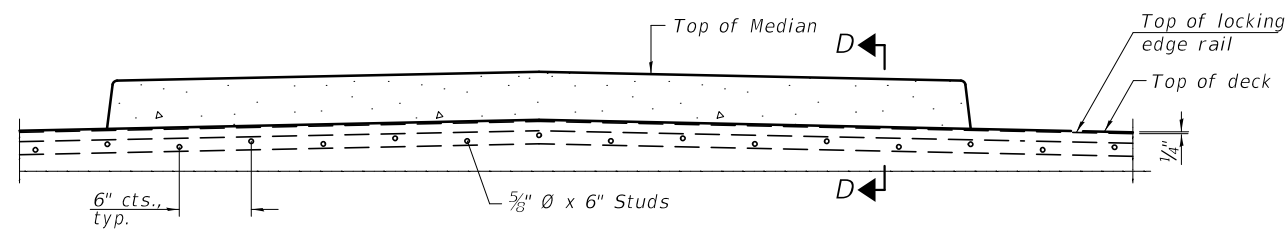
ELEVATION AT RAISED SIDEWALK



PLAN AT RAISED SIDEWALK

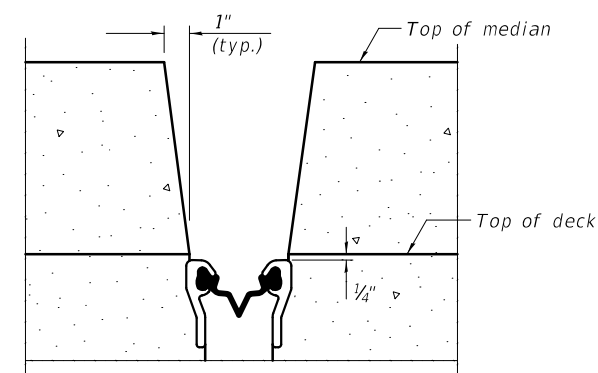


SECTION C-C



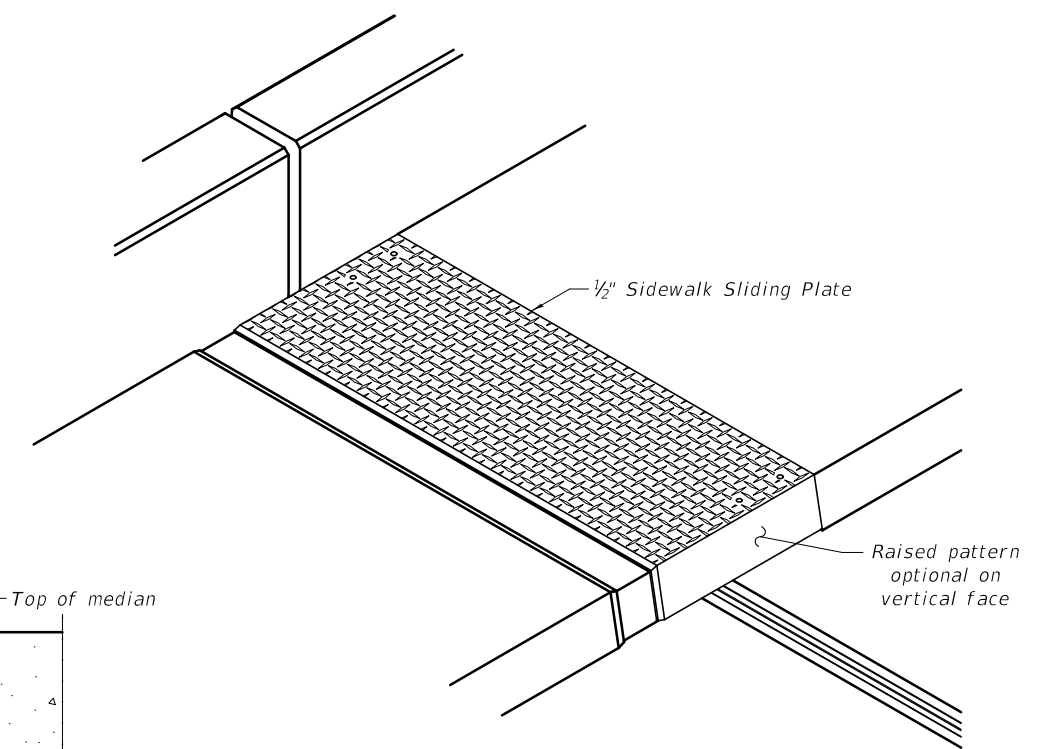
ELEVATION AT MEDIAN

For skews  $>$  30°, chamfer acute corners 2" similar to sidewalk.



SECTION D-D

(at Rt. L's)



TRIMETRIC VIEW

EJ-SS-S

8-11-17

(Sheet 2 of 3)

FILE LOCATION = \\PROJECTS\CITY\CURRENT\16-00352-00BR-BRIDGE REPAIRS\STRUC\OREGON BRIDGE.DGN

DESIGNED - ---  
 DRAWN - ---  
 CHECKED - ---  
 DATE - 1/3/2018

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

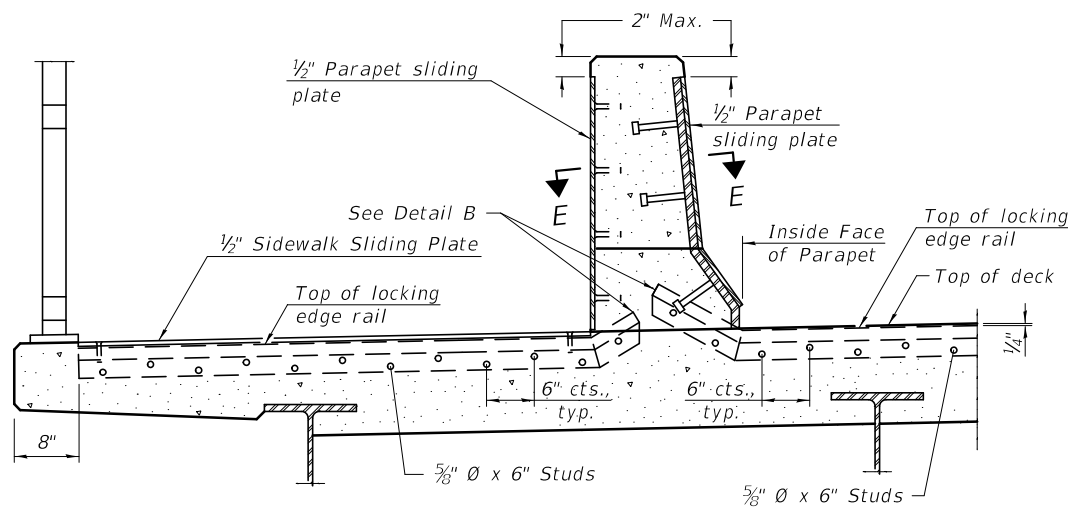


DEPARTMENT OF ENGINEERING  
 DANVILLE, IL R. DAVID SCHNELLE, CITY ENGINEER  
 Scale: N.A. = 1'-0"

2 OF 3

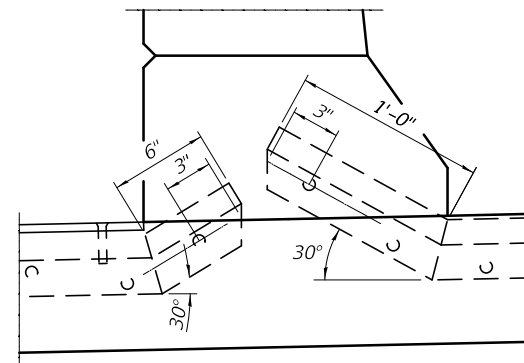
OREGON ST BRIDGE REPAIRS  
 PREFORMED JOINT SEAL-SIDEWALK

RT.	PROJECT NUMBER	COUNTY	TOTAL SHEETS	SHEET NO.
*	16-00352-00-BR	VERMILION	13	10
*	OREGON		SHT. S-10	OF S-13
	2017 BRIDGE REPAIRS		STRUCTURE NO. 092-6017	

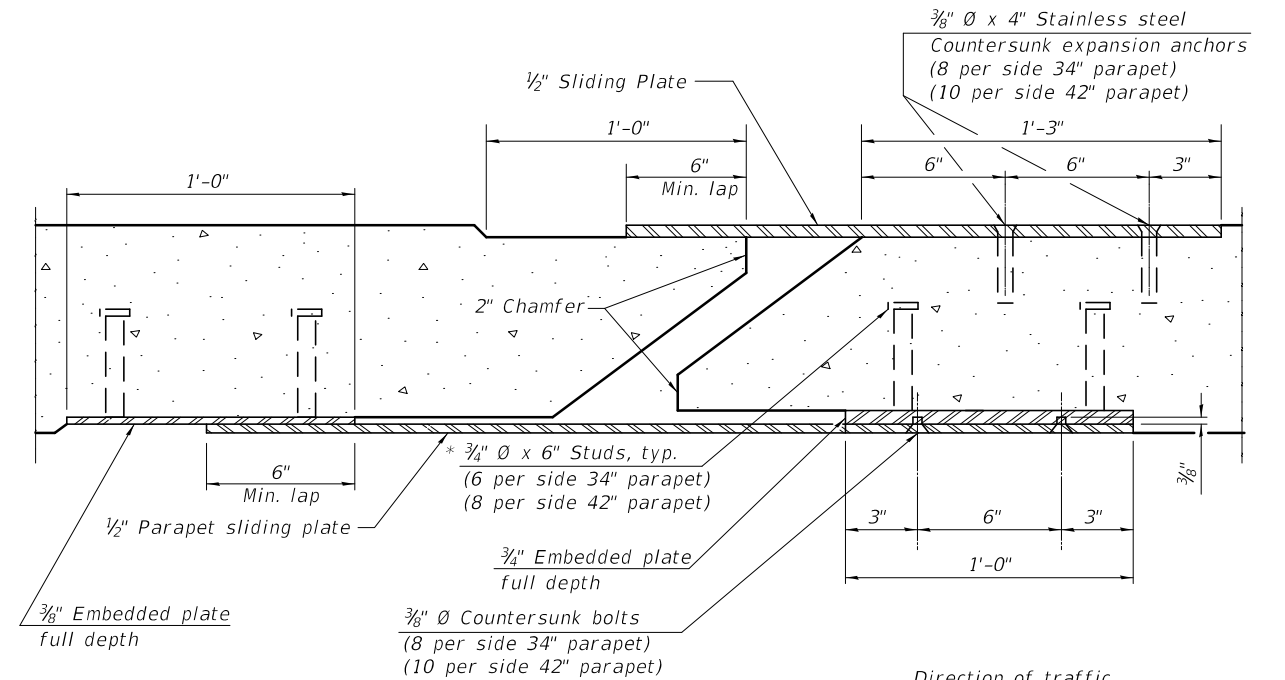


**ELEVATION AT DECK LEVEL SIDEWALK**

(Skews > 30° shown. Skews = 30° similar except as shown in plan view.)

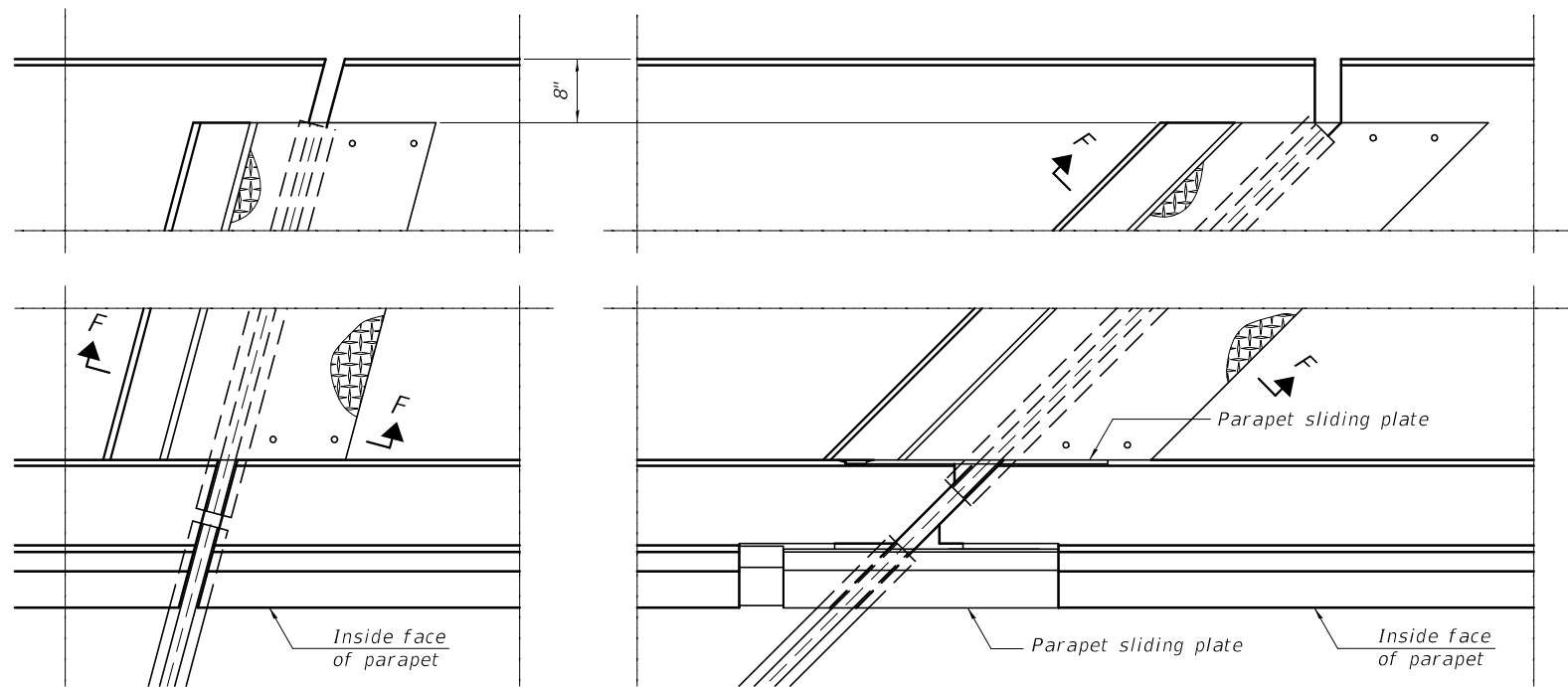


**DETAIL B**



**SECTION E-E**

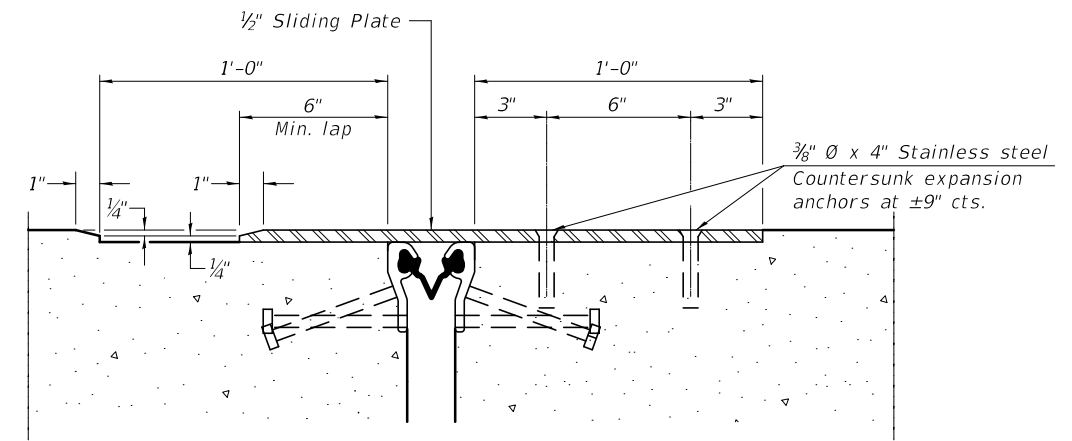
Direction of traffic



(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

**PLAN AT DECK LEVEL SIDEWALK**



**SECTION F-F**

EJ-SS-S

8-11-17

(Sheet 3 of 3)

FILE LOCATION = \\PROJECTS\CITY\CURRENT\16-00353-00BR-BRIDGE REPAIRS\STRUC\OREGON BRIDGE.DGN

DESIGNED - ---  
DRAWN - ---  
CHECKED - ---  
DATE - 1/3/2018

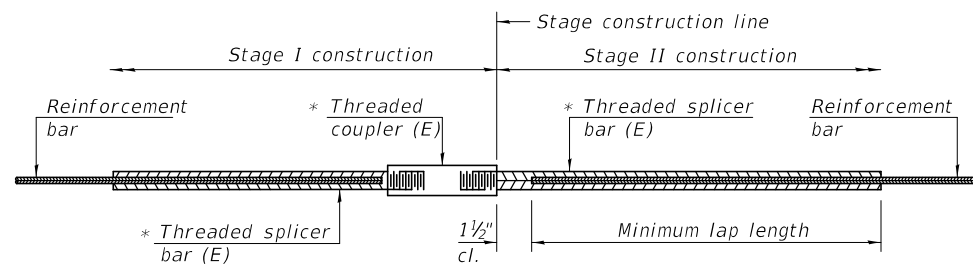
REVISED - ---  
REVISED - ---  
REVISED - ---  
REVISED - ---



DEPARTMENT OF ENGINEERING  
DANVILLE, IL R. DAVID SCHNELLE, CITY ENGINEER  
Scale: N.A. = 1'-0"

OREGON ST BRIDGE REPAIRS  
PREFORMED JOINT SEAL-SIDEWALK  
3 OF 3

RT#	PROJECT NUMBER	COUNTY	TOTAL SHEETS	SHEET NO.
•	16-00352-00-BR	VERMILION	13	11
•	OREGON		SHT. S-11	OF S-13
	2017 BRIDGE REPAIRS		STRUCTURE NO. 092-6017	

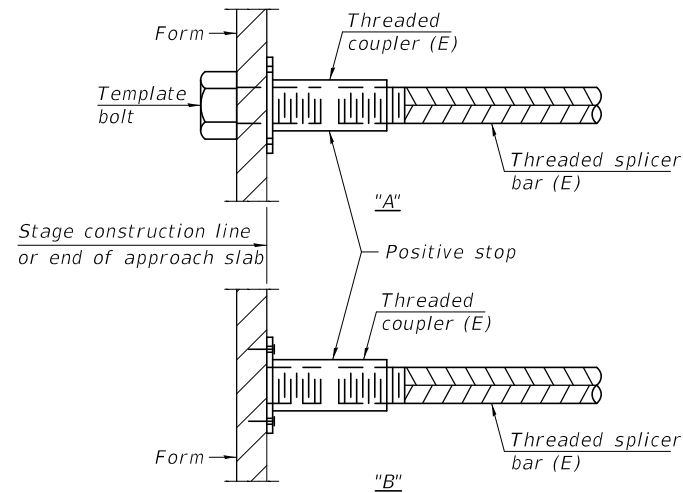


**STANDARD BAR SPLICER ASSEMBLY**

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

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

Location	Bar size	No. assemblies required	Minimum lap length
Slab	#5	16	3'-5"
Approach Pavements	#4	12	2'-2"
Approach Pavements	#5	16	3'-0"
Approach Pavements	#6	48	3'-2"
Abutments	#6	8	3'-6"

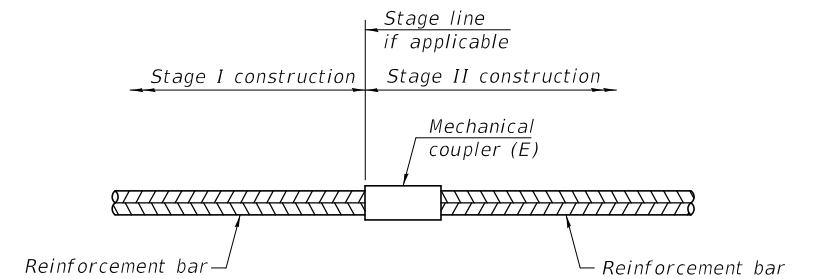


**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.

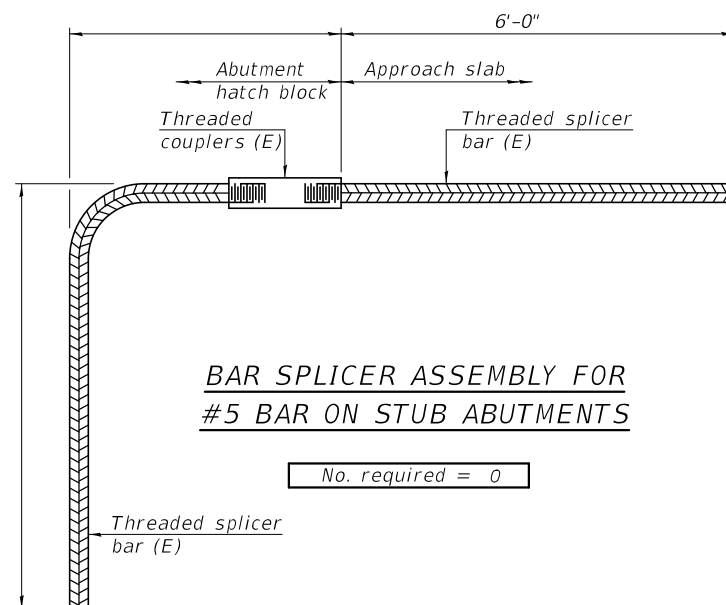
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required = 0

**NOTES**

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 2-17-2017

FILE LOCATION = X:\PROJECTS\CITY\CURRENT\16-00353-00BR-BRIDGE REPAIRS\STRUC\OREGON\_BRIDGE.DGN

DESIGNED - ---	REVISED -
DRAWN - ---	REVISED -
CHECKED - ---	REVISED -
DATE - 1/3/2018	REVISED -

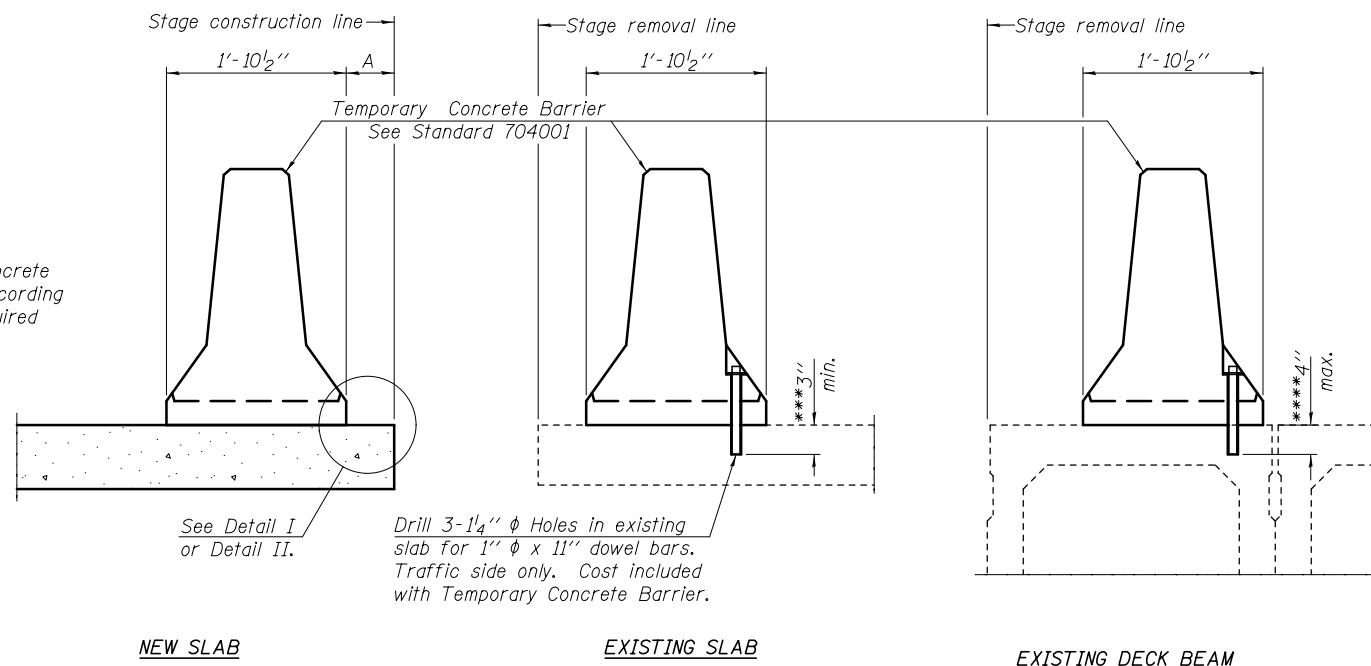


DEPARTMENT OF ENGINEERING  
DANVILLE, IL R. DAVID SCHNELLE, CITY ENGINEER  
Scale: N.A. = 1'-0"

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 092-6017

RT.	PROJECT NUMBER	COUNTY	TOTAL SHEETS	SHEET NO.
*	16-00352-00-BR	VERMILION	13	12
•	OREGON	SHT. S-12	OF	S-13
2017 BRIDGE REPAIRS			STRUCTURE NO. 092-6017	

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



**SECTIONS THRU SLAB OR DECK BEAM**

**NOTES**

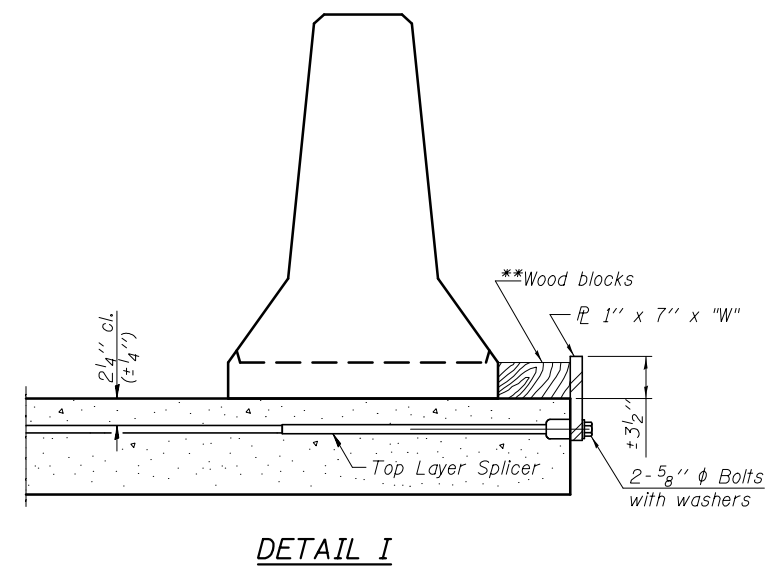
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.

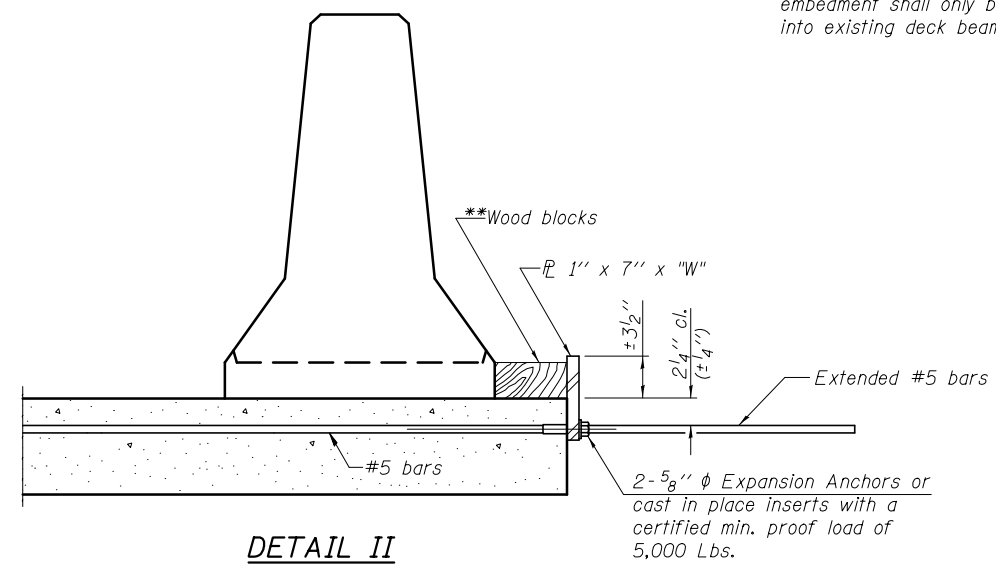
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

\*\*\* Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

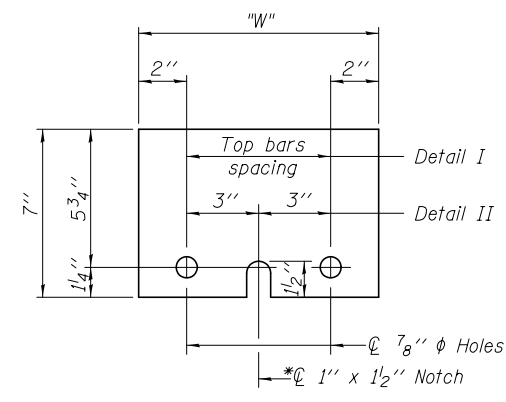
\*\*\*\* If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



**DETAIL I**



**DETAIL II**



**STEEL RETAINER PL 1" x 7" x "W"**

\* Required only with Detail II

\*\* Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

FILE LOCATION = X:\PROJECTS\CITY\CURRENT\16-00353-00BR-BRIDGE REPAIRS\STRUC\OREGON_BRIDGE.DGN	DESIGNED - ---	REVISED -	<p>DANVILLE, ILLINOIS 61832 TELEPHONE: 217.431.2400</p>	<p>DEPARTMENT OF ENGINEERING DANVILLE, IL R. DAVID SCHNELLE, CITY ENGINEER Scale: N.A. = 1'-0"</p>	<p>TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 092-6017</p>	RT.	PROJECT NUMBER	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN - ---	REVISED -	*				16-00352-00-BR	VERMILION	13	13	
CHECKED - ---	REVISED -	*OREGON						SHT. S-13 OF S-13		
DATE - 1/3/2018	REVISED -	2017 BRIDGE REPAIRS						STRUCTURE NO. 092-6017		