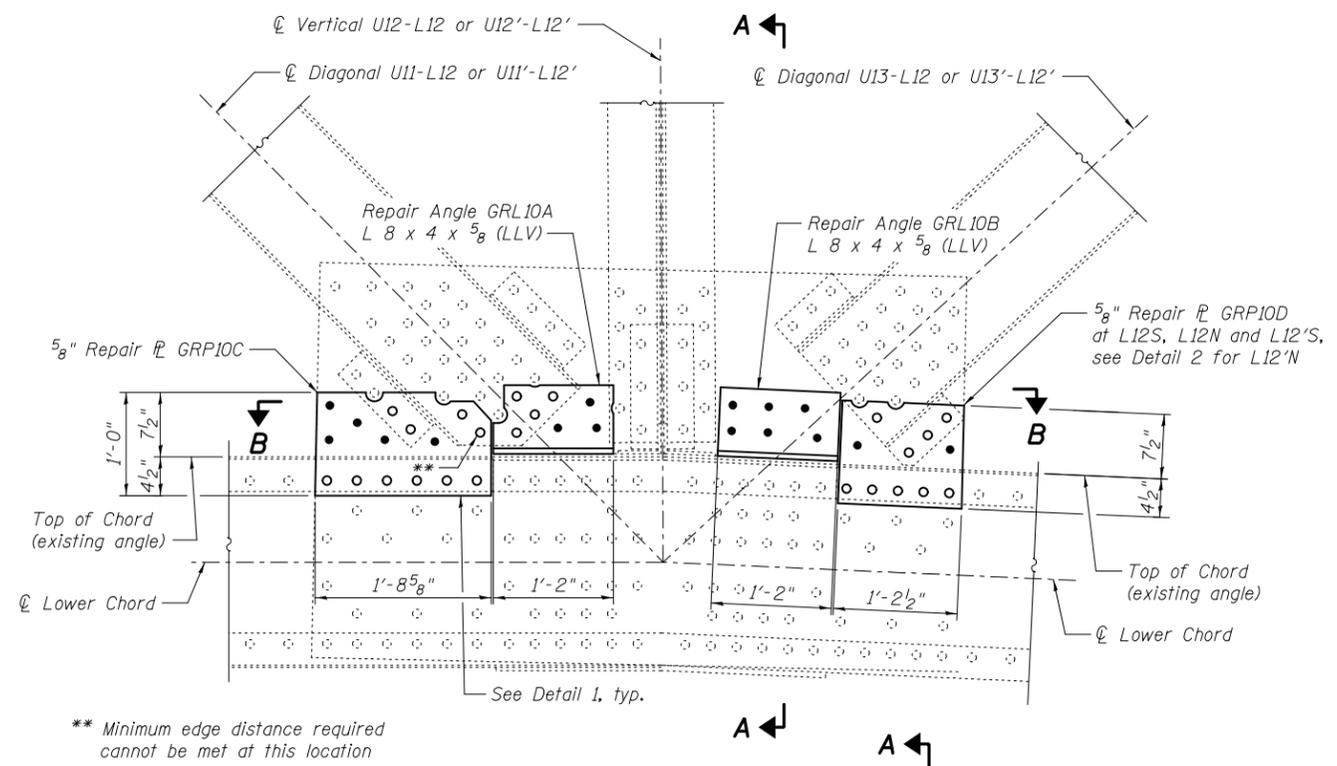


OUTSIDE ELEVATION

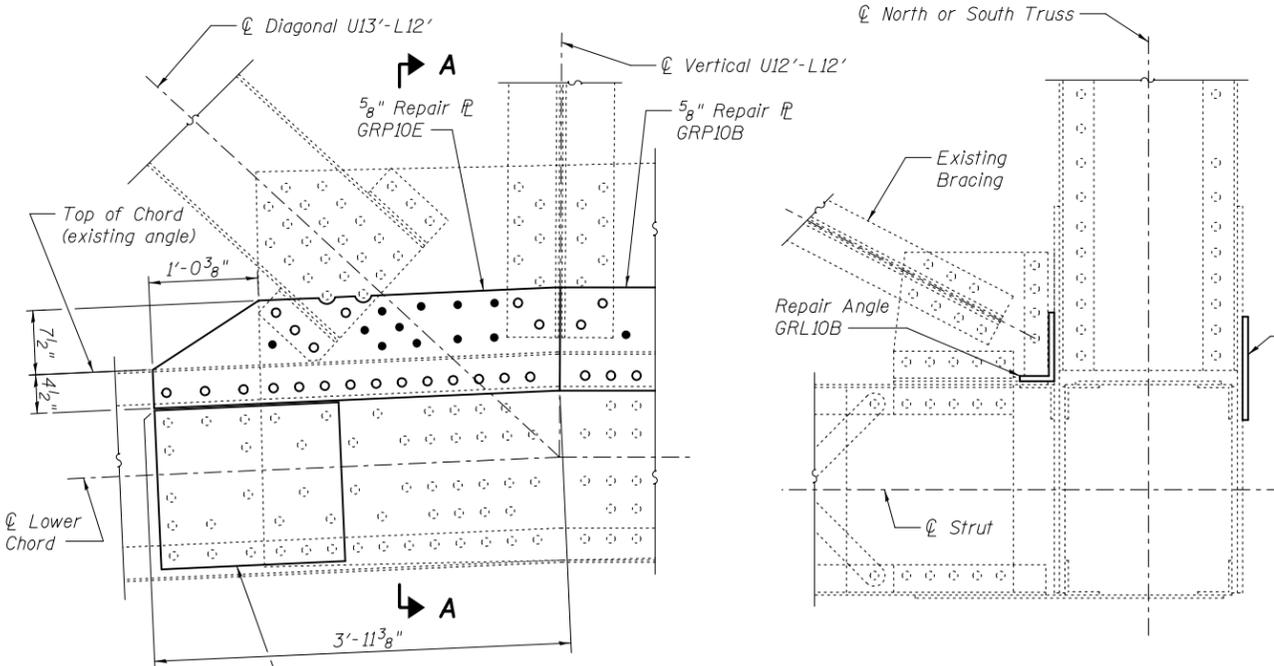


INSIDE ELEVATION

GUSSET PLATE L12 AND L12'

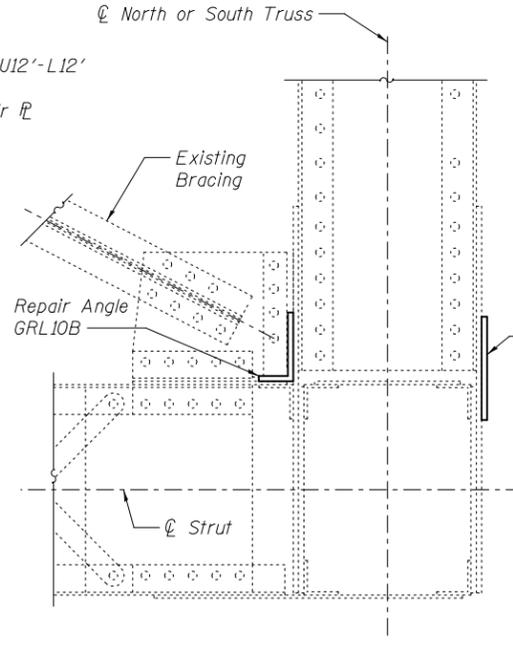
Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.

** Minimum edge distance required cannot be met at this location



DETAIL 2

(at L12'N only)



SECTION A-A

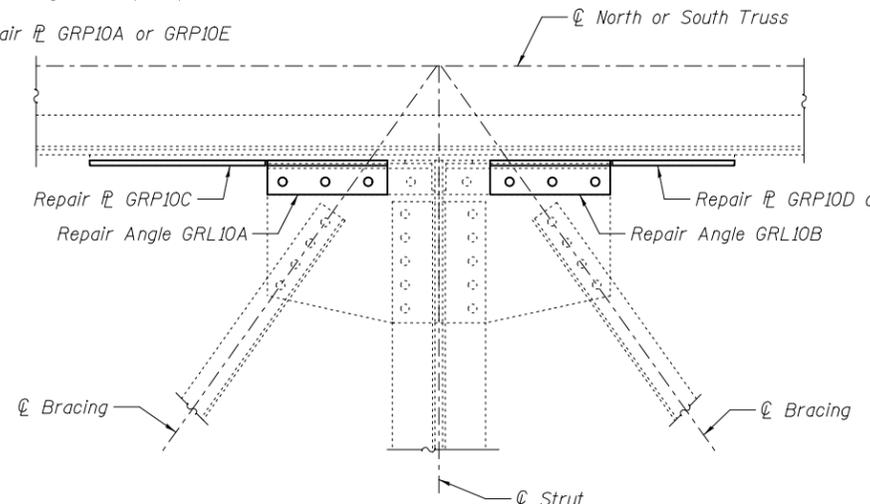
REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
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13	L12	South	1	1
15	L12'	North	1	1
15	L12'	South	1*	1

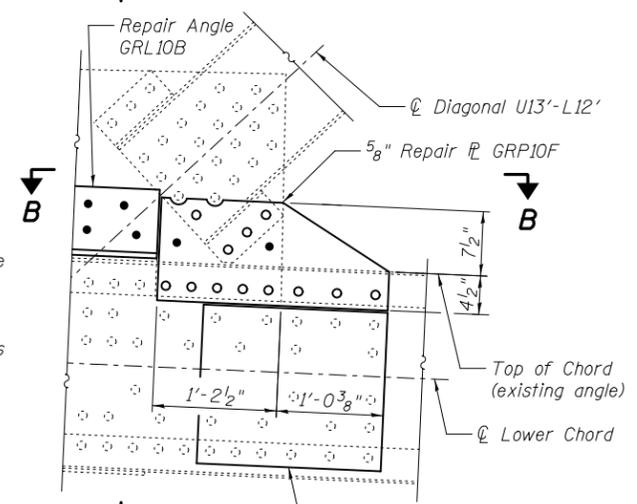
* Remove existing repair angle. Reuse existing holes and modify proposed fastener layout to accommodate additional fasteners in accordance with gusset repair procedures.

LEGEND

- Existing fastener to remain
- New 7/8" φ A325 bolt in new 5/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.



SECTION B-B



DETAIL 3

(at L12'N only)

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1,580



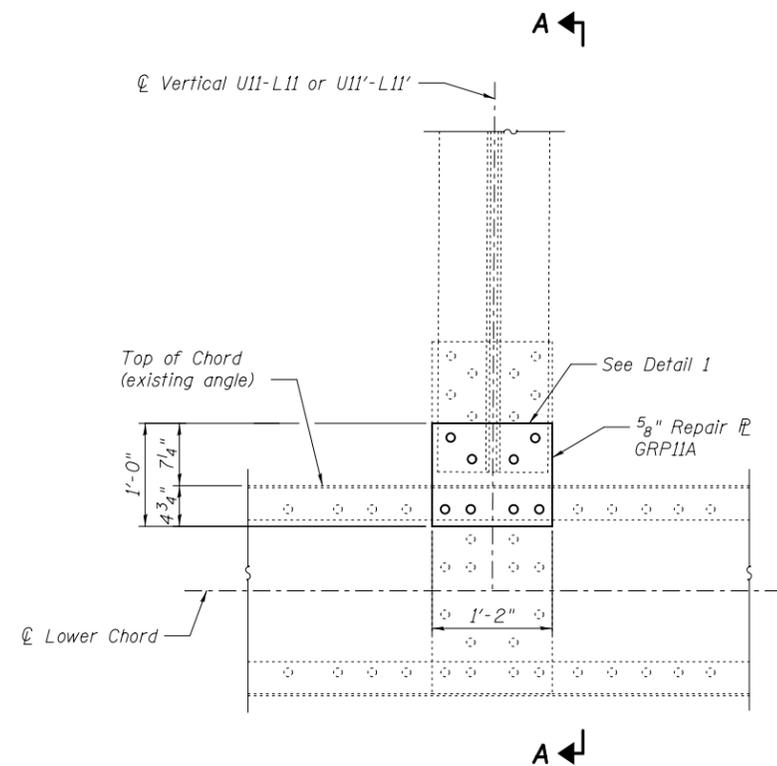
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

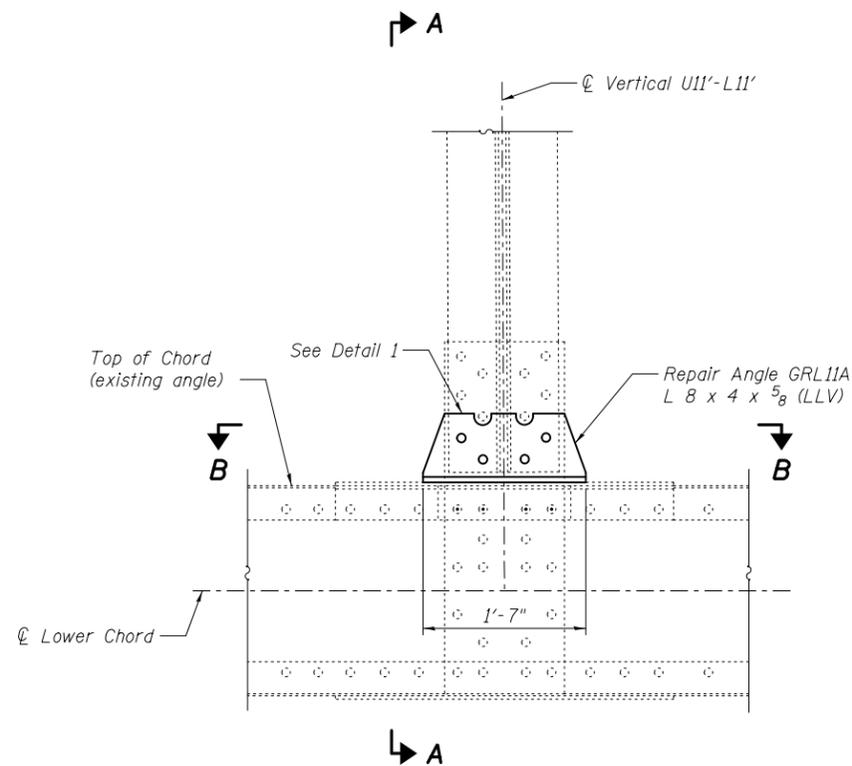
GUSSET PLATE REPAIRS - 10
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 33 OF 112 SHEETS

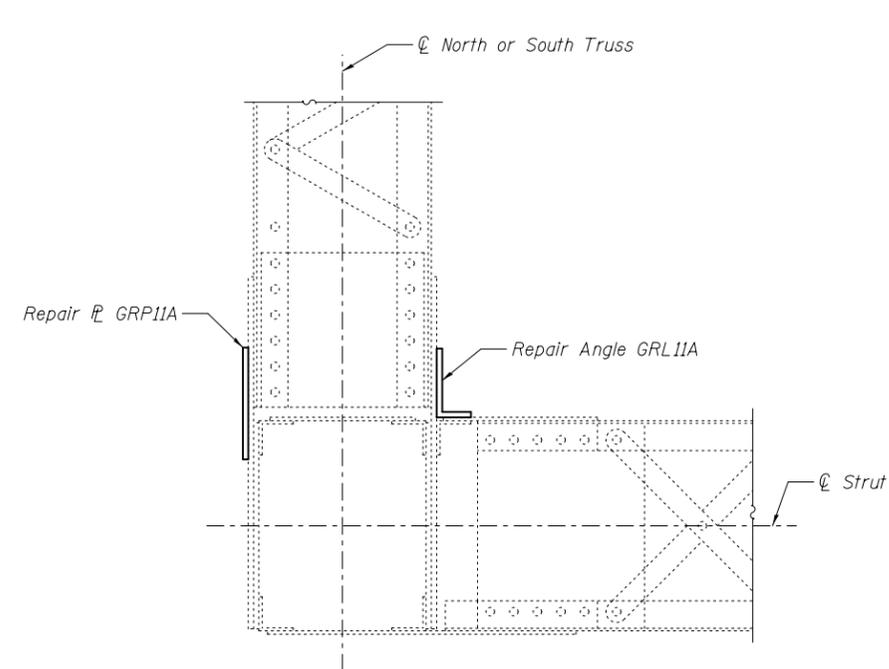
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103BI)-7	PEORIA/TAZEWELL	180	101
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



OUTSIDE ELEVATION



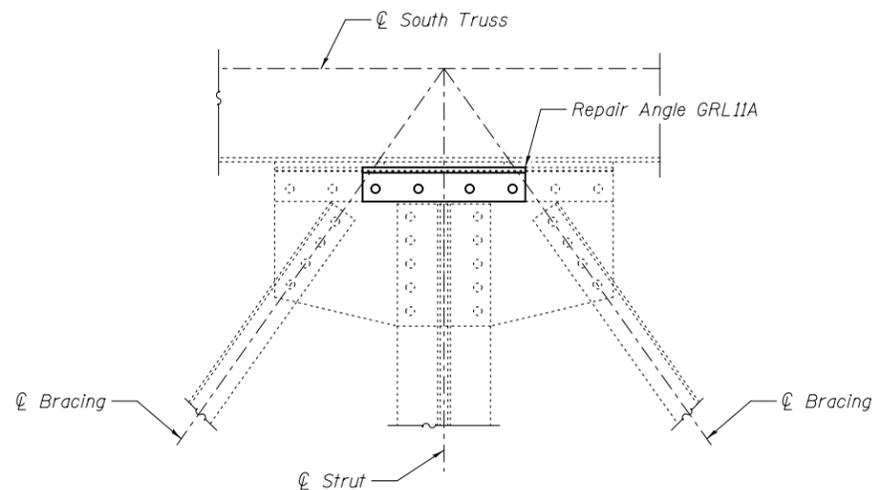
INSIDE ELEVATION



SECTION A-A

GUSSET PLATE L11 AND L11'

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION B-B

REPAIR LOCATIONS

Span	Joint	Truss	Inner Pl	Outer Pl
13	L11	North	N/A	1
13	L11	South	N/A	1
15	L11'	South	1	1

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	160



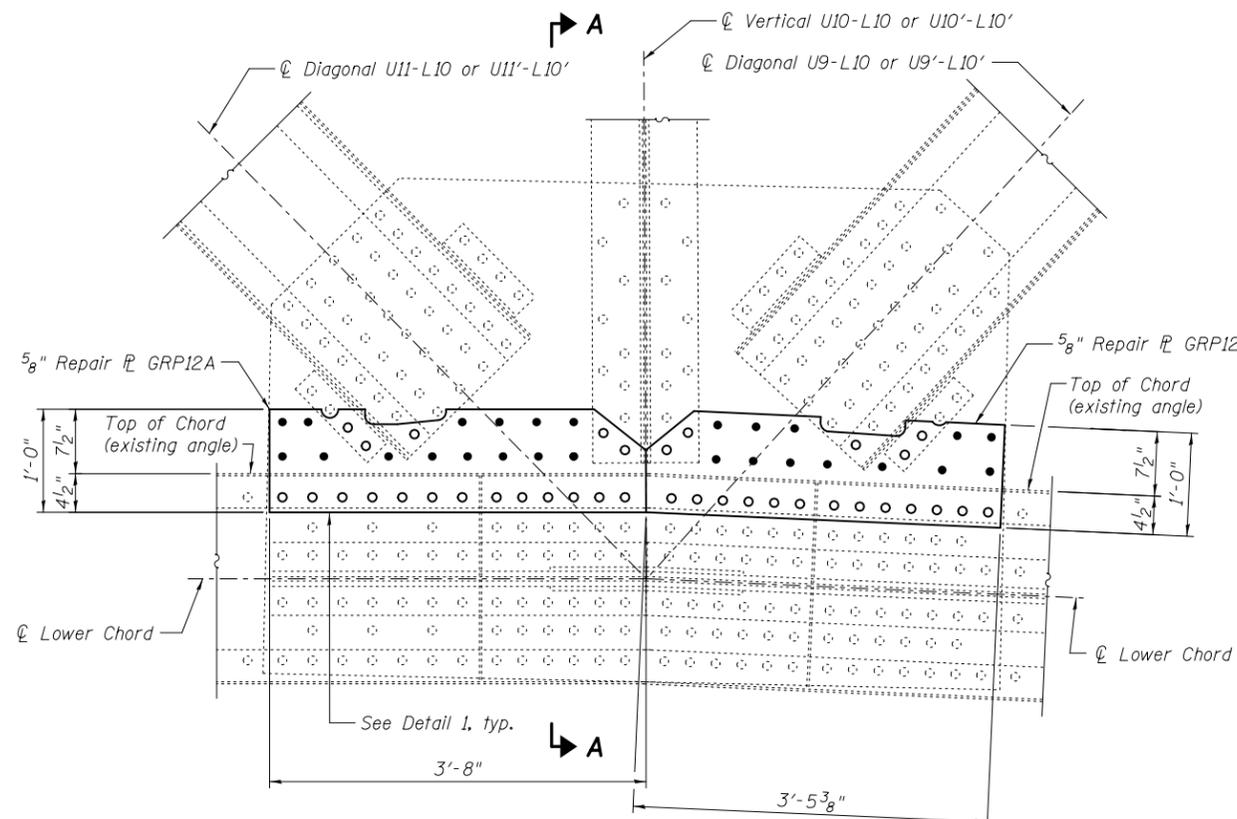
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

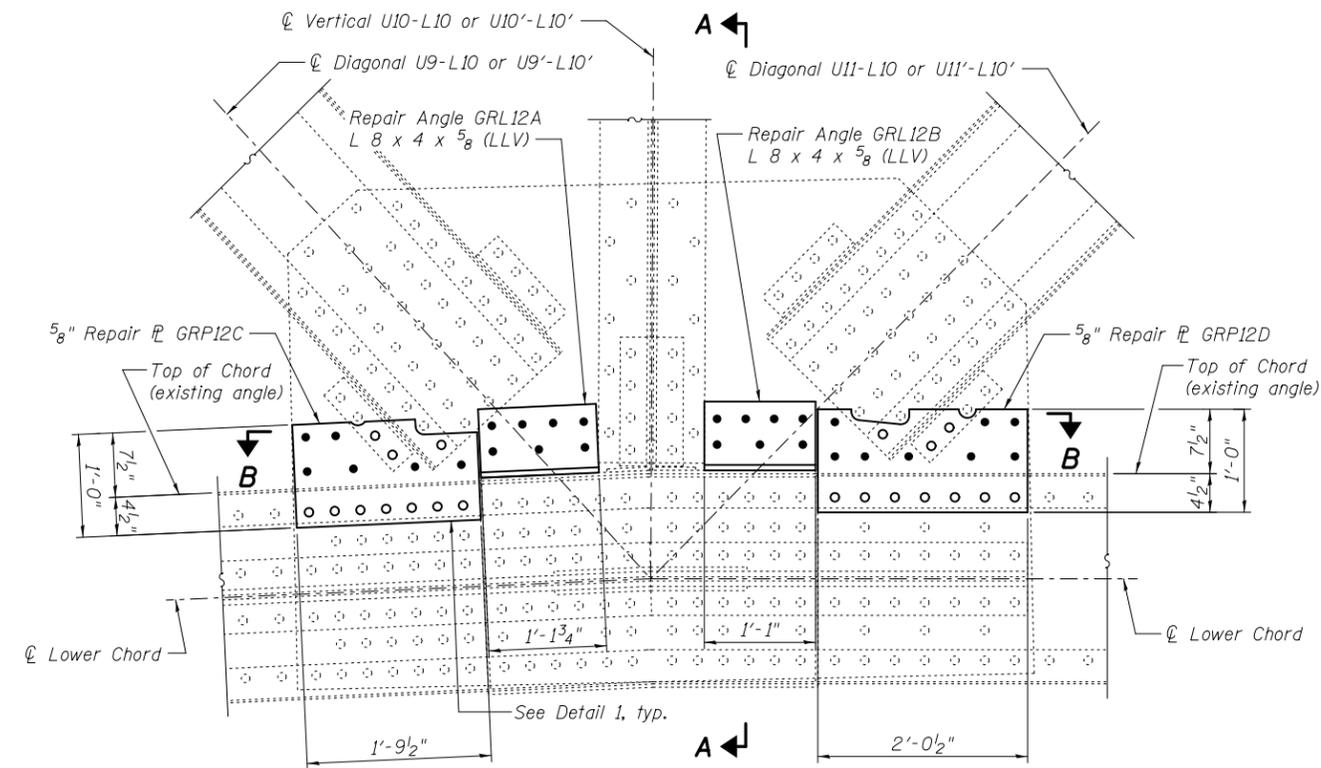
GUSSET PLATE REPAIRS - 11
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 34 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



OUTSIDE ELEVATION



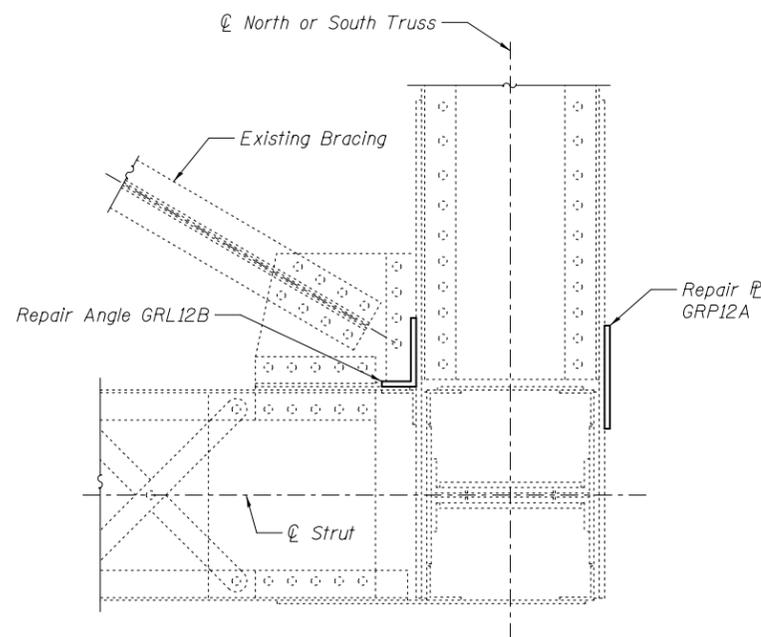
INSIDE ELEVATION

GUSSET PLATE L10 AND L10'

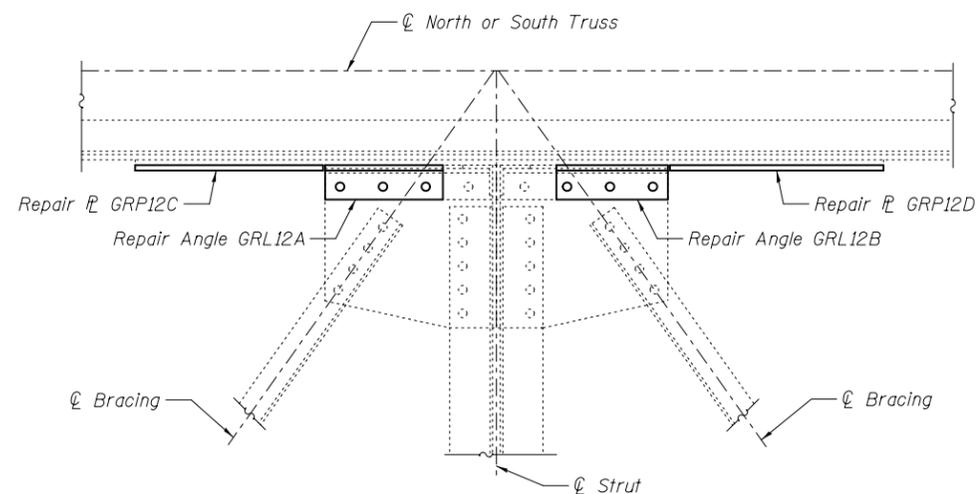
Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
13	L10	North	1	1
13	L10	South	1	1
15	L10'	North	1	1



SECTION A-A



SECTION B-B

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1300



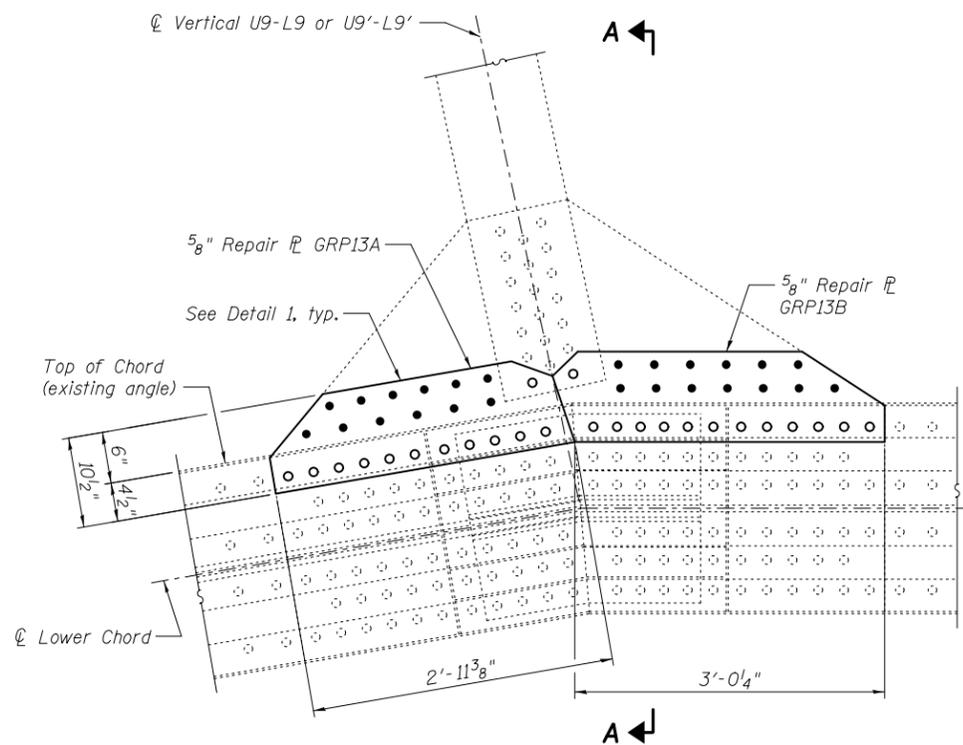
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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

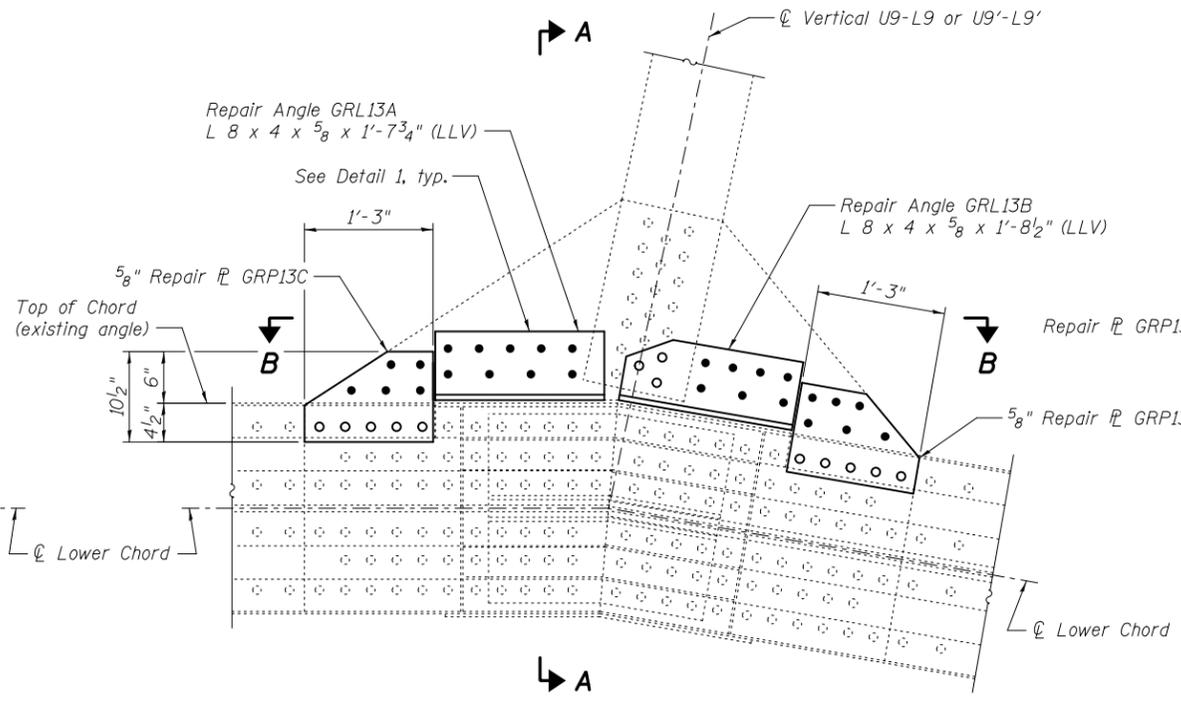
GUSSET PLATE REPAIRS - 12
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 35 OF 112 SHEETS

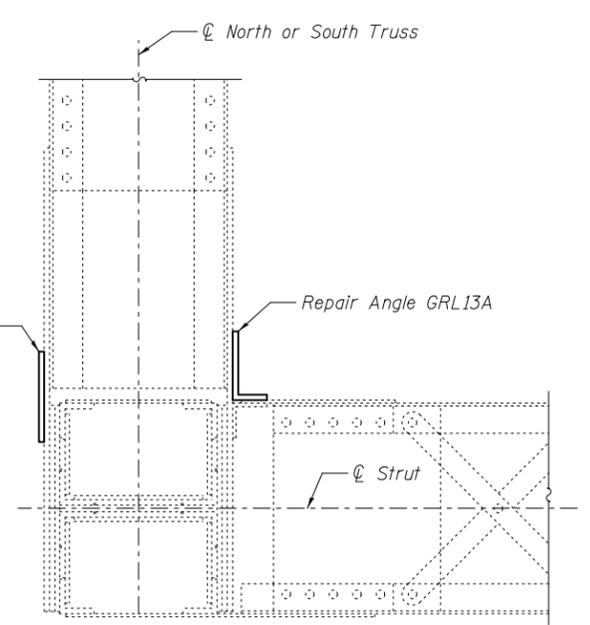
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	103
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



OUTSIDE ELEVATION



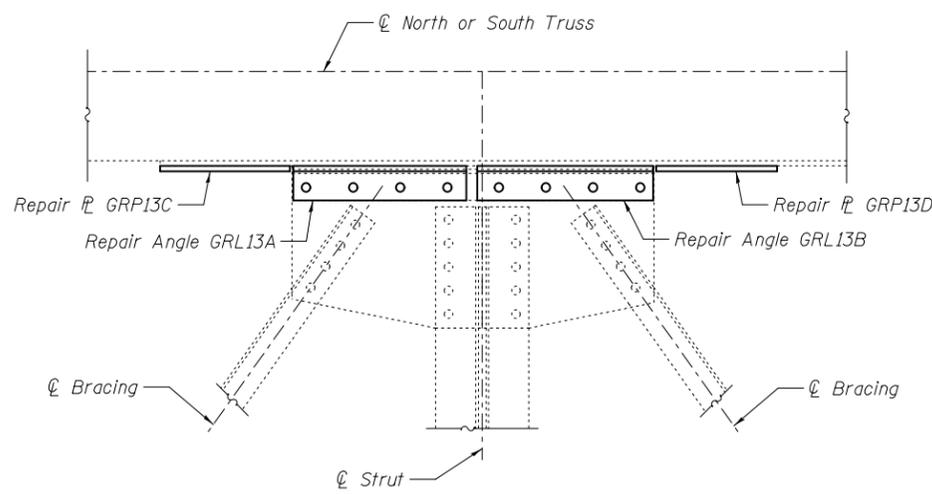
INSIDE ELEVATION



SECTION A-A

GUSSET PLATE L9 AND L9'

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION B-B

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
13	L9	North	1	1
13	L9	South	1	1
15	L9'	North	1	1
15	L9'	South	1	1

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1,440



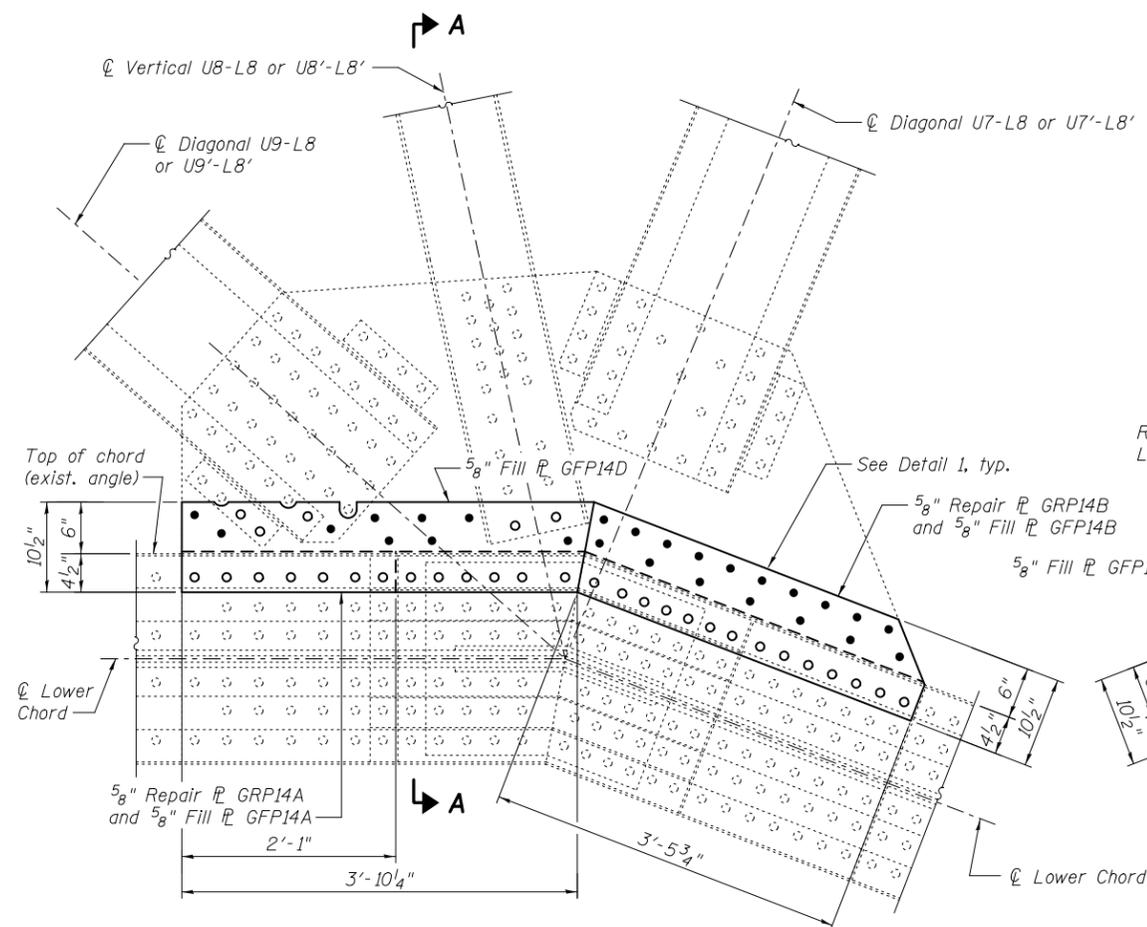
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

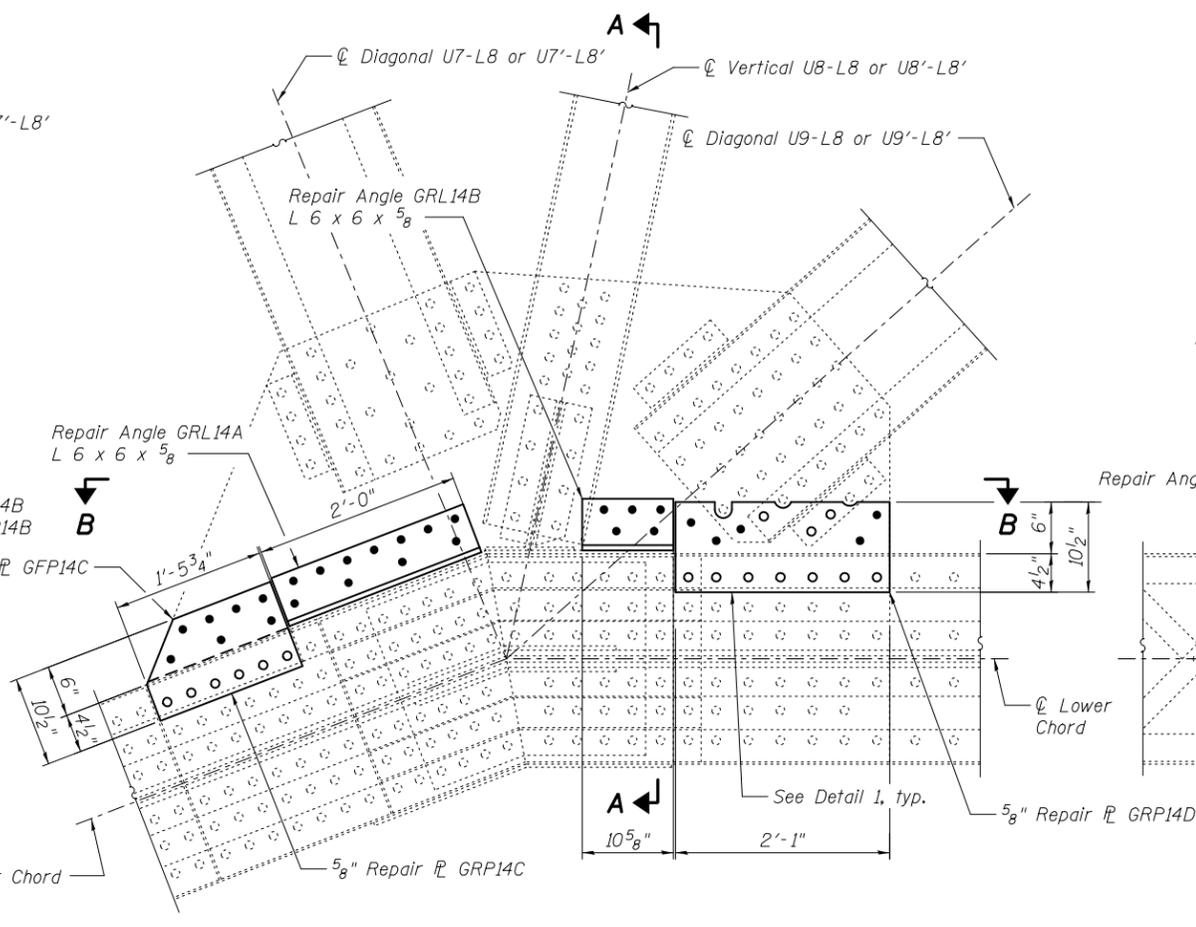
GUSSET PLATE REPAIRS - 13
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 36 OF 112 SHEETS

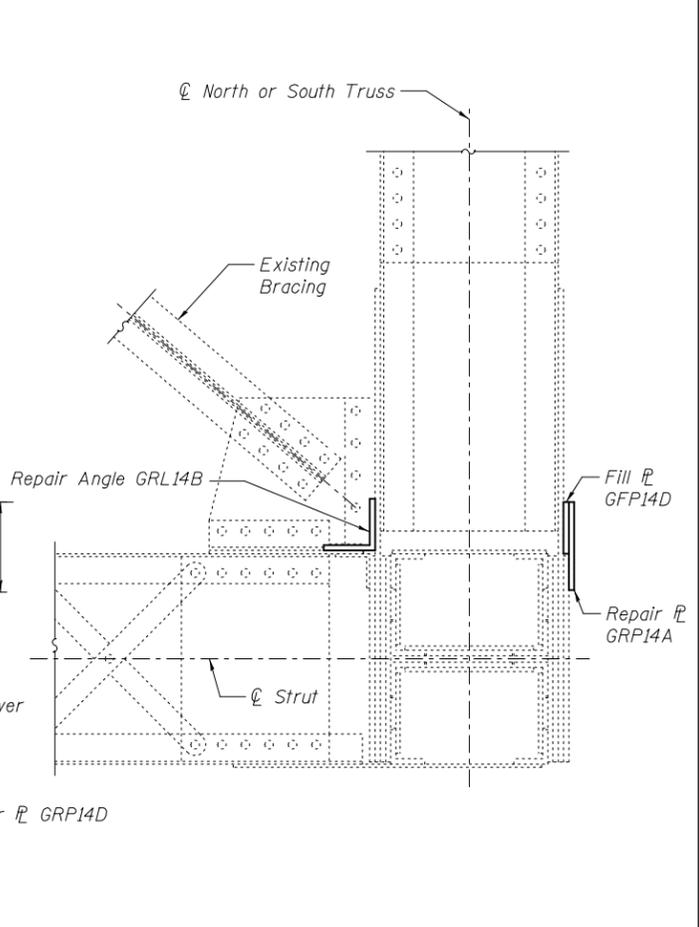
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	104
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



OUTSIDE ELEVATION



INSIDE ELEVATION



SECTION A-A

GUSSET PLATE L8 AND L8'

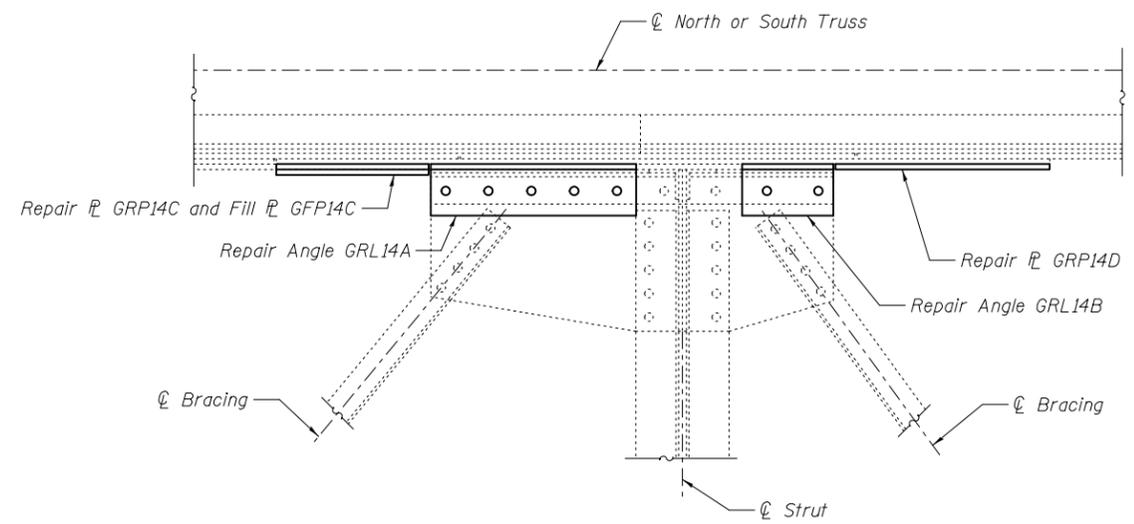
Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
13	L8	North	1	1
15	L8'	South	1	1



SECTION B-B

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1,110



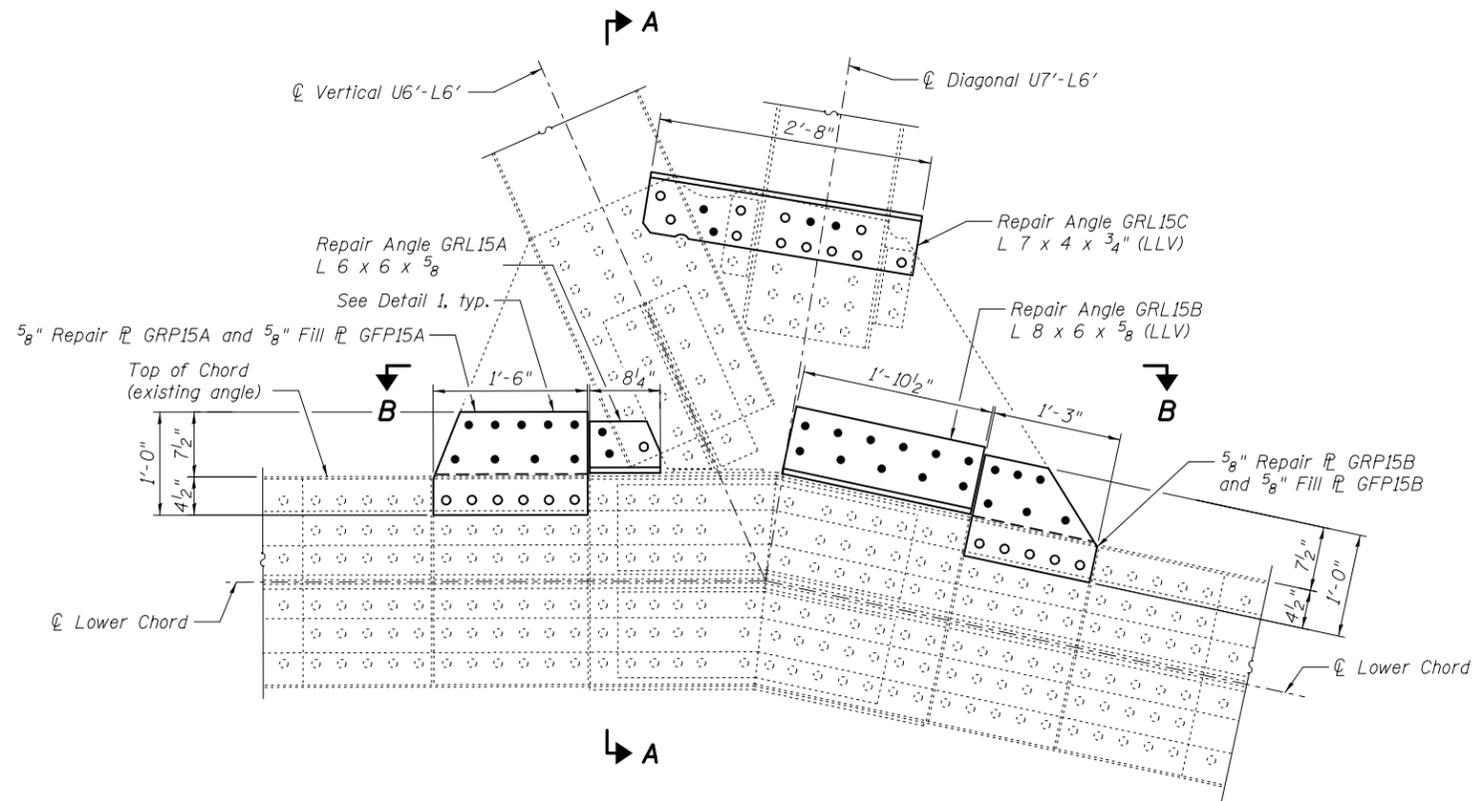
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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

GUSSET PLATE REPAIRS - 14
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 37 OF 112 SHEETS

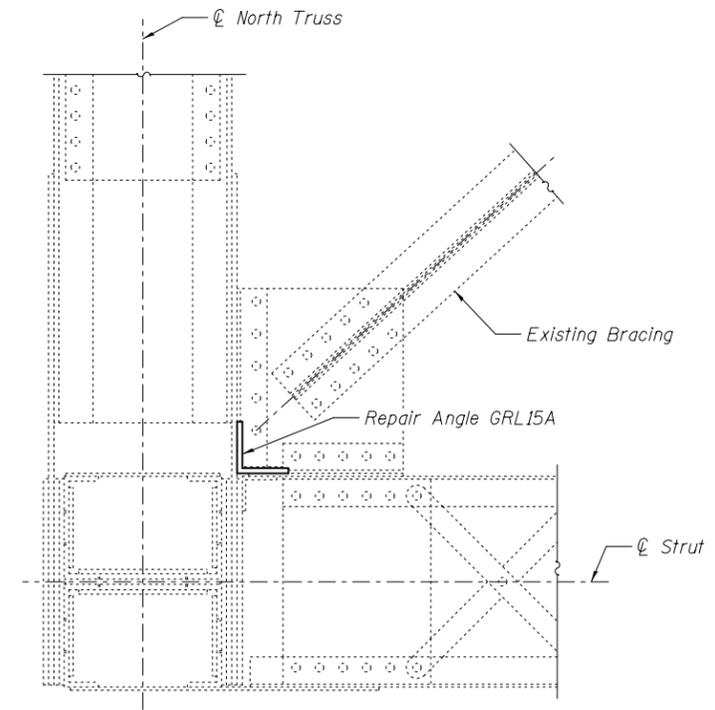
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669	(103B)I-7	PEORIA/TAZEWELL	180	105
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



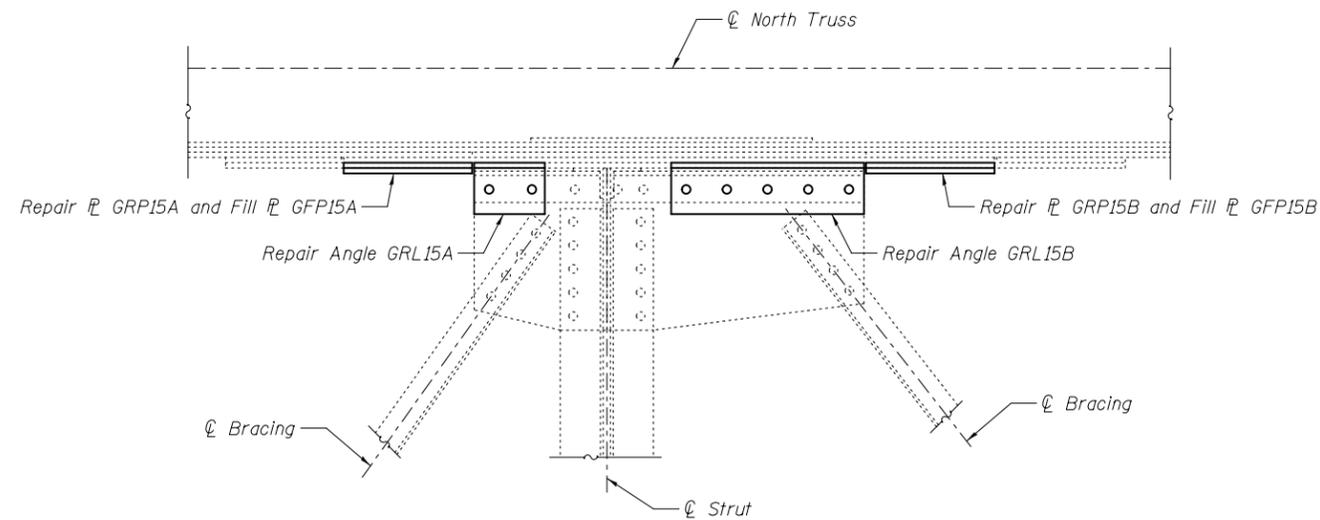
INSIDE ELEVATION

GUSSET PLATE L6'

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION A-A



SECTION B-B

REPAIR LOCATION

Span	Joint	Truss	Inner Pl	Outer Pl
14	L6'	North	1	N/A

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	310



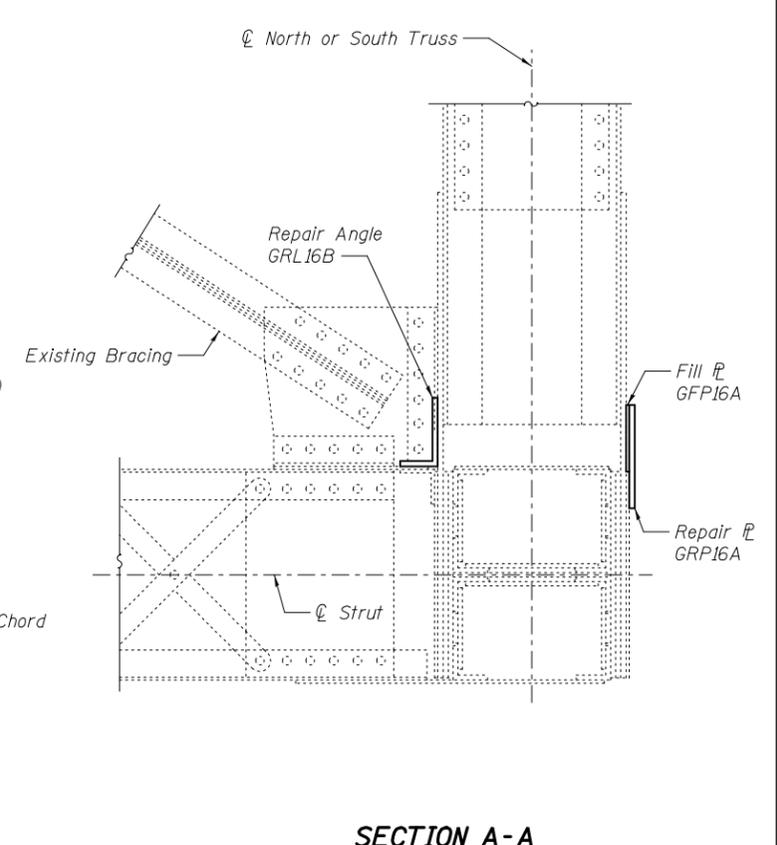
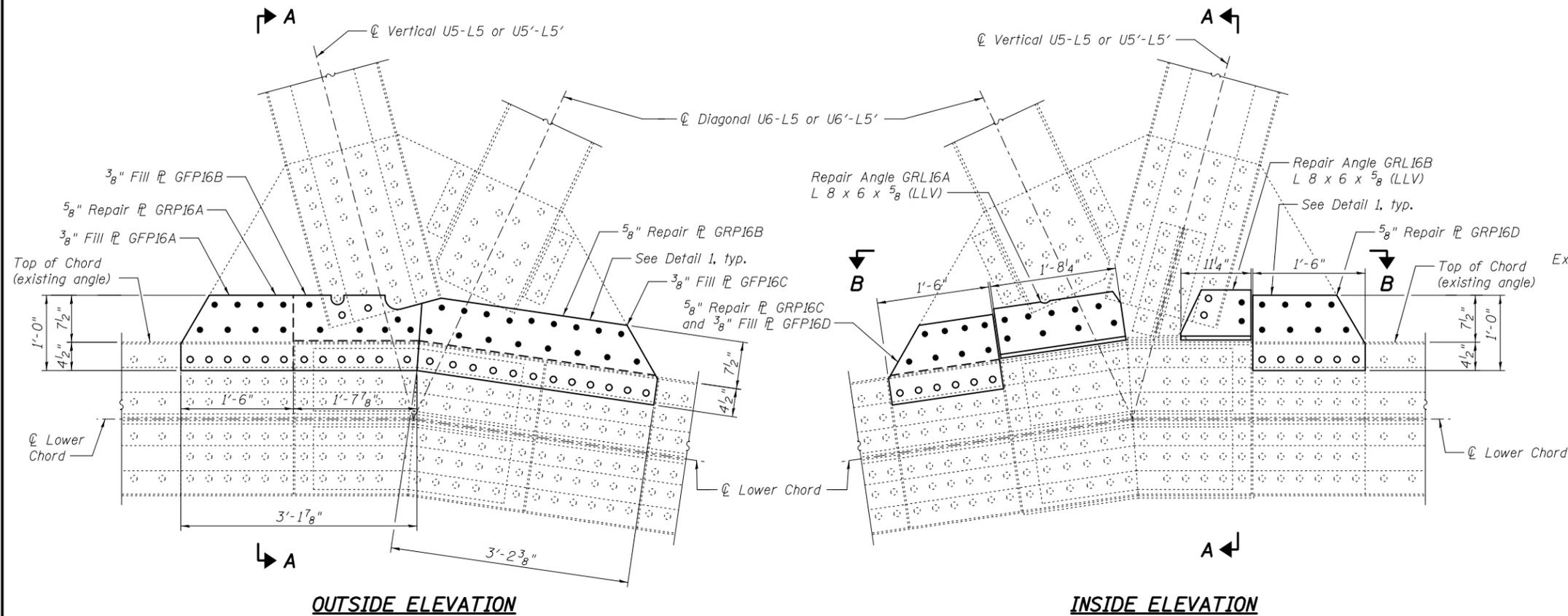
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GUSSET PLATE REPAIRS - 15
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

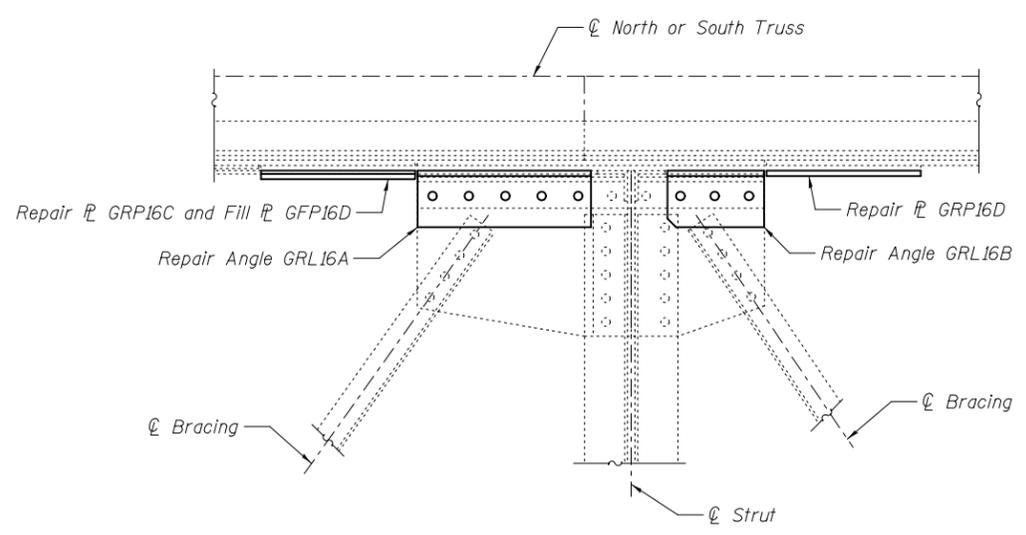
SHEET NO. 38 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	106
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



GUSSET PLATE L5 AND L5'

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



REPAIR LOCATIONS

Span	Joint	Truss	Inner P	Outer P
14	L5	North	1	1
14	L5'	North	1	1
14	L5'	South	1*	1

* Remove existing repair angle. Reuse existing holes and modify proposed fastener layout to accommodate additional fasteners in accordance with gusset repair procedures.

LEGEND

- Existing fastener to remain
- New 7/8" φ A325 bolt in new 1 5/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1,470



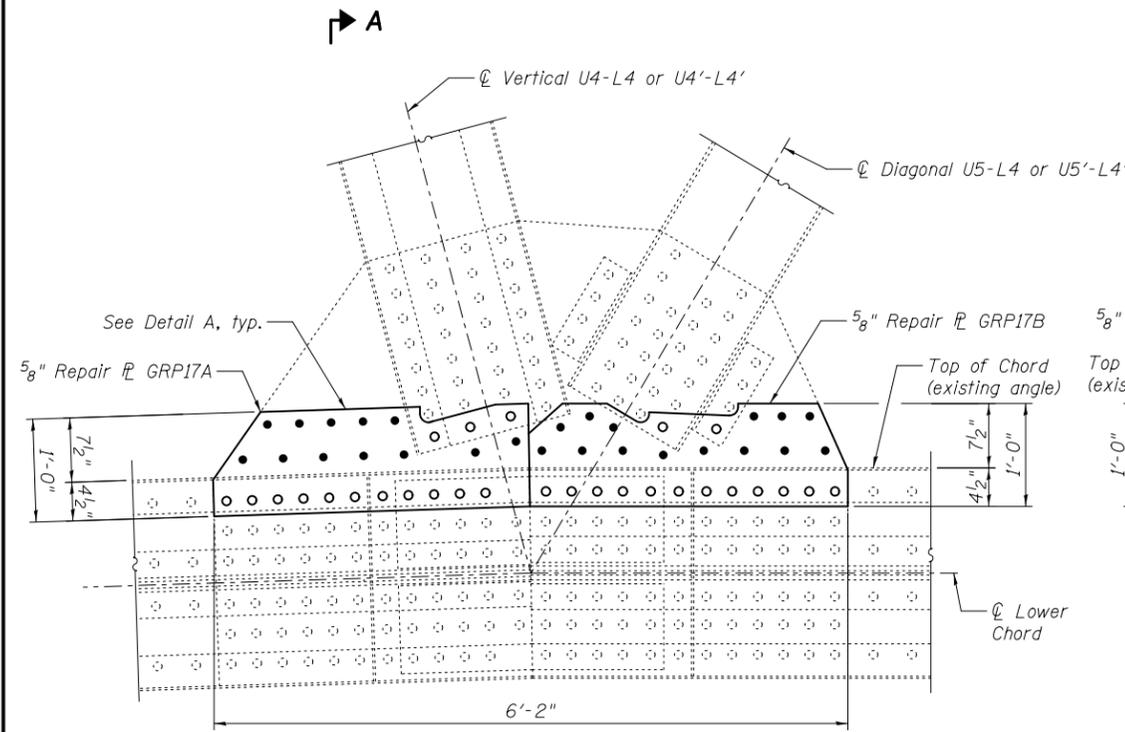
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

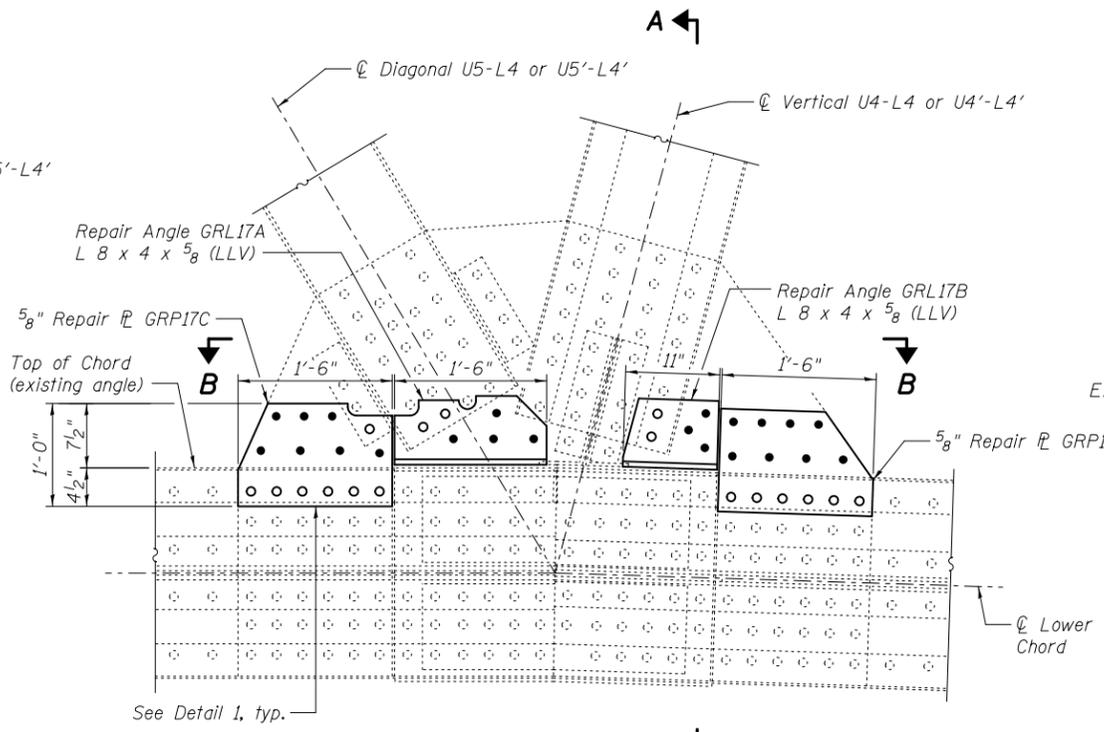
GUSSET PLATE REPAIRS - 16
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 39 OF 112 SHEETS

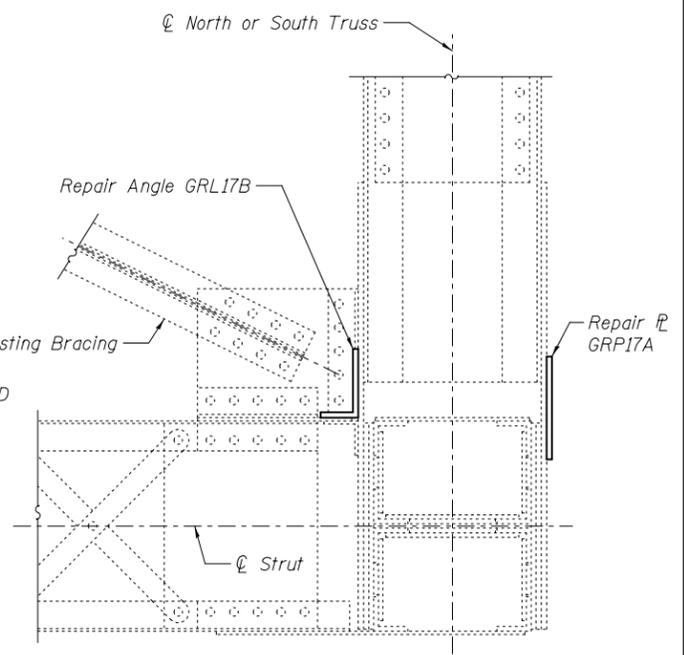
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	107
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



OUTSIDE ELEVATION



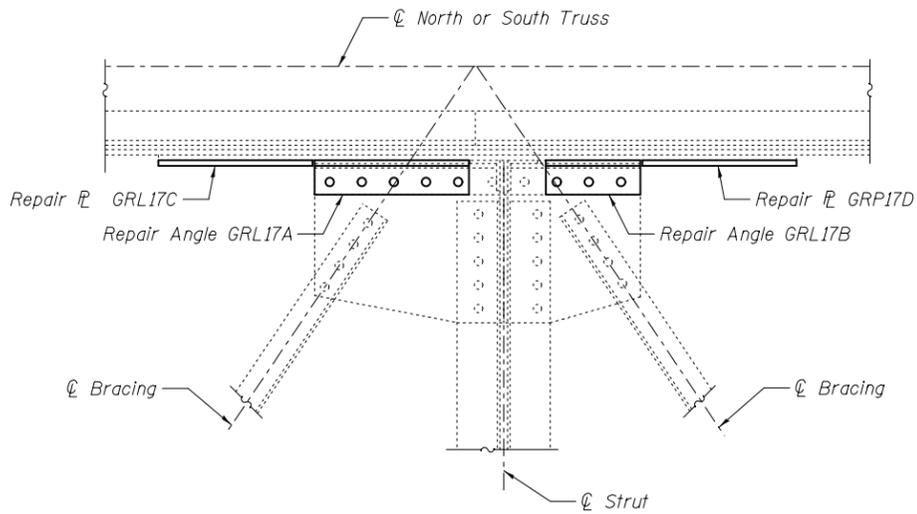
INSIDE ELEVATION



SECTION A-A

GUSSET PLATE L4 AND L4'

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION B-B

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
14	L4	North	1*	1*
14	L4'	North	1*	1*
14	L4'	South	1	1

* Remove existing repair plate and angle. Reuse existing holes and modify proposed fastener layout to accommodate additional fasteners in accordance with gusset repair procedures.

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1,140



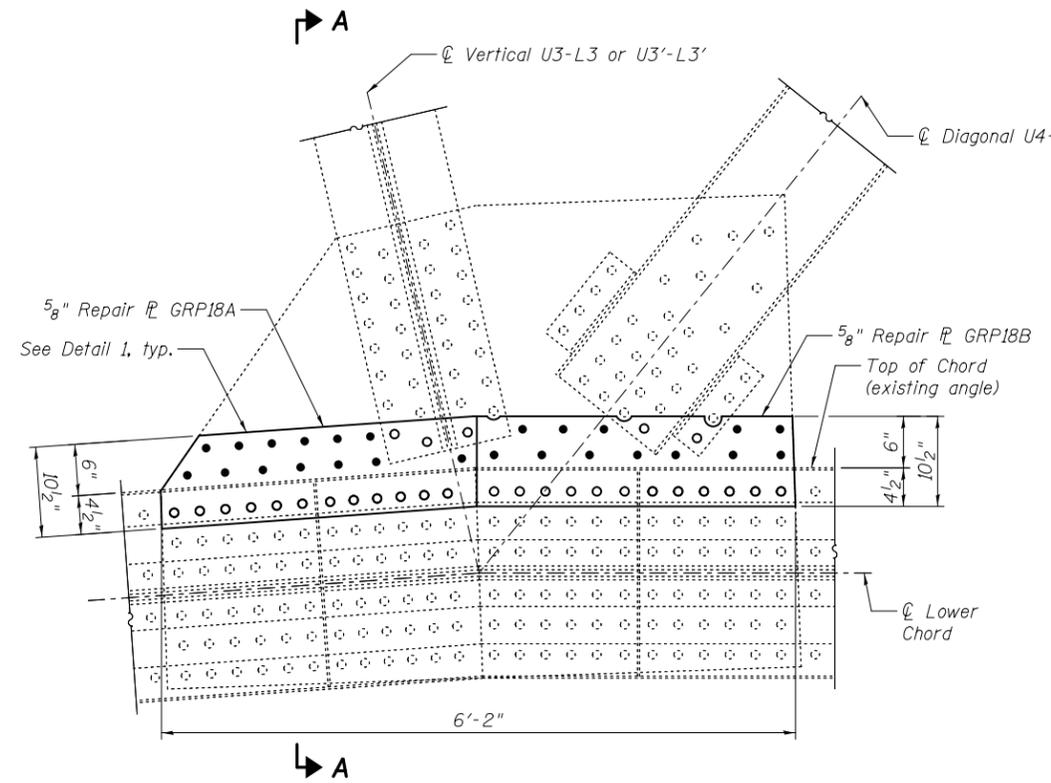
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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

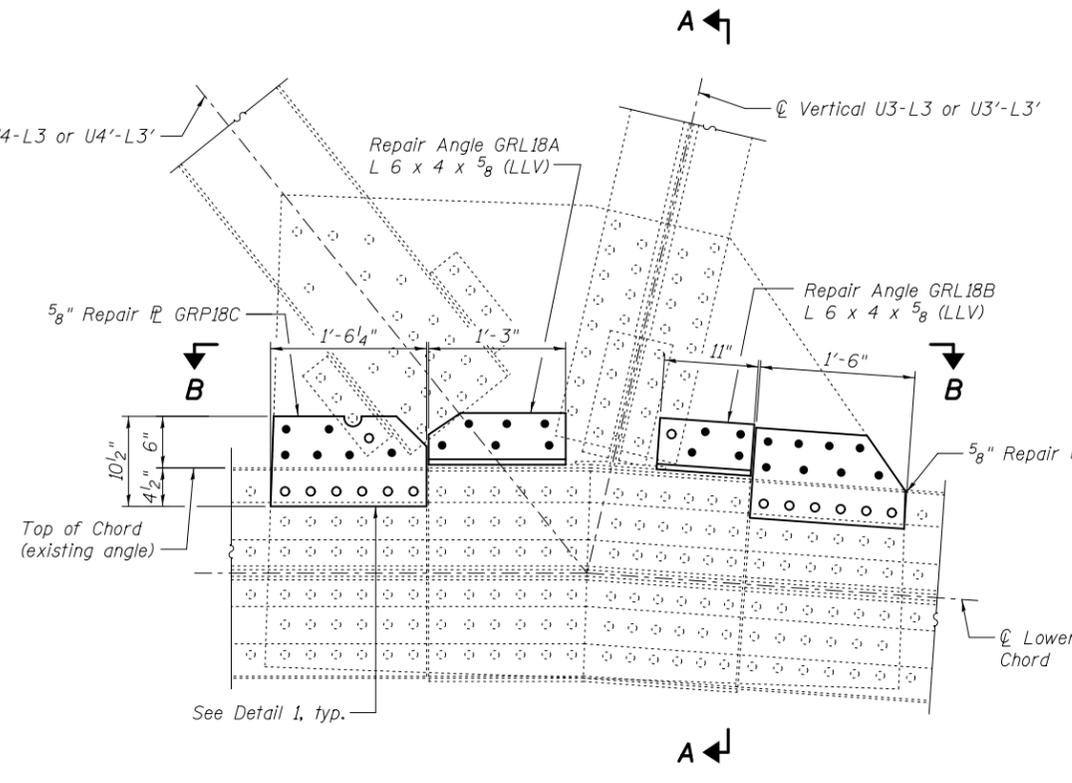
GUSSET PLATE REPAIRS - 17
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 40 OF 112 SHEETS

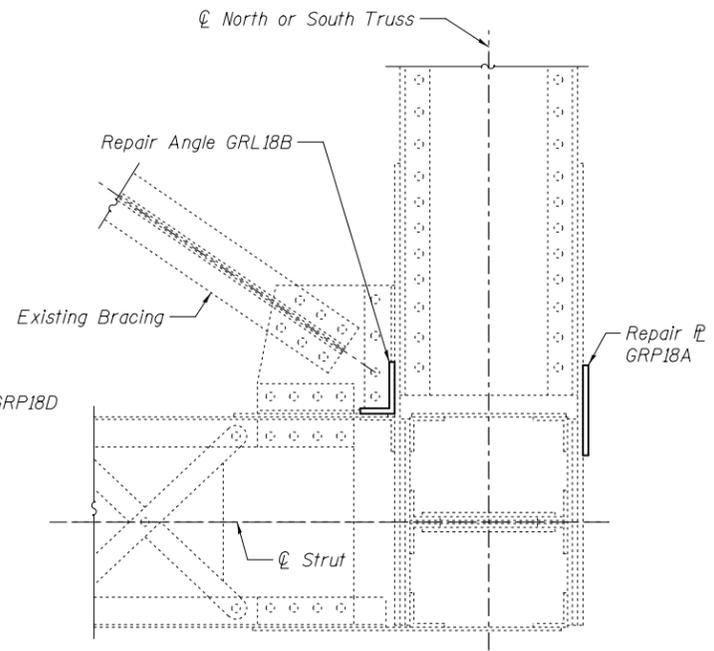
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	108
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



OUTSIDE ELEVATION



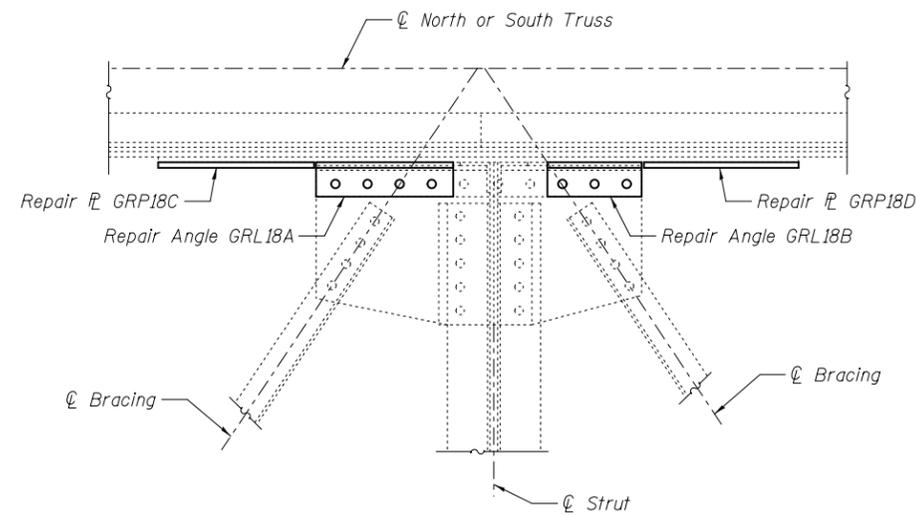
INSIDE ELEVATION



SECTION A-A

GUSSET PLATE L3 AND L3'

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION B-B

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
14	L3	North	1	1
14	L3	South	1	1
14	L3'	North	1	N/A
14	L3'	South	1	1

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1150



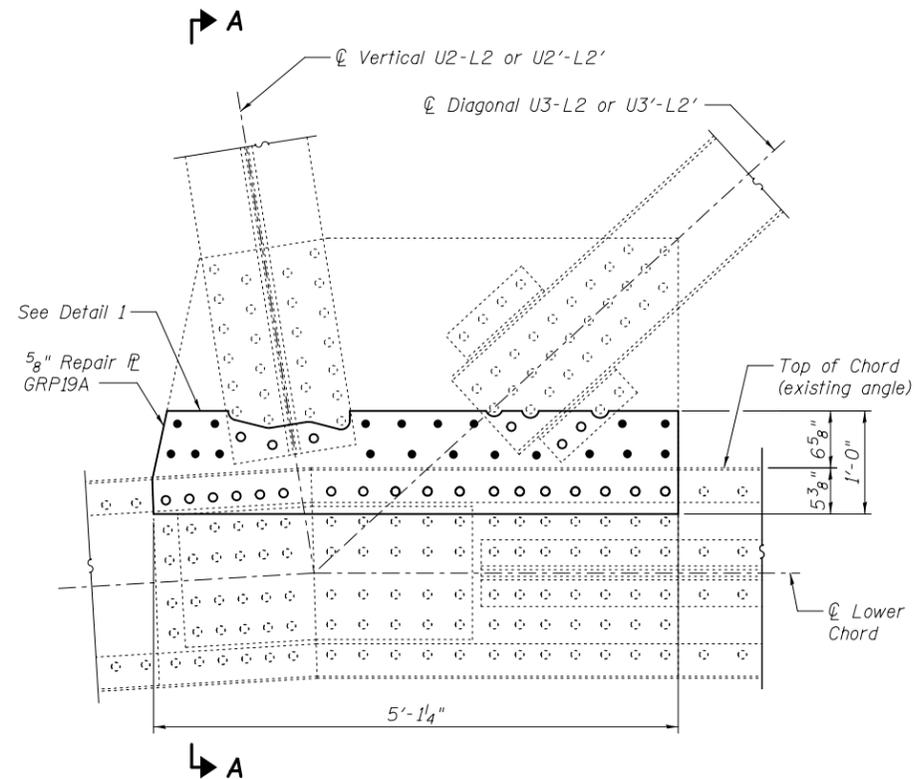
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

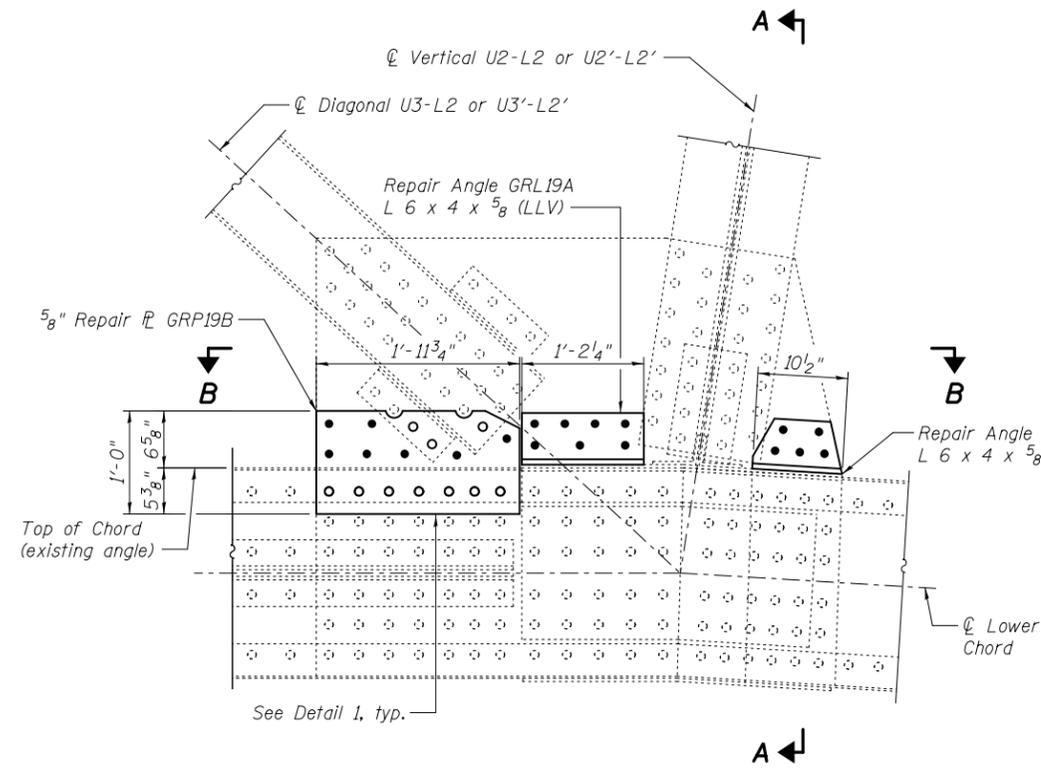
GUSSET PLATE REPAIRS - 18
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 41 OF 112 SHEETS

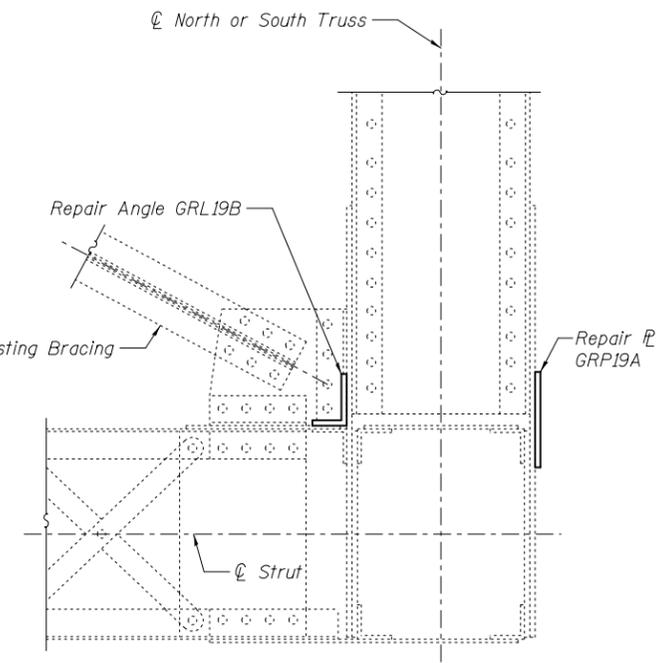
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	109
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68A93	



OUTSIDE ELEVATION



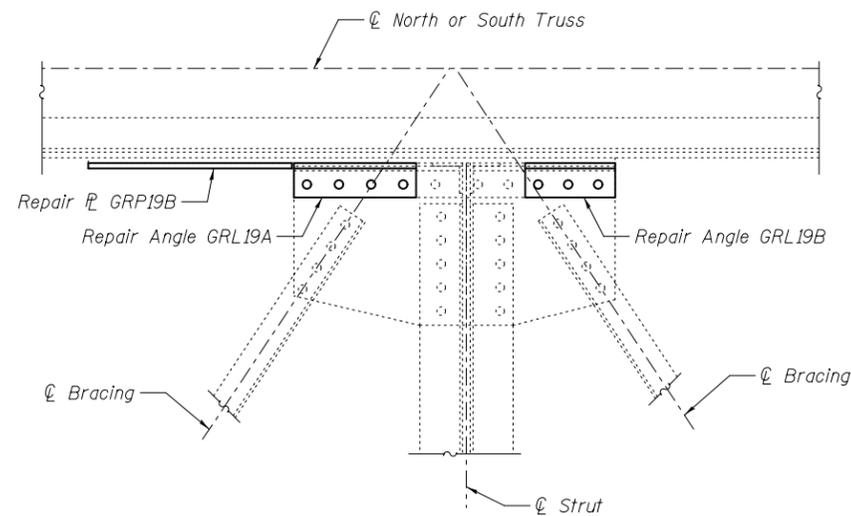
INSIDE ELEVATION



SECTION A-A

GUSSET PLATE L2 AND L2'

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION B-B

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
14	L2	North	1	1
14	L2'	North	1	1
14	L2'	South	1	1

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	870



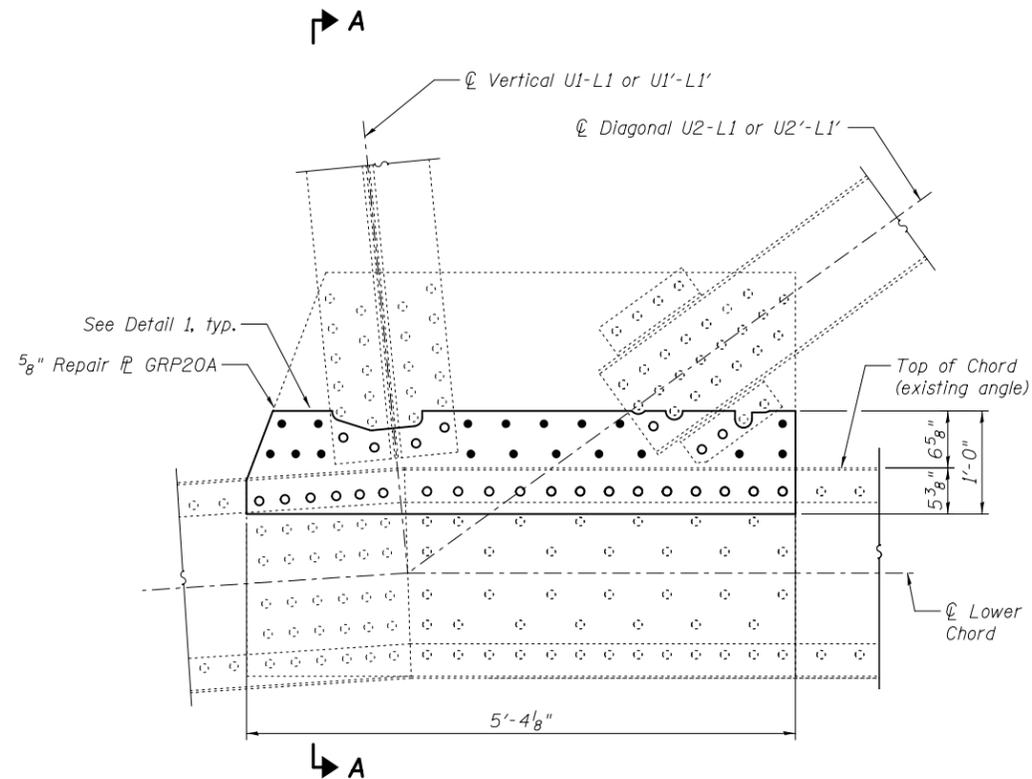
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STATE OF ILLINOIS
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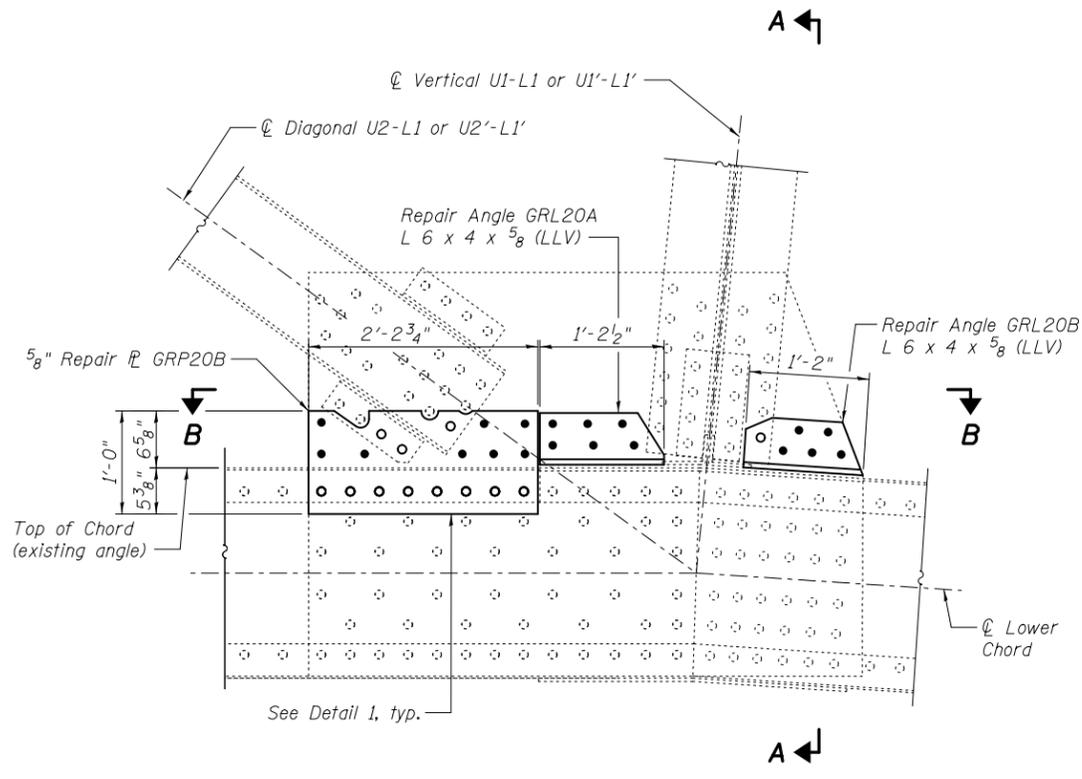
GUSSET PLATE REPAIRS - 19
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 42 OF 112 SHEETS

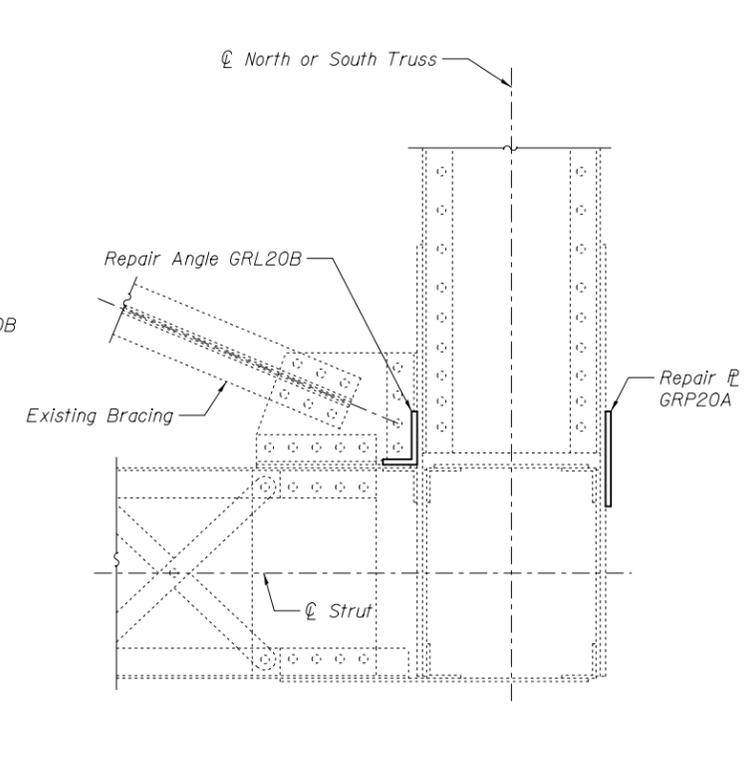
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669	(103B)I-7	PEORIA/TAZEWELL	180	110
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68A93	



OUTSIDE ELEVATION



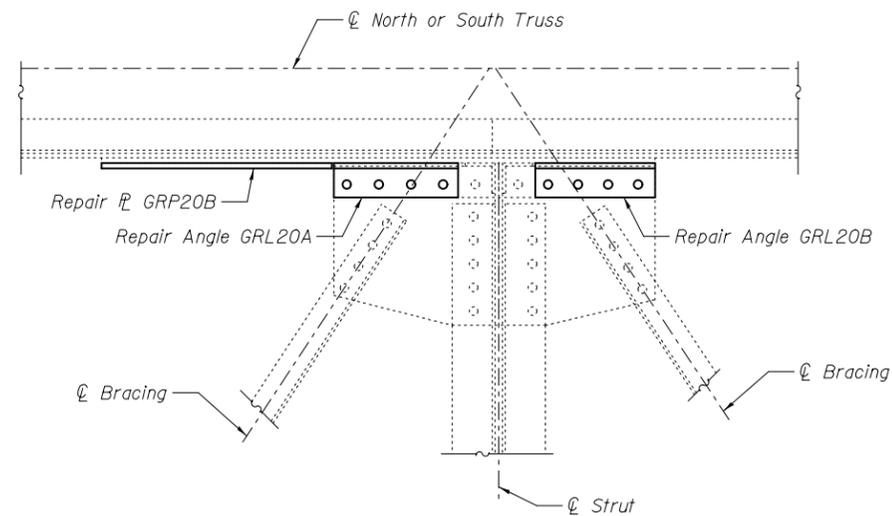
INSIDE ELEVATION



SECTION A-A

GUSSET PLATE L1 AND L1'

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION B-B

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
14	L1	North	1	1
14	L1	South	1	1
14	L1'	North	1	1
14	L1'	South	1	N/A

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1080



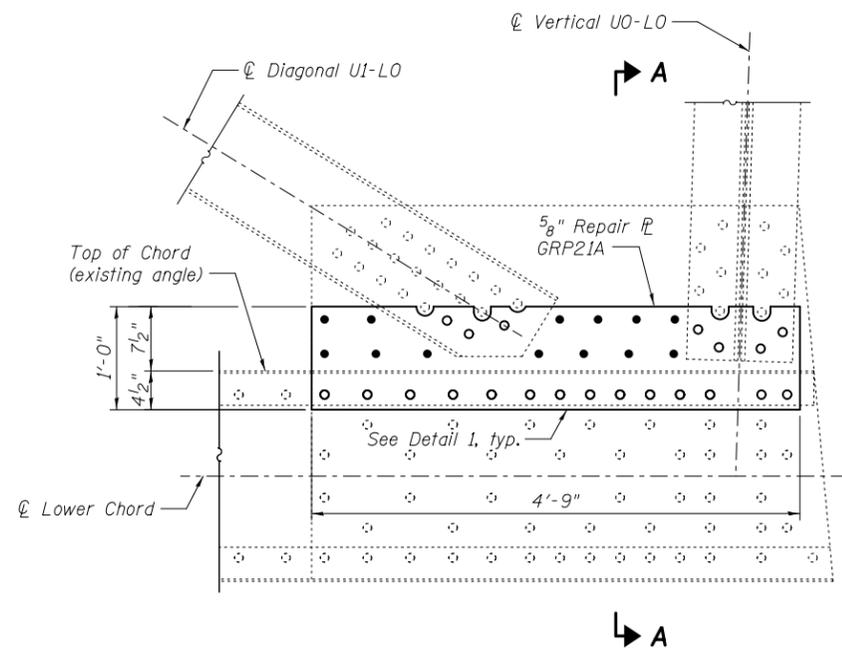
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

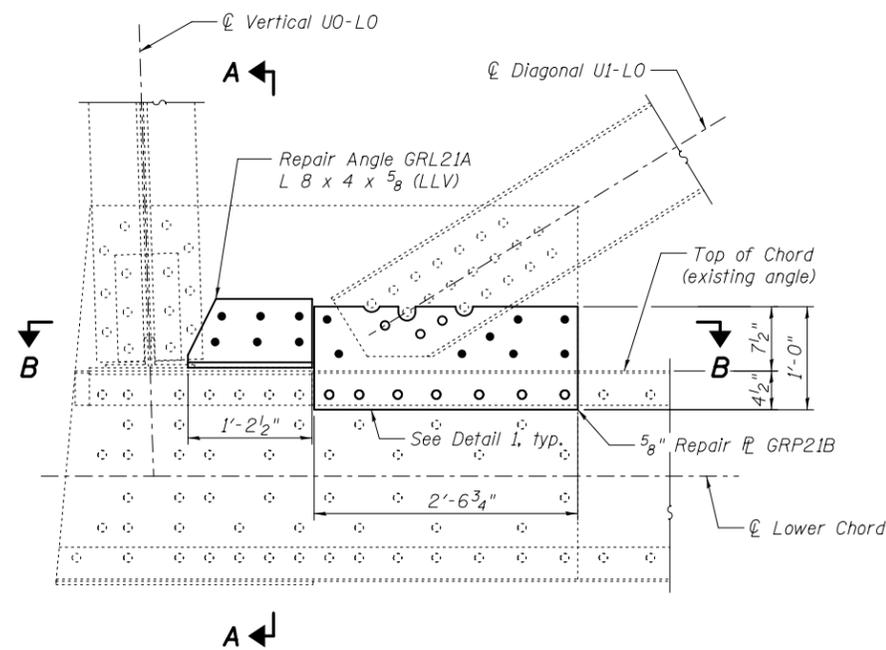
GUSSET PLATE REPAIRS - 20
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 43 OF 112 SHEETS

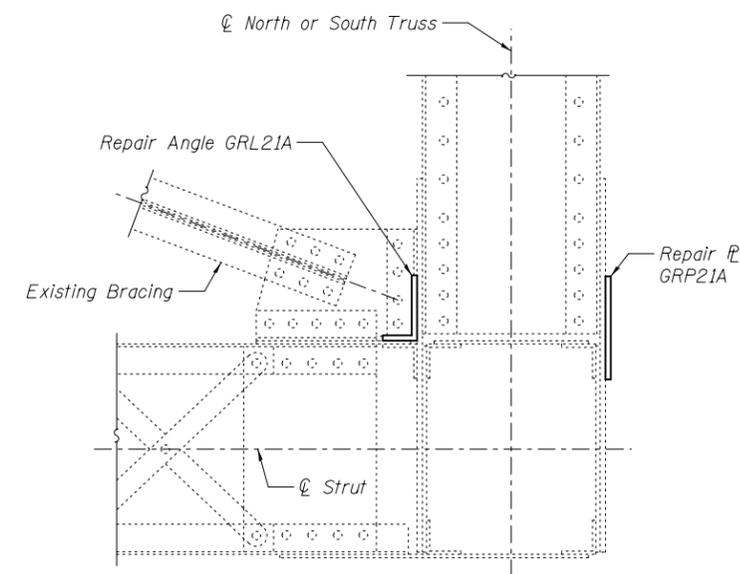
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ILLINOIS FED. AID PROJECT				CONTRACT NO. 68A93



OUTSIDE ELEVATION



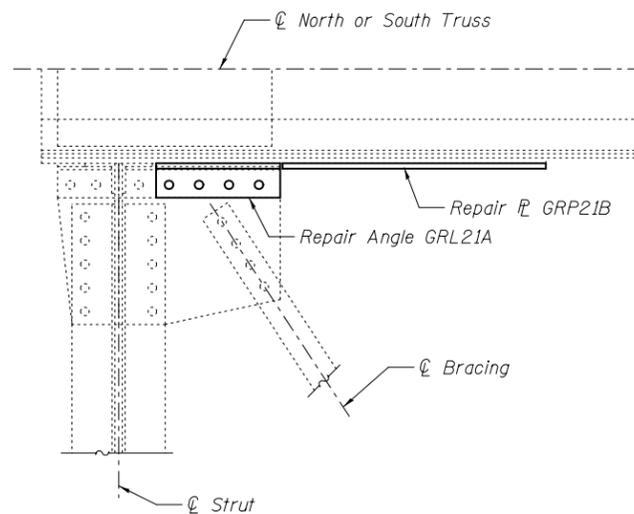
INSIDE ELEVATION



SECTION A-A

GUSSET PLATE LO

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION B-B

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
14	LO	North	1	1
14	LO	South	1	1

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	540



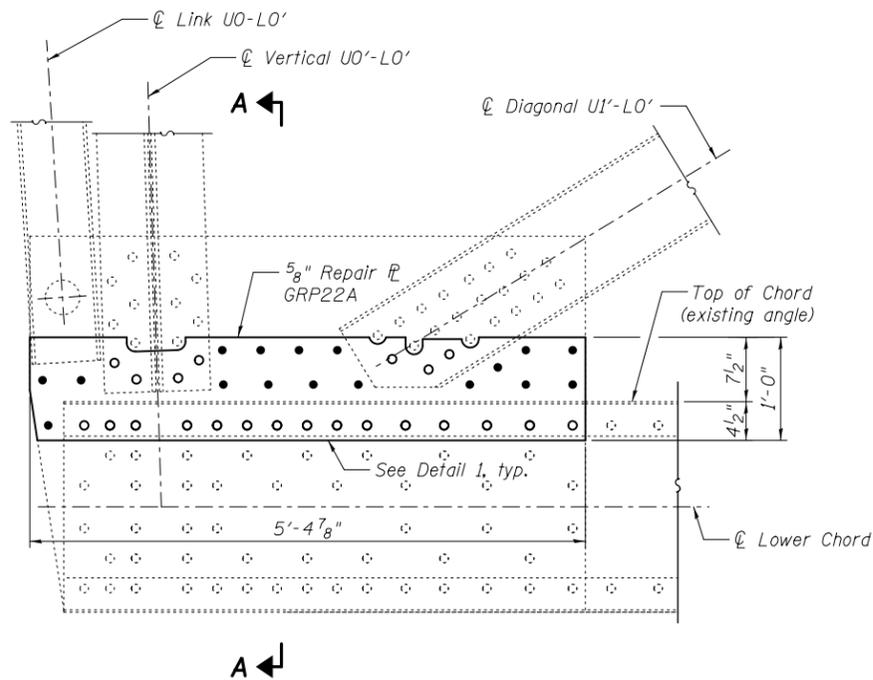
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

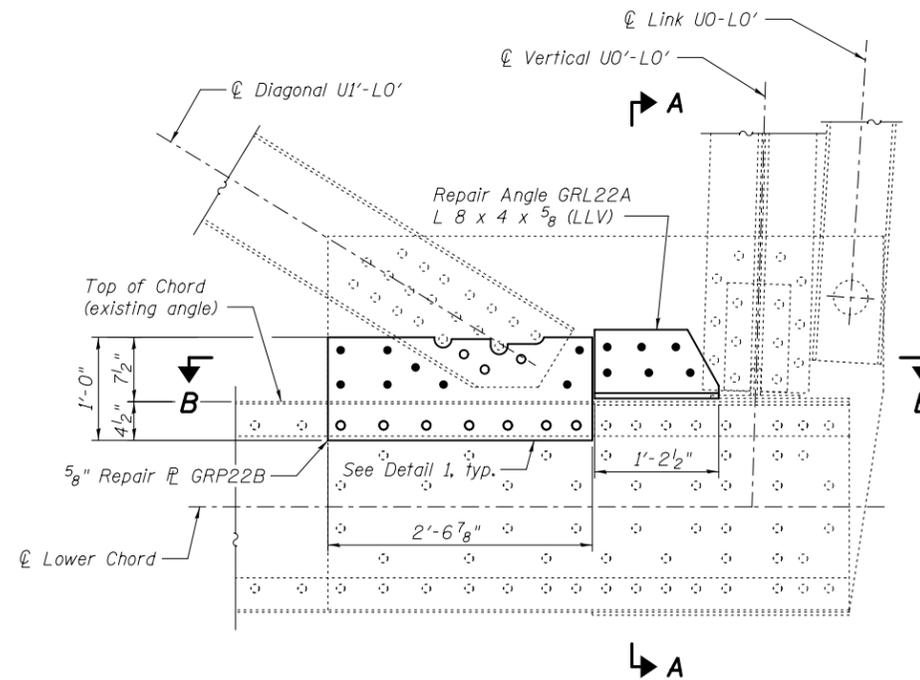
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 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 44 OF 112 SHEETS

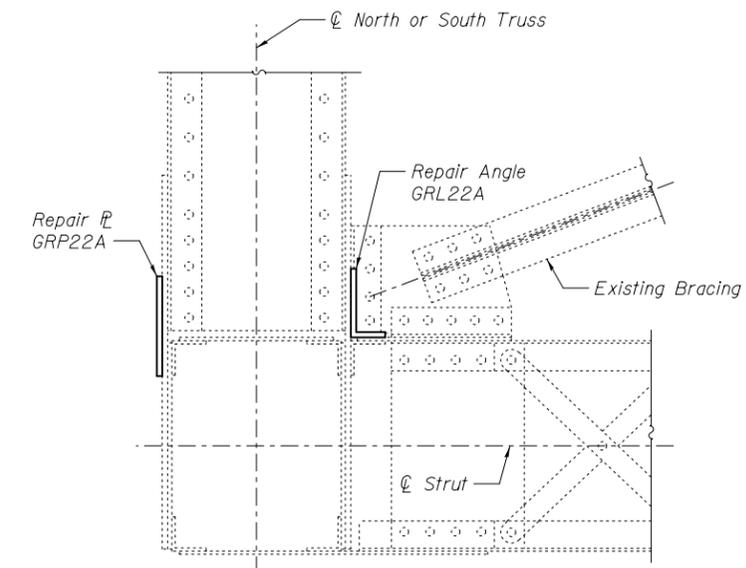
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CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



OUTSIDE ELEVATION



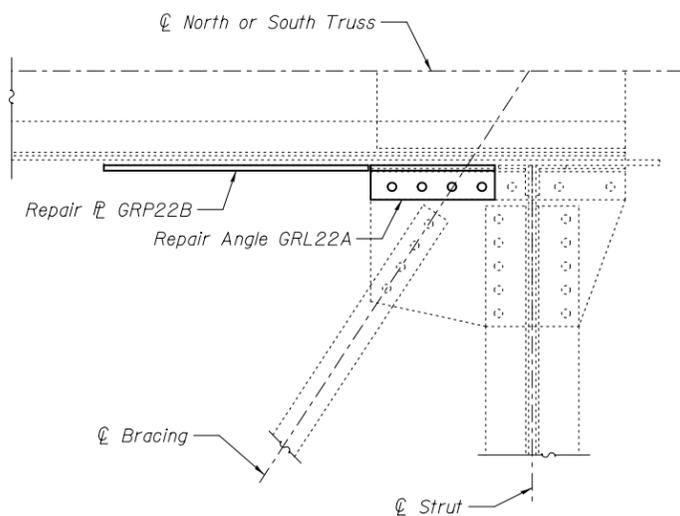
INSIDE ELEVATION



SECTION A-A

GUSSET PLATE LO'

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION B-B

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
14	LO'	North	1	1
14	LO'	South	1	1

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	590



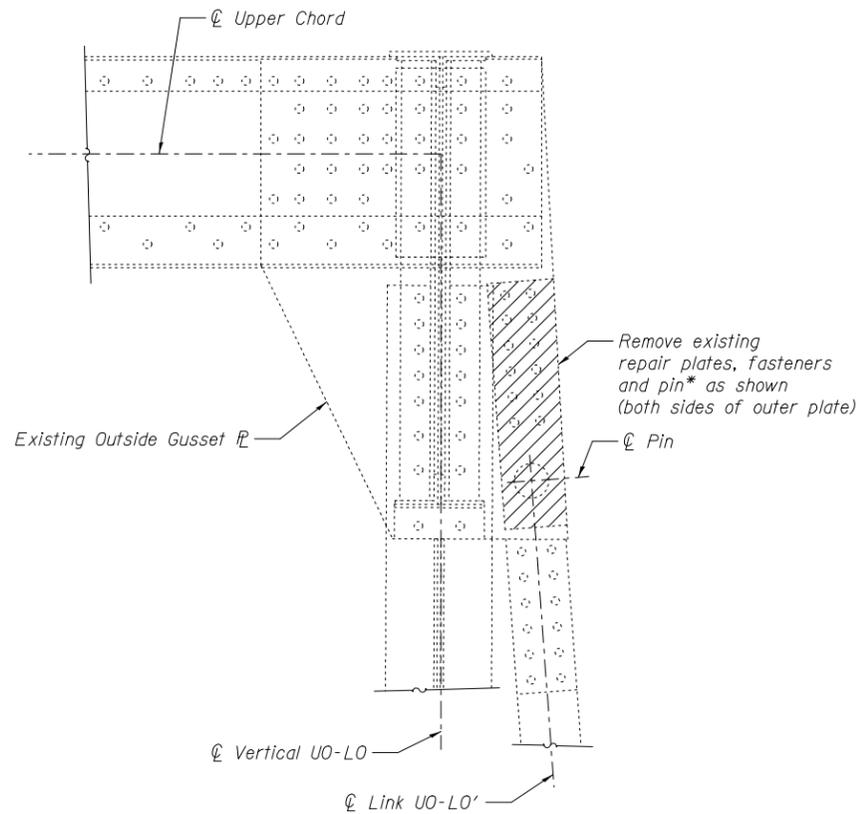
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STATE OF ILLINOIS
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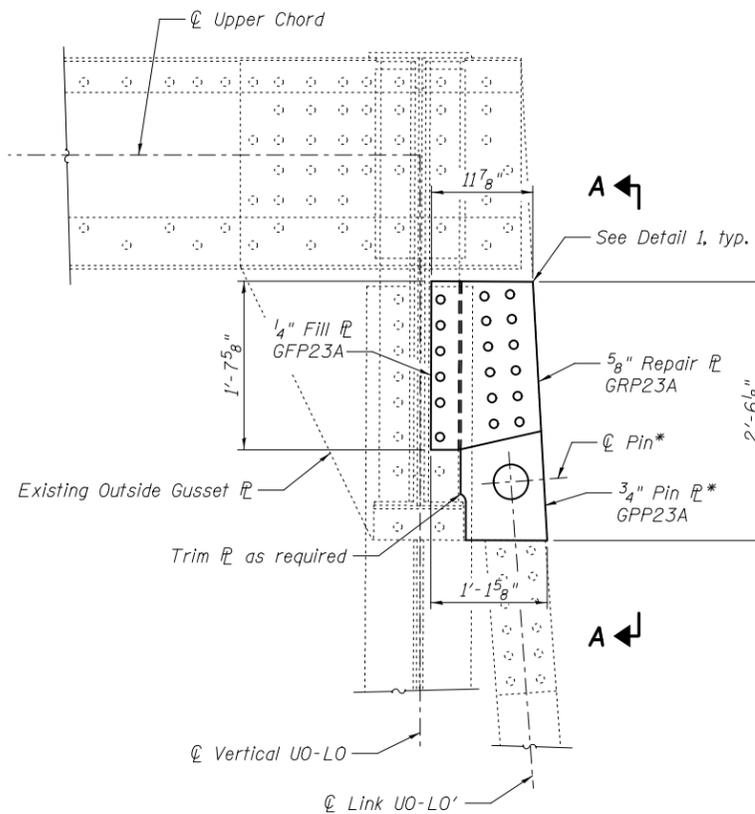
GUSSET PLATE REPAIRS - 22
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 45 OF 112 SHEETS

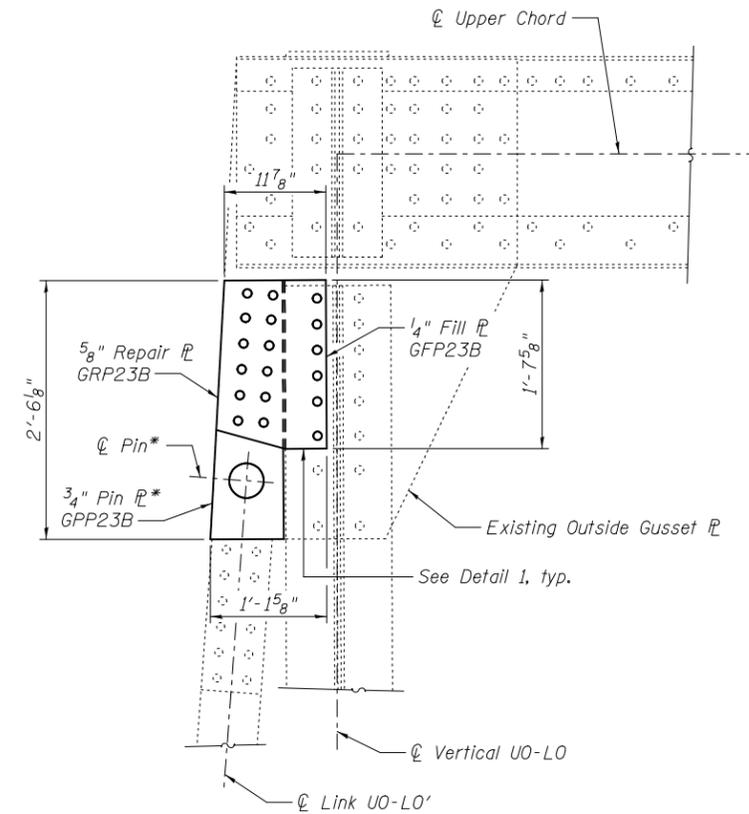
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669	(103B)I-7	PEORIA/TAZEWELL	180	113
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



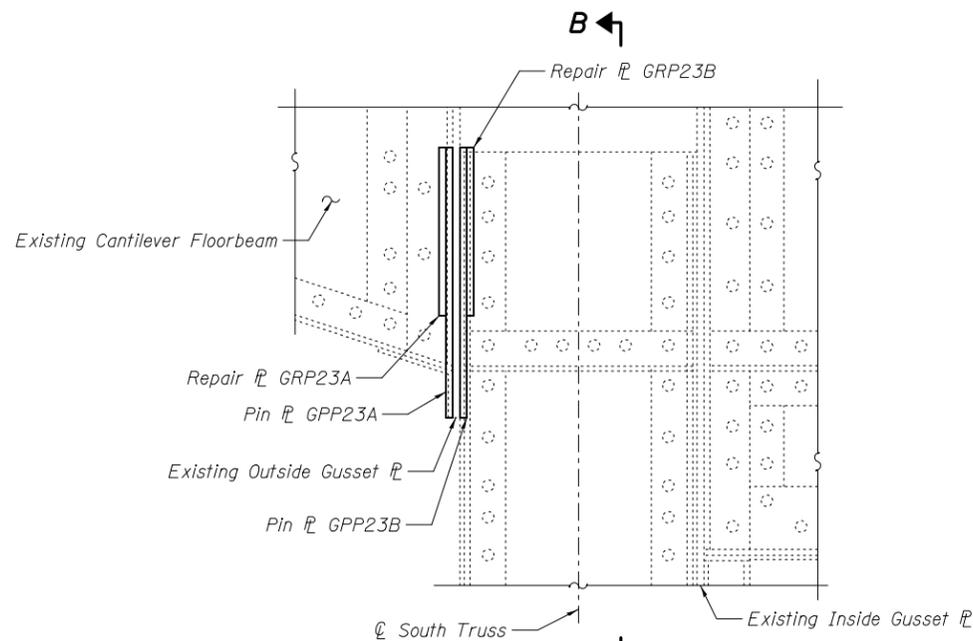
**OUTSIDE ELEVATION
EXISTING PLATE REMOVAL**



**OUTSIDE ELEVATION
REPAIR PLATE INSTALLATION**



VIEW B-B



VIEW A-A

GUSSET PLATE UOS

* Pin to be removed and replaced. Hole in existing gusset plate to be line bored to required diameter for new pin and bushing, see Sheet 74 and 75 of 112. Hole in proposed 3/4 inch pin plates to be shop drilled to 3 3/4 inch and field bored to final diameter with existing gusset plate to ensure proper fit.

REPAIR LOCATIONS

Span	Joint	Truss	Inner P	Outer P
14	UO	South	N/A	1

LEGEND

- ⊙ Existing fastener to remain
- Replace existing fastener with new 7/8 inch diameter A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:

For gusset repair general notes and procedures, see Sheet 23 of 112.

The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.

For Detail 1 (Sealant), see Sheet 23 of 112.

Work on this sheet to be completed in coordination with main span pin and link replacements shown on Sheet 74 and 75 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	250



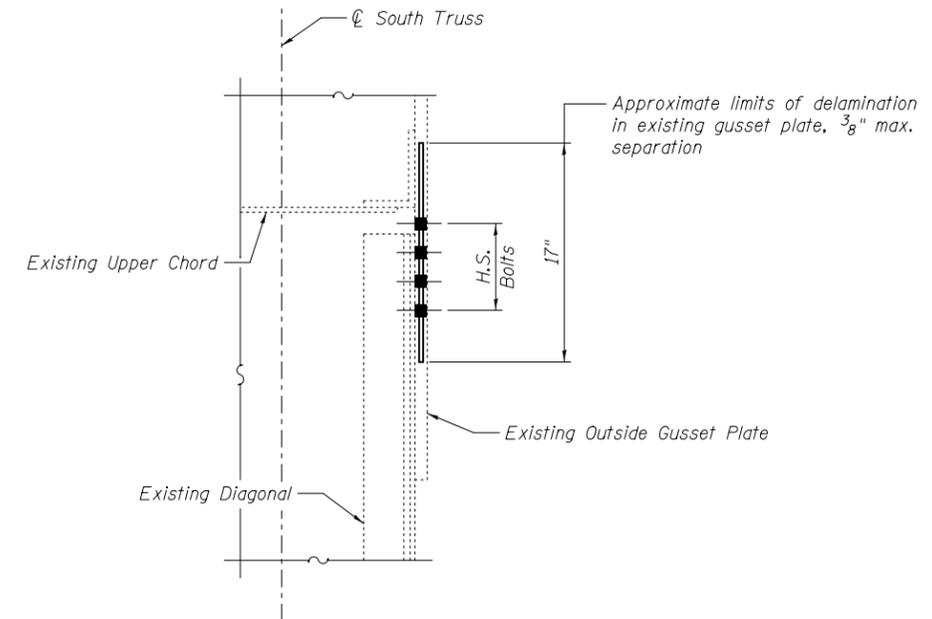
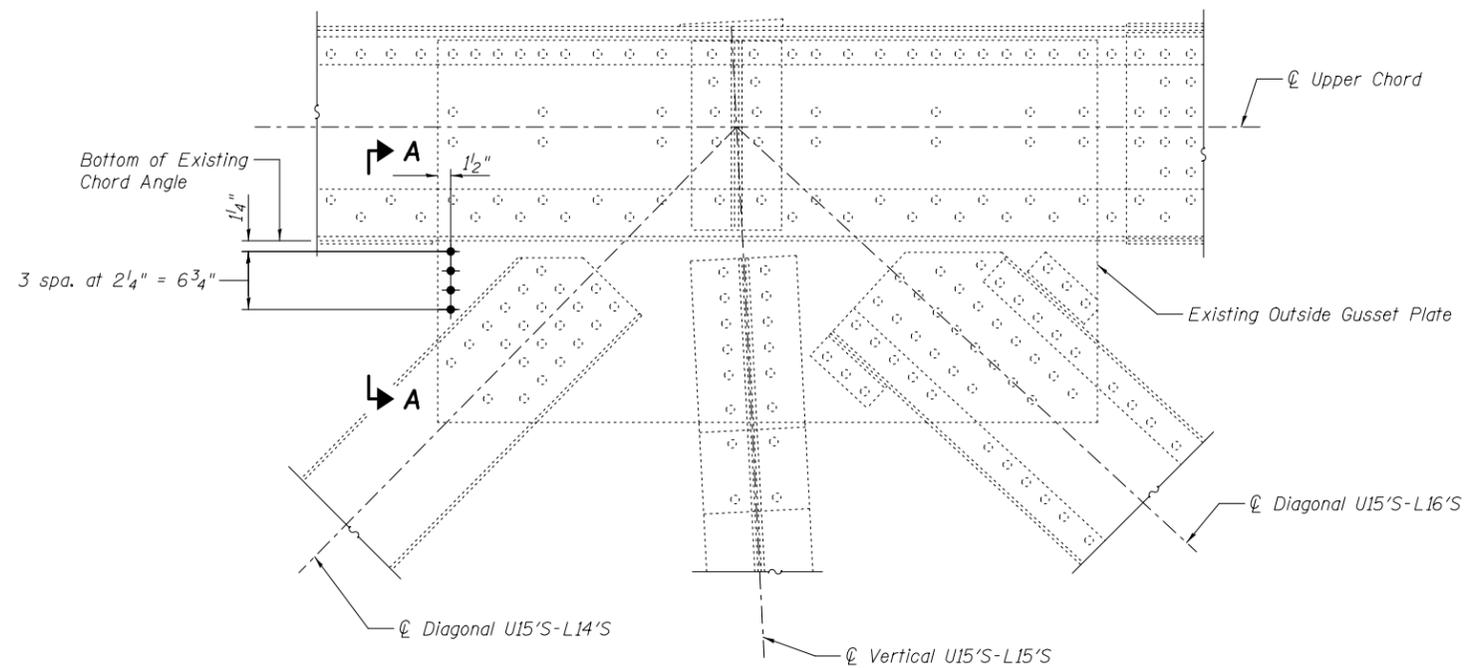
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GUSSET PLATE REPAIRS - 23
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

SHEET NO. 46 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	114
				CONTRACT NO. 68A93
ILLINOIS FED. AID PROJECT				



SECTION A-A

**OUTSIDE ELEVATION
GUSSET PLATE U15'S**

REPAIR LOCATION

Span	Joint	Truss	Inner P.	Outer P.
15	U15'	South	N/A	I

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole

Repair Procedure:

1. Clean delamination in accordance with the special provision for Cleaning and Painting Existing Steel Structures per the section titled Water Cleaning of Lead Containing Coatings Prior to Overcoating.
2. Install fully tensioned high-strength bolts as shown.
3. Seal edge of delamination with approved sealant.
4. Paint repair area with Paint System 2 PS/EM/U in accordance with the special provision for Cleaning and Painting Existing Steel Structures.

Notes:

For gusset repair general notes and procedures, see Sheet 23 of 112.
 The sealant shall be a polyurethane sealant compatible with the proposed paint system. The Contractor shall submit the sealant to the Engineer for approval prior to use.
 Cost of cleaning, sealing and painting delamination included with Structural Steel Repair.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	10



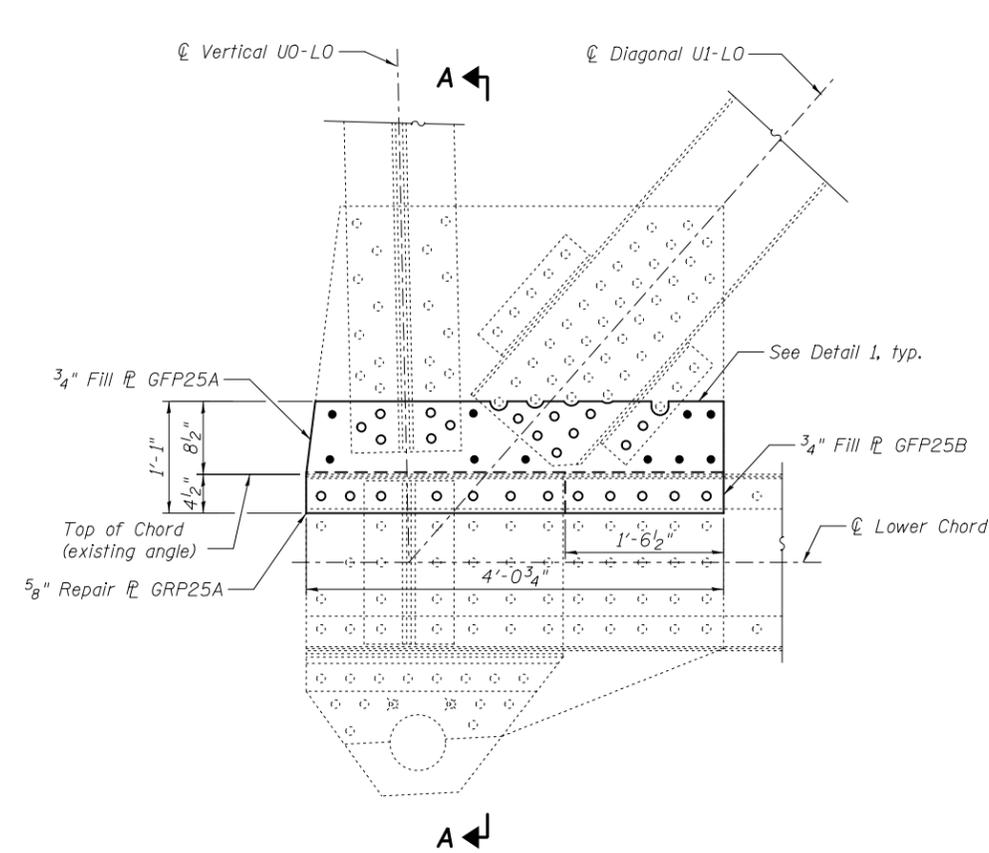
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

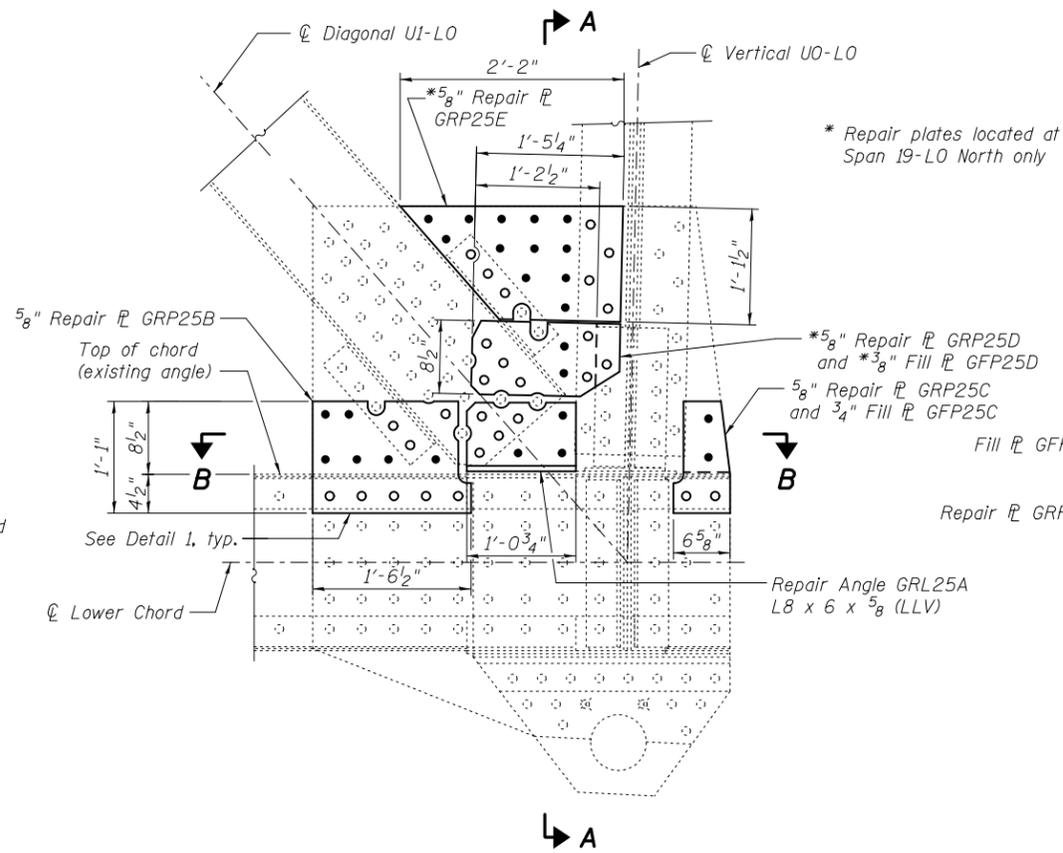
**GUSSET PLATE REPAIRS - 24
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

SHEET NO. 47 OF 112 SHEETS

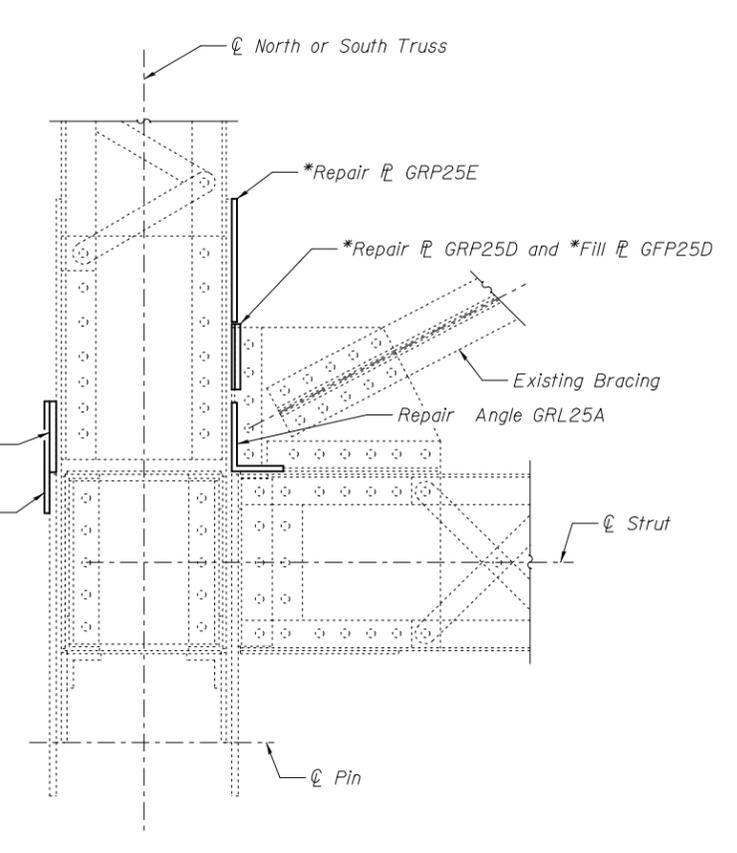
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669	(103B)I-7	PEORIA/TAZEWELL	180	115
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



OUTSIDE ELEVATION



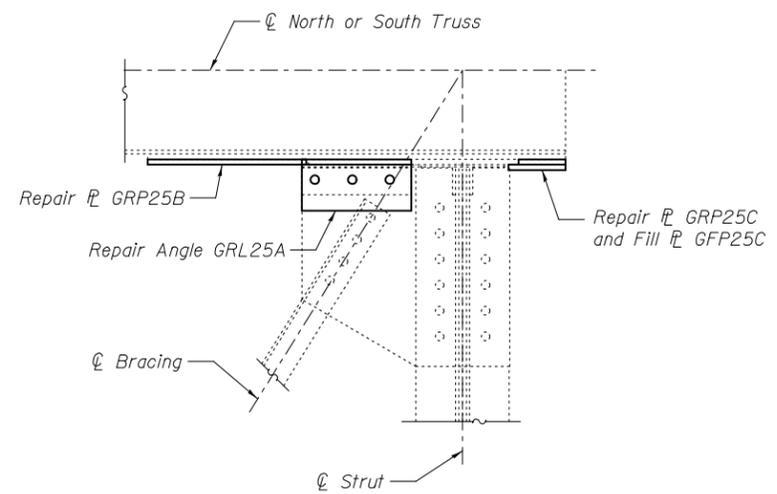
INSIDE ELEVATION



SECTION A-A

GUSSET PLATE LO

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION B-B

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
18	LO	North	1	1
18	LO	South	1	1
19	LO	North	1	1
19	LO	South	1	1

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1620



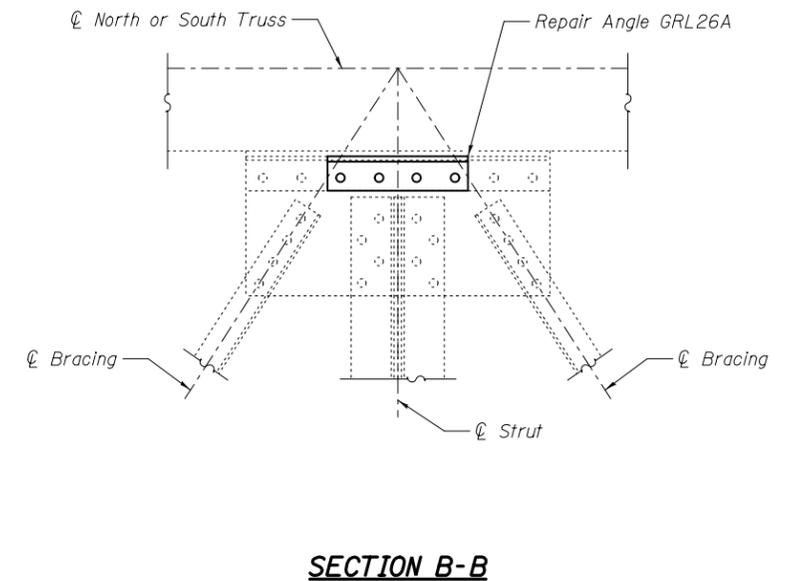
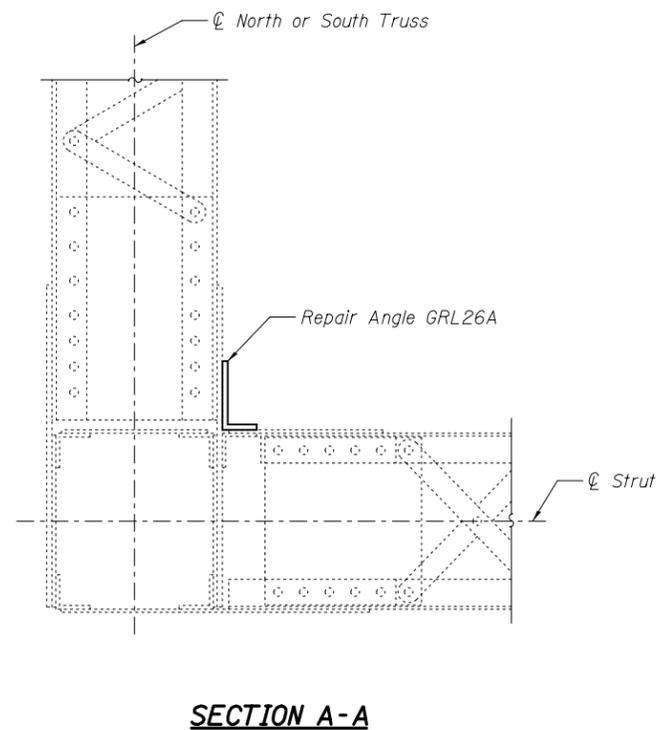
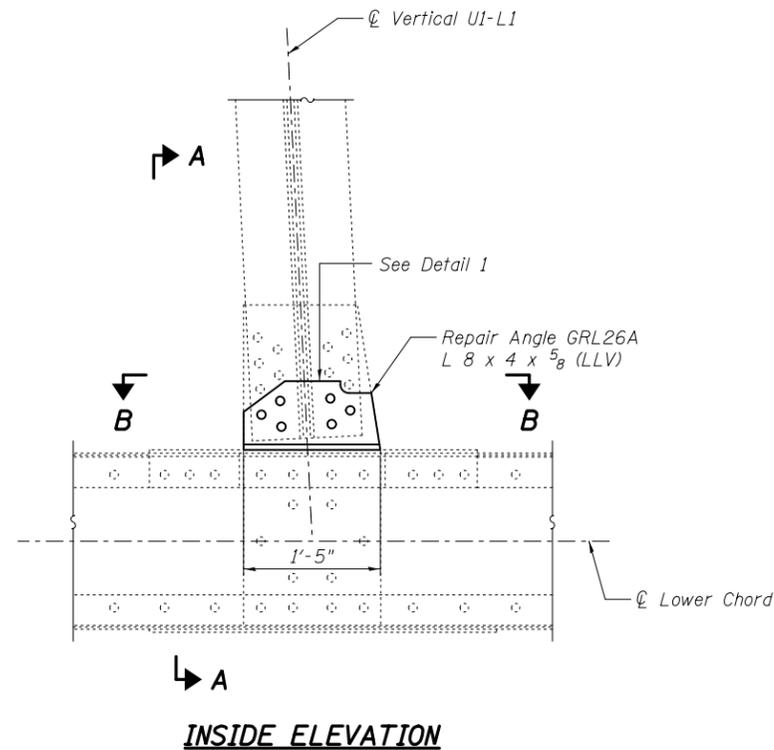
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

GUSSET PLATE REPAIRS - 25
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 48 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	116
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



GUSSET PLATE L1

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.

REPAIR LOCATIONS

Span	Joint	Truss	Inner \mathbb{R}	Outer \mathbb{R}
18	L1	North	1	N/A
18	L1	South	1	N/A

LEGEND

- ◊ Existing fastener to remain
- New $7/8"$ ϕ A325 bolt in new $15/16"$ ϕ hole (shop or field drilled)
- Replace existing fastener with new $7/8"$ ϕ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	90



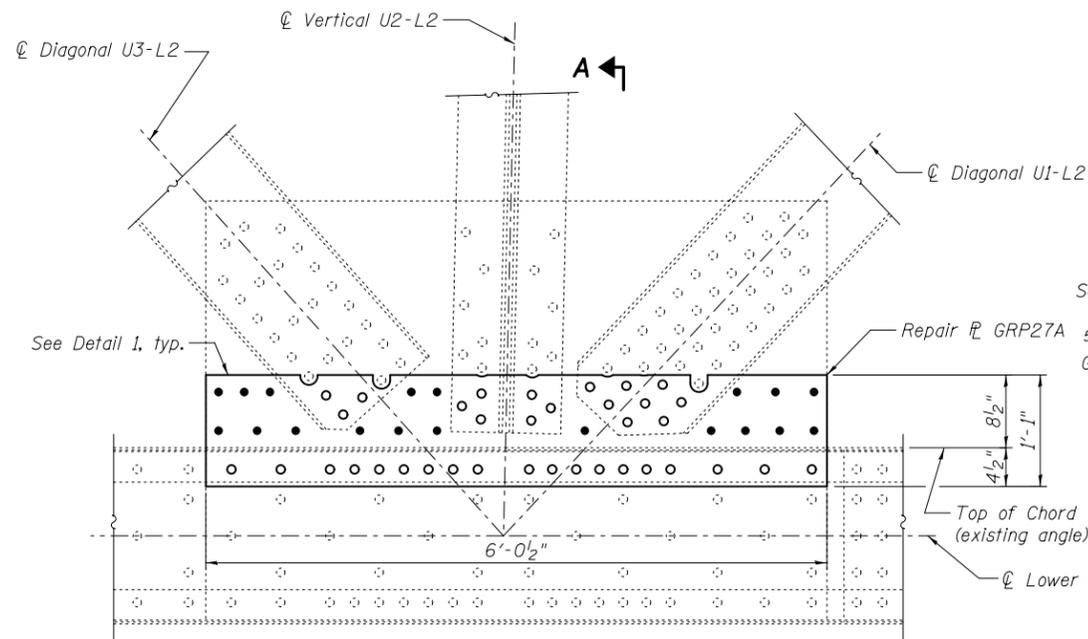
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

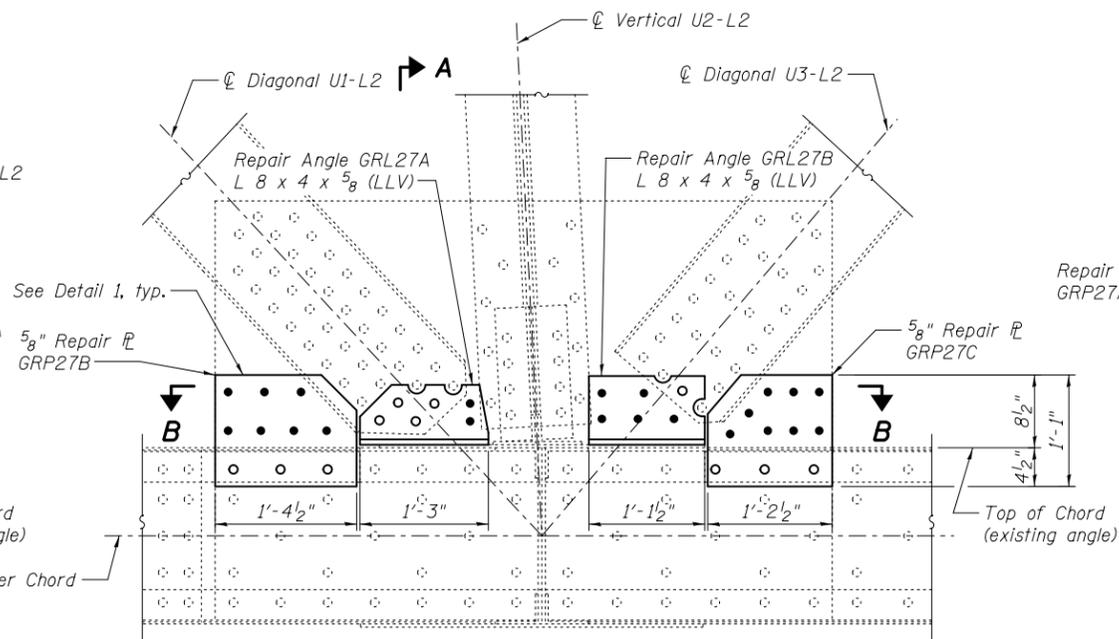
GUSSET PLATE REPAIRS - 26
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 49 OF 112 SHEETS

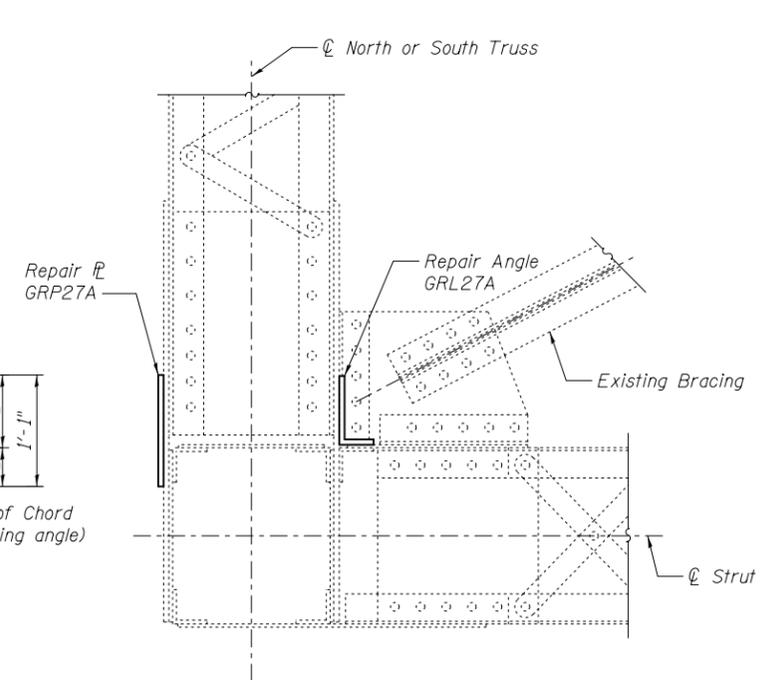
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669	(103B)I-7	PEORIA/TAZEWELL	180	117
				CONTRACT NO. 68A93
ILLINOIS FED. AID PROJECT				



OUTSIDE ELEVATION



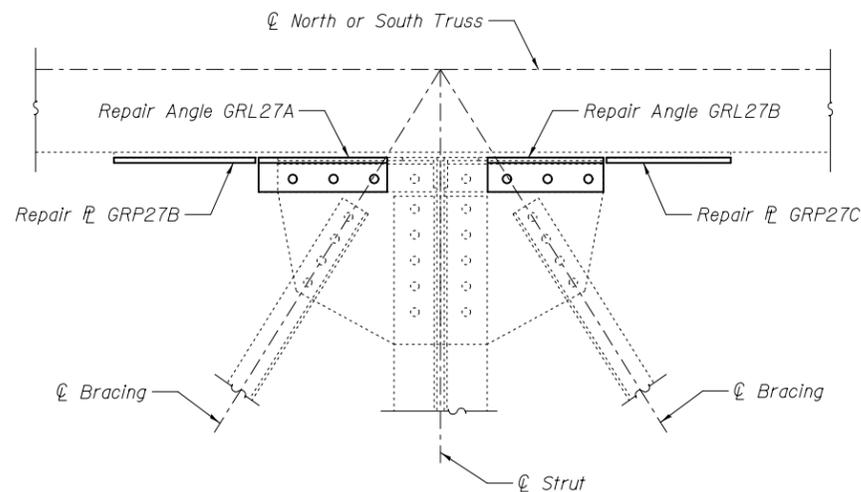
INSIDE ELEVATION



SECTION A-A

GUSSET PLATE L2

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.



SECTION B-B

REPAIR LOCATIONS

Span	Joint	Truss	Inner P	Outer P
18	L2	North	1	N/A
19	L2	North	N/A	1
19	L2	South	1	N/A

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	540



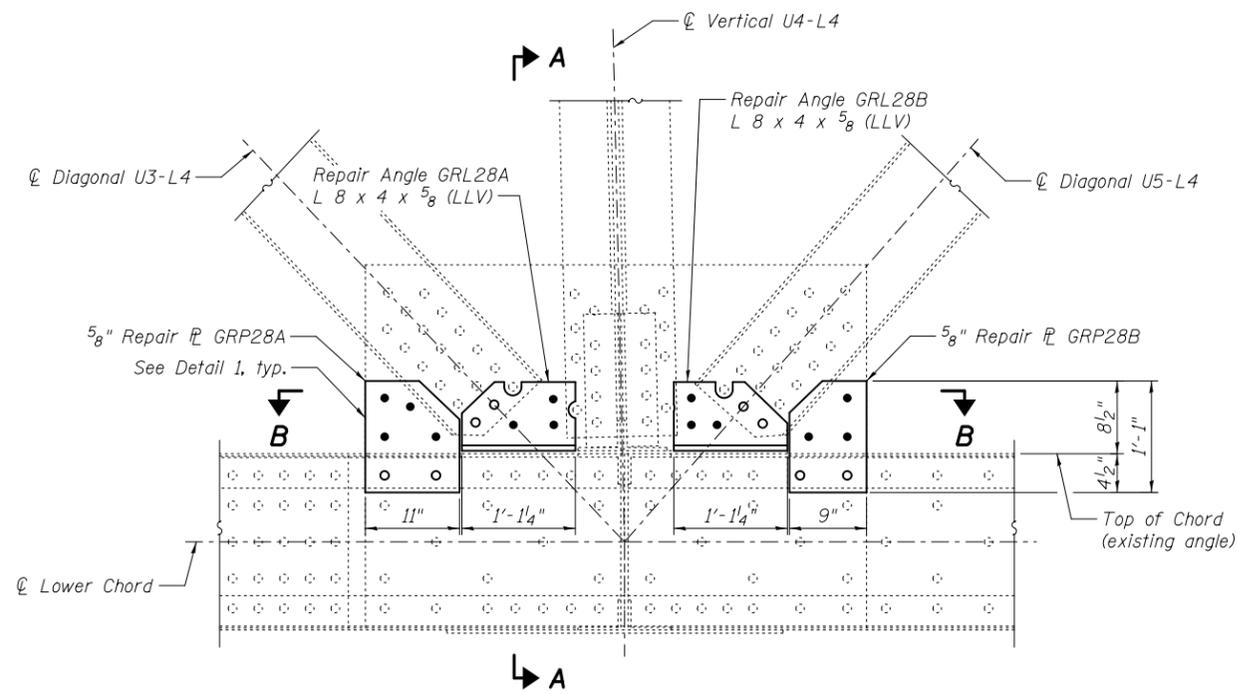
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STATE OF ILLINOIS
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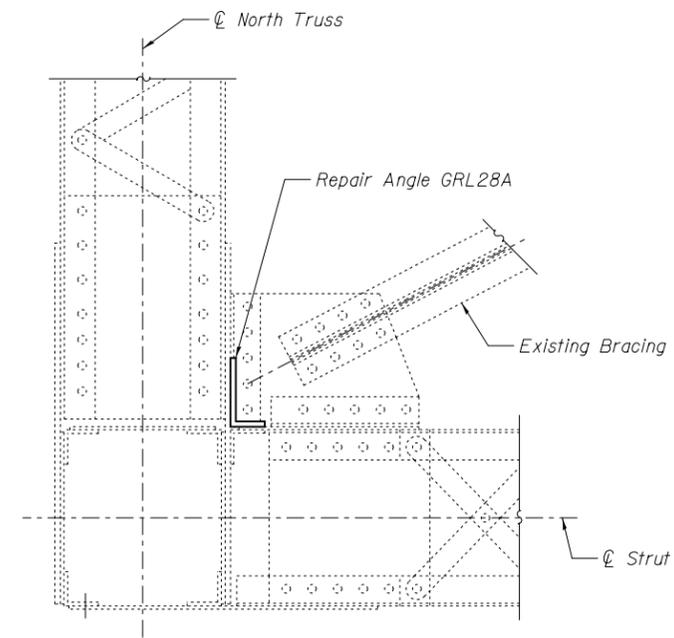
GUSSET PLATE REPAIRS - 27
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 50 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	118
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



INSIDE ELEVATION



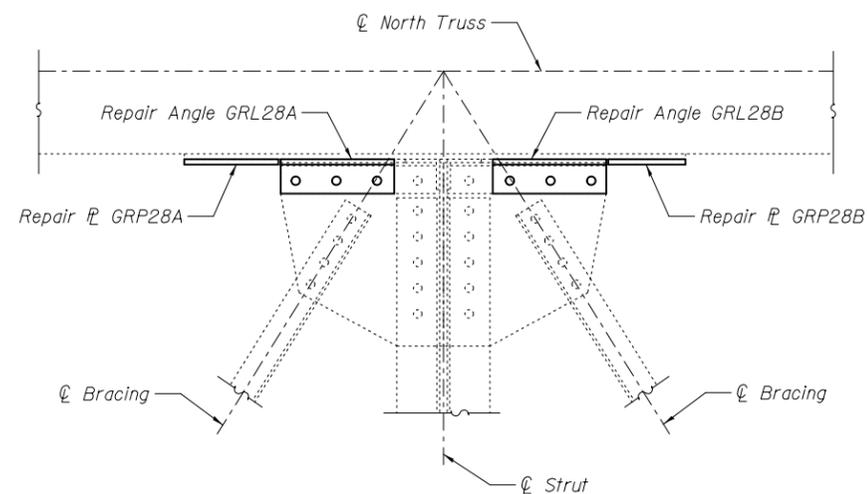
SECTION A-A

GUSSET PLATE L4

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.

REPAIR LOCATION

Span	Joint	Truss	Inner PL	Outer PL
19	L4	North	1	N/A



SECTION B-B

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:

For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	130



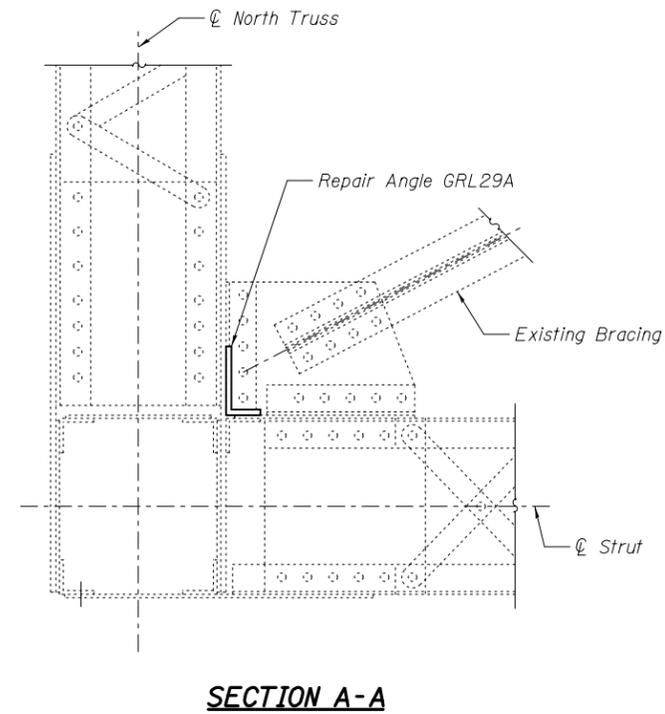
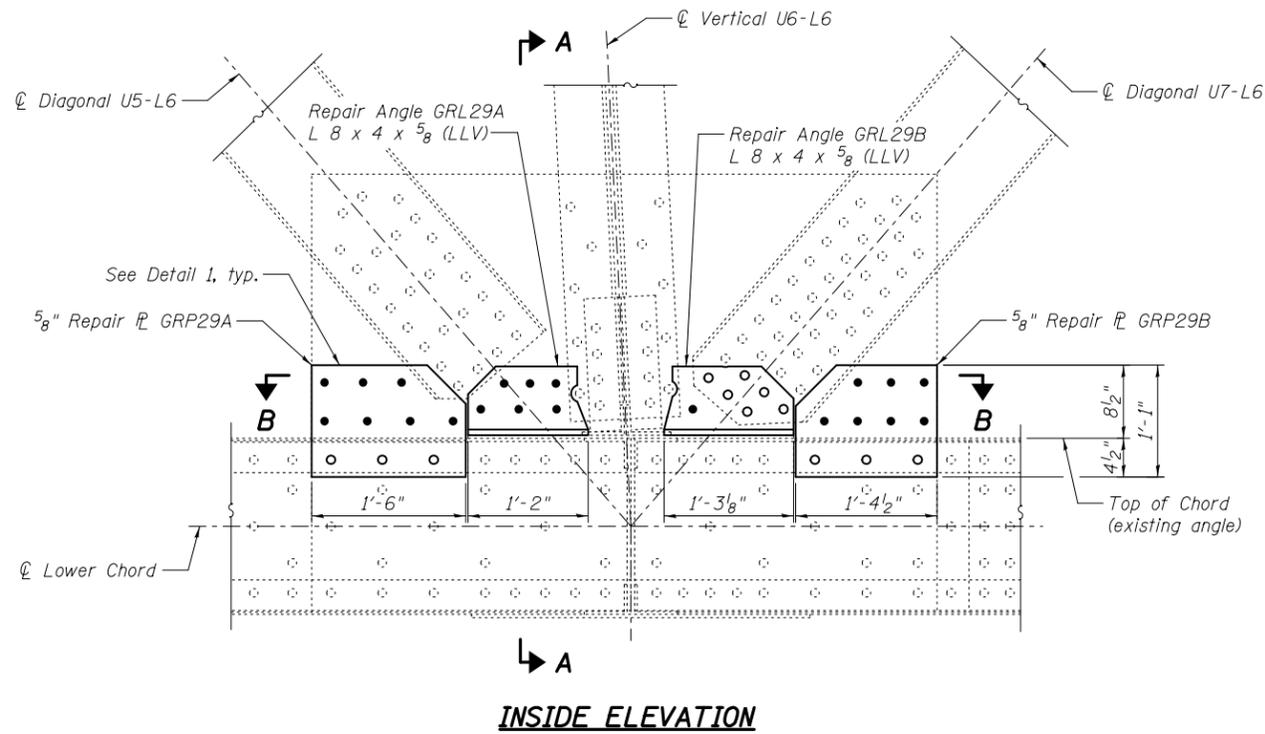
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUSSET PLATE REPAIRS - 28
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 51 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	119
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



GUSSET PLATE L6

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.

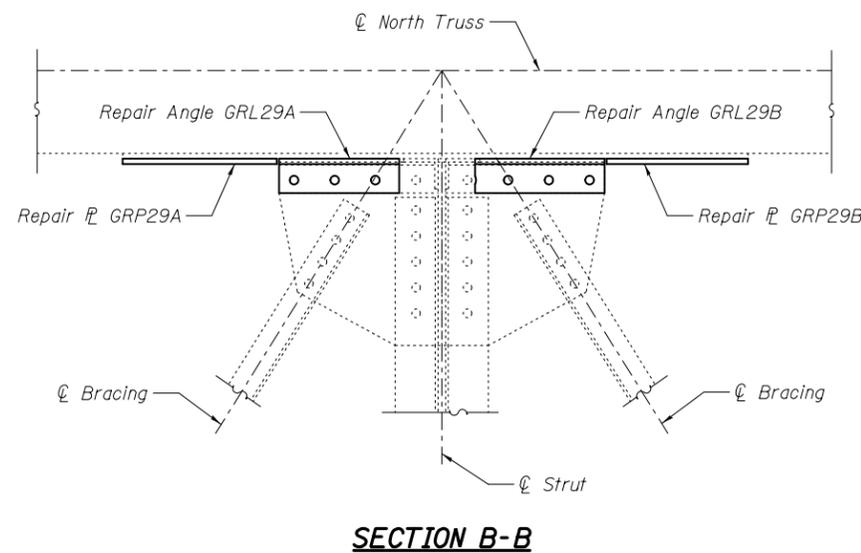
REPAIR LOCATIONS

Span	Joint	Truss	Inner Pl	Outer Pl
18	L6	North	1	N/A
19	L6	North	1	N/A

LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.



BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	180



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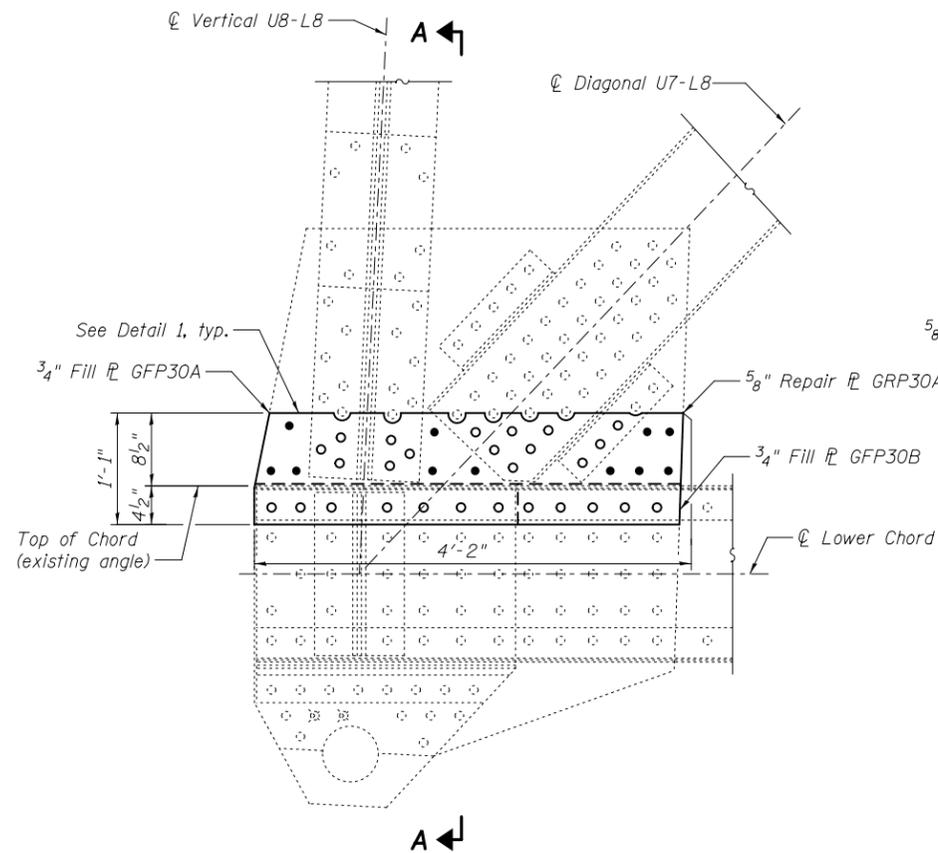
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GUSSET PLATE REPAIRS - 29
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

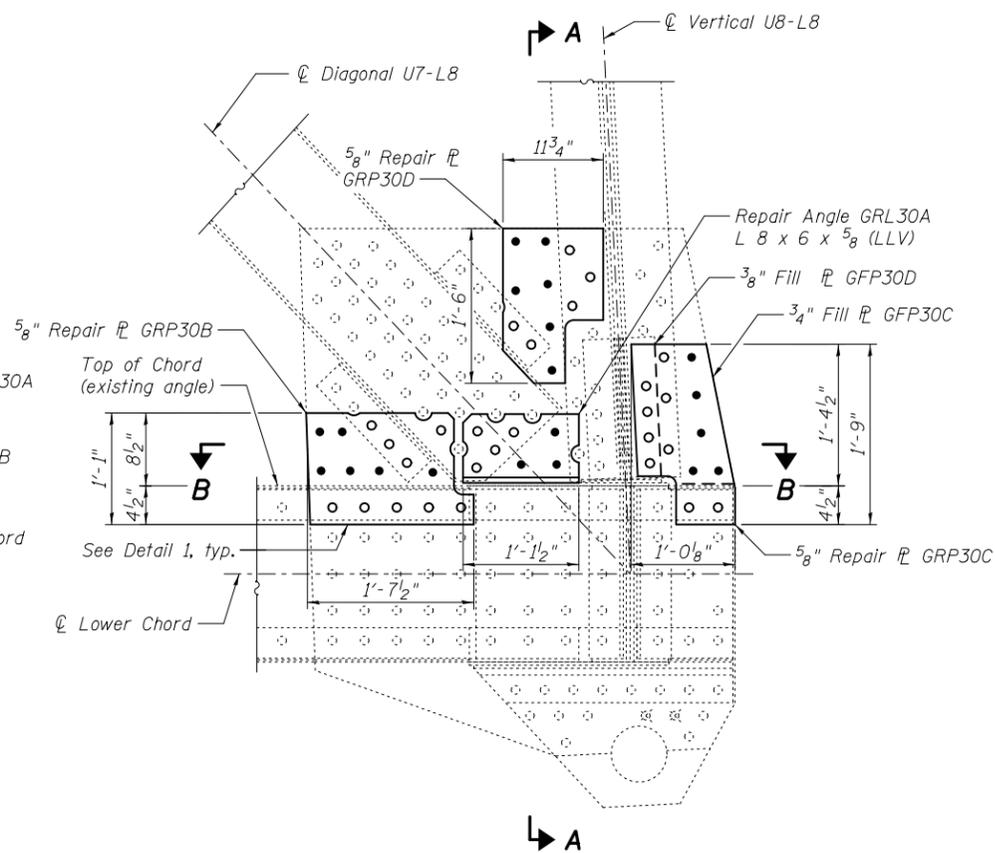
SHEET NO. 52 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	120
CONTRACT NO. 68A93				

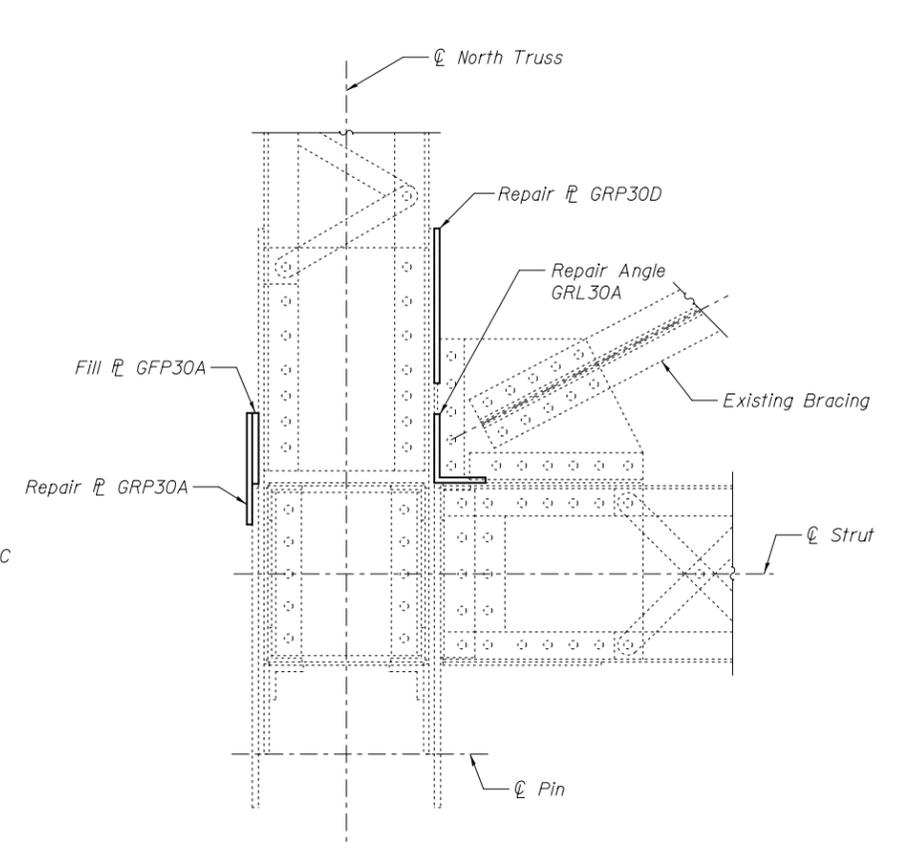
ILLINOIS FED. AID PROJECT



OUTSIDE ELEVATION



INSIDE ELEVATION



SECTION A-A

GUSSET PLATE L8

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.

REPAIR LOCATIONS

Span	Joint	Truss	Inner PL	Outer PL
18	L8	North	1	1

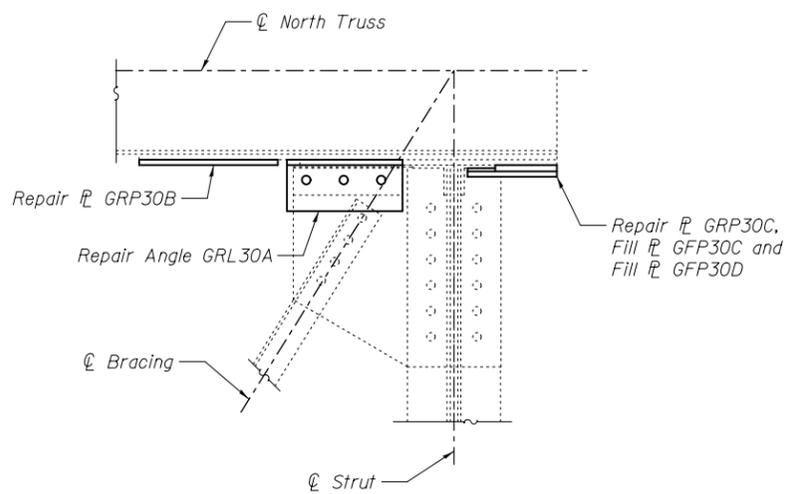
LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	500



SECTION B-B



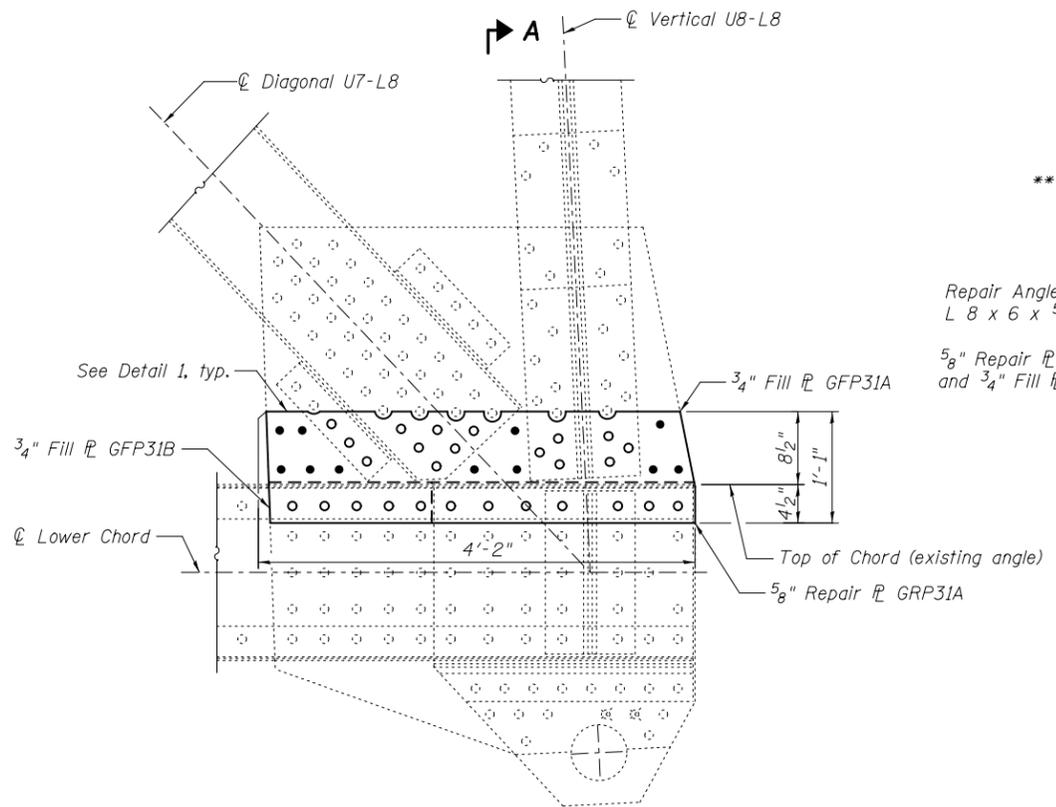
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	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

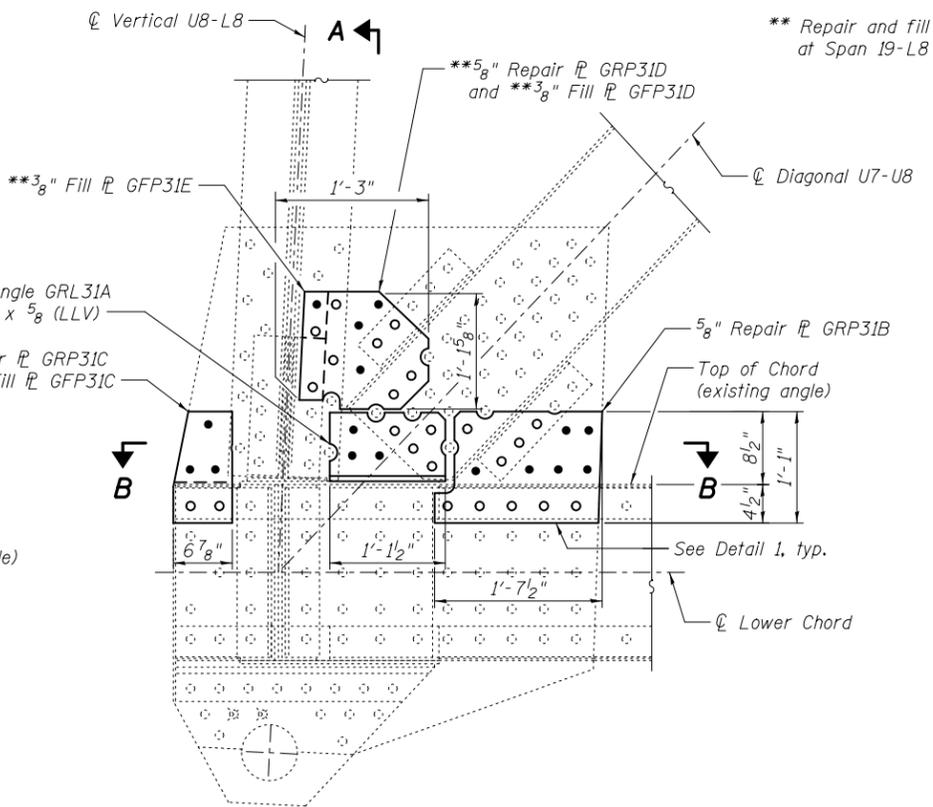
GUSSET PLATE REPAIRS - 30
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 53 OF 112 SHEETS

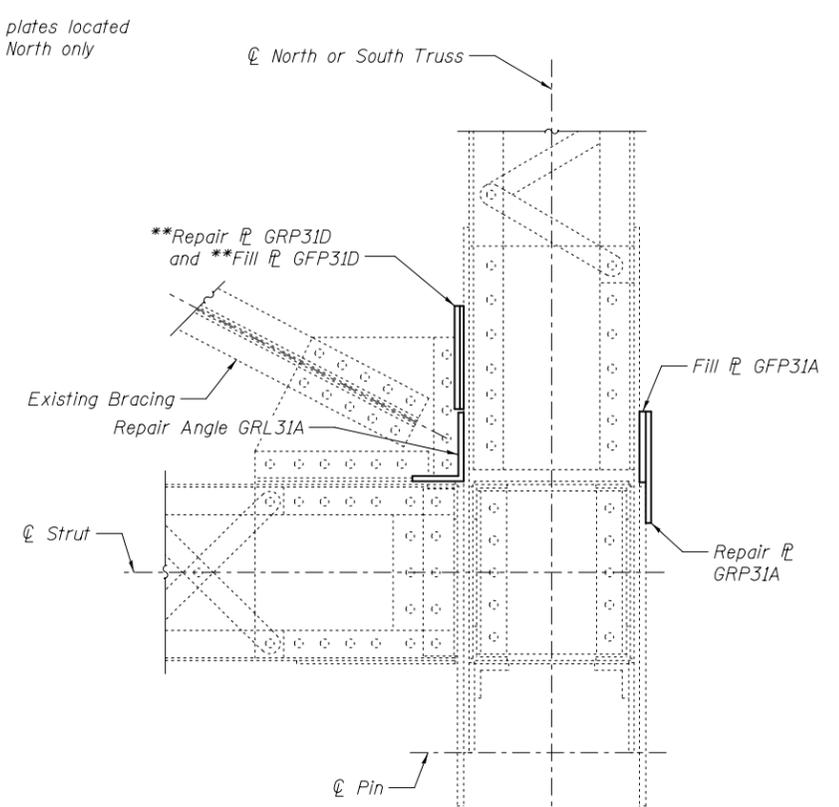
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	121
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



OUTSIDE ELEVATION



INSIDE ELEVATION



SECTION A-A

GUSSET PLATE L8

Field cut/cope new materials to accommodate existing fasteners not used in repair, as required.

REPAIR LOCATIONS

Span	Joint	Truss	Inner Pl	Outer Pl
18	L8	South	1	1
19	L8	North	1*	1*
19	L8	South	1	1

* Remove existing repair angle and plate. Reuse existing holes and modify proposed fastener layout to accommodate additional fasteners in accordance with gusset repair procedures.

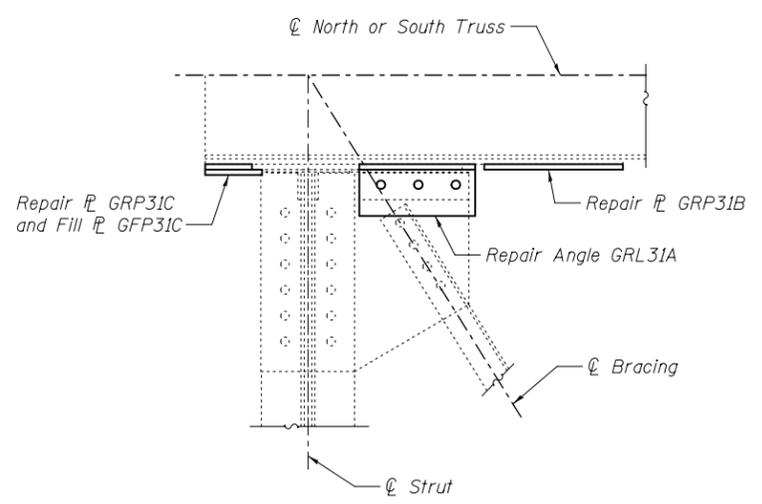
LEGEND

- ◊ Existing fastener to remain
- New 7/8" φ A325 bolt in new 15/16" φ hole (shop or field drilled)
- Replace existing fastener with new 7/8" φ A325 bolt in existing hole. Holes in new material shall be field drilled using existing members as a template.

Notes:
 For gusset repair general notes and procedures, see Sheet 23 of 112.
 The Contractor shall field verify existing conditions, including gusset plates, connection plates, connection angles, miscellaneous steel and layout of the fastener holes prior to ordering new materials.
 For Detail 1 (Sealant), see Sheet 23 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1240



SECTION B-B



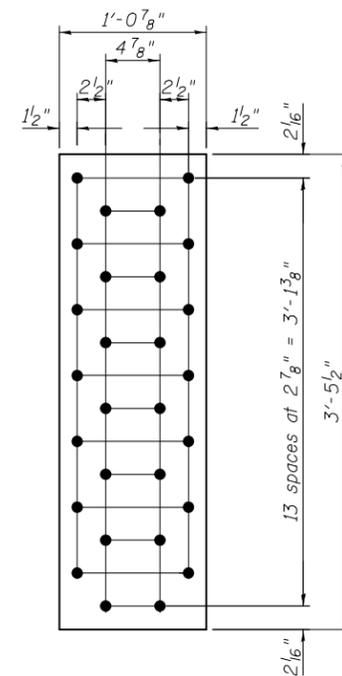
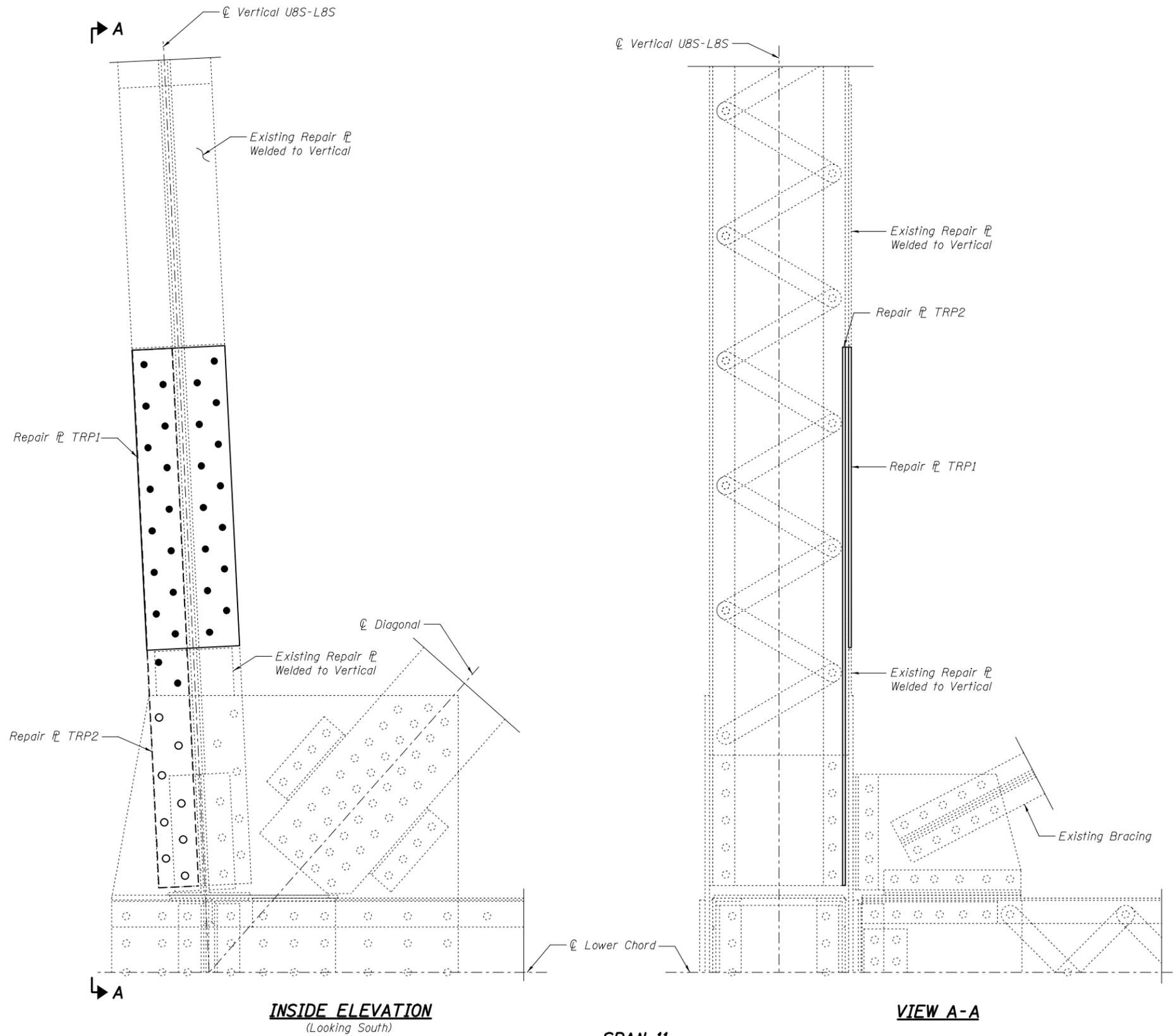
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	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

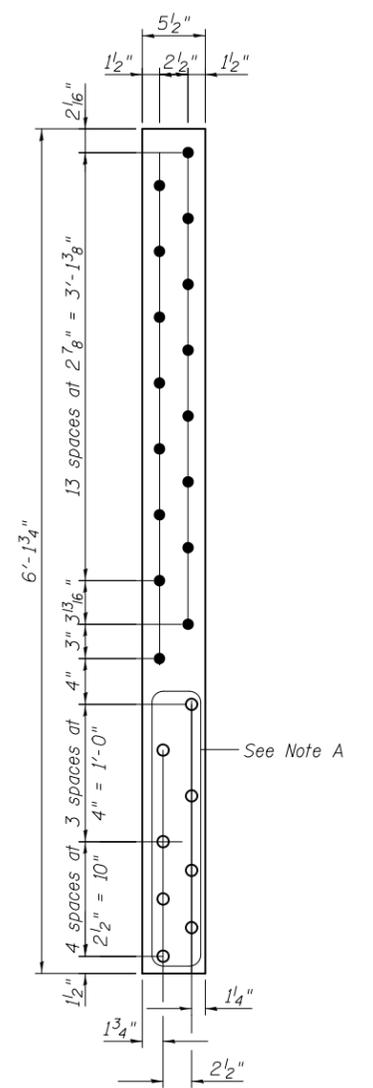
GUSSET PLATE REPAIRS - 31
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 54 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	122
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



REPAIR PL TRP1
 PL 3/8" x 12 7/8" x 3'-5 1/2"
 (1-required)



REPAIR PL TRP2
 PL 3/8" x 5 1/2" x 6'-1 3/4"
 (1-required)

LEGEND

- ◊ Existing fastener
- New bolt in new hole
- New bolt in existing hole

Note:
 Coordinate truss member repairs with gusset plate repairs shown on Sheet 26 of 112.

Note A:
 Field drill holes using existing holes as template. Remainder of holes may be shop or field drilled.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	140

INSIDE ELEVATION
 (Looking South)

SPAN 11
UBS-L8S AT L8S
TRUSS MEMBER REPAIR

VIEW A-A



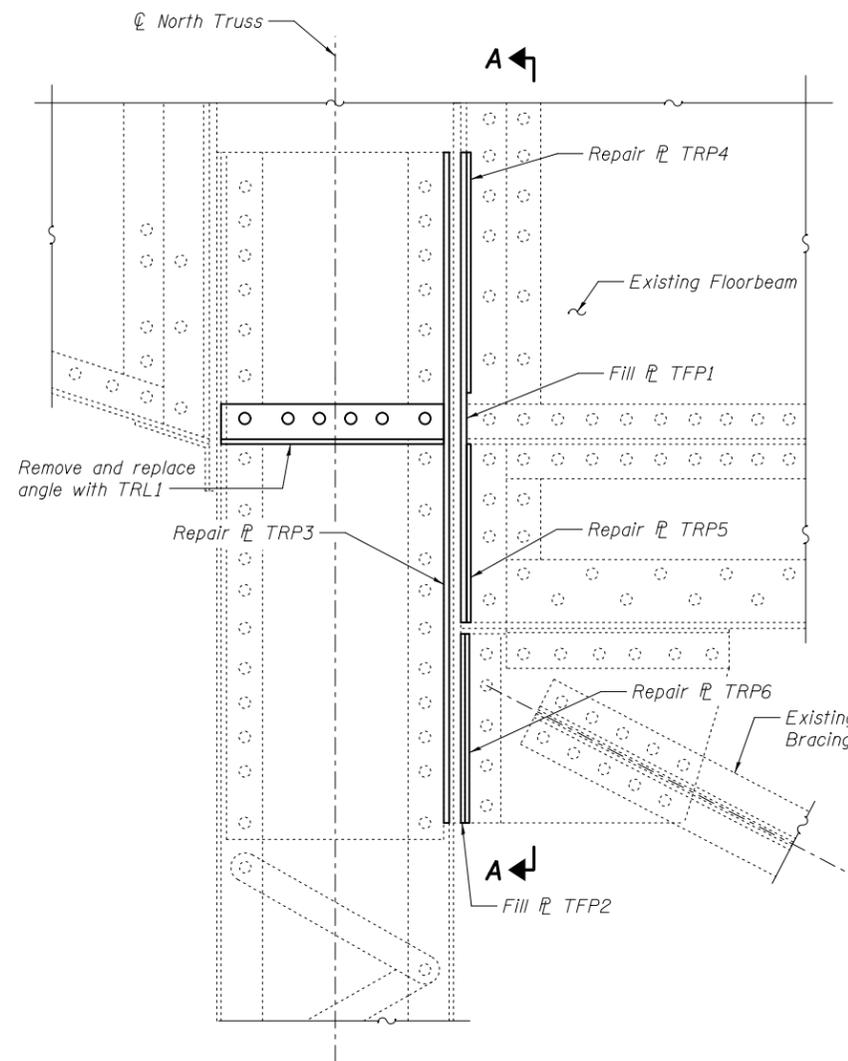
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	CHECKED - APL	REVISIONS
PLOT SCALE =	DRAWN - CMM	REVISIONS
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUSS MEMBER REPAIRS - 1
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

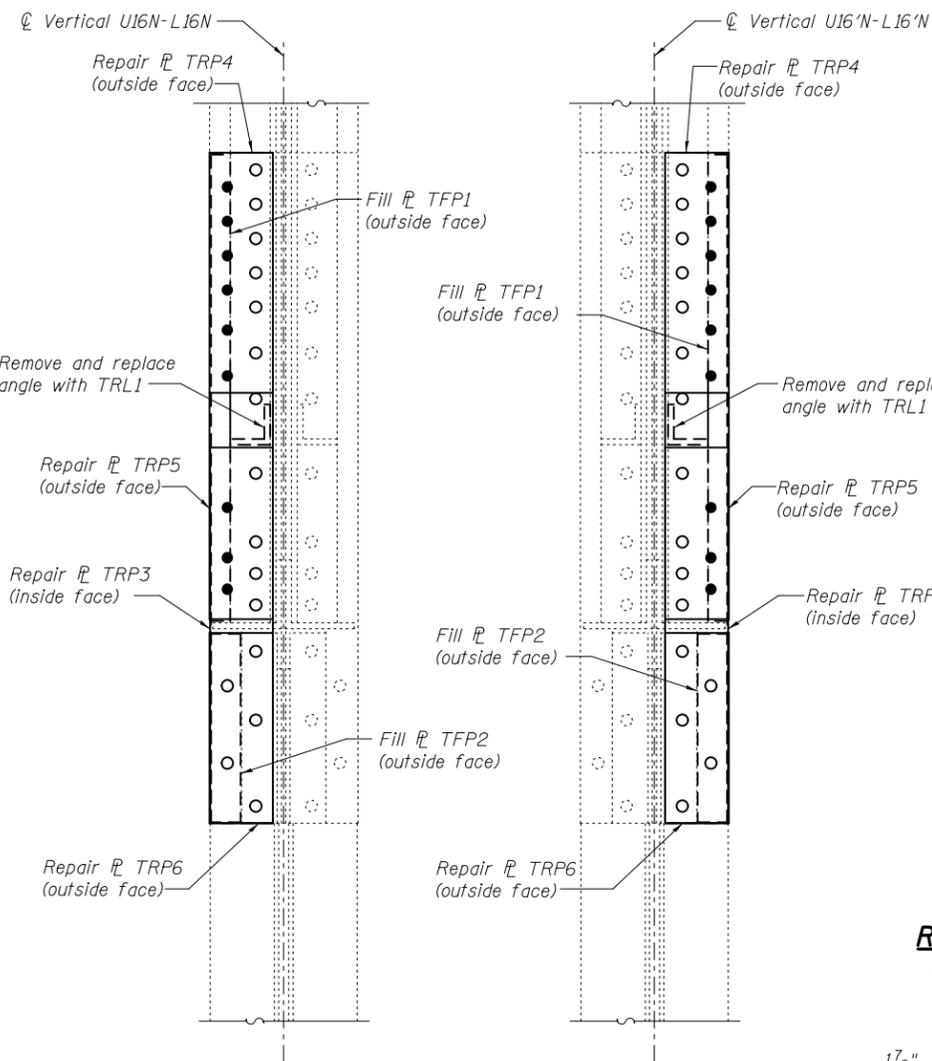
SHEET NO. 55 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	123
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



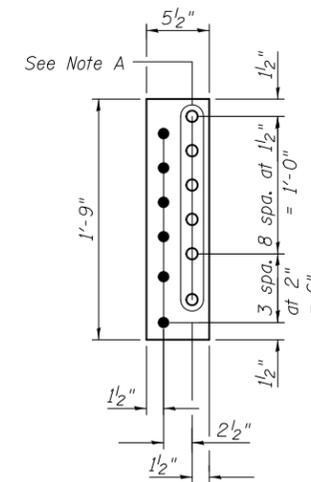
SPAN 13
U16N-L16N AT U16N
TRUSS MEMBER REPAIR
 (Shown Looking East)

SPAN 15
U16'N-L16'N AT U16'N
TRUSS MEMBER REPAIR
 (Similar)

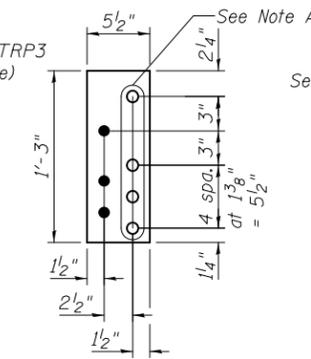


SECTION A-A
 (Span 13)

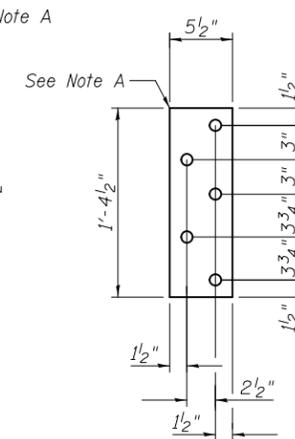
SECTION A-A
 (Span 15)



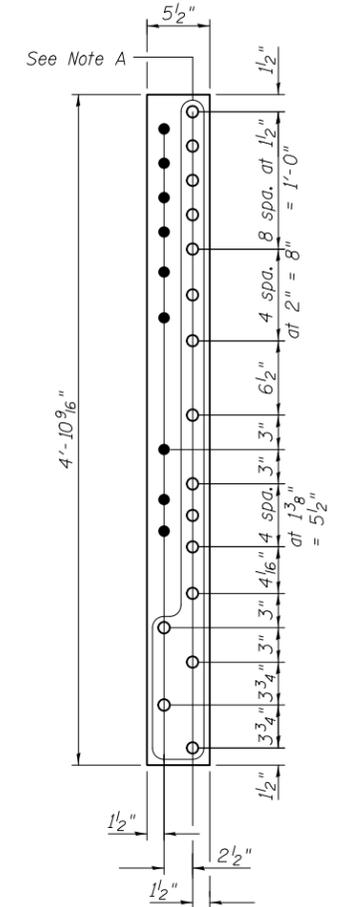
REPAIR P TRP4
 $\text{P } \frac{3}{8} \text{''} \times 5\frac{1}{2} \text{''} \times 1\text{'-}9 \text{''}$
 (2-required)



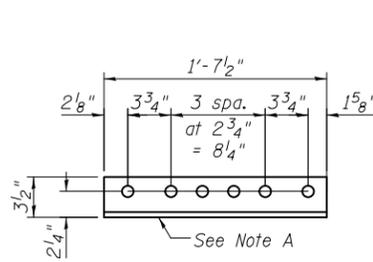
REPAIR P TRP5
 $\text{P } \frac{3}{8} \text{''} \times 5\frac{1}{2} \text{''} \times 1\text{'-}3 \text{''}$
 (2-required)



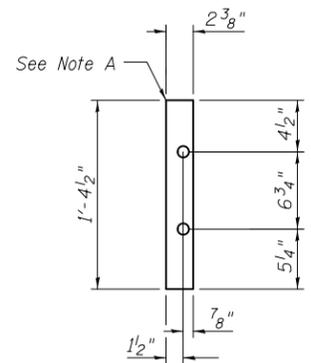
REPAIR P TRP6
 $\text{P } \frac{3}{8} \text{''} \times 5\frac{1}{2} \text{''} \times 1\text{'-}4\frac{1}{2} \text{''}$
 (2-required)



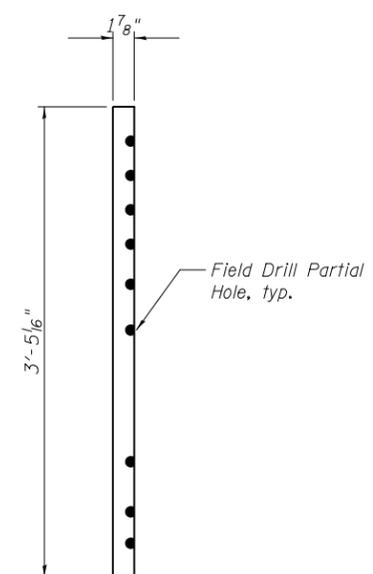
REPAIR P TRP3
 $\text{P } \frac{3}{8} \text{''} \times 5\frac{1}{2} \text{''} \times 4\text{'-}10\frac{9}{16} \text{''}$
 (2-required)



REPAIR ANGLE TRL1
 $\text{L } 5 \text{''} \times 3\frac{1}{2} \text{''} \times \frac{1}{2} \text{''}$
 (2-required)



FILL P TFP2
 $\text{P } \frac{3}{8} \text{''} \times 2\frac{3}{8} \text{''} \times 1\text{'-}4\frac{1}{2} \text{''}$
 (2-required)



FILL P TFP1
 $\text{P } \frac{1}{2} \text{''} \times 1\frac{7}{8} \text{''} \times 3\text{'-}5\frac{1}{8} \text{''}$
 (2-required)

LEGEND

- ⊙ Existing fastener
- New bolt in new hole
- New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	250

Notes:

Flanges of vertical truss members to be repaired are warped. Angle legs shall be mechanically straightened prior to attaching repair and fill plates. Heat straightening is not allowed. Contractor shall submit a straightening procedure to the Engineer for review and approval prior to performing work. The cost to straighten the angle legs shall be included with Structural Steel Repair. Work shown on this sheet shall be performed during Bridge Closure Stage.

Note A:
 Field drill holes using existing holes as template. Remainder of holes may be shop or field drilled.

Bolt spacing shown for Span 13. Span 15 opposite hand.



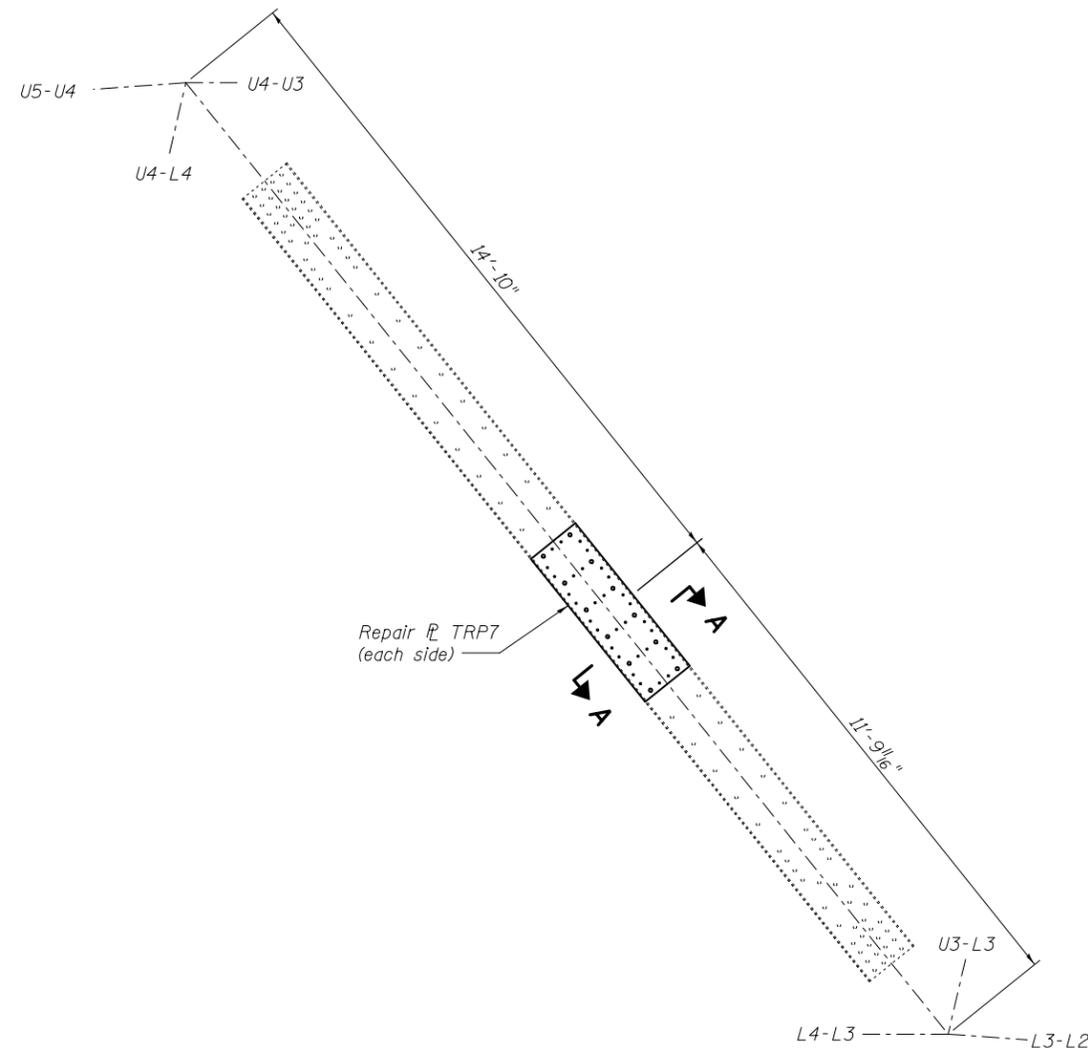
USER NAME =	DESIGNED - RLM	REVISED
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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

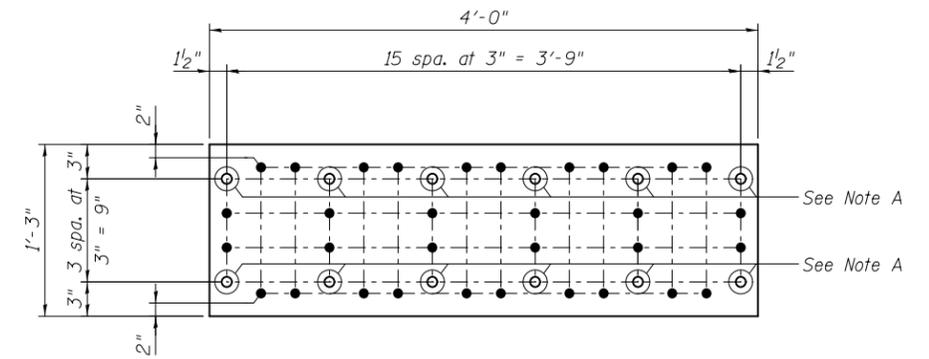
TRUSS MEMBER REPAIRS - 2
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 56 OF 112 SHEETS

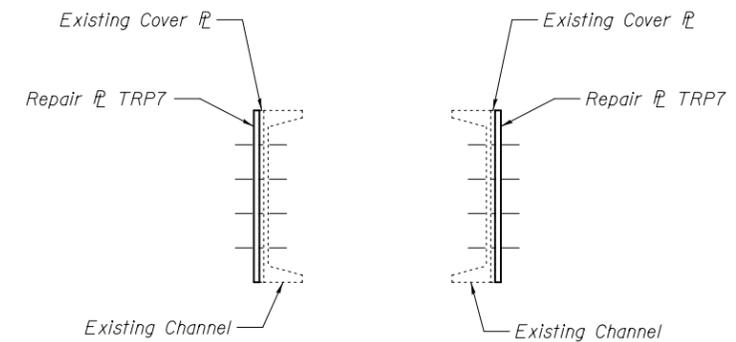
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103BI)-7	PEORIA/TAZEWELL	180	124
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



SPAN 14 AT U4S-L3S
TRUSS MEMBER REPAIR
 (Looking North)



REPAIR PLATE TRP7
 PL 1/2" x 1'-3" x 4'-0" (NTR)
 (2-required)



SECTION A-A

LEGEND

- ⊙ Existing fastener
- New bolt in new hole
- New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	280

Note A:
 Field drill holes using existing holes as template.
 Remainder of holes may be shop or field drilled.

Note:
 Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

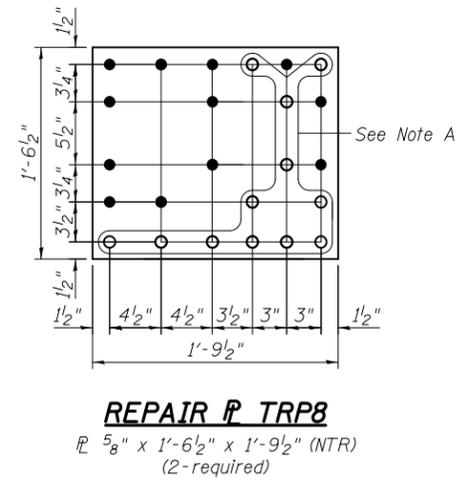
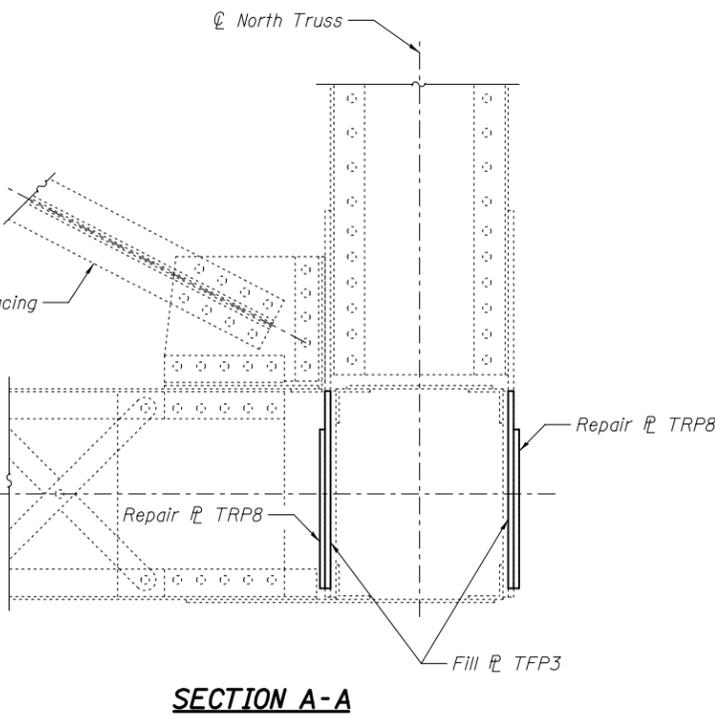
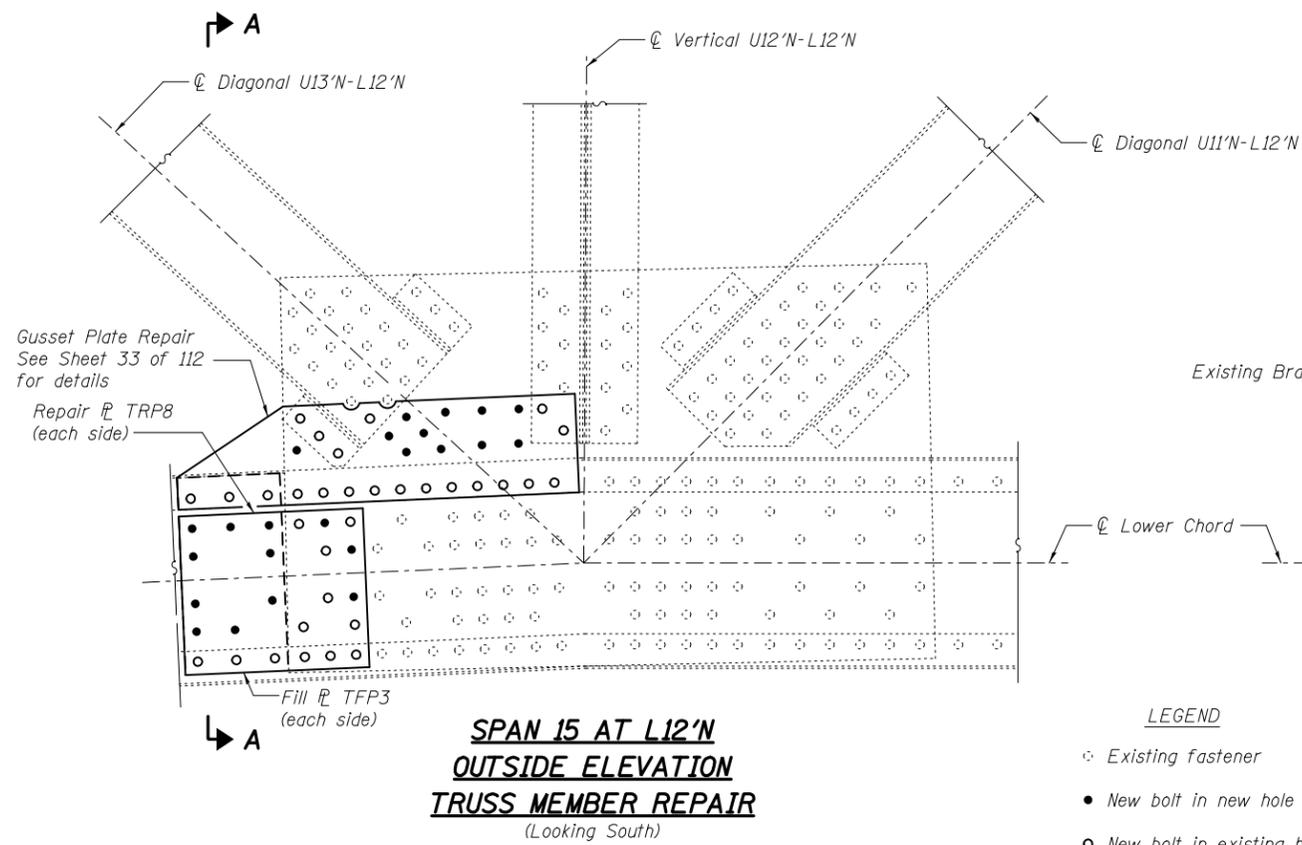


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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

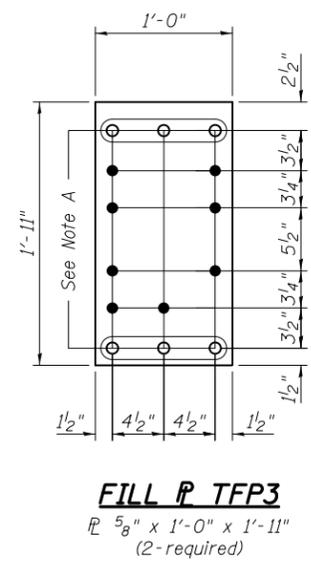
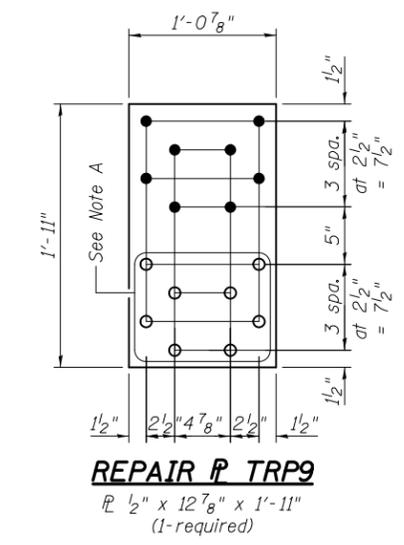
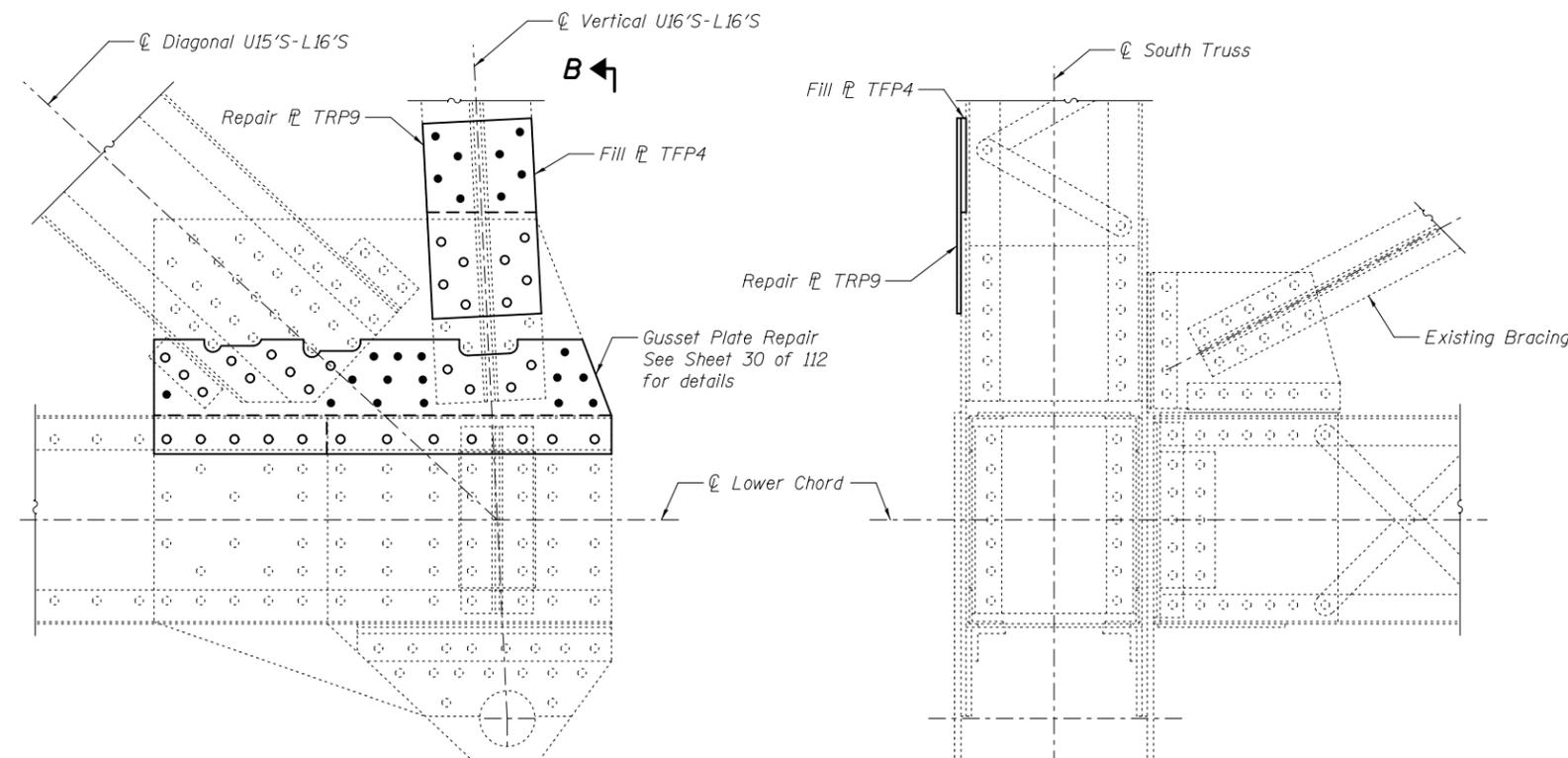
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUSS MEMBER REPAIRS - 3
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	125
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				

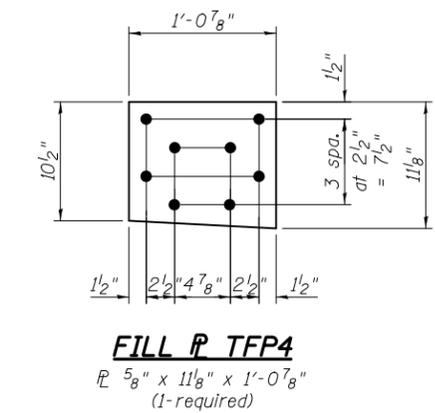


- LEGEND**
- Existing fastener
 - New bolt in new hole
 - New bolt in existing hole



**SPAN 15 AT L16'S
OUTSIDE ELEVATION
TRUSS MEMBER REPAIR**
(Looking North)

SECTION B-B



Note A:
Field drill holes using existing holes as template.
Remainder of holes may be shop or field drilled.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	370

Note:
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

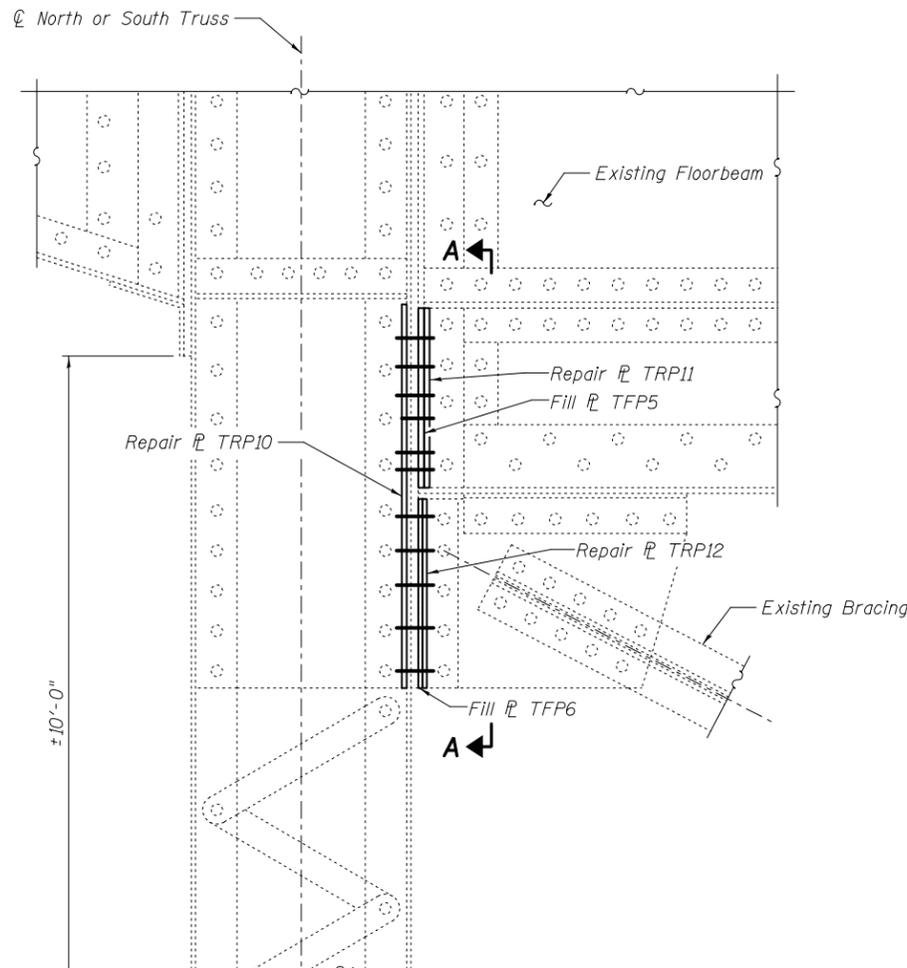


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PLOT SCALE =	CHECKED - APL	REVISED
PLOT DATE = 10/05/2015	DRAWN - PRC	REVISED
	CHECKED - RLM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRUSS MEMBER REPAIRS - 4
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

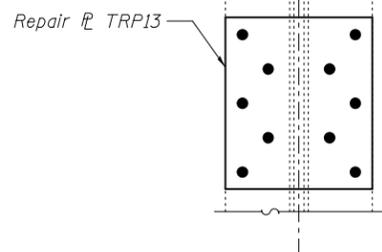
F.A.P. RTE. 669	SECTION (103B)I-7	COUNTY PEORIA/TAZEWELL	TOTAL SHEETS 180	SHEET NO. 126
CONTRACT NO. 68A93				



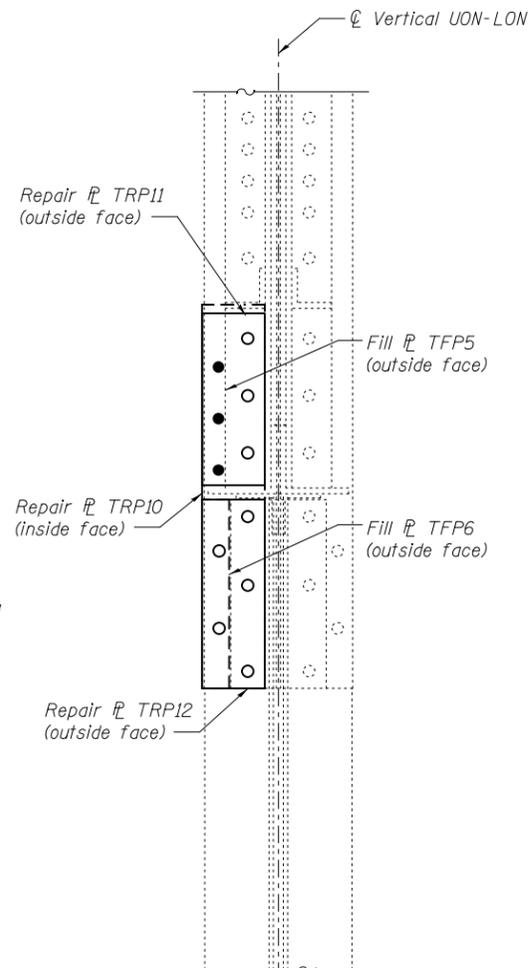
Repair PL TRP13
at Span 17
UOS-LOS

SPAN 16
UON-LON AT UON
TRUSS MEMBER REPAIR
(Shown Looking East)

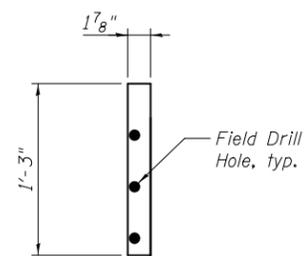
SPAN 17
UOS-LOS AT UOS
TRUSS MEMBER REPAIR
(Similar)



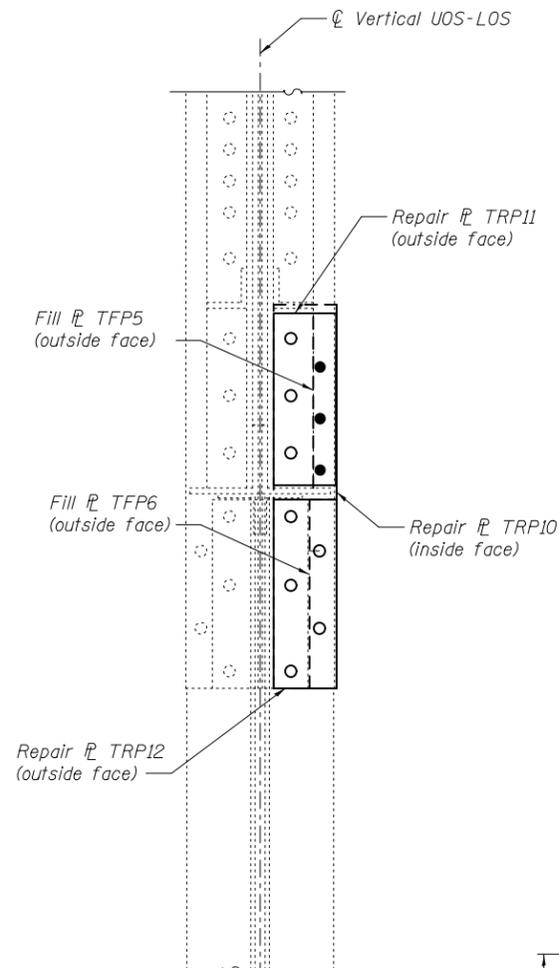
VIEW B-B
(Span 17)



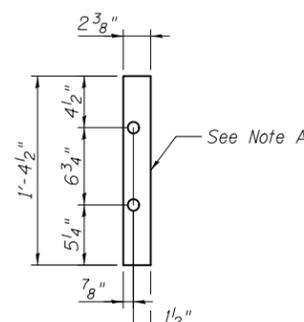
SECTION A-A
(Span 16)



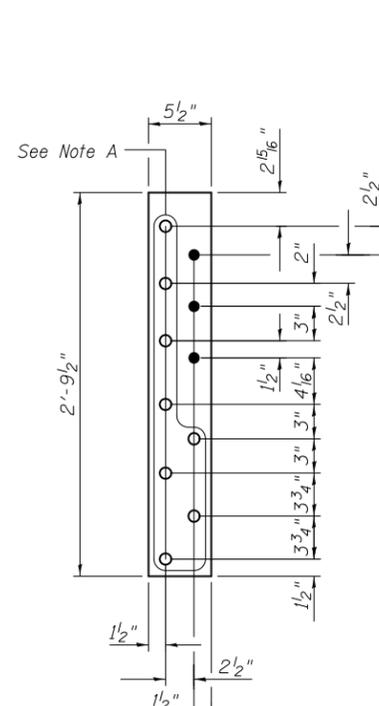
FILL PL TFP5
PL 1/2" x 1 7/8" x 1'-3"
(2-required)



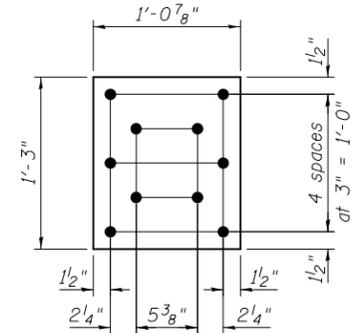
SECTION A-A
(Span 17)



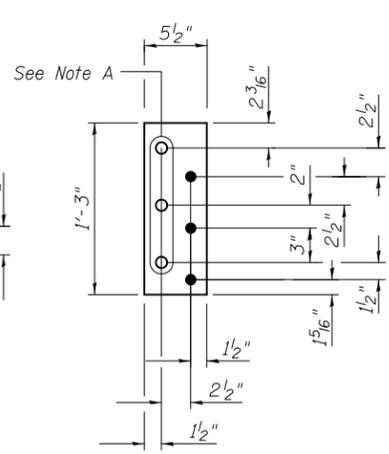
FILL PL TFP6
PL 3/8" x 2 3/8" x 1'-4 1/2"
(2-required)



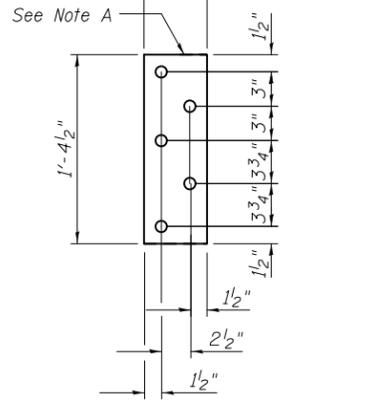
REPAIR PL TRP10
PL 3/8" x 5 1/2" x 2'-9 1/2"
(2-required)



REPAIR PL TRP13
PL 1/2" x 1'-0 7/8" x 1'-3"
(1-required)



REPAIR PL TRP11
PL 3/8" x 5 1/2" x 1'-3"
(2-required)



REPAIR PL TRP12
PL 3/8" x 5 1/2" x 1'-4 1/2"
(2-required)

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	150

Note:
Flanges of vertical truss members to be repaired are warped. Angle legs shall be mechanically straightened prior to attaching repair and fill plates. Heat straightening is not allowed. Contractor shall submit a straightening procedure to the Engineer for review and approval prior to performing work.
The cost to straighten the angle legs shall be included with Structural Steel Repair.

LEGEND

- ◊ Existing fastener
- New bolt in new hole
- New bolt in existing hole

Note A:
Field drill holes using existing holes as template. Remainder of holes may be shop or field drilled.



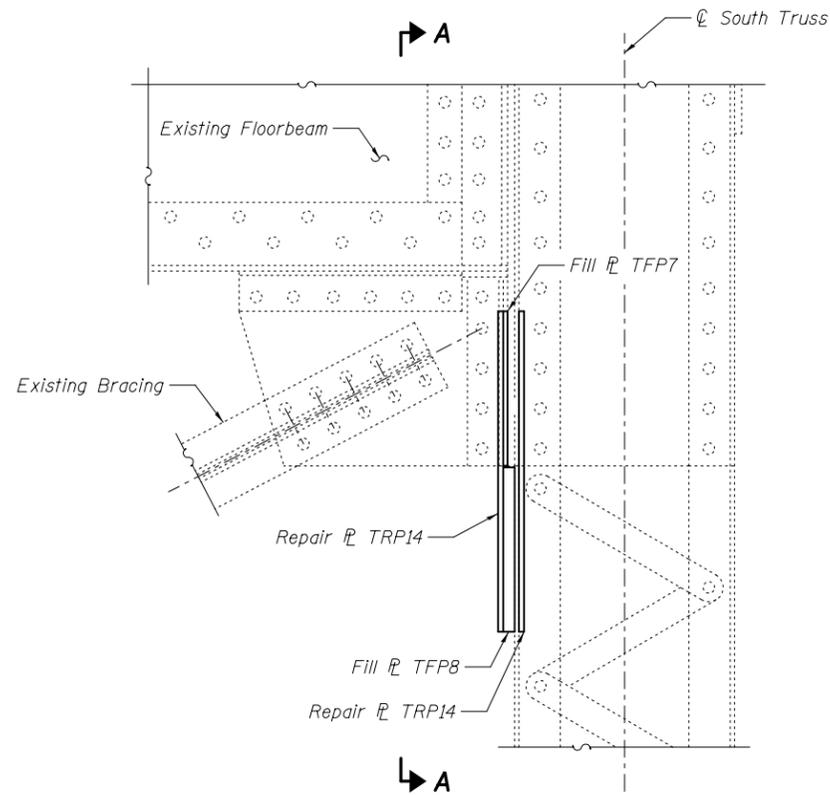
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PLOT SCALE =	CHECKED - APL	REVISED
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	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

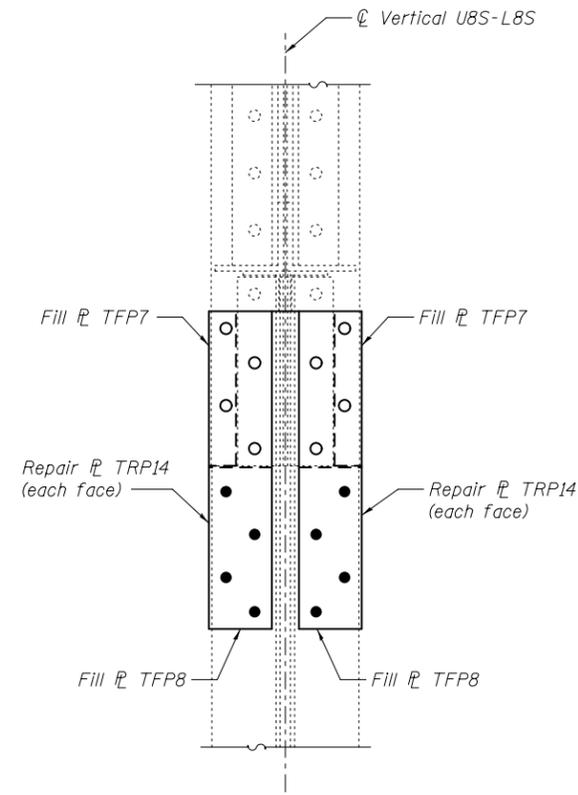
TRUSS MEMBER REPAIRS - 5
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 59 OF 112 SHEETS

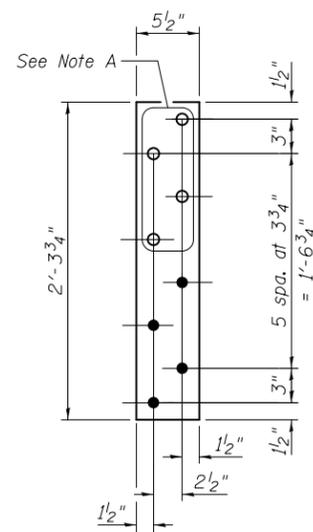
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103BI)-7	PEORIA/TAZEWELL	180	127
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



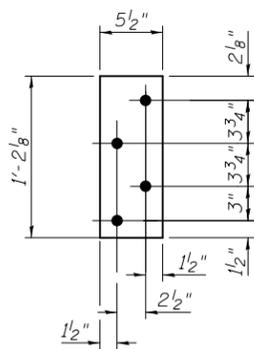
SPAN 17
UBS-L8S AT UBS
TRUSS MEMBER REPAIR
 (Looking East)



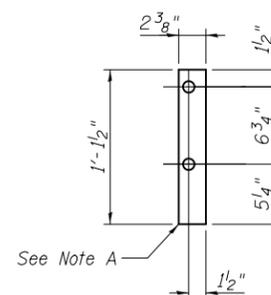
SECTION A-A



REPAIR R TRP14
 R 3/8" x 5 1/2" x 2'-3 3/4"
 (4-required)



FILL R TFP8
 R 1" x 5 1/2" x 1'-2 1/8"
 (2-required)



FILL R TFP7
 R 3/8" x 2 3/8" x 1'-1 1/2"
 (2-required)

Note A:
 Field drill holes using existing holes as template.
 Remainder of holes may be shop or field drilled.

LEGEND

- Existing fastener
- New bolt in new hole
- New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	140



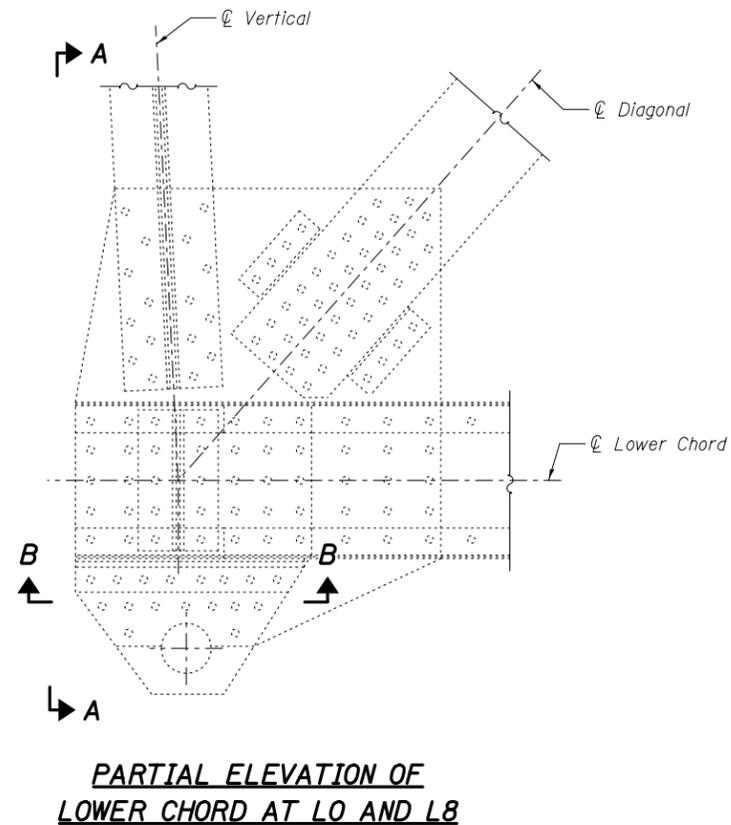
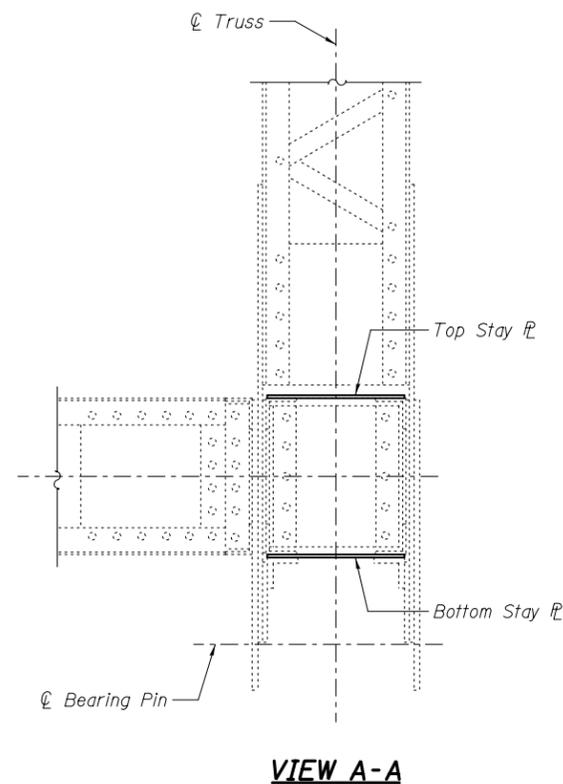
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	CHECKED - APL	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUSS MEMBER REPAIRS - 6
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

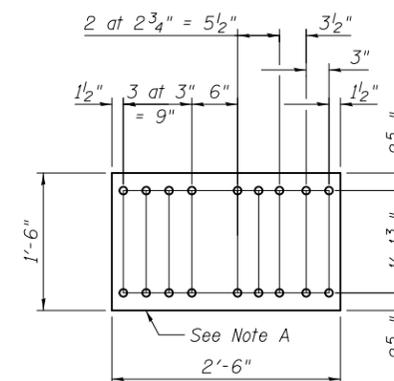
SHEET NO. 60 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	128
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68A93	

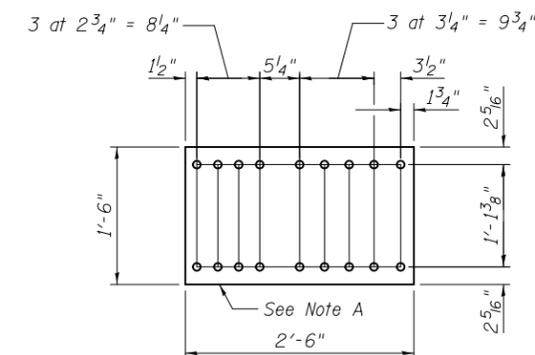


**STAY PLATE
REMOVAL/REPLACEMENT**

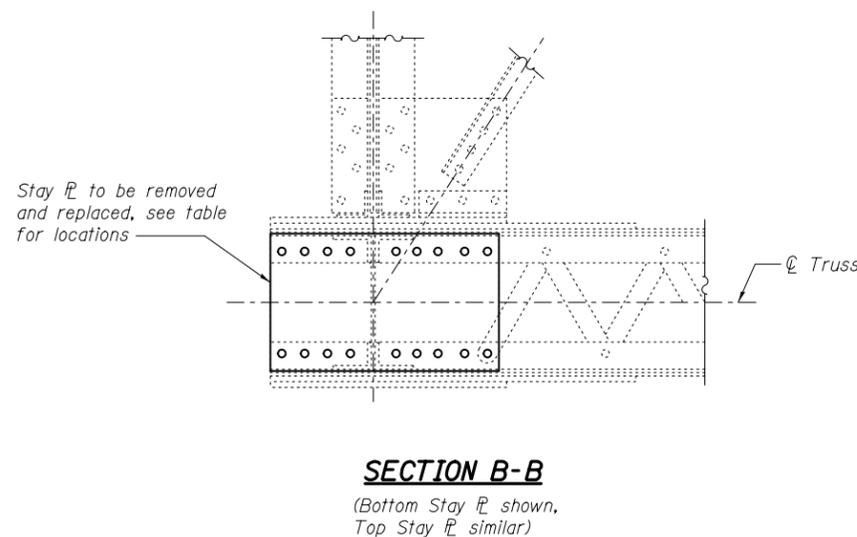
Span	Location		Description	Piece Mark
	Member	Panel Point		
10	LOS-LIS	LOS	Top Stay Plate	TRP15
10	LOS-LIS	LOS	Bottom Stay Plate	TRP15
10	L7S-L8S	L8S	Bottom Stay Plate	TRP15
11	LON-LIN	LON	Bottom Stay Plate	TRP15
11	LOS-LIS	LOS	Bottom Stay Plate	TRP15
11	L7N-L8N	L8N	Top Stay Plate	TRP15
11	L7N-L8N	L8N	Bottom Stay Plate	TRP15
12	LON-LIN	LON	Top Stay Plate	TRP15
12	LON-LIN	LON	Bottom Stay Plate	TRP15
12	LOS-LIS	LOS	Bottom Stay Plate	TRP15
12	LOS-LIS	LOS	Top Stay Plate	TRP15
12	L7N-L8N	L8N	Bottom Stay Plate	TRP15
18	LOS-LIS	LOS	Bottom Stay Plate	TRP16
19	LOS-LIS	LOS	Bottom Stay Plate	TRP16



STAY PLATE - TRP15
 PL 3/8" x 18" x 2'-6"
 (12-required)



STAY PLATE - TRP16
 PL 3/8" x 18" x 2'-6"
 (2-required)



LEGEND

- ⊙ Existing fastener
- New bolt in new hole
- New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1,030

Note A:
 Field drill holes using existing holes as template.
 Remainder of holes may be shop or field drilled.



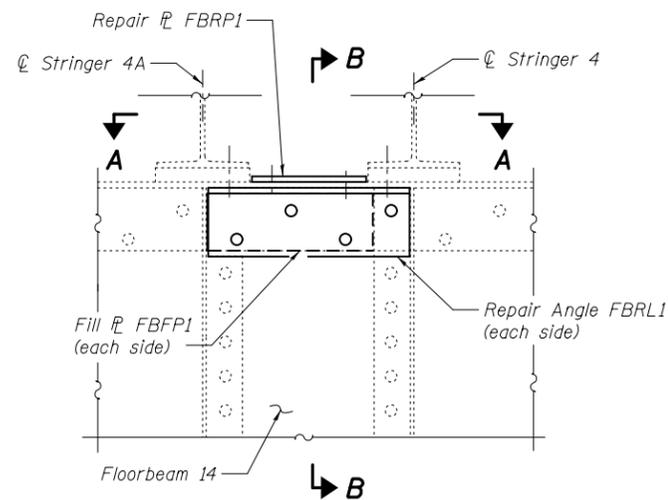
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PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - APL	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

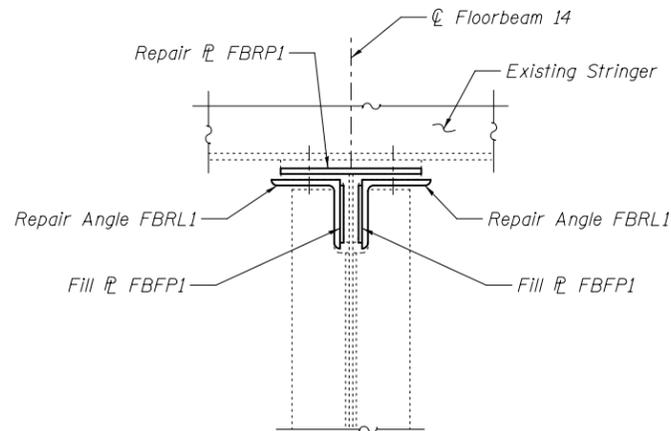
TRUSS MEMBER REPAIRS - 7
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 61 OF 112 SHEETS

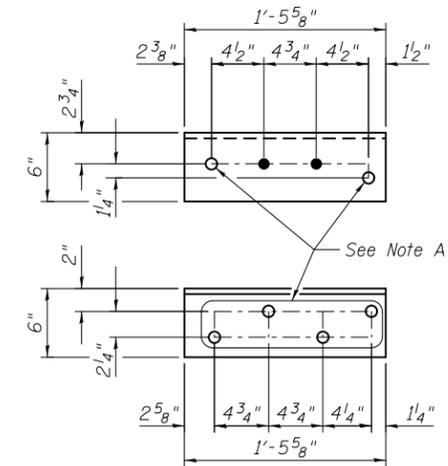
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	129
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



SPAN 13, FLOORBEAM 14
(Looking West)

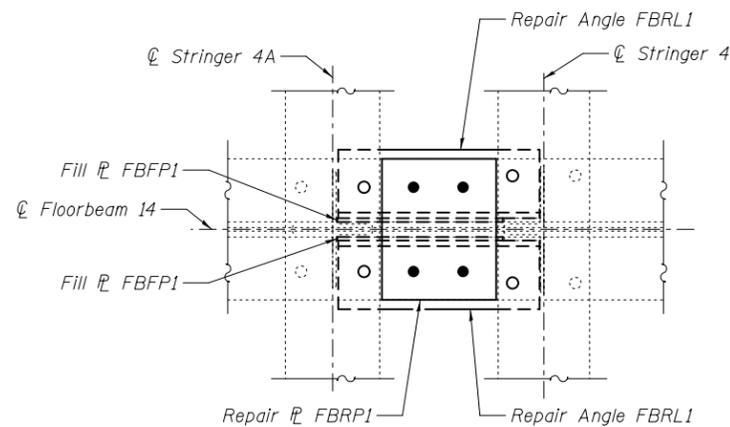


SECTION B-B

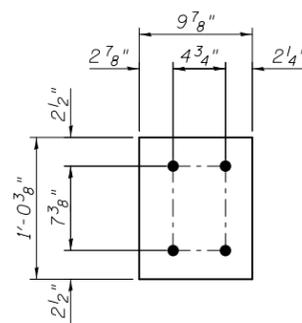


REPAIR ANGLE FBRL1

L 6 x 6 x 1/2" x 1'-5 5/8"
(2-required)
(East side angle shown,
West side angle opposite hand)

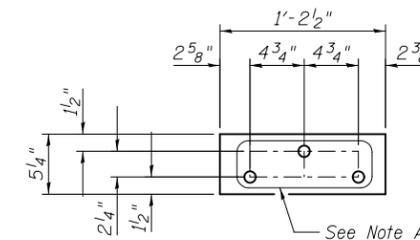


SECTION A-A



REPAIR P FBRP1

P 3/8" x 9 7/8" x 1'-0 3/8"
(1-required)



FILL P FBFP1

P 5/16" x 5 1/4" x 1'-2 1/2"
(2-required)

LEGEND

- ◊ Existing fastener
- New bolt in new hole
- New bolt in existing hole

Note A:
Field drill holes using existing holes as template.
Remainder of holes may be shop or field drilled.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	100



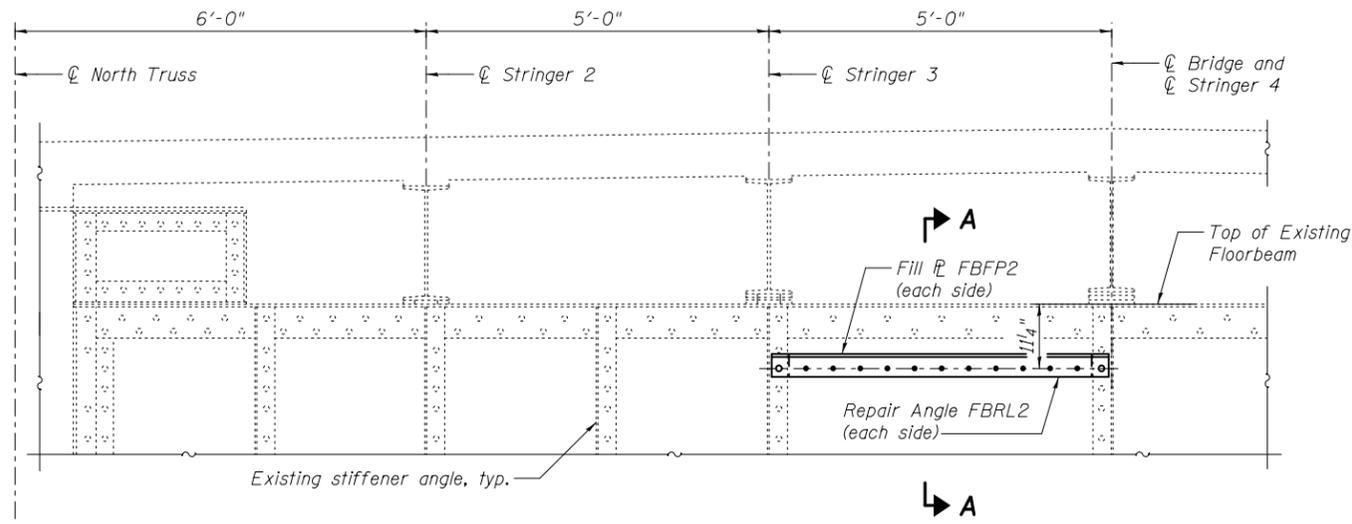
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

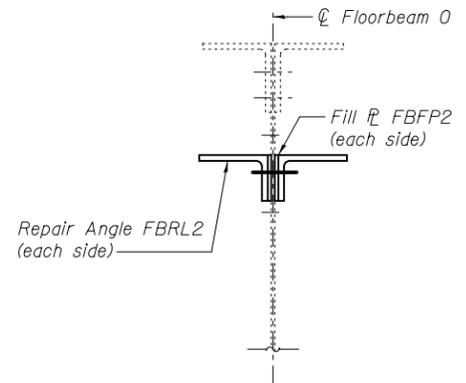
FLOORBEAM - TOP FLANGE REPAIRS - 1
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 62 OF 112 SHEETS

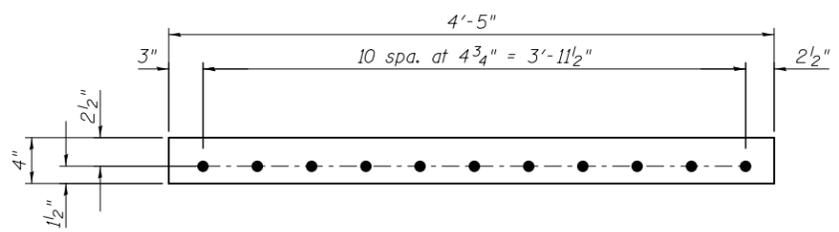
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	130
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



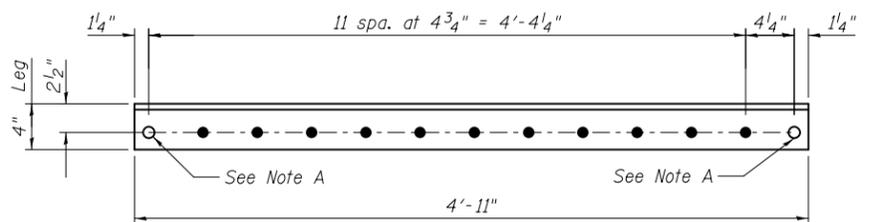
PART ELEVATION
SPAN 17 - FLOORBEAM 0
 (Looking East)



SECTION A-A



FILL P FBFP2
 P 5/16" x 4" x 4'-5"
 (2-required)



REPAIR ANGLE FBRL2
 L 6 x 4 x 1/2 x 4'-11"
 (2-required)

West side angle shown. East side angle opposite hand.

Note A:
 Field drill holes using existing holes as template.
 Remainder of holes may be shop or field drilled.

- LEGEND**
- ⊙ Existing fastener
 - New bolt in new hole
 - New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	210



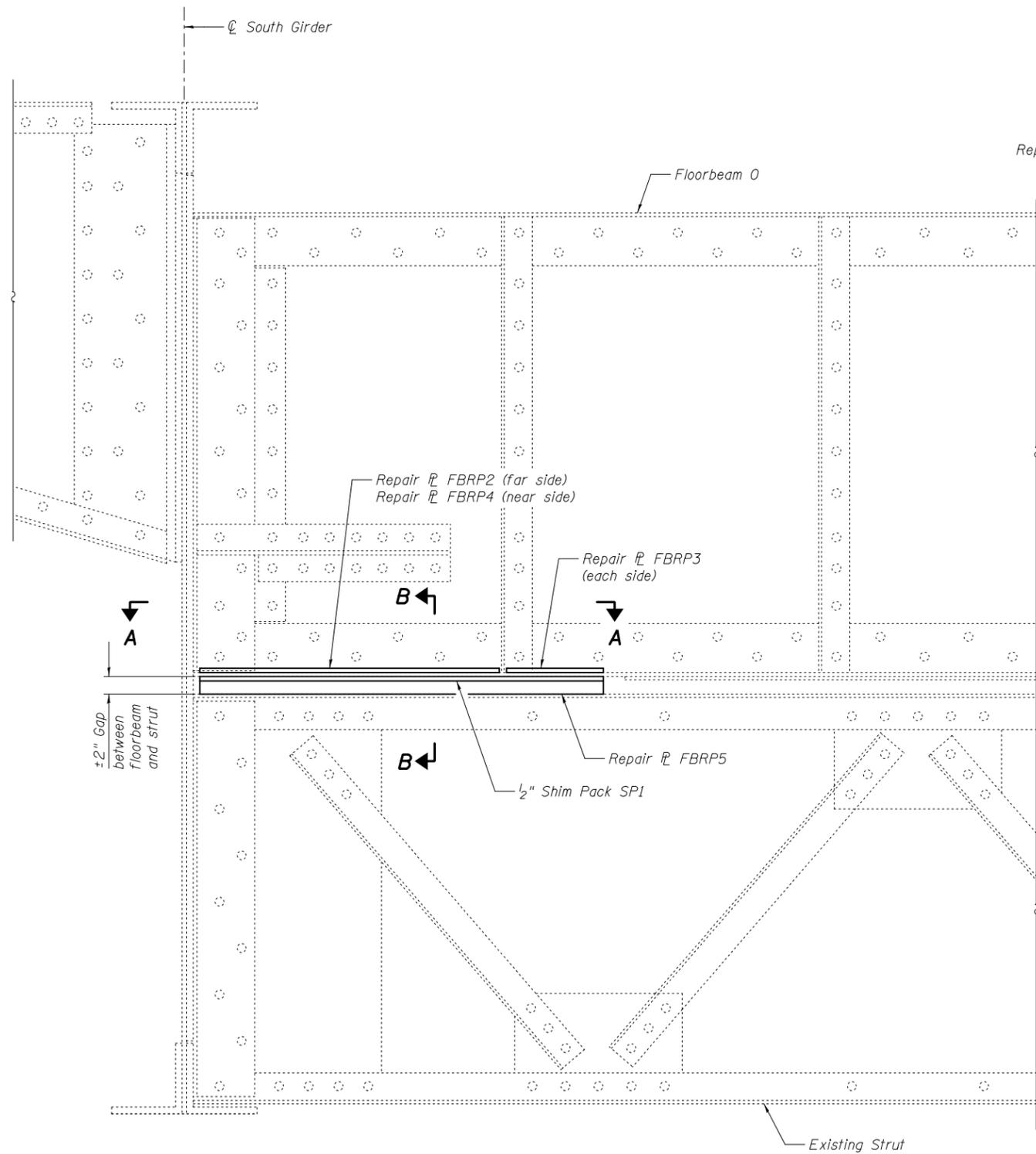
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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

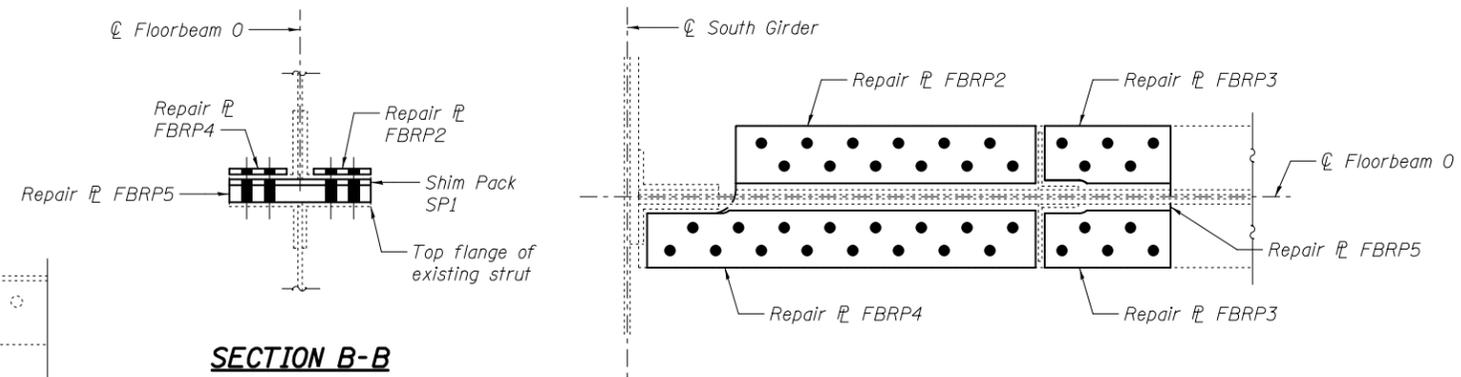
FLOORBEAM - TOP FLANGE REPAIRS - 2
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 63 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	131
				CONTRACT NO. 68A93
ILLINOIS FED. AID PROJECT				

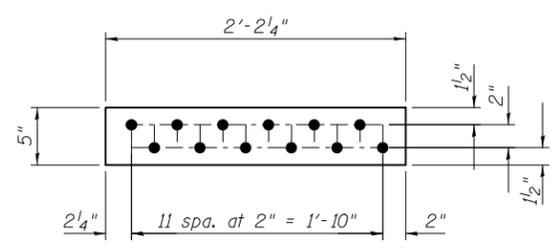


**SOUTH END PART ELEVATION
SPAN 23 AT FLOORBEAM 0**
(Looking West)

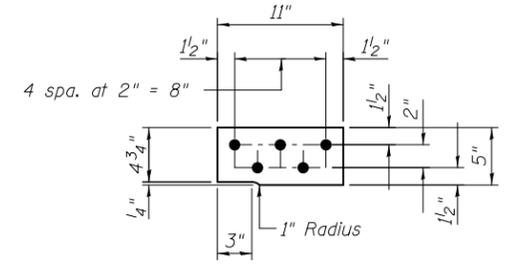


SECTION B-B

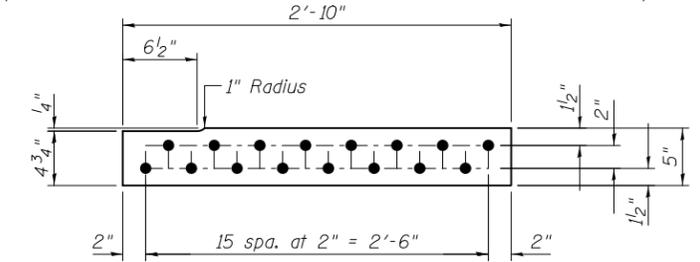
SECTION A-A



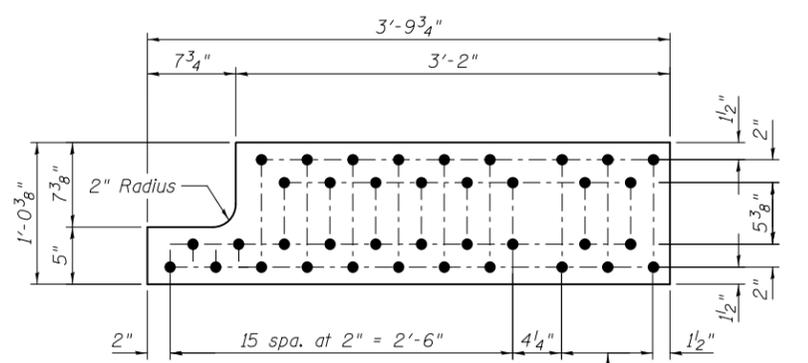
REPAIR FBRP2
PL 3/8" x 5" x 2'-2 1/4" (NTR)
(1-required)



REPAIR FBRP3
PL 3/8" x 5" x 0'-11" (NTR)
(2-required)



REPAIR FBRP4
PL 3/8" x 5" x 2'-10" (NTR)
(1-required)



REPAIR FBRP5
PL 1 3/4" x 1'-0 3/8" x 3'-9 3/4" (NTR)
(1-required)

SHIM PACK SP1
PL *1/2" x 1'-0 3/8" x 3'-9 3/4" (1-required)

* Shim Pack = 1-1/4" PL, 1-1/8" PL and 2-1/16" PL's

- LEGEND**
- ⊙ Existing fastener
 - New bolt in new hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	410

Note:
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.



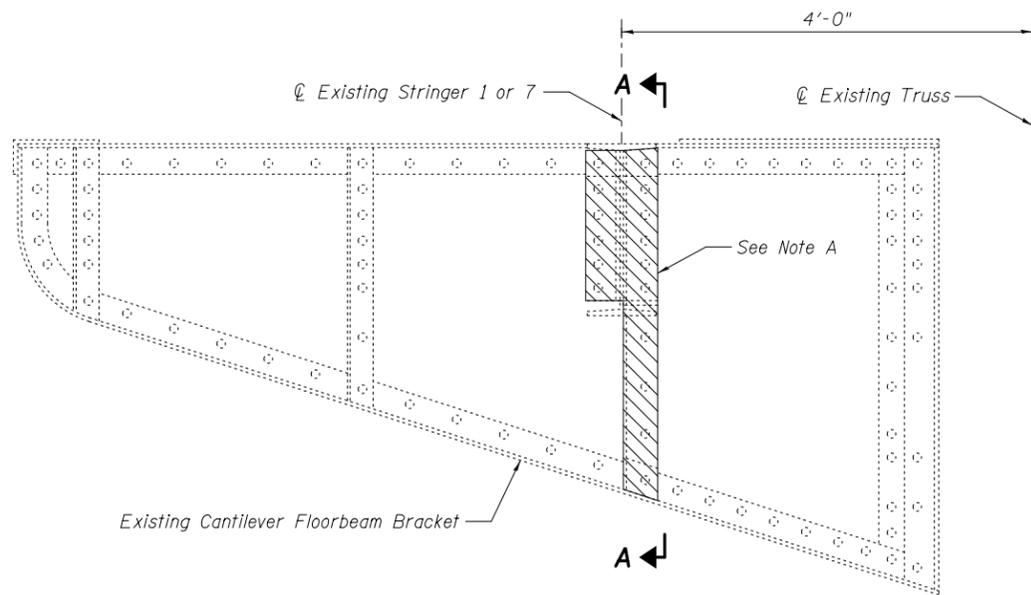
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	CHECKED - APL	REVISED
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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

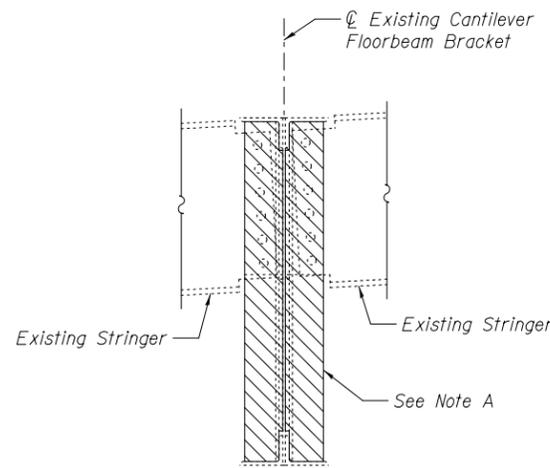
FLOORBEAM - BOTTOM FLANGE REPAIR
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 64 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103BI-7	PEORIA/TAZEWELL	180	132
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				

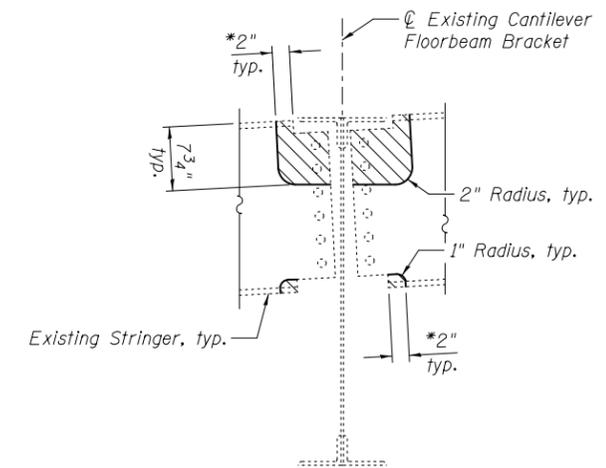


**PARTIAL ELEVATION
CANTILEVER FLOORBEAM BRACKET REPAIR**
(Removal Detail)



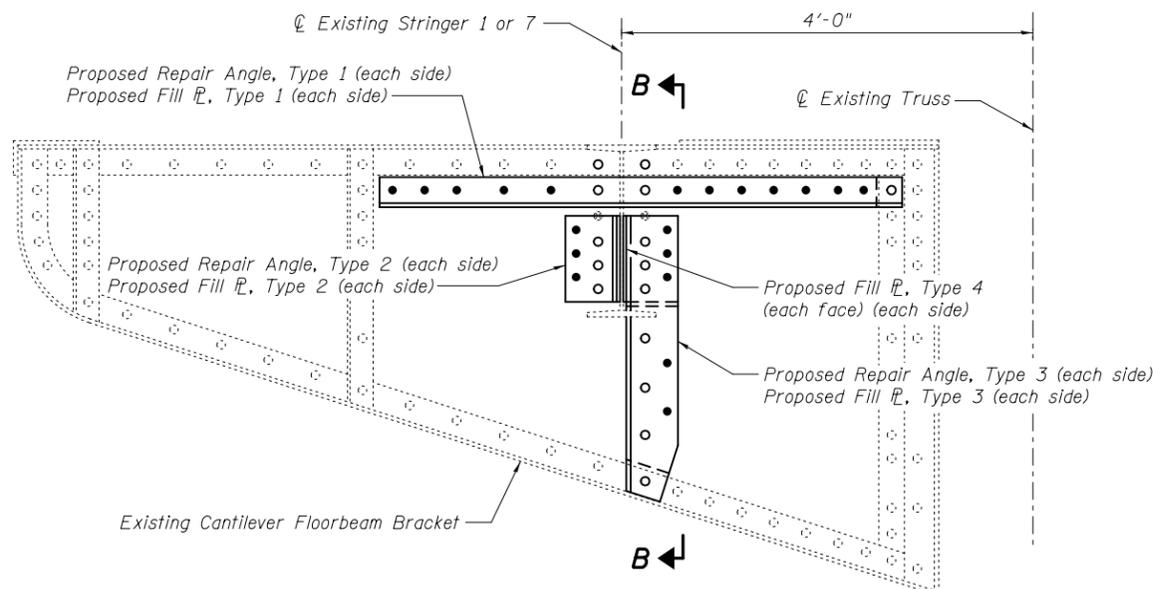
SECTION A-A

Note A:
Remove existing stiffener angles, connection angles, and fill plates, each side of cantilever floorbeam bracket. Temporarily support existing stringers.

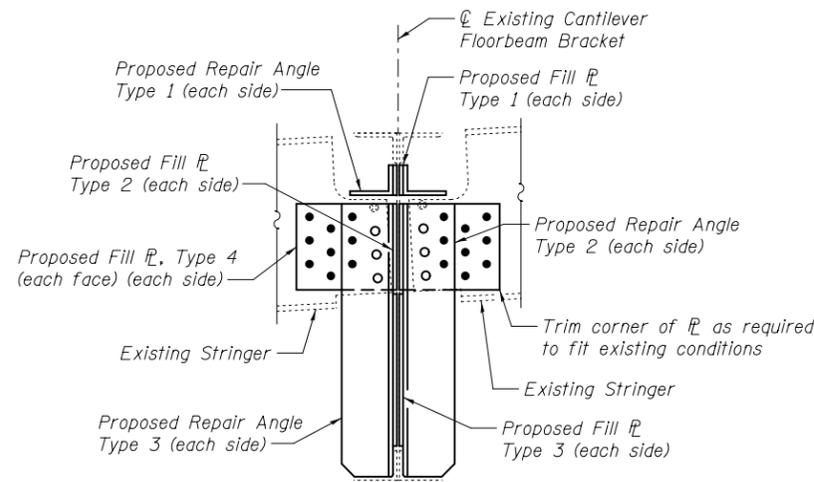


STRINGER COPING DETAIL

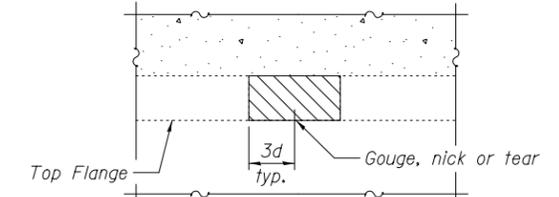
* Extend existing cope to accommodate new repair angle installation. Copes shall be ground smooth to ANSI 250, cleaned and painted. Cost included with Structural Steel Repair.



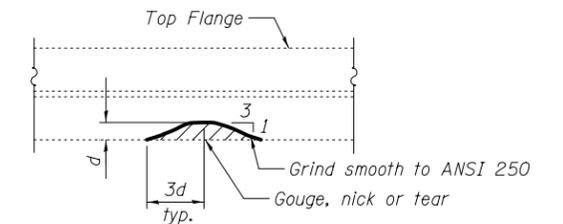
**PARTIAL ELEVATION
CANTILEVER FLOORBEAM BRACKET REPAIR**
(Installation Detail)



SECTION B-B



ELEVATION



PLAN

GRINDING DETAIL

After grinding, the damaged area shall be inspected for cracks using dye penetrant or magnetic particle testing and then cleaned and painted. Cost for grinding, inspecting, and painting included with Structural Steel Repair.

LEGEND

- ⊗ Open hole
- ⊙ Existing fastener
- New bolt in new hole
- New bolt in existing hole

Notes:
Hatched areas indicate removal of existing structural steel. Cost included with Structural Steel Repair.
For repair angle and fill plate details, see Sheet 66 of 112.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	2,430

CANTILEVER FLOORBEAM BRACKET REPAIR LOCATIONS

Span	Member	Location	Repair Angle Type 1	Repair Angle Type 2	Repair Angle Type 3	Fill PL Type 1	Fill PL Type 2	Fill PL Type 3	Fill PL Type 4	d
10	FB5	South Bracket	CFBRL2	CFBRL4	CFBRL6	CFBFP2	CFBFP4	CFBFP8	CFBFP6	4"
13	FB11	North Bracket	CFBRL1	CFBRL3	CFBRL5	CFBFP1	CFBFP3	CFBFP7	CFBFP5	2 1/2"
14	FB1'	South Bracket	CFBRL1	CFBRL3	CFBRL5	CFBFP1	CFBFP3	CFBFP7	CFBFP5	1/2"
15	FB12'	South Bracket	CFBRL1	CFBRL3	CFBRL5	CFBFP1	CFBFP3	CFBFP7	CFBFP5	2"
16	FB7	South Bracket	CFBRL2	CFBRL4	CFBRL6	CFBFP2	CFBFP4	CFBFP8	CFBFP6	3/4"



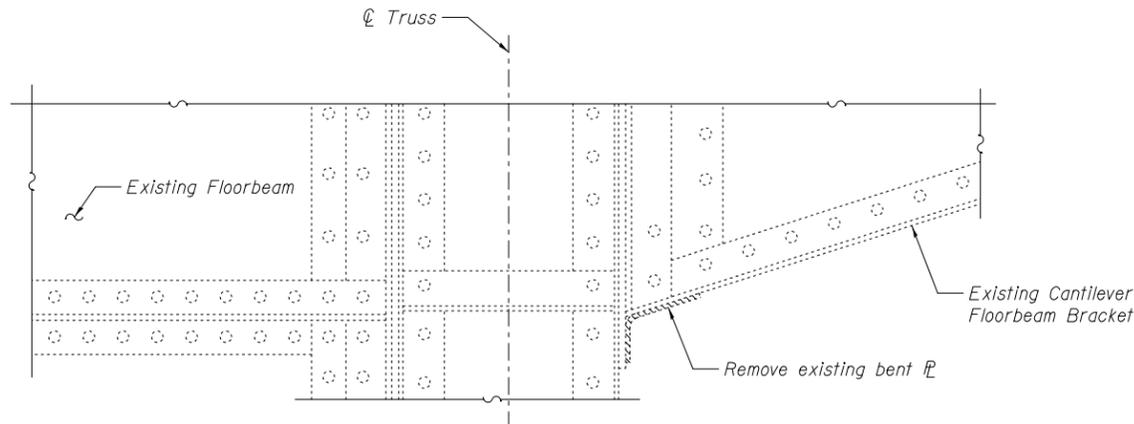
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

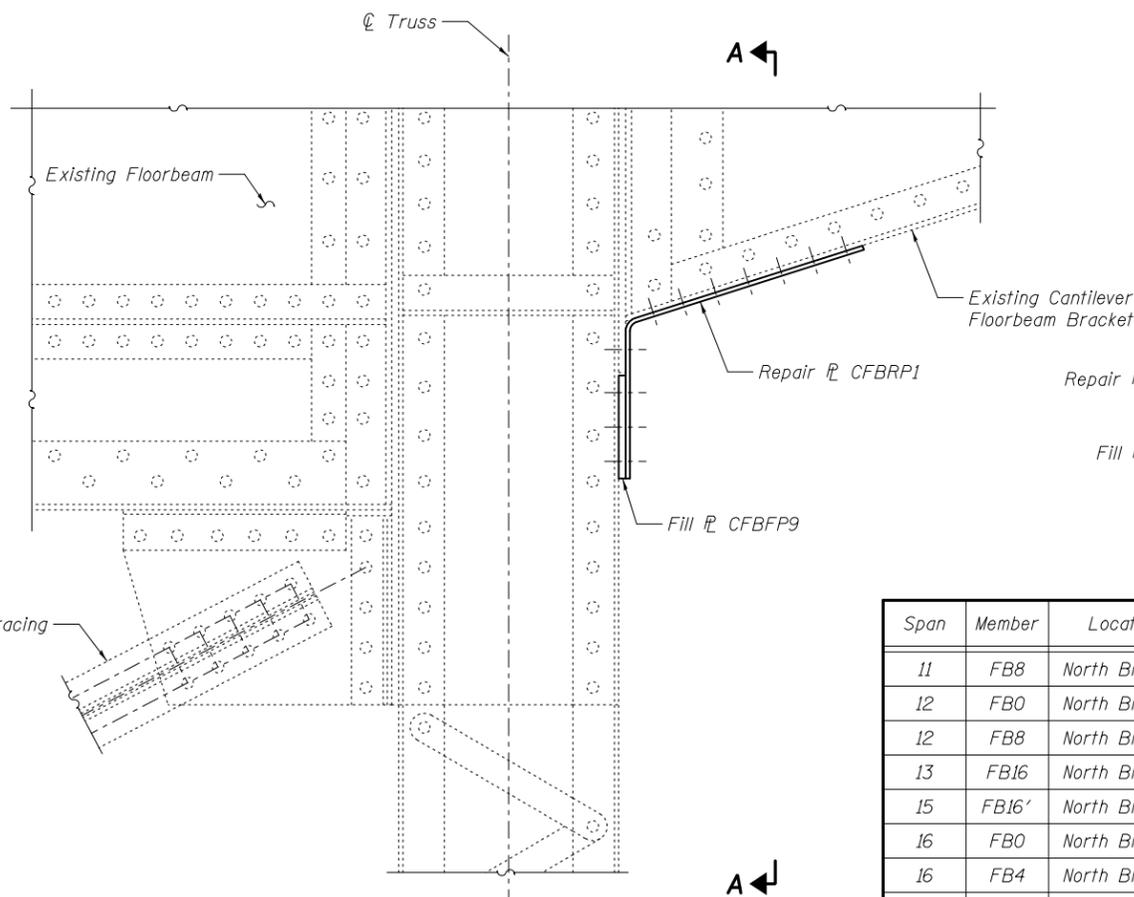
CANTILEVER FLOORBEAM BRACKET - TOP FLANGE REPAIRS - 1
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 65 OF 112 SHEETS

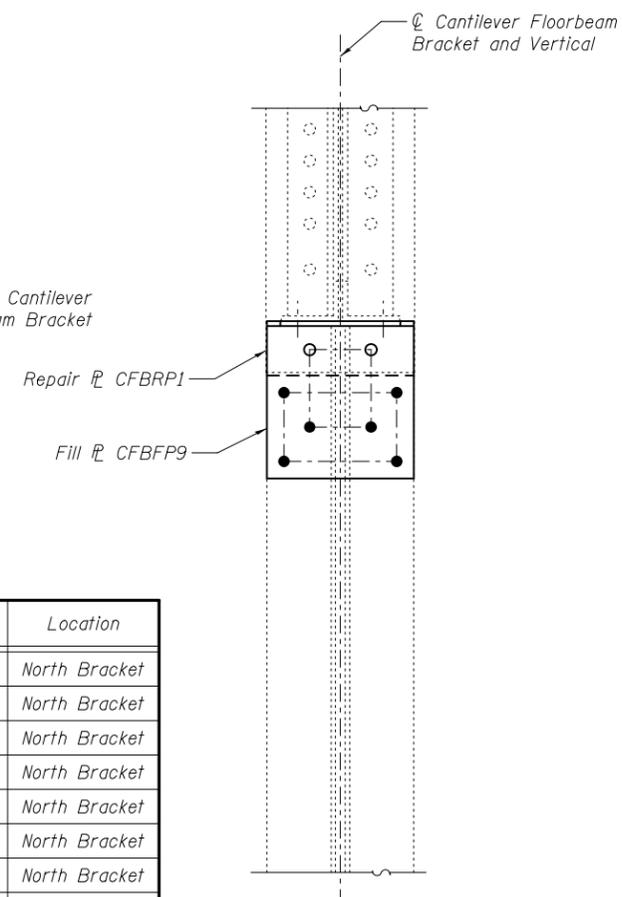
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	133
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



**CANTILEVER FLOORBEAM BRACKET
BENT PLATE REMOVAL**

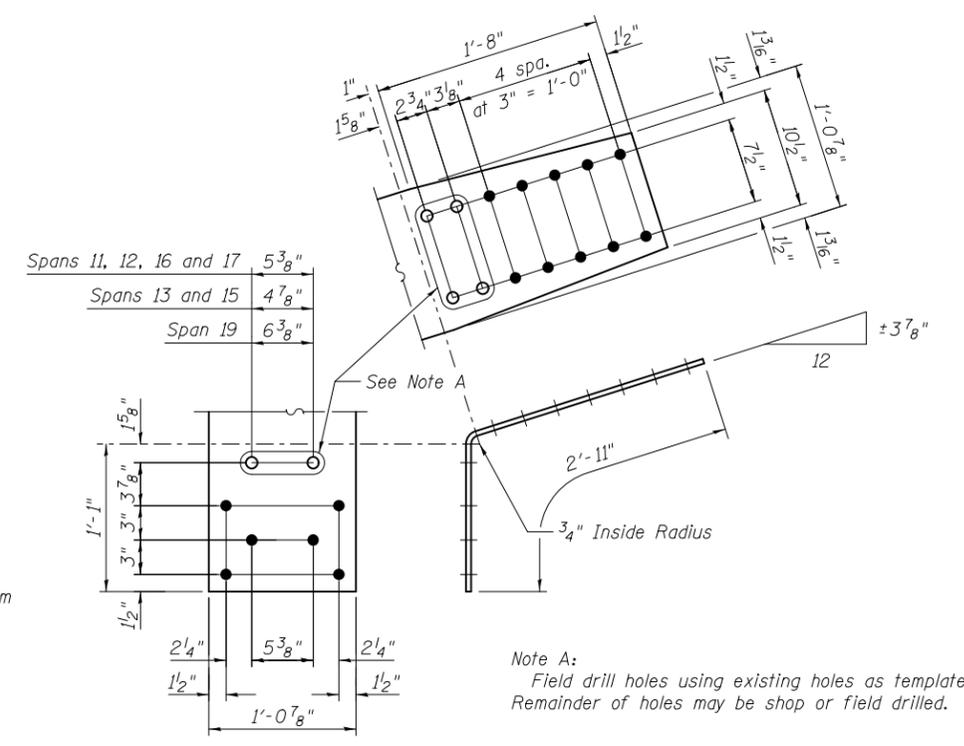


CANTILEVER FLOORBEAM BRACKET REPAIR

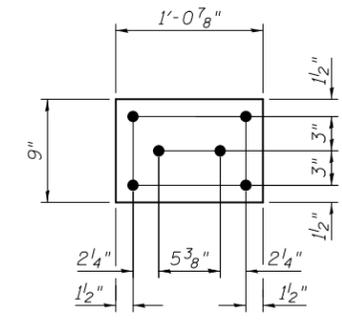


SECTION A-A

Span	Member	Location
11	FB8	North Bracket
12	FBO	North Bracket
12	FB8	North Bracket
13	FB16	North Bracket
15	FB16'	North Bracket
16	FBO	North Bracket
16	FB4	North Bracket
16	FB8	North Bracket
17	FBO	North Bracket
17	FBO	South Bracket
17	FB8	North Bracket
17	FB8	South Bracket
19	FBO	North Bracket



REPAIR OF CFBRP1
Bent PL 1/2" x 12 7/8" x 2'-11"
(13-required)



FILL OF CFBFP9
PL 5/8" x 9" x 1'-0 7/8"
(13-required)

LEGEND

- ⊙ Existing fastener
- New bolt in new hole
- New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	1,310



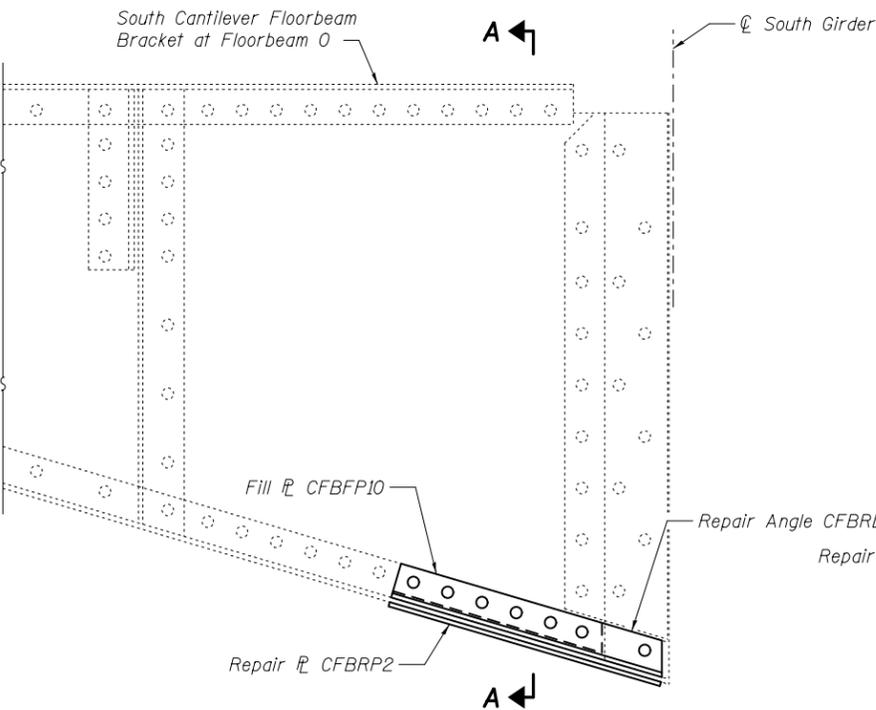
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

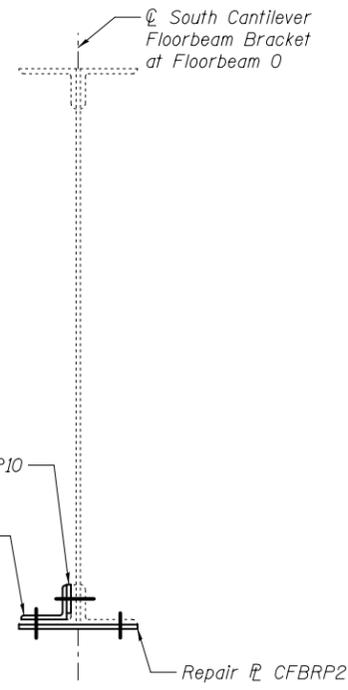
CANTILEVER FLOORBEAM BRACKET - BOTTOM FLANGE REPAIRS - 1
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 67 OF 112 SHEETS

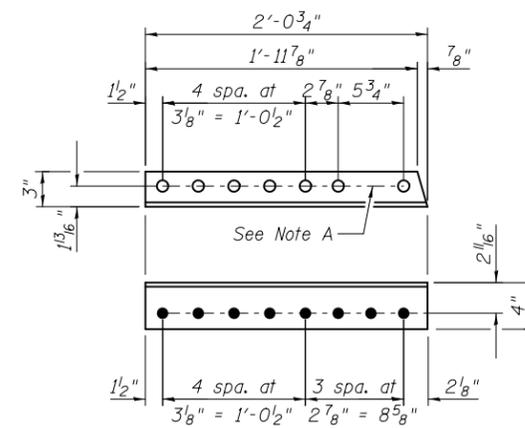
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	135
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



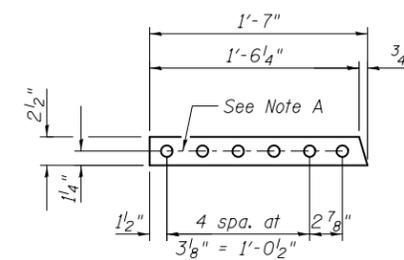
SPAN 8 AT FLOORBEAM 0
SOUTH CANTILEVER FLOORBEAM BRACKET REPAIR
 (Looking West)



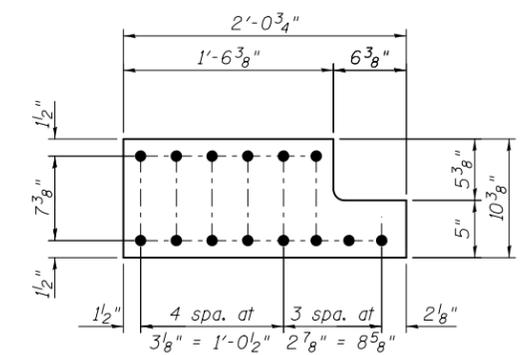
SECTION A-A



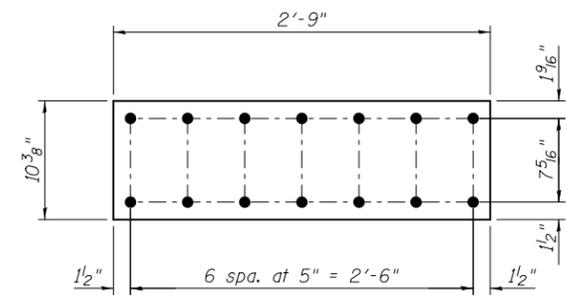
REPAIR ANGLE CFBRL7
 L 4 x 3 x 3/8 x 2'-0 3/4"
 (1-required)



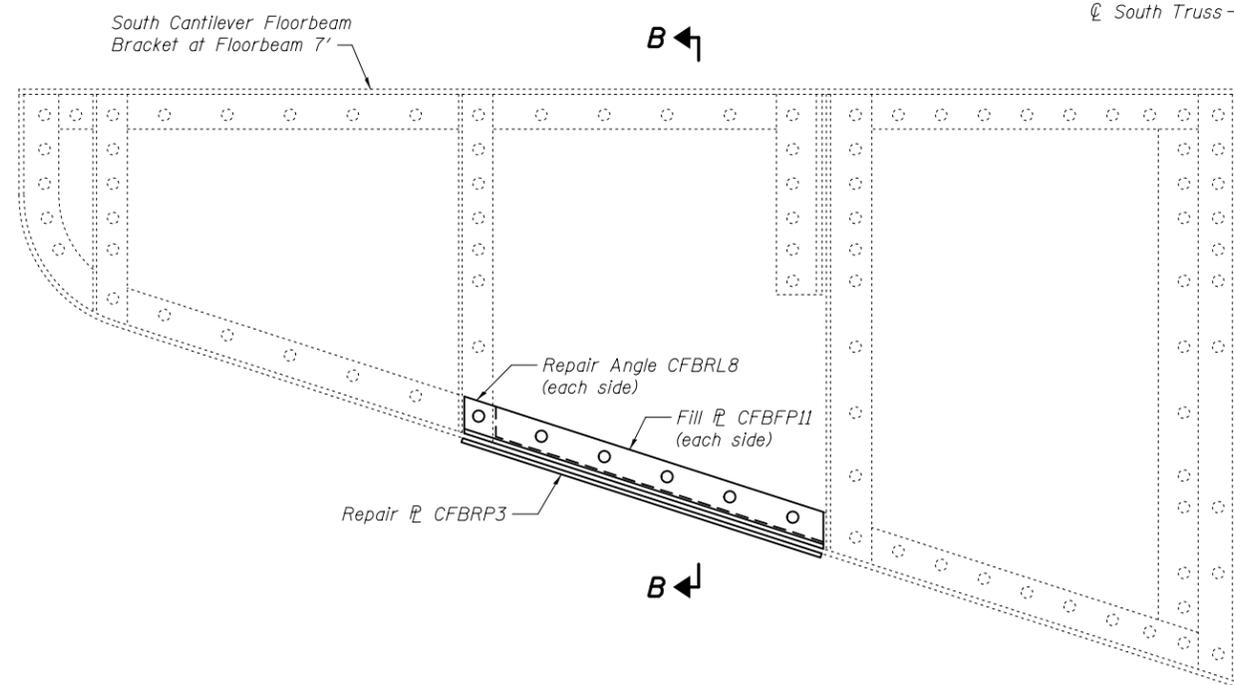
FILL R CFBFP10
 R 3/8" x 2 1/2" x 1'-7"
 (1-required)



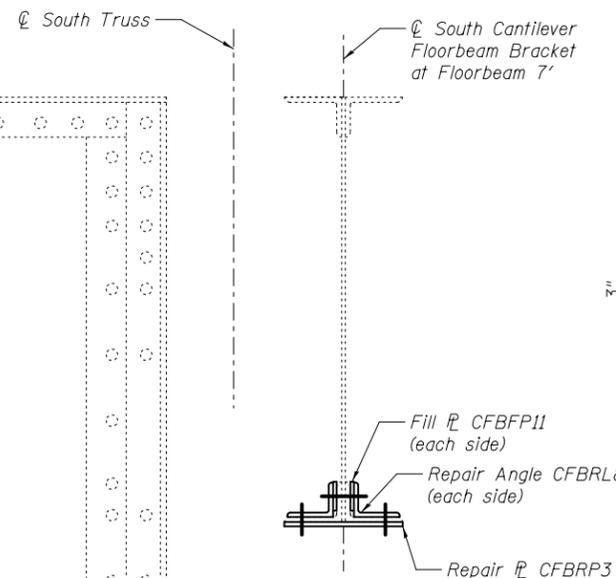
REPAIR R CFBRP2
 R 3/8" x 10 3/8" x 2'-0 3/4"
 (1-required)



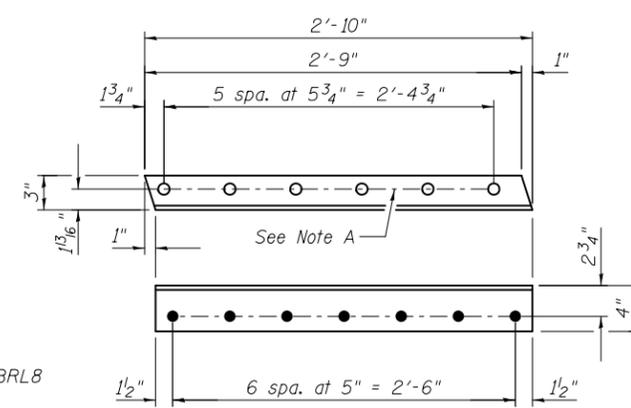
REPAIR R CFBRP3
 R 3/8" x 10 3/8" x 2'-9"
 (1-required)



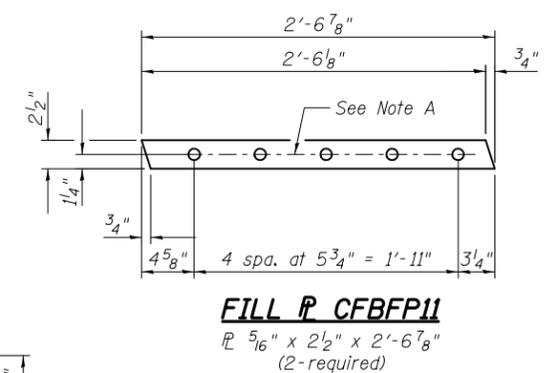
SPAN 14-15 AT FLOORBEAM 7'
SOUTH CANTILEVER FLOORBEAM BRACKET REPAIR
 (Looking West)



SECTION B-B



REPAIR ANGLE CFBRL8 (LT AND RT)
 L 4 x 3 x 3/8 x 2'-10"
 (1-required, left)
 (1-required, right)



FILL R CFBFP11
 R 5/16" x 2 1/2" x 2'-6 7/8"
 (2-required)

LEGEND

- ⊙ Existing fastener
- New bolt in new hole
- New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	180

Note A:
 Field drill holes using existing holes as template.
 Remainder of holes may be shop or field drilled.



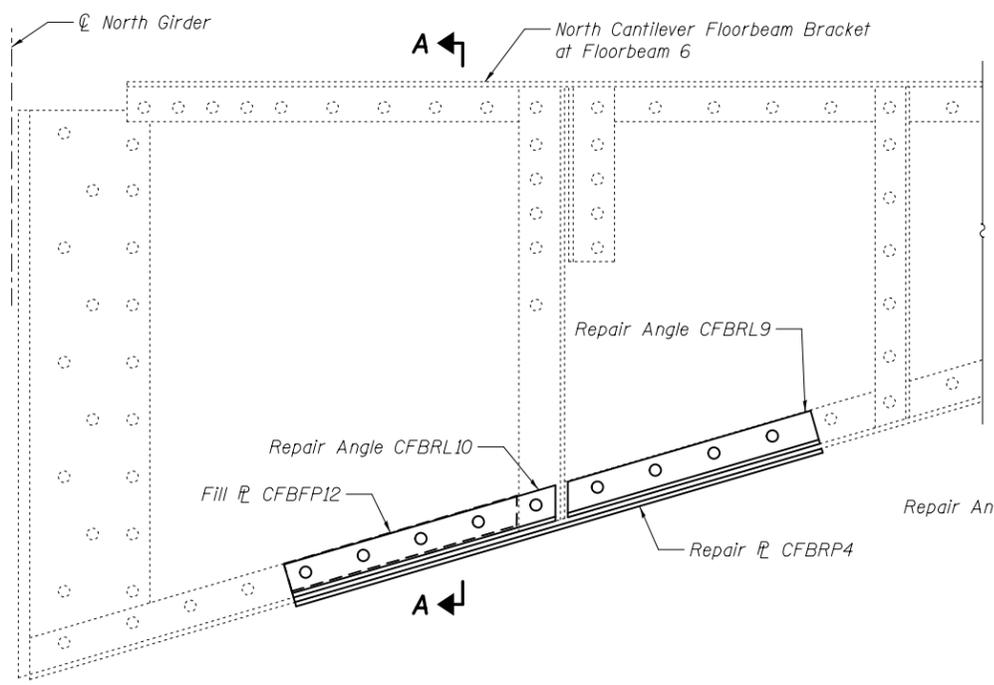
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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

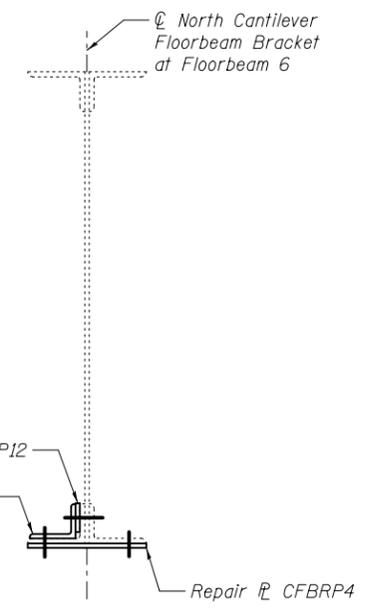
CANTILEVER FLOORBEAM BRACKET - BOTTOM FLANGE REPAIRS - 2
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 68 OF 112 SHEETS

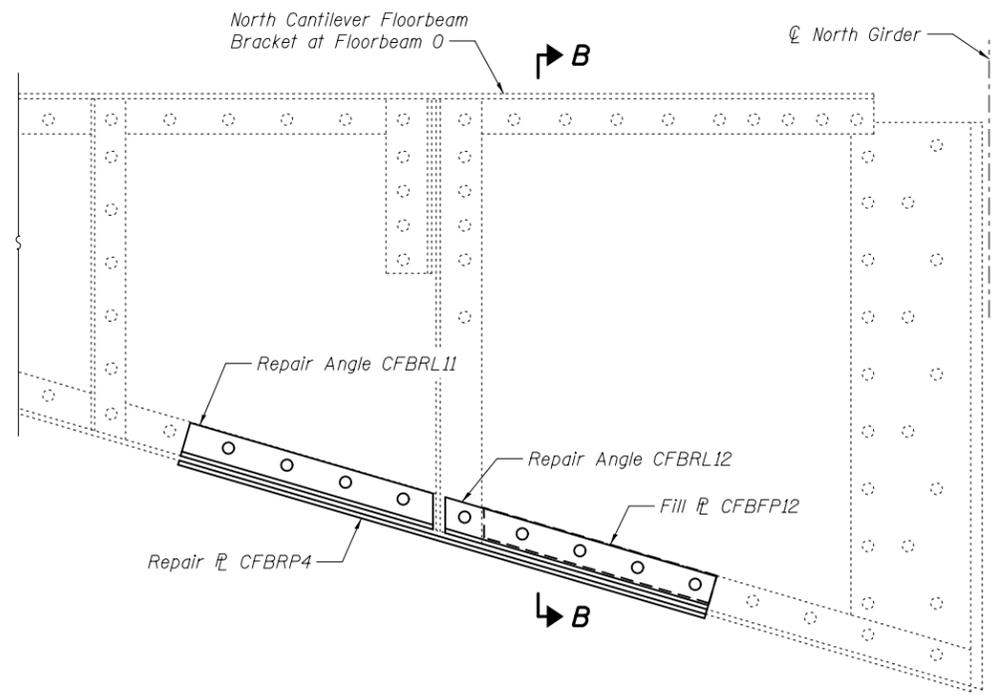
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	136
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



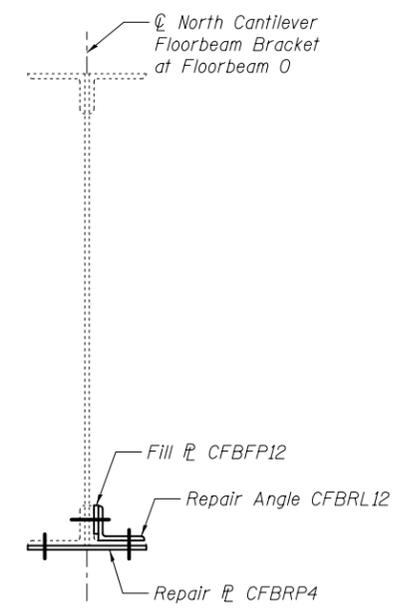
SPAN 20 AT FLOORBEAM 6
NORTH CANTILEVER FLOORBEAM BRACKET REPAIR
 (Looking West)



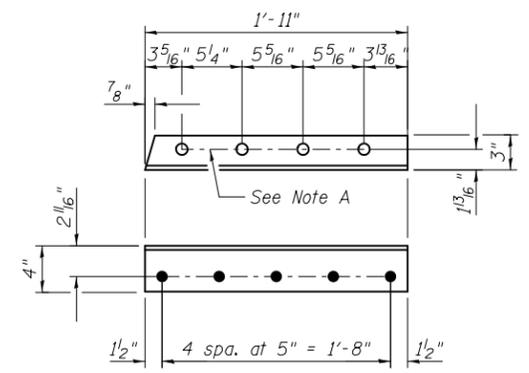
SECTION A-A



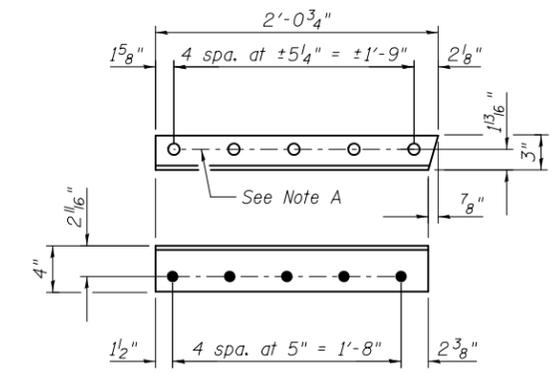
SPAN 21 AT FLOORBEAM 0
NORTH CANTILEVER FLOORBEAM BRACKET REPAIR
 (Looking East)



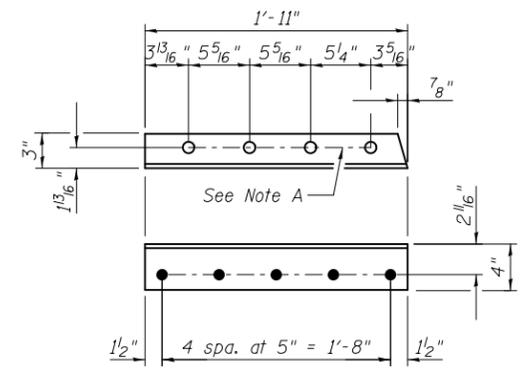
SECTION B-B



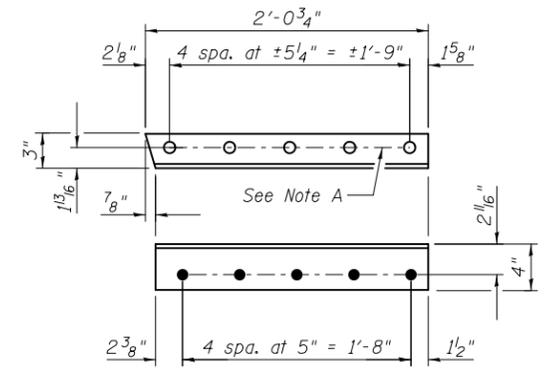
REPAIR ANGLE CFBRL9
 L 4 x 3 x 3/8 x 1'-11"
 (1-required)



REPAIR ANGLE CFBRL10
 L 4 x 3 x 3/8 x 2'-0 3/4"
 (1-required)

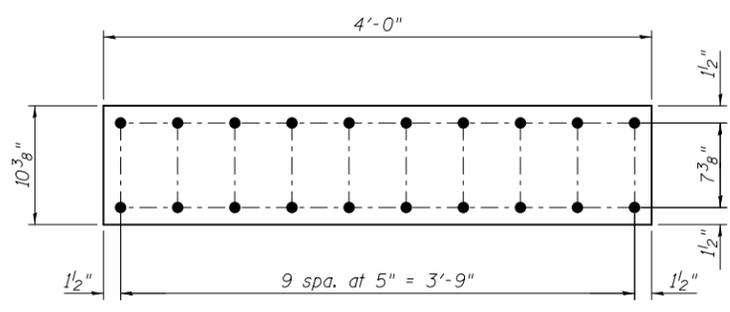


REPAIR ANGLE CFBRL11
 L 4 x 3 x 3/8 x 1'-11"
 (1-required)

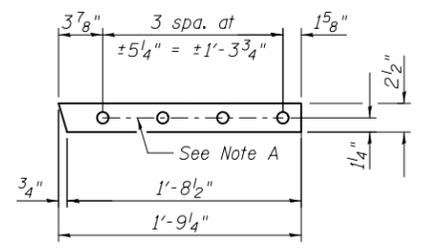


REPAIR ANGLE CFBRL12
 L 4 x 3 x 3/8 x 2'-0 3/4"
 (1-required)

Note A:
 Field drill holes using existing holes as template.
 Remainder of holes may be shop or field drilled.



REPAIR P CFBRP4
 P 3/8" x 10 3/8" x 4'-0"
 (2-required)



FILL P CFBFP12
 P 3/8" x 2 1/2" x 1'-9 1/4"
 (2-required)

- LEGEND**
- ⊙ Existing fastener
 - New bolt in new hole
 - New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	240



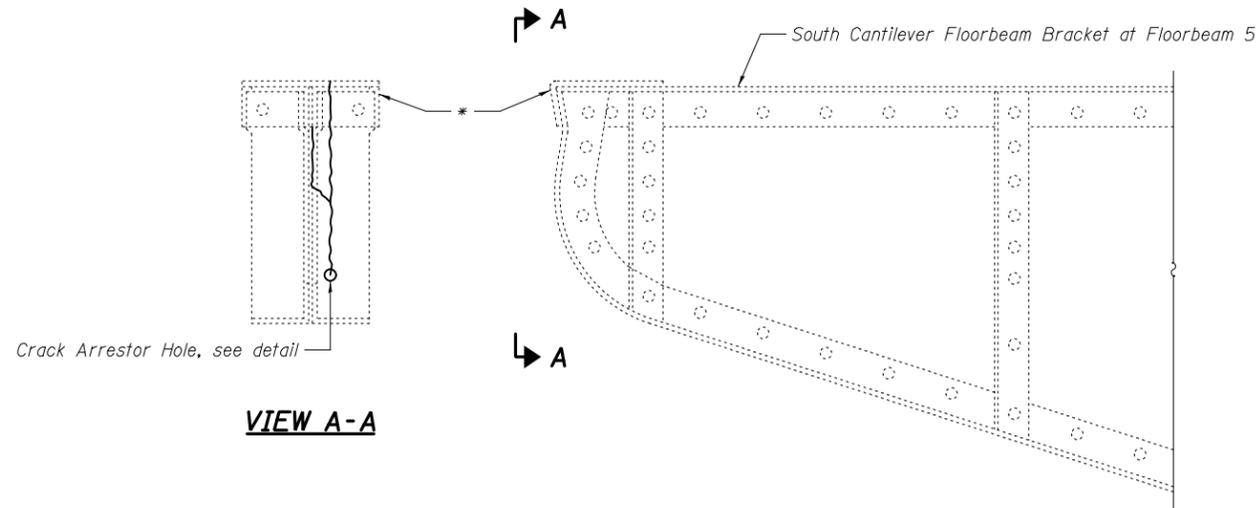
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	CHECKED - APL	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

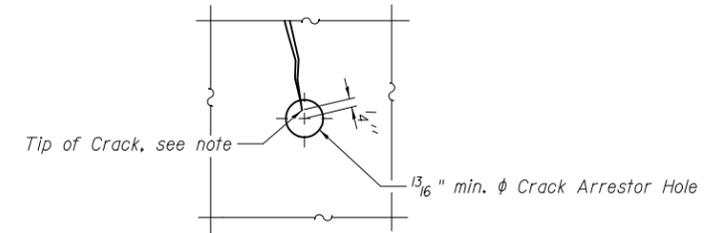
CANTILEVER FLOORBEAM BRACKET - BOTTOM FLANGE REPAIRS - 3
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 69 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	137
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



VIEW A-A

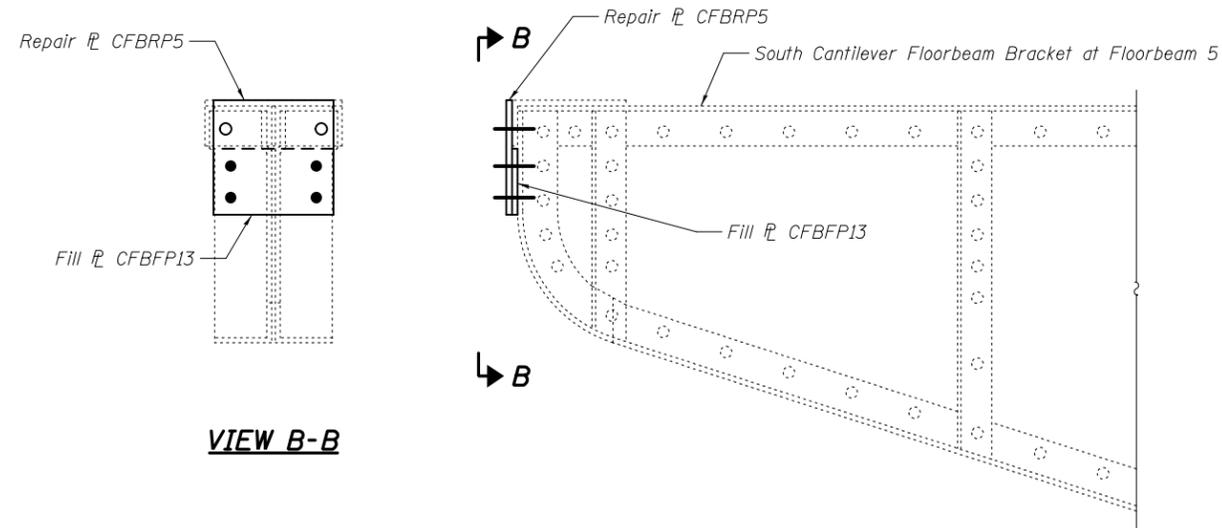


CRACK ARRESTOR HOLE DETAIL

Note: Locate crack tip using liquid dye penetrant or magnetic particle testing. Drill $\frac{13}{16}$ " min. ϕ Crack Arrestor hole at the crack tip. After crack arrestor hole has been drilled, dye penetrant or magnetic particle testing shall be used to verify that the drilled hole has captured the crack tip. If crack arrestor hole intersects with the cantilever floorbeam bracket web or vertical leg of flange angle, drill $\frac{13}{16}$ " min. ϕ hole in web and vertical leg of flange angle at location of intersection. Cost shall be included with Structural Steel Repair.

REPAIR TREATMENT

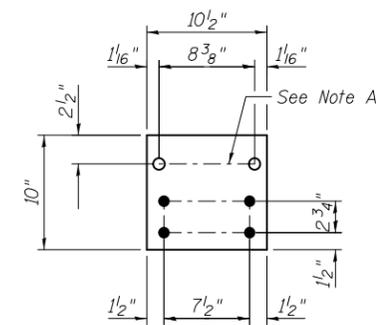
* Existing bent plate and flange angle are warped. Members shall be mechanically straightened prior to attaching repair plates. Heat strengthening is not allowed. Contractor shall submit a straightening procedure to the Engineer for review and approval prior to performing work. Cost to straighten existing members shall be included with Structural Steel Repair.



VIEW B-B

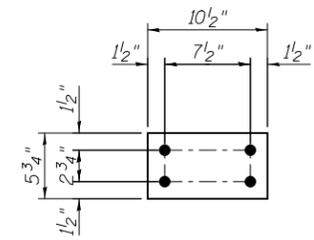
REPAIR PLATE INSTALLATION

**SPAN 11 AT FLOORBEAM 5
SOUTH CANTILEVER FLOORBEAM BRACKET**



REPAIR P CFBRP5

$P \frac{1}{2}$ " x 10" x 0'-10 1/2"
(1-required)



FILL P CFBFP13

$P \frac{1}{2}$ " x 5 3/4" x 0'-10 1/2"
(1-required)

Note A:
Field drill holes using existing holes as template. Remainder of holes may be shop or field drilled.

LEGEND

- ◊ Existing fastener
- New bolt in new hole
- New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	30



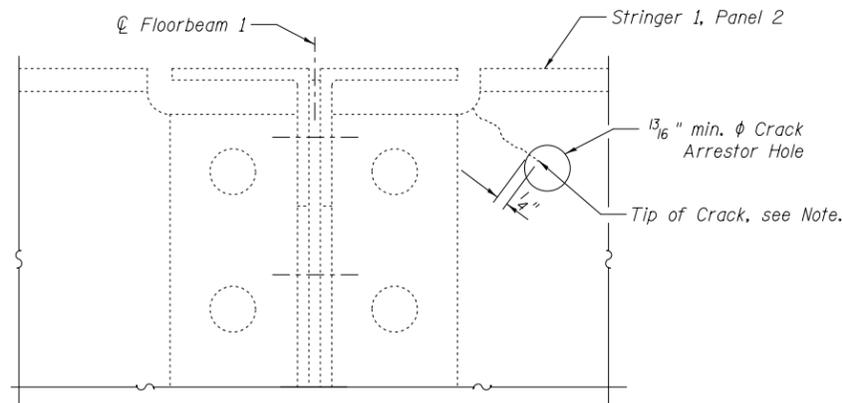
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	CHECKED - APL	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER FLOORBEAM BRACKET - BOTTOM FLANGE REPAIRS - 4
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

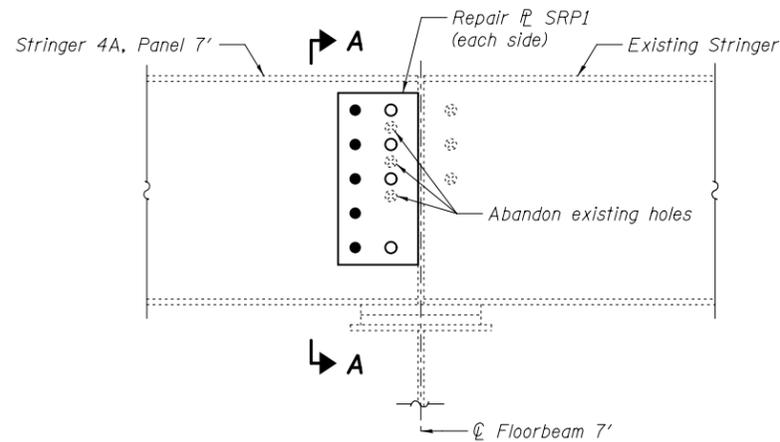
SHEET NO. 70 OF 112 SHEETS

F.A.P. RTE. 669	SECTION (103B)I-7	COUNTY PEORIA/TAZEWELL	TOTAL SHEETS 180	SHEET NO. 138
CONTRACT NO. 68A93				ILLINOIS FED. AID PROJECT

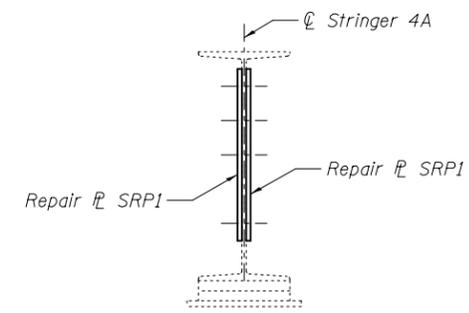


SPAN 19, STRINGER 1, PANEL 2
 (Looking North)

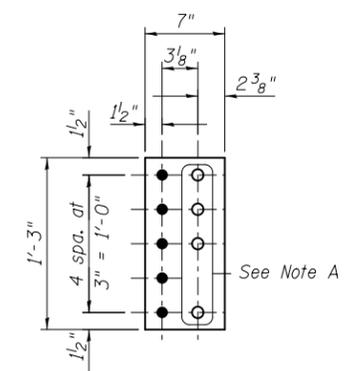
Note: Locate crack tip using liquid dye penetrant or magnetic particle testing. Drill 1 3/16" min. φ crack arrester hole at the crack tip. After crack arrester hole has been drilled, dye penetrant or magnetic particle testing shall be used to verify that the drilled hole has captured the crack tip. Cost shall be included in the cost of Structural Steel Repair.



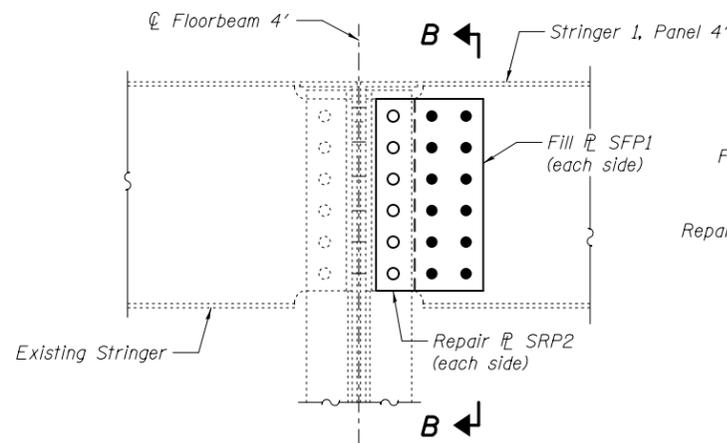
SPAN 14, STRINGER 4A, PANEL 7'
 (Looking North)



SECTION A-A

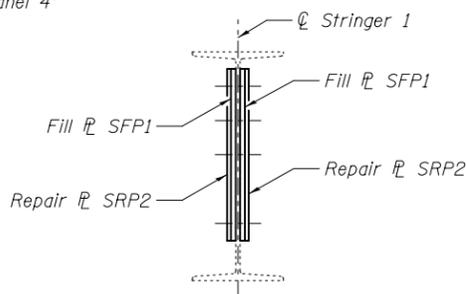


REPAIR PL SRP1
 PL 3/8" x 7" x 1'-3" (NTR)
 (2-required)

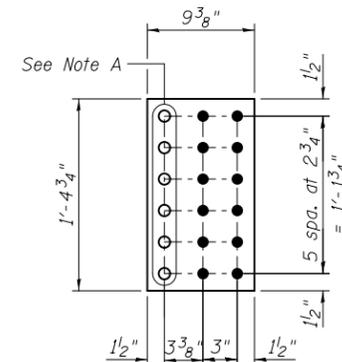


SPAN 14, STRINGER 1, PANEL 4'
 (Looking South)

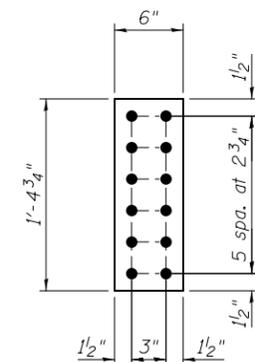
Note: Temporarily support existing stringer. Cost to support stringer shall be included with Structural Steel Repair.



SECTION B-B



REPAIR PL SRP2
 PL 3/8" x 9 3/8" x 1'-4 3/4" (NTR)
 (2-required)



FILL PL SFP1
 PL 1/2" x 6" x 1'-4 3/4" (NTR)
 (2-required)

LEGEND

- ⊕ Open hole
- ⊙ Existing fastener
- New bolt in new hole
- New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	110

Note A:
 Field drill holes using existing holes as template. Remainder of holes may be shop or field drilled.

Note:
 Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.



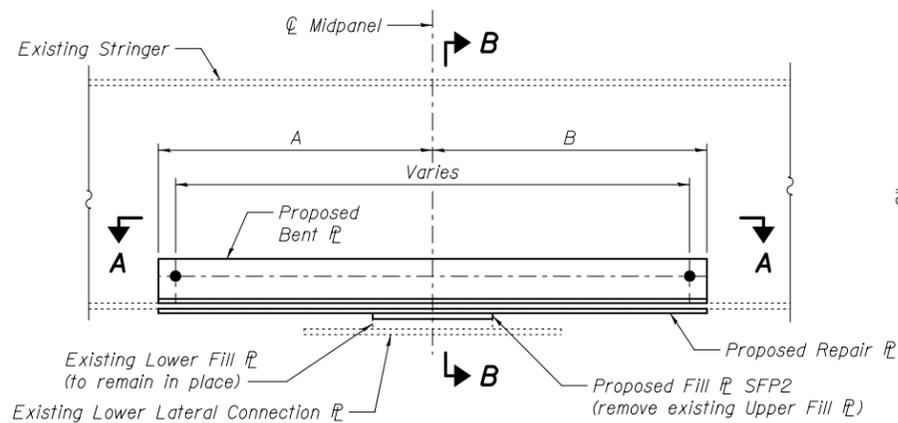
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	CHECKED - APL	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STRINGER REPAIR DETAILS - 1
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 71 OF 112 SHEETS

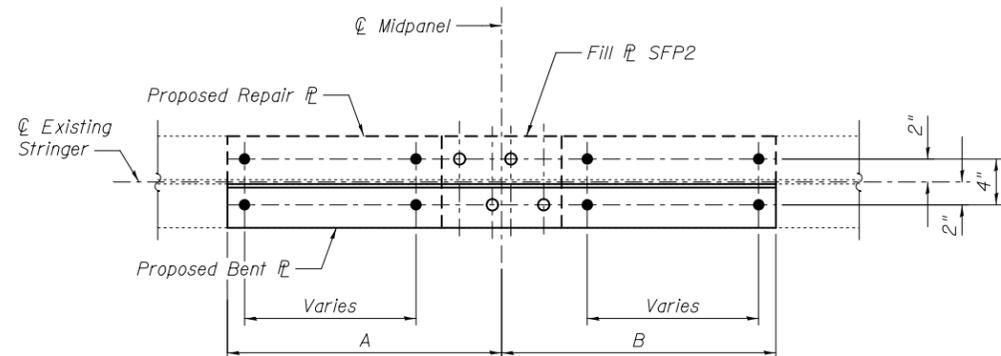
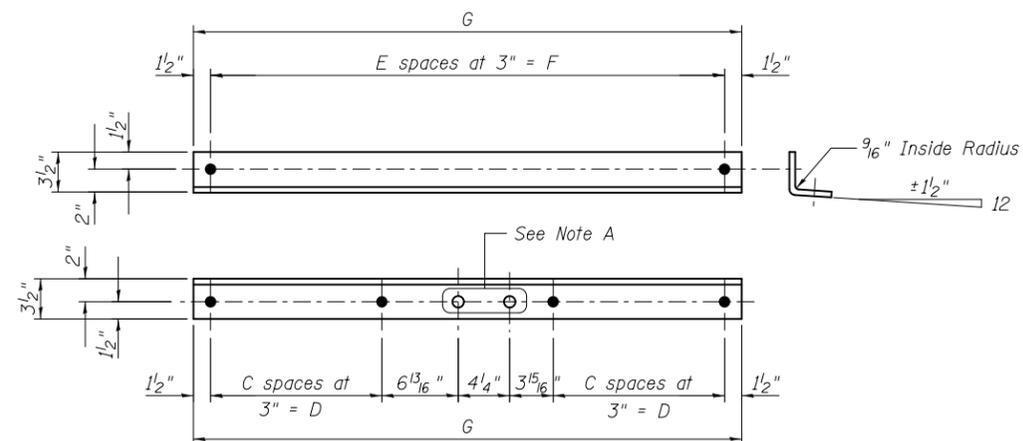
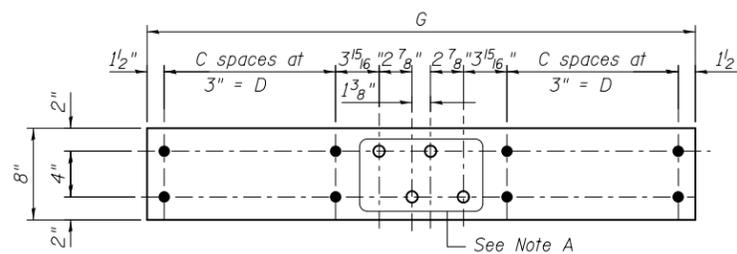
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	139
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



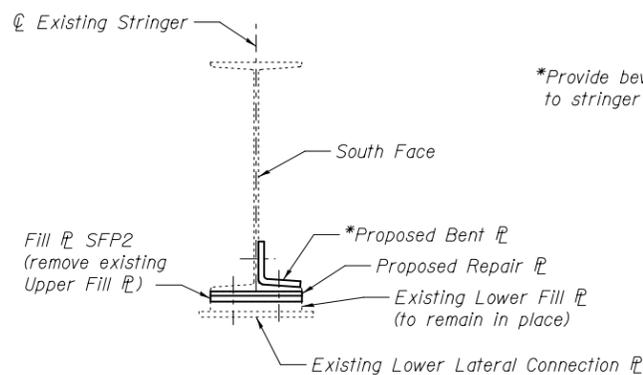
STRINGER REPAIR DETAIL

(Looking North)

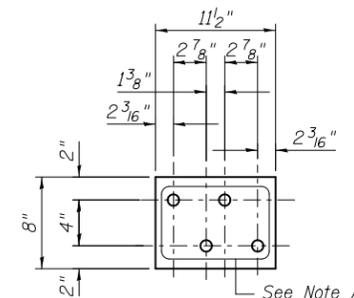
Note: See Table for repair locations and piece marks.



SECTION A-A



SECTION B-B



STRINGER REPAIR LOCATIONS

Span	Stringer	Panel	A	B	Repair PL	Bent PL
13	4	11, 13 and 14	1'-6"	1'-6"	SRP3	SBP1
15	4	10'	1'-6"	1'-6"	SRP3	SBP1
15	4	11' and 13'	2'-0"	2'-0"	SRP4	SBP2
15	4	12'	2'-6"	2'-6"	SRP5	SBP3

REPAIR AND BENT PLATE DIMENSIONS

Piece Mark	C	D	E	F	G	H
SRP3	3	9"	—	—	3'-0"	4
SRP4	5	1'-3"	—	—	4'-0"	2
SRP5	7	1'-9"	—	—	5'-0"	1
SBP1	3	9"	11	2'-9"	3'-0"	4
SBP2	5	1'-3"	15	3'-9"	4'-0"	2
SBP3	7	1'-9"	19	4'-9"	5'-0"	1

LEGEND

- New bolt in new hole
- New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	810

Notes:
 Lower lateral bracing shall be supported during stringer repair. Contractor shall submit support procedure to Engineer for review and approval prior to performing work. Cost to support lower lateral bracing shall be included with Structural Steel Repair.
 Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

Note A:
 Field drill holes using existing holes as template. Remainder of holes may be shop or field drilled.



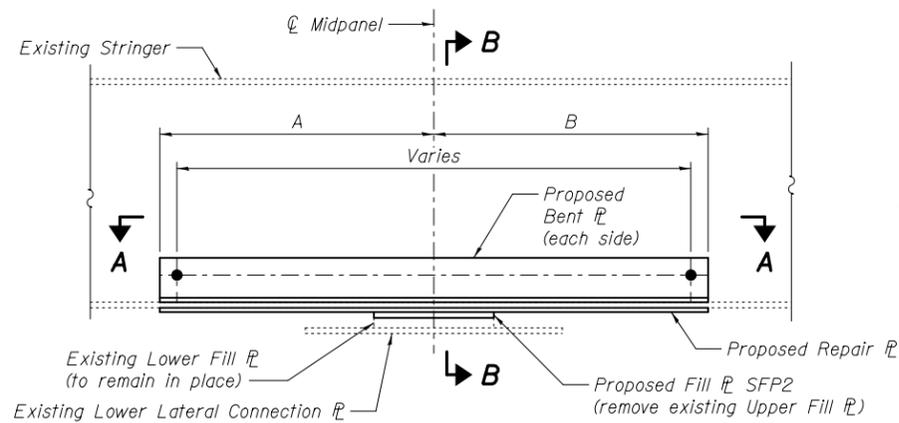
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	CHECKED - APL	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STRINGER REPAIR DETAILS - 2
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 72 OF 112 SHEETS

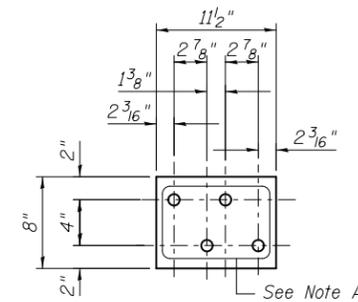
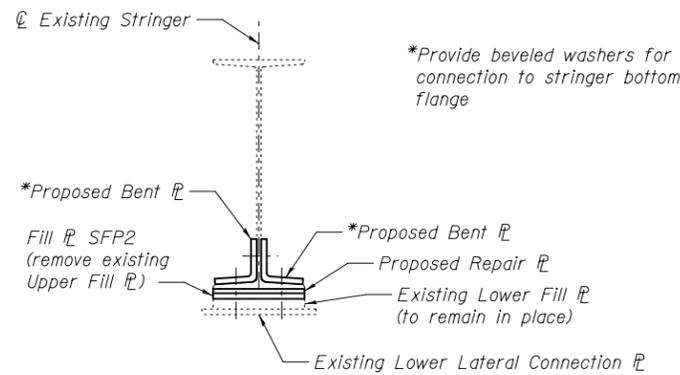
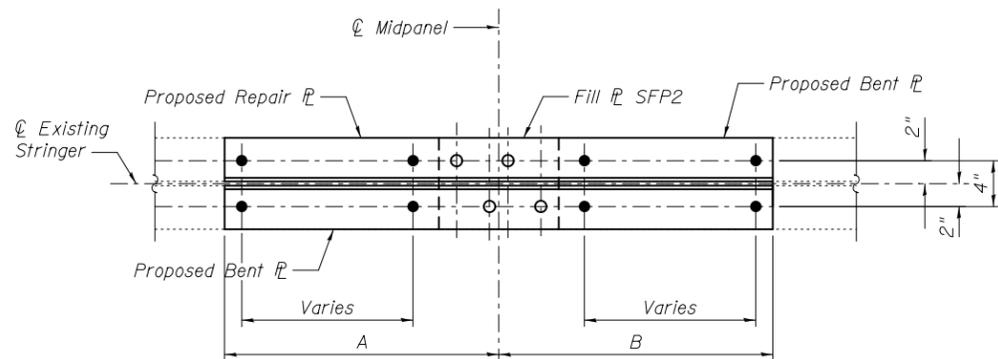
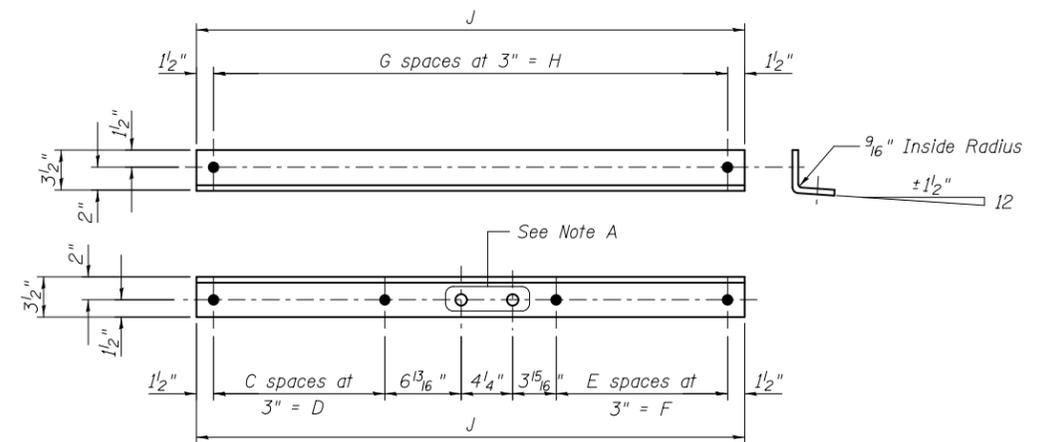
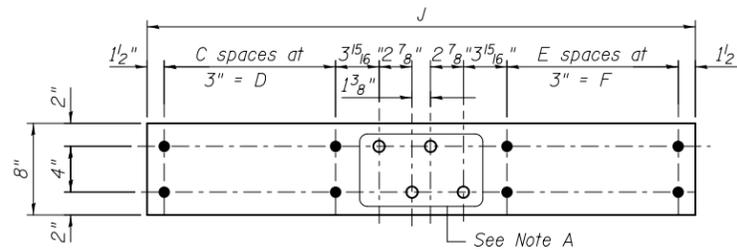
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	140
CONTRACT NO. 68A93			ILLINOIS FED. AID PROJECT	



STRINGER REPAIR DETAIL

(Looking North)

Note: See Table for repair locations and piece marks.



STRINGER REPAIR LOCATIONS

Span	Stringer	Panel	A	B	Repair PL	Bent PL
14	4	4	9"	2'-6"	SRP6	SBP4
15	4	14'	3'-9"	1'-3"	SRP7	SBP5
15	4	15'	2'-0"	3'-0"	SRP8	SBP6

REPAIR AND BENT PLATE DIMENSIONS

Piece Mark	C	D	E	F	G	H	J	K
SRP6	—	—	7	1'-9"	—	—	3'-3"	1
SRP7	12	3'-0"	2	6"	—	—	5'-0"	1
SRP8	5	1'-3"	9	2'-3"	—	—	5'-0"	1
SBP4	—	—	7	1'-9"	12	3'-0"	3'-3"	2
SBP5	12	3'-0"	2	6"	19	4'-9"	5'-0"	2
SBP6	5	1'-3"	9	2'-3"	19	4'-9"	5'-0"	2

LEGEND

- New bolt in new hole
- New bolt in existing hole

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	540

Note A:
 Field drill holes using existing holes as template.
 Remainder of holes may be shop or field drilled.

Notes:
 Lower lateral bracing shall be supported during stringer repair. Contractor shall submit support procedure to Engineer for review and approval prior to performing work. Cost to support lower lateral bracing shall be included with Structural Steel Repair.
 Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.



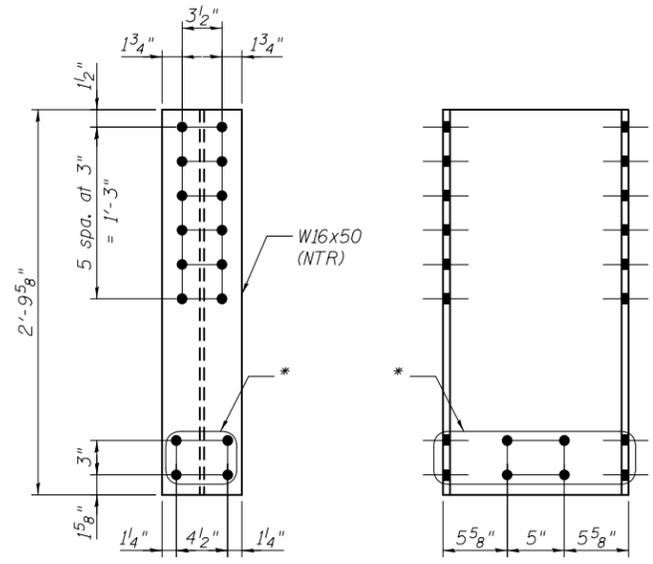
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	CHECKED - APL	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STRINGER REPAIR DETAILS - 3
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

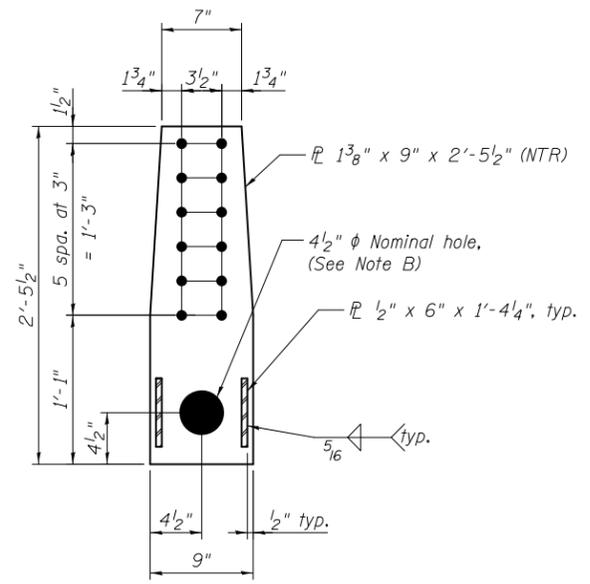
SHEET NO. 73 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	141
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				

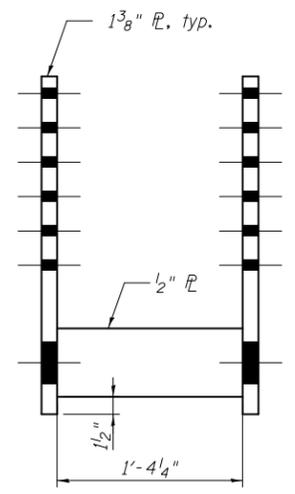


* Shop drill holes in two of the required links.
Holes to be field drilled in the two remaining links.
Install one of each at each pin and link assembly.

LINK
(4-required)

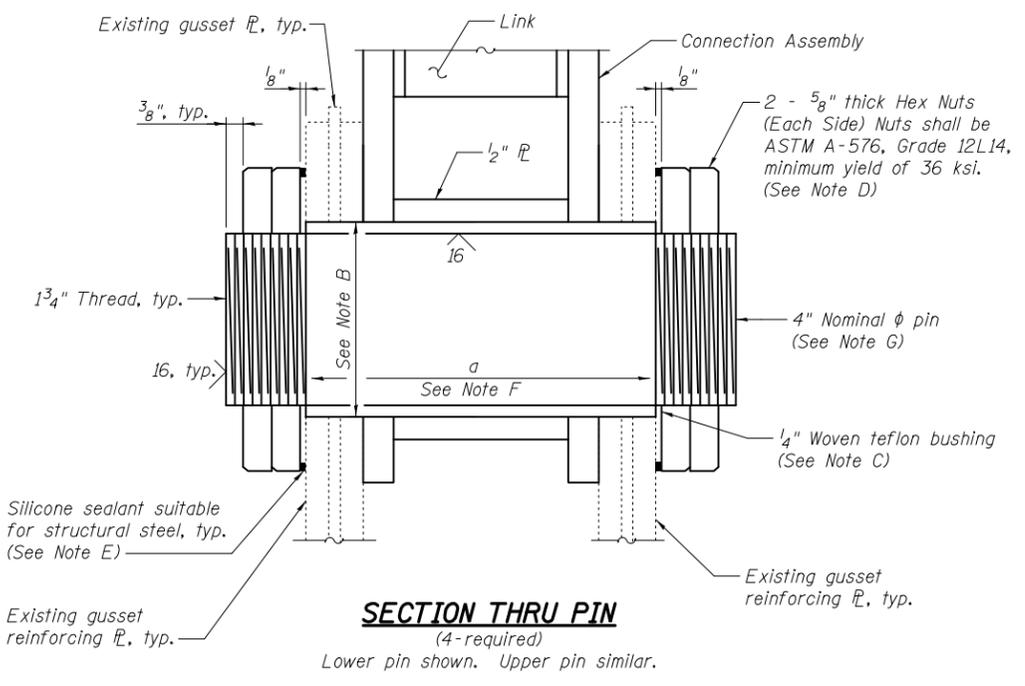


CONNECTION PL
(2-required per assembly)



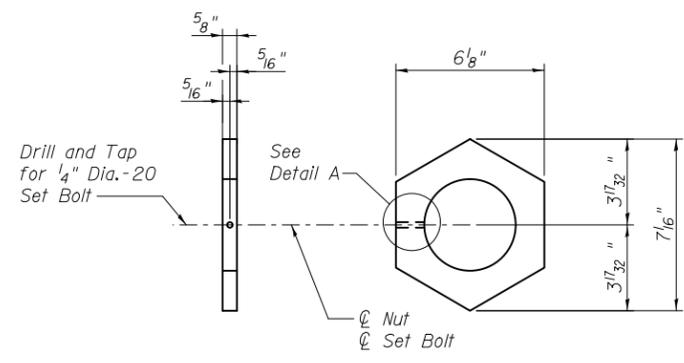
SIDE VIEW

CONNECTION ASSEMBLY
(4-required)

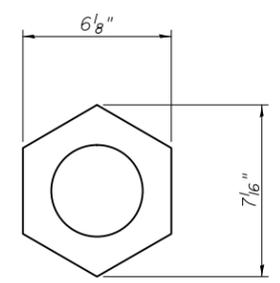


SECTION THRU PIN
(4-required)

Lower pin shown. Upper pin similar.



EXTERIOR NUT DETAIL
(8-required)



INTERIOR NUT DETAIL
(8-required)

Note A:
Existing welds shall be inspected for cracks using liquid dye penetrant or magnetic particle testing. Any cracks that are found shall be identified and reported to the Bureau of Bridges and Structures for further disposition. Clean and paint before installing new link plates.

Note B:
Bore diameter for bushing in link plate, existing gusset plates and existing gusset reinforcing plates shall correspond to bushing manufacturer's allowable tolerances for proper functioning. Hole diameter may be adjusted to allow use of stock bushings.

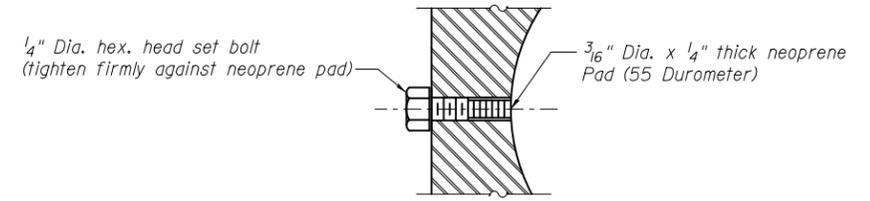
Note C:
Actual bushing thickness per manufacturer's specifications, 1/4" is approximate. Bushings shall be a self lubricating filament with epoxy matrix backed Duralon Bearing, metal backed Fiber Glide Bearing or equivalent. No primer or grease shall be allowed on bushings. Bushings shall be suitable for dynamic loads of 20,000 psi.

Note D:
Tighten inside nuts to bring all bushings into firm contact, then back off 1/4 turn and tighten outer nuts and set bolts.

Note E:
Place sealant around nuts after installation. Sealant shall be suitable for prolonged exterior exposure without losing flexibility or adhesion to painted steel surfaces. Proposed products shall be subject to Department's acceptance based on documented testing or other evidence.

Note F:
Body of Pin dimension "a" shall be based on measured thickness of captured plates (including paint), plus 1/2".

Note G:
Nominal Pin diameter (diameter tolerances subject to Specifications of Teflon Bushing Manufacturer and shall be approved by the Engineer). Pin shall be ASTM A276, UNS 21800 (Nitronic 60 or equal) (No step at threads) 12 threads per Inch.



DETAIL A

Set bolts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.



USER NAME =	DESIGNED - JAK	REVISED
	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN SPAN PIN AND LINK REPLACEMENT DETAILS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 75 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	143
CONTRACT NO. 68A93				

ILLINOIS FED. AID PROJECT

TABLE OF BOLT REPLACEMENTS

2015 NBIS INSPECTION DEFICIENCY ITEM NO.	LOCATION	SPAN	UNIT	QTY.	DESCRIPTION
344	PIER 6, BEAM 1 AT BOTTOM OF FLANGE TO BEARING	6	EACH	2	Loose Bolts
56	S. END OF FLOORBEAM 2 ON OUTSIDE OF S. GIRDER	8	EACH	1	Rivet Head Popped Off
345	STRINGER 7, NEAR FLOOR BEAM 0	8	EACH	3	Misdrilled Holes
424	S GIRDER, 1' E OF FLOOR BEAM 2	9	EACH	1	Misdrilled Hole
425	STRINGER 5, 8' W OF FLOOR BEAM 4	9	EACH	1	Missing Fastener
390	FLOORBEAM 5 AT S. CANTILEVER ON S. END	11	EACH	1	Sheared Rivet
298	FLOOR BEAM 4 AT STRINGER 6, DIAPHRAGM CONNECTION TO STRINGER 6	12	EACH	3	Missing Bolts
436	L7S-U7S AT L7S	13	EACH	4	Misdrilled Holes
435	2' N. OF S. TRUSS ON FLOOR BEAM 7	13-14	EACH	5	Missing Rivets and Misdrilled Holes
308	STRINGER 3 AT FLOOR BEAM 6, PAN. 6	14	EACH	2	Missing Bolts
309	STRINGER 4 AT FLOOR BEAM 6, PAN. 6	14	EACH	1	Missing Nut
311	STRINGER 4 AT FLOOR BEAM 5, PAN. 5	14	EACH	2	Missing Bolts
311	STRINGER 5 AT FLOOR BEAM 5, PAN. 5	14	EACH	2	Missing Bolts
310	U4N-U5N AT U5N IN SPLICE PLATE	14	EACH	6	Missing Rivets
440	U4S-U5S AT U5S IN SPLICE PLATE	14	EACH	1	Missing Rivet
398	GUSSET PLATE L6N, INNER PLATE	14	EACH	2	Missing Fasteners
319	2' N. OF S. TRUSS ON FLOOR BEAM 7'	14-15	EACH	5	Missing Rivets and Misdrilled Holes
362	STRINGER 4A AT FLOORB BEAM 7'	15	EACH	3	Misdrilled Holes
327	U6N-U7S, AT STRINGER 3 AND 5	16	EACH	2	Missing and Broken Fastener
460	L0S-L1S AT L1S	17	EACH	1	Misdrilled Hole
460	L1S-L2S AT L1S	17	EACH	1	Misdrilled Hole
46	L0S-L0N AT L0N CONNECTION TO PIER 1 (CATWALK)	17	EACH	1	Missing Bolt at Catwalk Connection
459	U0N-U1S AT U0N	17	EACH	4	Loose Bolts
465	L7N-L8N AT L7N	18	EACH	1	Misdrilled Hole
273	STRINGER 2 AT FLOOR BEAM 5, PAN. 5	21	EACH	1	Missing Bolt
33	STRINGER 6 ABOVE FLOOR BEAM 4	21	EACH	4	Holes in Web
417	S. GIRDER 5' FROM FLOOR BEAM 4	22	EACH	1	Misdrilled Hole
474	STRINGER 2, 3, 4, 5, AND 6 EAST OF FLOOR BEAM 5	22	EACH	10	Misdrilled Holes
336	STRINGER 3 AT FLOOR BEAM 2 ON E. FACE	23	EACH	2	Loose Bolts
336	STRINGER 4 AT FLOOR BEAM 2 ON E. FACE	23	EACH	2	Loose Bolts
477	STRINGER 2, 4' E OF FLOOR BEAM 2	30	EACH	1	Misdrilled Hole
478	FLOORBEAM 1-3, S. CANTILEVER BRACKET	34	EACH	12	Misdrilled Holes
480	N. GIRDER, BTW. FLOOR BEAM 4 AND 5	34	EACH	1	Misdrilled Hole
481	S. GIRDER, BTW. FLOOR BEAM 4 AND 6	34	EACH	2	Misdrilled Holes
			TOTAL	91	

Bolt Notes:

- Contractor shall verify Bolt length and diameter in field prior to ordering material.
- All bolts shall be ASTM A325 Type 1, mechanically galvanized.
- Cost of bolt replacement is included in STRUCTURAL STEEL REPAIR.

GRINDING OF WELDS

2015 NBIS INSPECTION DEFICIENCY ITEM NO.	LOCATION	SPAN	UNIT	QTY.	DESCRIPTION
307	FLOOR BEAM 7, 39" SOUTH OF STC	13-14	EACH	1	Grind Weld to Remove 1/2" Crack only
473	FLOORBEAM 5, STRINGER 3	22	EACH	1	Partially Cracked Tack Weld
375	NORTH GIRDER, TOP FLANGE TO FLOORBEAM 2 CANTILEVER	21	EACH	1	Fully Cracked Tack Weld
472	SOUTH GIRDER, BEARING STIFFENER AT SOUTH FACE AT PIER 21	22	EACH	1	Partially Cracked Tack Weld
			TOTAL	4	

Weld Notes:

- Remove existing cracked welds by grinding smooth to an ANSI 250 finish.
- Cost of removal or rewelding is included in STRUCTURAL STEEL REPAIR.
- Grinding shall be done parallel to the longitudinal axis of the member. Ground surfaces shall be inspected for cracks using dye penetrant or magnetic particle testing. Any cracks that cannot be removed by grinding approximately 1/4" deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition.

TABLE OF REWELDING

2015 NBIS INSPECTION DEFICIENCY ITEM NO.	LOCATION	SPAN	UNIT	QTY.	DESCRIPTION
446	PLATFORM, E END OF CENTER STRUT	14-15	EACH	1	Broken Weld - Reweld
			TOTAL	1	

FILE NAME : S:\Projects\2015 JOBS\1511L004-00 OEI PTB 168-17 D4 Cedar St Bridge\CADD\CADD Sheets\0900030-68A93-144-StructSteelRepair.dgn
 MODEL : Default
 PLOT DRIVER : IDDT_PDF.plt



USER NAME : cstokes	DESIGNED - DRB	REVISED
0900030-68A93-144-StructSteelRepair.dgn	CHECKED - SDM	REVISED
PLOT SCALE : 0:2.0000 '1' / in.	DRAWN - TRF	REVISED
PLOT DATE : 10/05/2015	CHECKED - DRB	REVISED

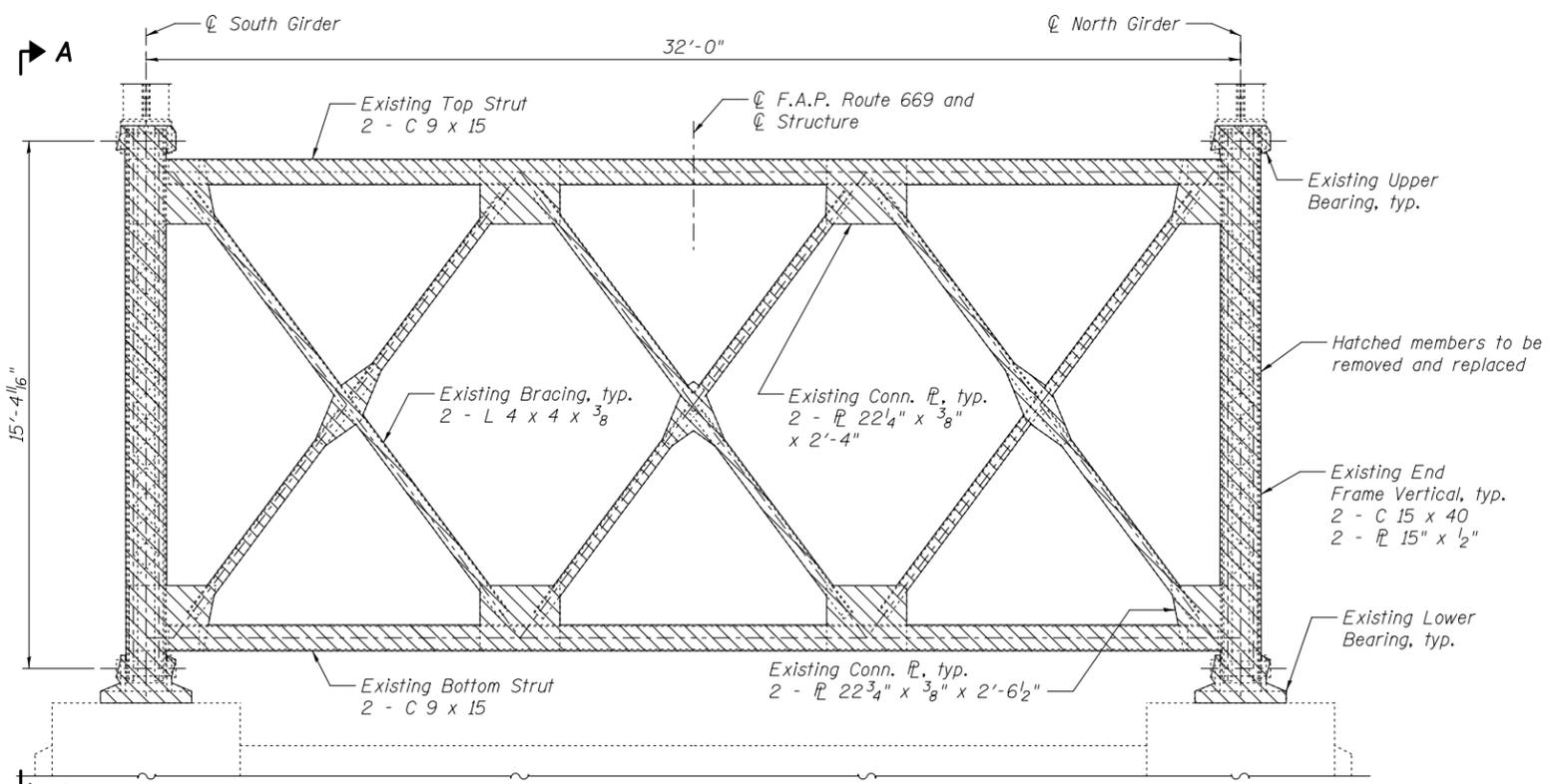
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MISCELLANEOUS STEEL REPAIRS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

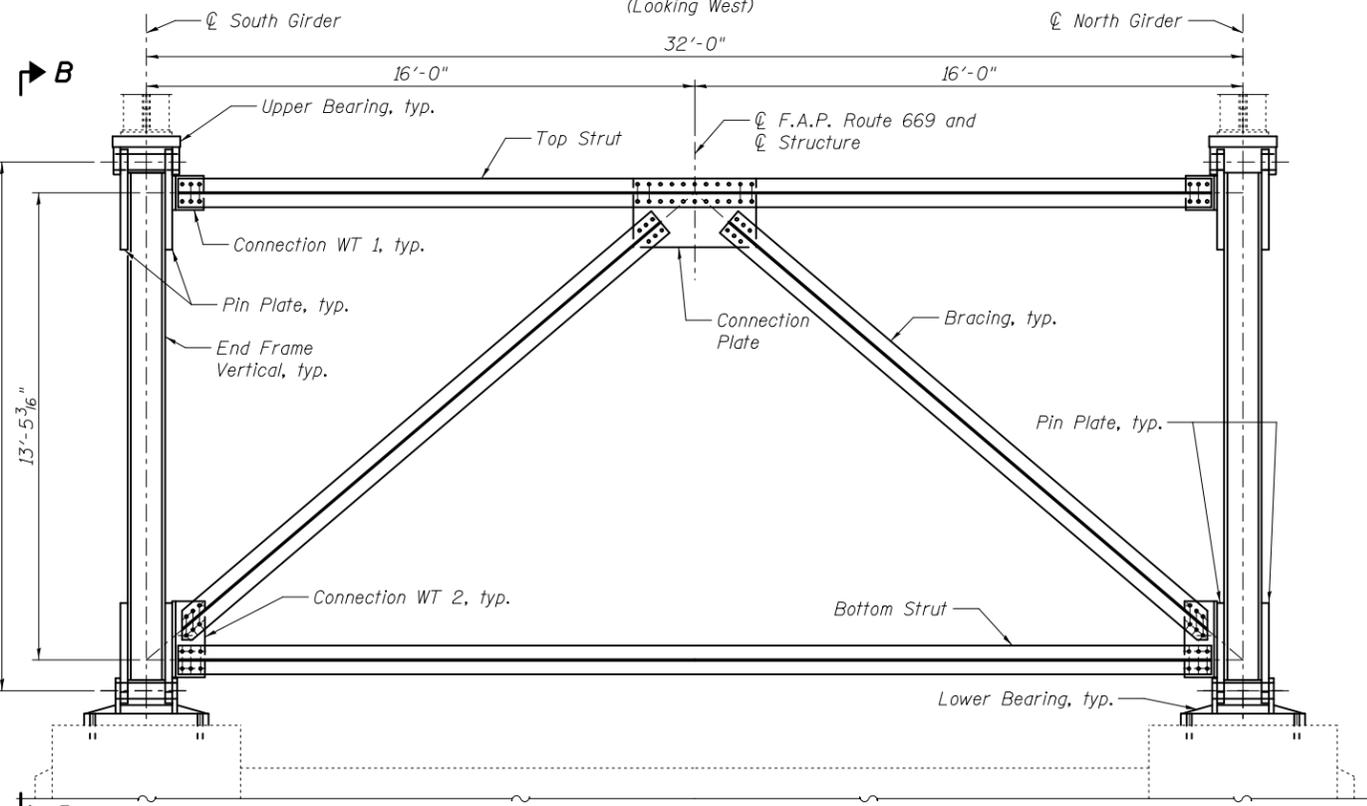
SHEET NO. 76 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	(*)	180	144
				CONTRACT NO. 68A93
ILLINOIS FED. AID PROJECT				

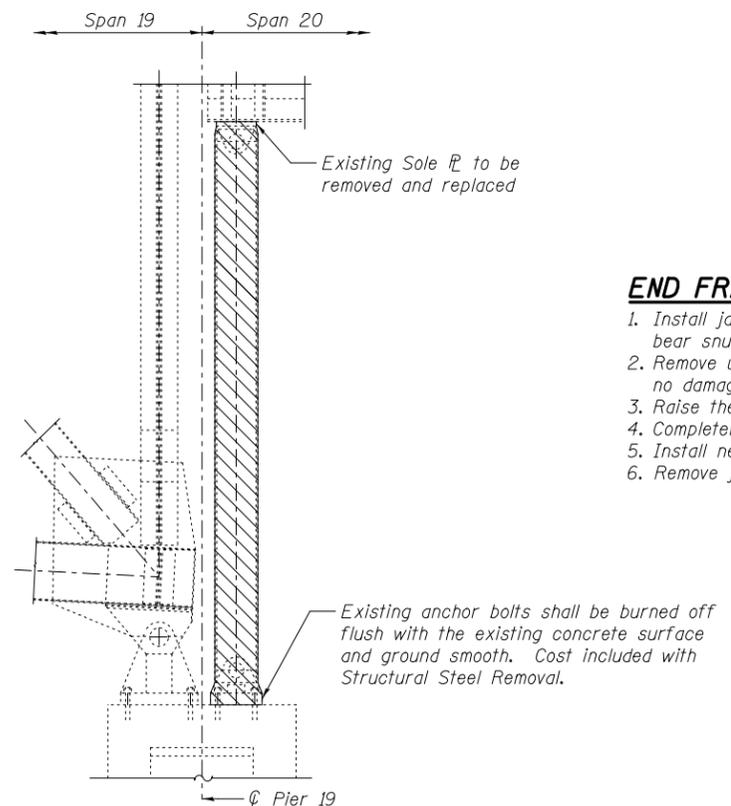
(*) Peoria / Tazewell



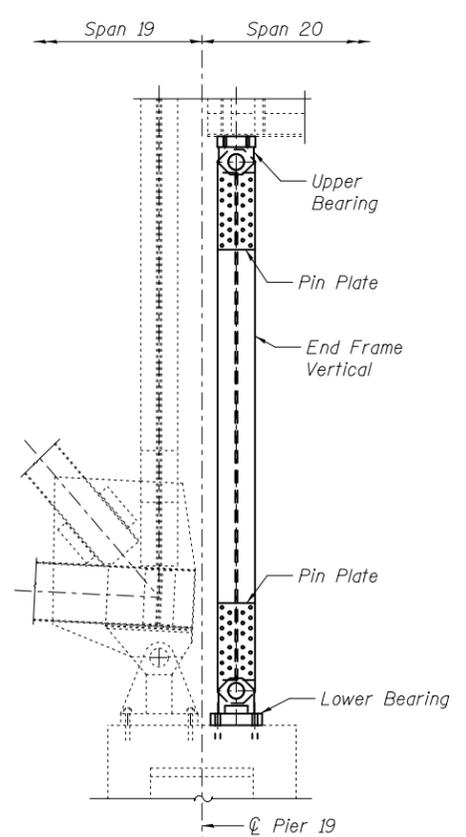
ELEVATION
EXISTING SPAN 20 END FRAME AT PIER 19
(Looking West)



ELEVATION
PROPOSED SPAN 20 END FRAME AT PIER 19
(Looking West)



SECTION A-A



SECTION B-B

END FRAME REPLACEMENT PROCEDURE

1. Install jacking and cribbing. Jacking and cribbing shall bear snugly on girder bottom flanges.
2. Remove upper bearing attachment to girders ensuring that no damage is done to the existing girders.
3. Raise the girders a maximum of 1/8 inch.
4. Completely remove existing bearings and end frame.
5. Install new bearings and end frame.
6. Remove jacking and cribbing.

Existing anchor bolts shall be burned off flush with the existing concrete surface and ground smooth. Cost included with Structural Steel Removal.

BEARING REACTION TABLE

Span	Pier	Vertical			Total (k)
		DL (k)	LL (k)	I (k)	
20	19	259	128	96	483

Notes:
 Estimated load to be supported during the end frame replacement is 295 tons. This load is based on an assumed construction live load of 20 psf. The Contractor shall determine the actual live load to be supported during construction and design the Temporary Shoring and Cribbing accordingly. This analysis shall be included with the calculations for temporary shoring and cribbing.
 See Sheet 78 of 112 for End Frame Details.
 See Sheet 79 of 112 for Upper Bearing Details.
 See Sheet 80 of 112 for Lower Bearing details.
 Cost to furnish and erect complete in-place the upper and lower bearings and end frame including all structural steel shapes and plates, bearing pins and nuts, and fasteners shall be paid for as Furnishing and Erecting Structural Steel. Anchor bolts for the lower bearings will be paid for separately.
 Removal and disposal of the existing bearings, end frame and miscellaneous items identified on the plans shall be in accordance with the special provision Structural Steel Removal.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	L. Sum	1
Structural Steel Removal	L. Sum	1
Temporary Shoring and Cribbing	L. Sum	1

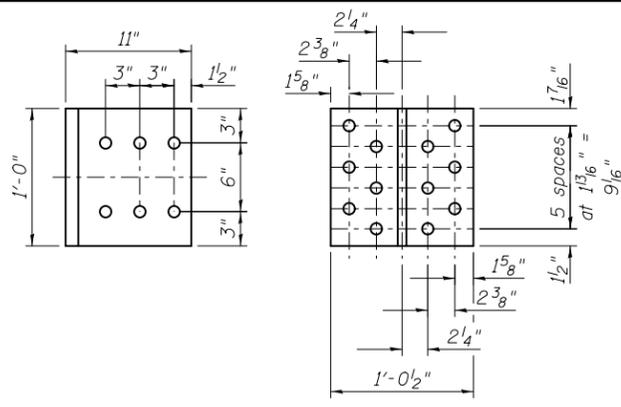


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	CHECKED - JTH	REVISED
PLOT SCALE =	DRAWN - CMM	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

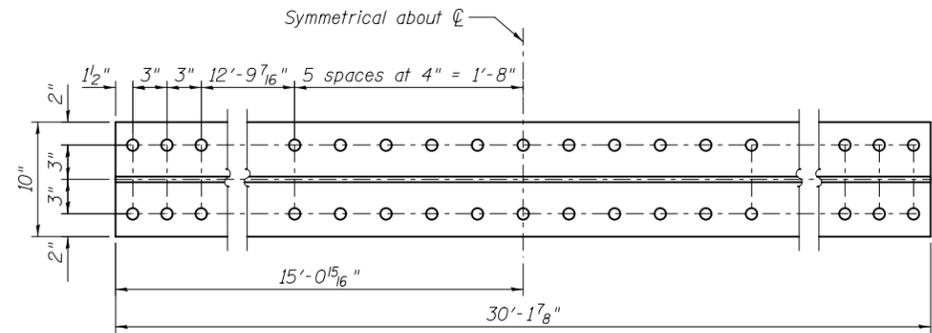
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING AND END FRAME REPLACEMENT AT SPAN 20, PIER 19
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

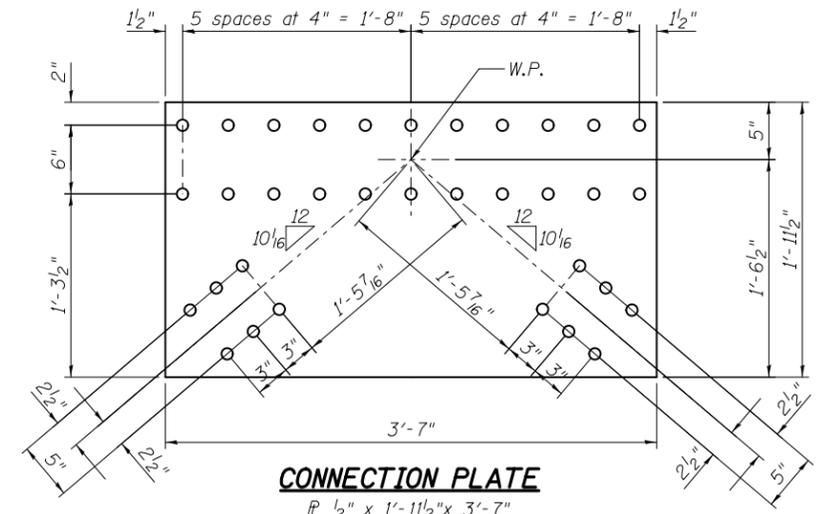
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	145
CONTRACT NO. 68A93				



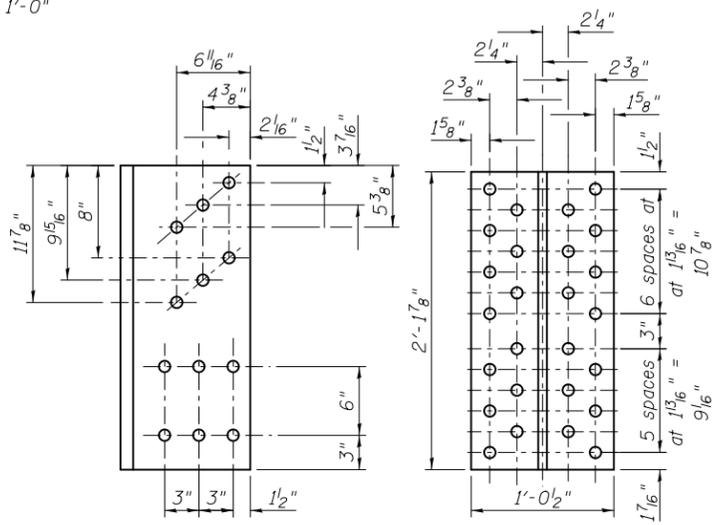
CONNECTION WT 1
WT 10.5 x 73.5 x 1'-0"
(2-required)



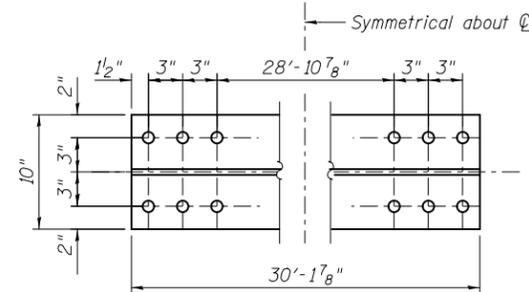
TOP STRUT
WT 7 x 34 x 30'-1 7/8"
(1-required)



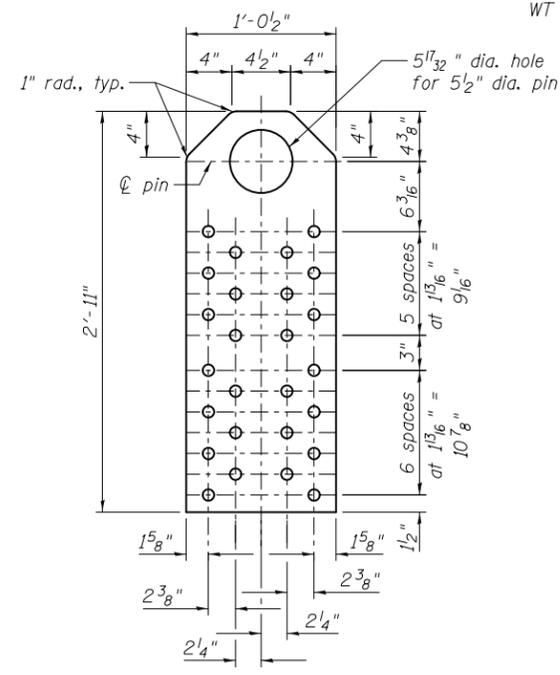
CONNECTION PLATE
PL 1/2" x 1'-11 1/2" x 3'-7"
(1-required)



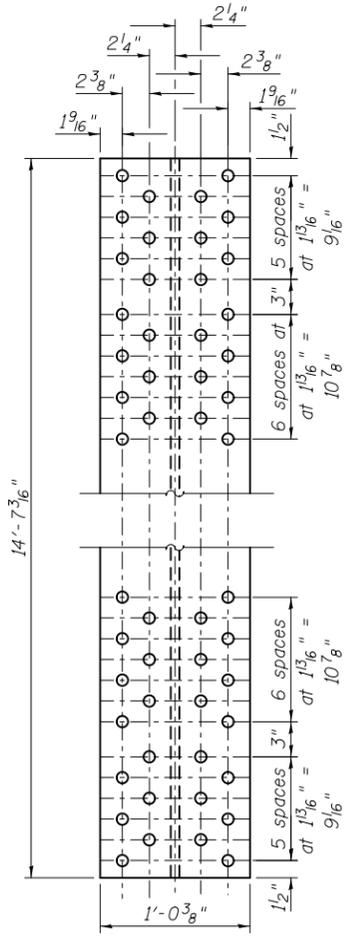
CONNECTION WT 2
WT 10.5 x 73.5 x 2'-1 7/8"
(2-required)



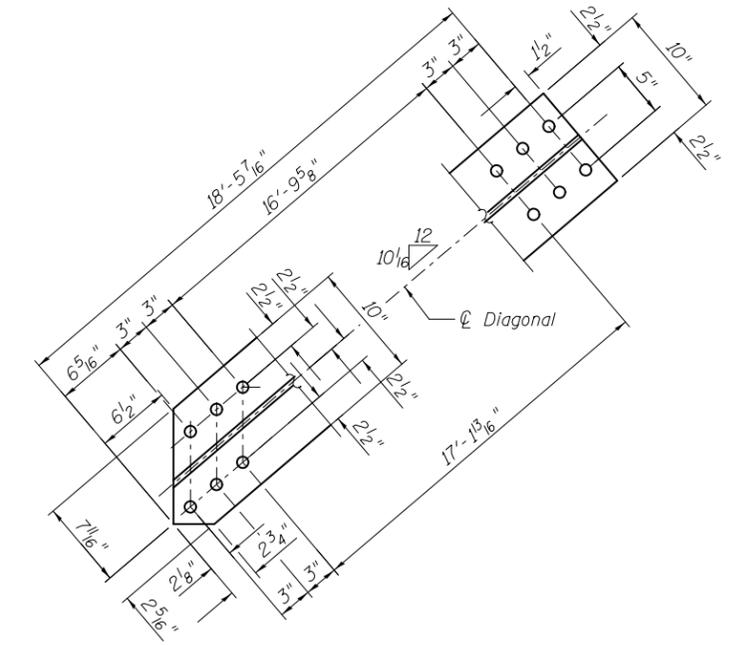
BOTTOM STRUT
WT 7 x 34 x 30'-1 7/8"
(1-required)



PIN PLATE
PL 2 1/2" x 1'-0 1/2" x 2'-11"
(8-required)



END FRAME VERTICAL
W 12 x 120 x 14'-7 3/16"
(2-required)



BRACING
WT 7 x 34 x 18'-5 7/16"
(1-required as shown)
(1-required opposite hand)



USER NAME =	DESIGNED - APL	REVISED
PLOT SCALE =	CHECKED - JTH	REVISED
PLOT DATE = 10/05/2015	DRAWN - CMM	REVISED
	CHECKED - RLM	REVISED

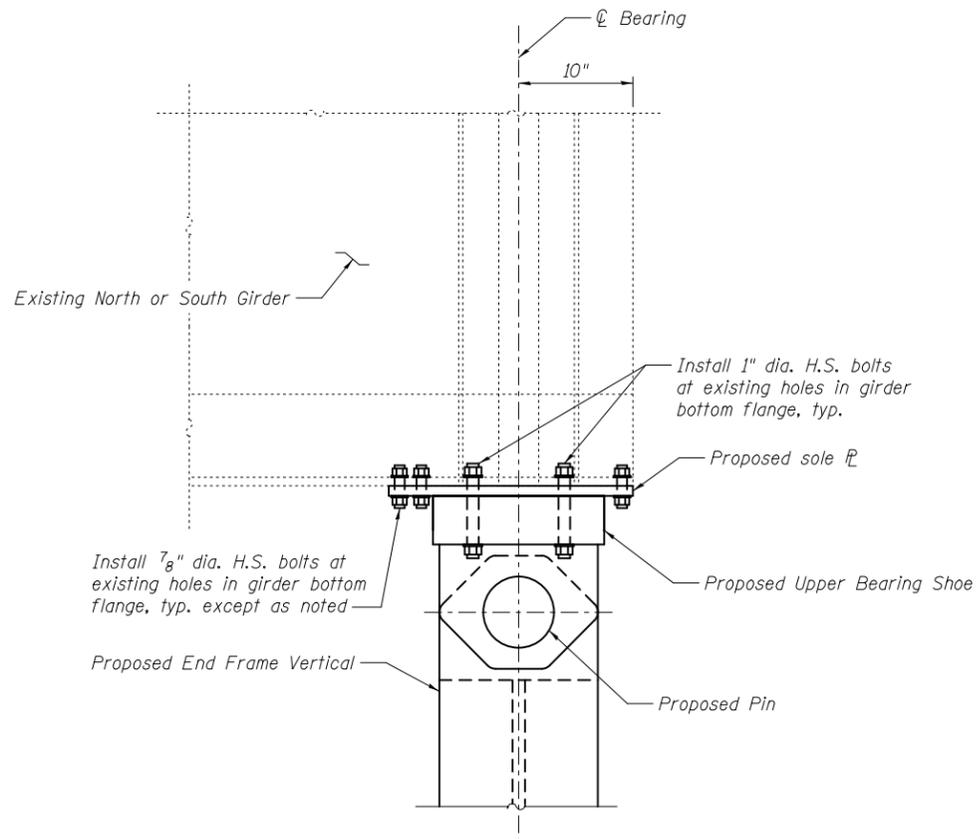
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

END FRAME DETAILS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

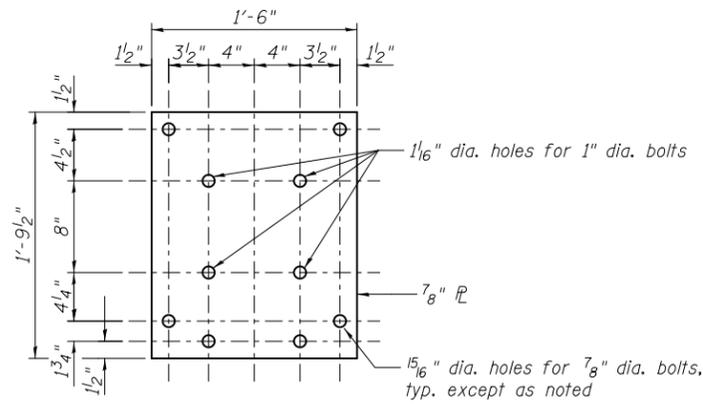
SHEET NO. 78 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	146
CONTRACT NO. 68A93				

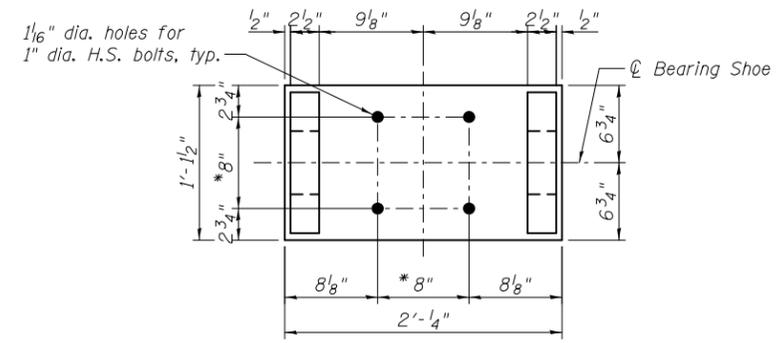
ILLINOIS FED. AID PROJECT



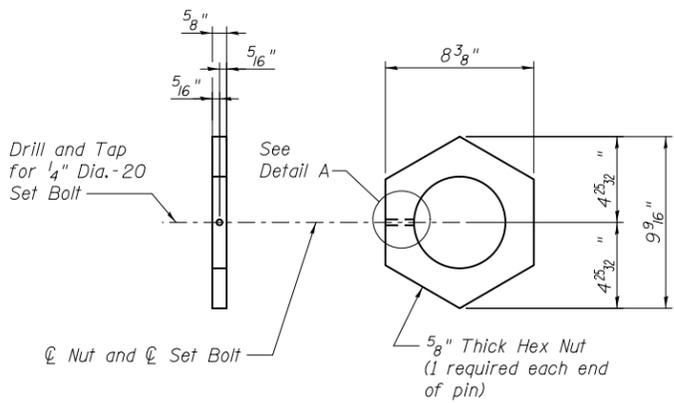
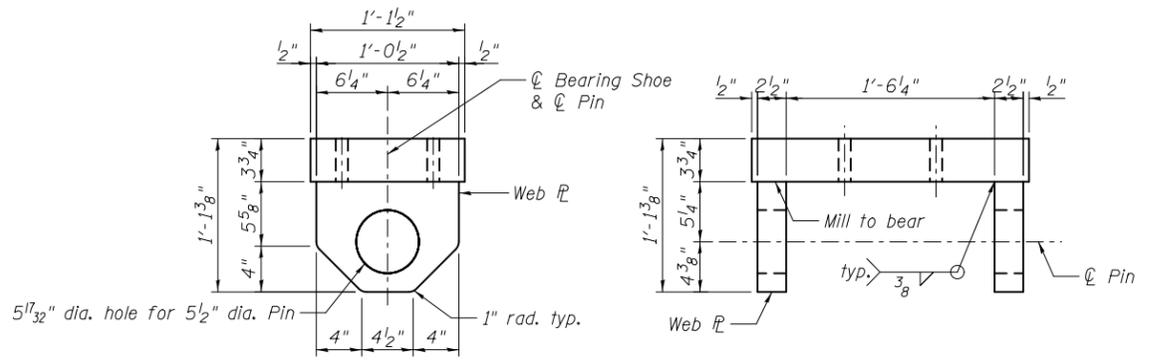
UPPER BEARING REPLACEMENT AT SPAN 20 - PIER 19
(Looking south)



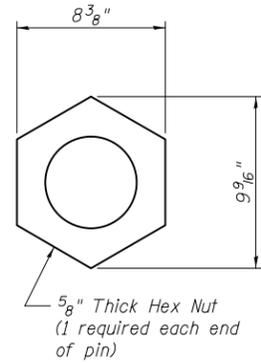
SOLE PLATE
PL $7/8$ " x 1'-6" x 1'-9 1/2"
(2-required)
Field verify all sole plate dimensions



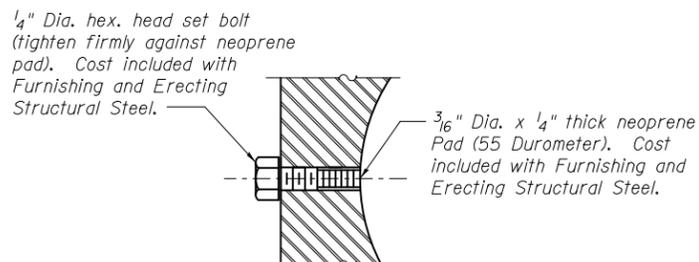
UPPER BEARING SHOE
(2-required)
*Field verify



EXTERIOR NUT DETAIL
(4-required)

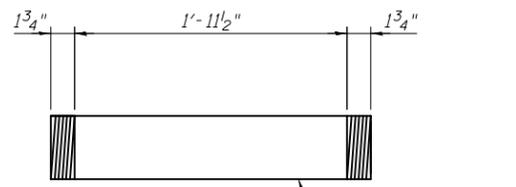


INTERIOR NUT DETAIL
(4-required)



DETAIL A

Set bolts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.



PIN
(2-required)

Notes:
See Sheet 77 of 112 for Bill of Material and Bearing Reaction Table.
See Sheet 78 for End Frame Details.
See Sheet 80 for Lower Bearing Details.
All steel for bearings shall conform to the requirements of AASHTO M270 Grade 50, unless otherwise noted.
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates.
Pins shall be ASTM A276, UNS 21800 (Nitronic 60 or equal) (No step at threads) 12 threads per inch.
Nuts shall be ASTM A576, Grade 12L14, minimum yield of 36 ksi.



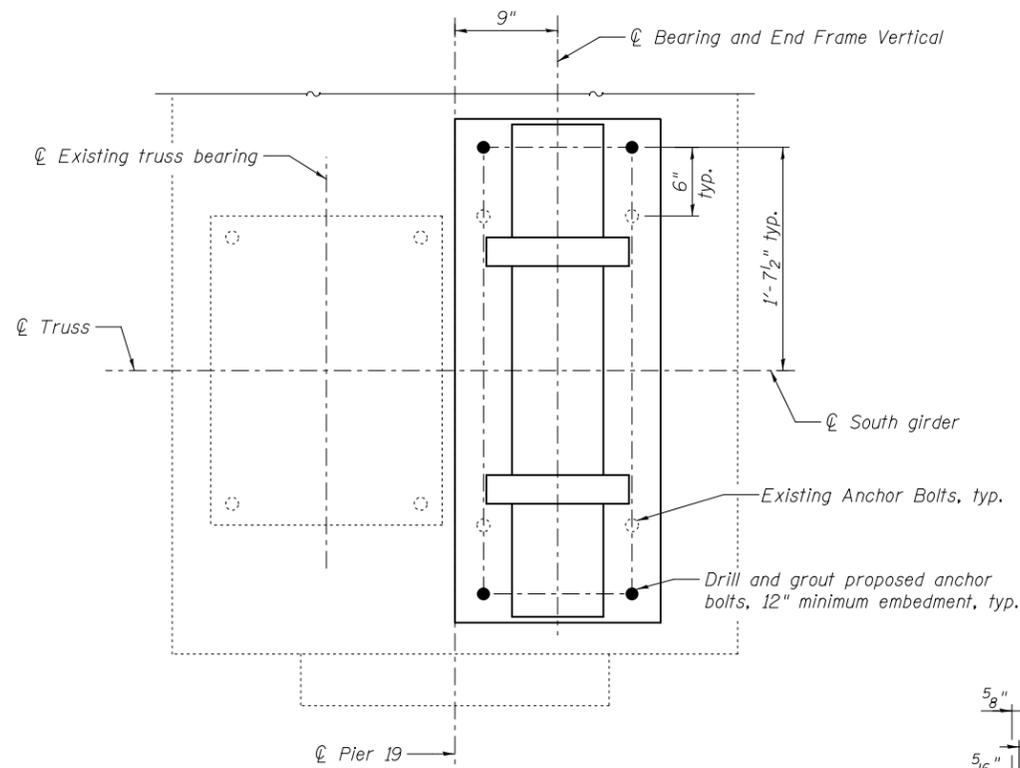
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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

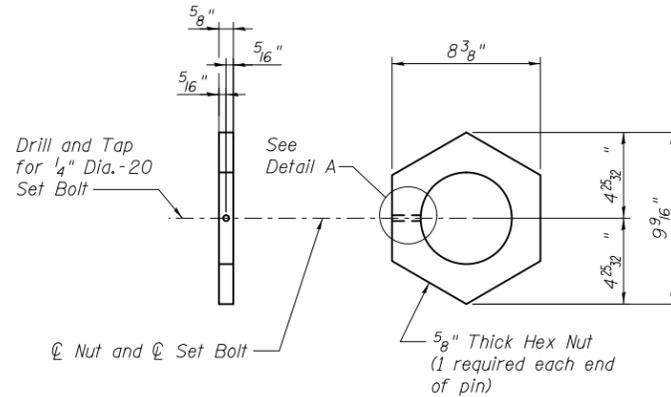
UPPER BEARING DETAILS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 79 OF 112 SHEETS

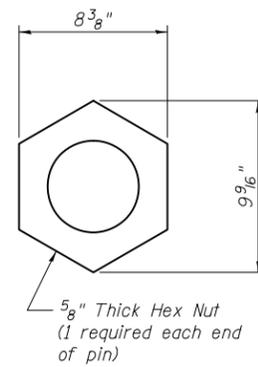
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	147
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



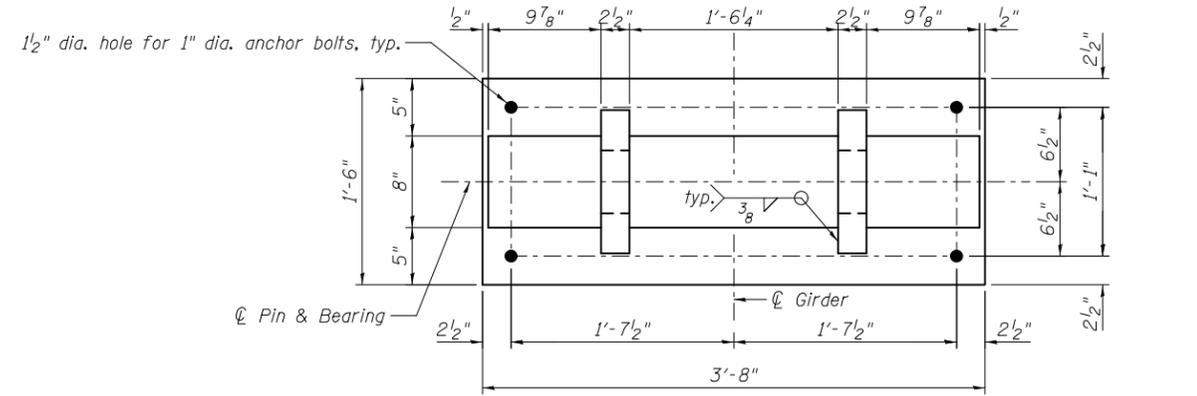
PARTIAL PLAN - SOUTH BEARING
(North Bearing Similar)



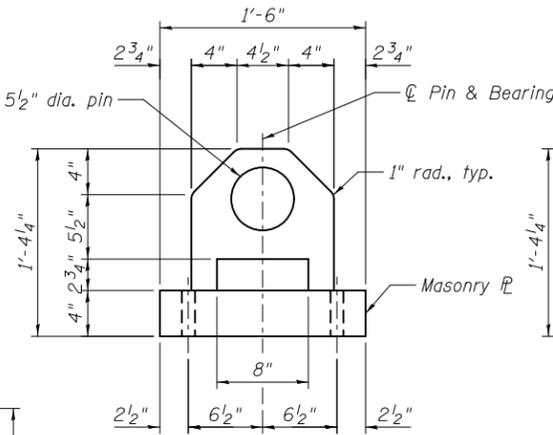
EXTERIOR NUT DETAIL
(4-required)



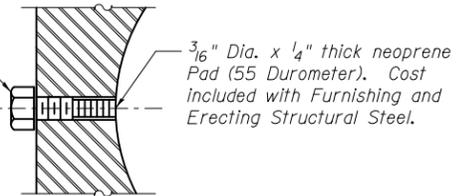
INTERIOR NUT DETAIL
(4-required)



LOWER BEARING BOLSTER
(2-required)

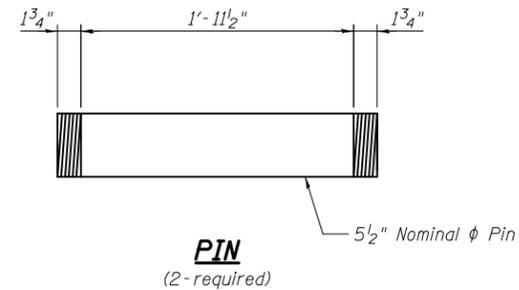


1/4" Dia. hex. head set bolt
(tighten firmly against neoprene pad). Cost included with Furnishing and Erecting Structural Steel.

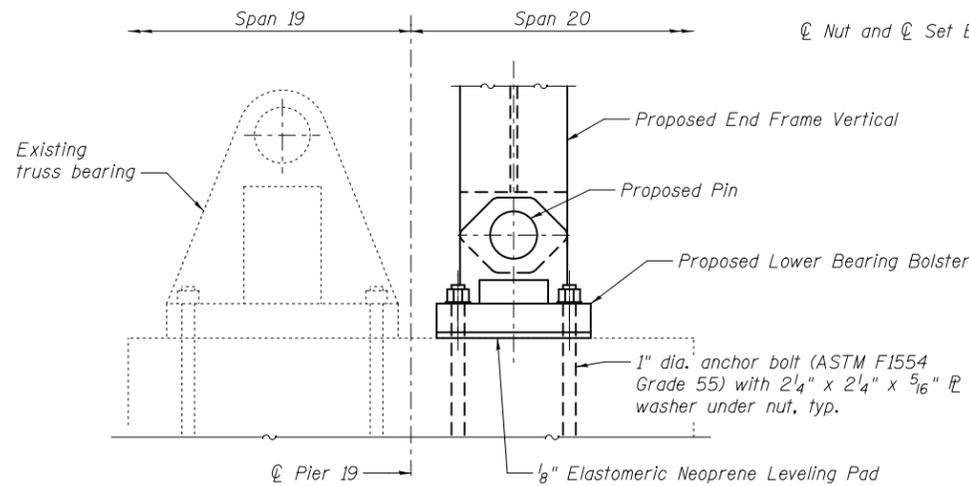


DETAIL A

Set bolts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.



PIN
(2-required)



LOWER BEARING REPLACEMENT AT SPAN 20 - PIER 19
(Looking North)

Notes:
See Sheet 77 of 112 for Bill of Material and Bearing Reaction Table.
See Sheet 78 of 112 for End Frame Details.
See Sheet 79 of 112 for Upper Bearing Details.
All steel for bearings shall conform to the requirements of AASHTO M270 Grade 50, unless otherwise noted.
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade and diameter specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554. Anchor bolts shall be drilled and set according to Article 521.06 of the Standard Specifications.
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates.
The anchor bolt size and grade shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.
The elastomeric neoprene leveling pad shall be in accordance with Article 1052.02(a) of the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.
Pins shall be ASTM A276, UNS 21800 (Nitronic 60 or equal) (No step at threads) 12 threads per inch. Nuts shall be ASTM A576, Grade 12L14, minimum yield of 36 ksi.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	8



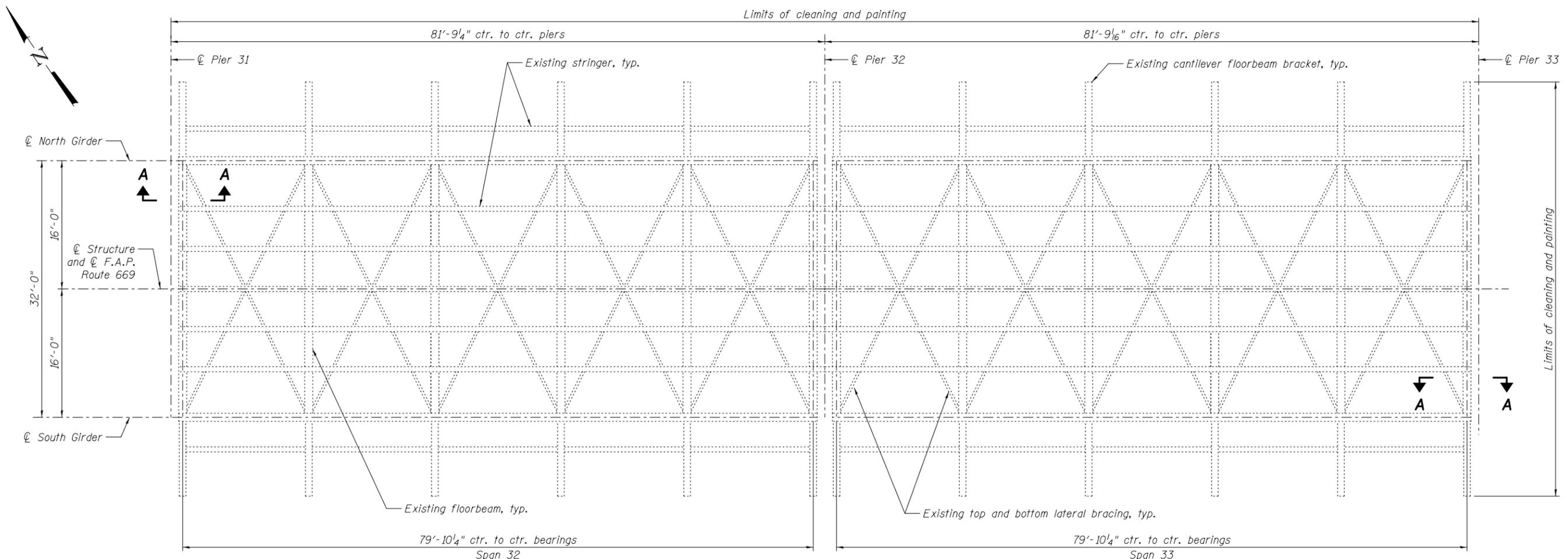
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PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOWER BEARING DETAILS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 80 OF 112 SHEETS

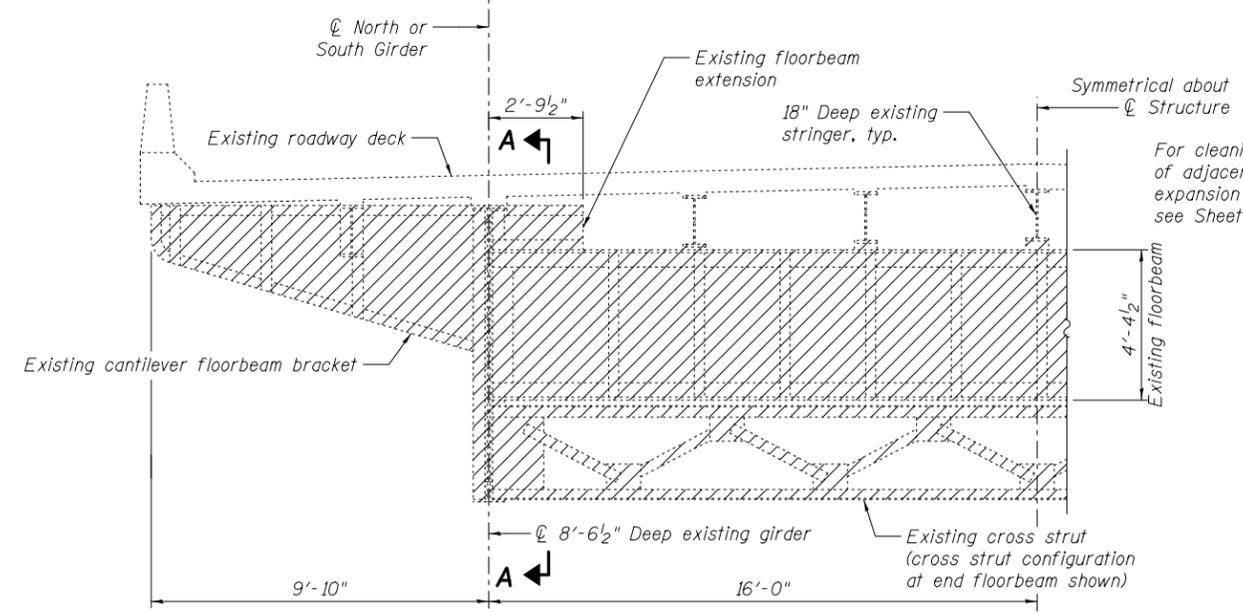
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103BI)-7	PEORIA/TAZEWELL	180	148
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



CLEANING AND PAINTING DETAILS AT SPANS 32 AND 33

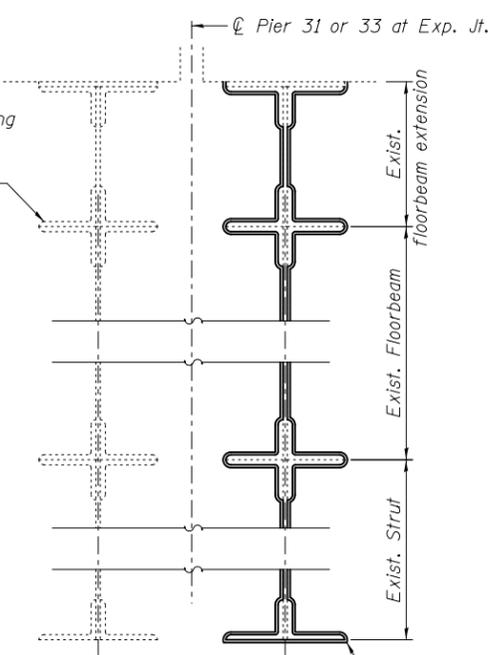
EXISTING FRAMING PLAN

(Roadway deck not shown)



TYPICAL HALF SECTION

Note: All exposed faces of existing steel components below roadway deck to be cleaned and painted within spans 32 and 33.



SECTION A-A

Bold faces to be cleaned and painted including all steel components attached to the faces.

Notes:

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures, except at the locations of structural repairs or new structural installations. The designated areas for cleaning and painting existing structural steel at Spans 32 and 33, as shown on this sheet, shall be cleaned per Power Tool Cleaning - Modified SSPC-SP3 and painted according to the requirements of Paint System 2 - PS/EM/U. The cost for cleaning and painting the existing structural steel as shown on this sheet shall be included with the pay item Cleaning and Painting Steel Bridge, No. 1.

Areas designated for cleaning and painting of members within Spans 32 and 33 below the expansion joints at Piers 31 and 33 that overlap cleaning and painting limits shown on Sheet 83 of 112 shall be cleaned and painted per the requirements shown on Sheet 83 of 112.

Cleaning and painting existing structural steel in the areas of structural repairs or new structural installations shall be in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures and included in the cost of Structural Steel Repair.

The existing structural steel coating contains lead. Removal and disposal of the existing lead paint shall be in accordance with the special provision for Containment and Disposal of Lead Paint Cleaning Residues.

See the existing structural plans for more information about the size and geometry of members to be cleaned and painted.

LEGEND

Limits of cleaning and painting steel members

BILL OF MATERIAL

Item	Unit	Total
Cleaning and Painting Steel Bridge No. 1	L Sum	1
Containment and Disposal of Lead Paint Cleaning Residues No. 1	L Sum	1



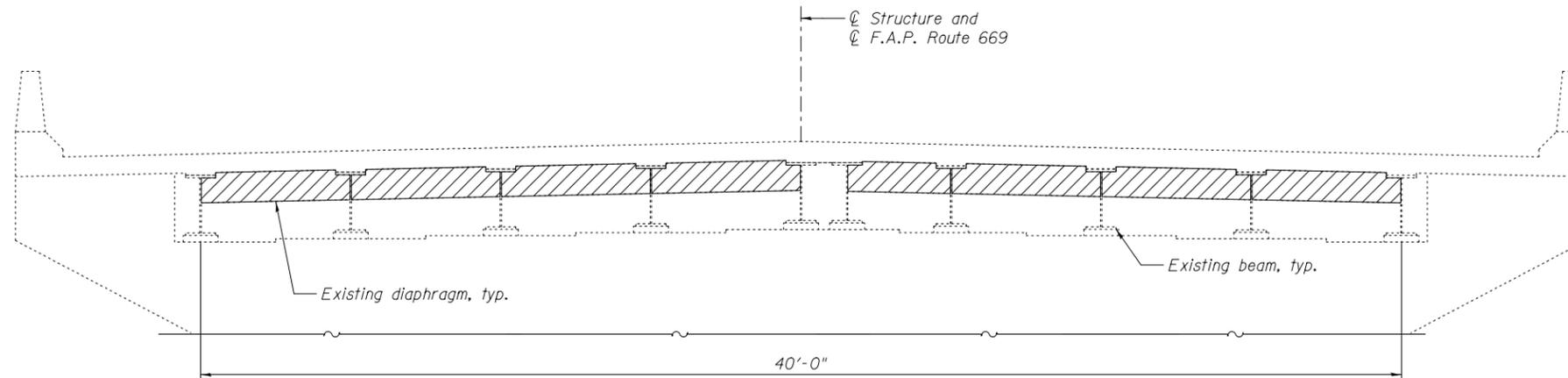
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PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CLEANING AND PAINTING DETAILS - 1
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

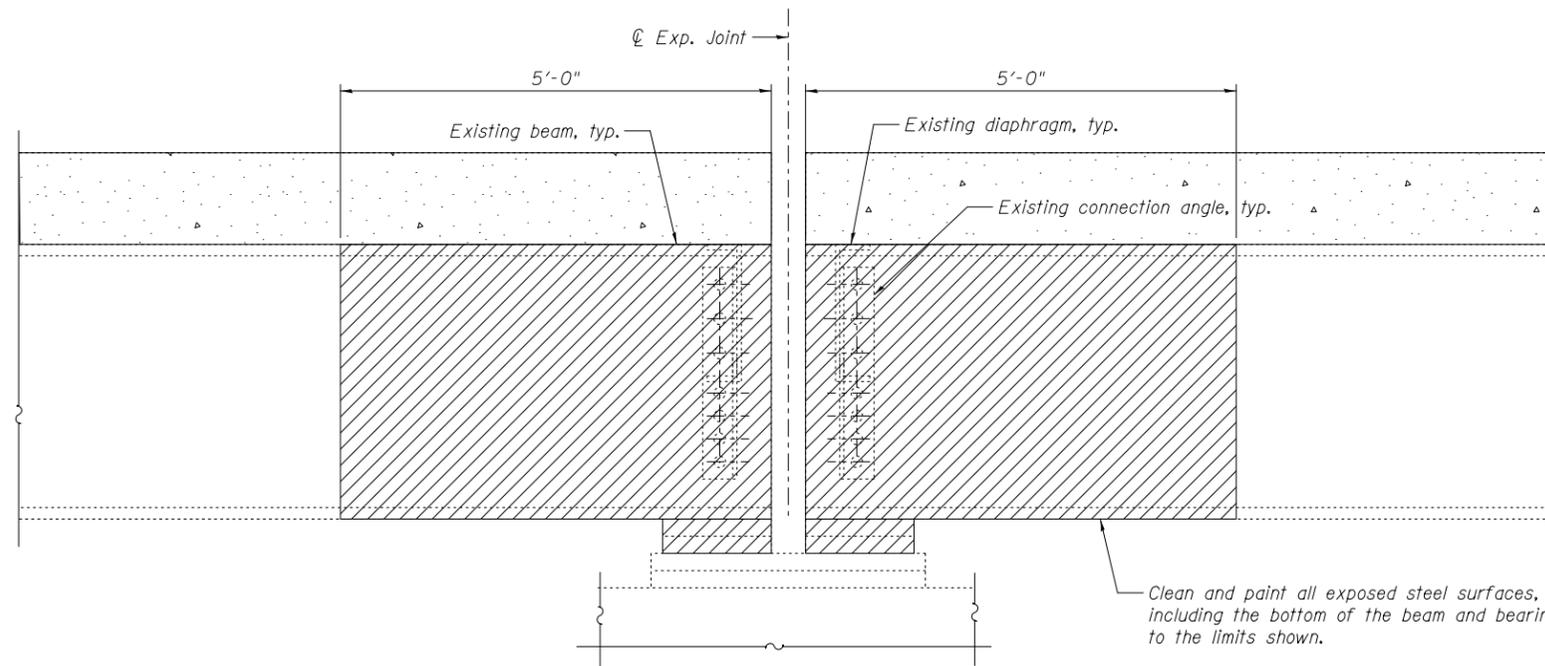
SHEET NO. 81 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	149
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



ELEVATION

(Looking East)



TYPICAL SECTION AT PIERS 2, 4 AND 5

West Abutment and West Side of Joint at Pier 7 similar

See Sheet 83 of 112 for cleaning and painting details for east side of joint at Pier 7.

LEGEND

 Limits of cleaning and painting steel members

Notes:

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures, except at the locations of structural repairs or new structural installations. The designated areas for cleaning and painting existing structural steel at expansion joints, as shown on this sheet, shall be cleaned per Near White Blast Cleaning SSPC - SP10 and painted according to the requirements of Paint System 1 - OZ/E/U. The cost for cleaning and painting the existing structural steel as shown on this sheet shall be included with the pay item Cleaning and Painting Steel Bridge, No. 1.

Cleaning and painting existing structural steel in the areas of structural repairs or new structural installations shall be in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures and included in the cost of Structural Steel Repair.

The existing structural steel coating contains lead. Removal and disposal of the existing lead paint shall be in accordance with the special provision for Containment and Disposal of Lead Paint Cleaning Residues.

See the existing structural plans for more information about the size and geometry of members to be cleaned and painted.

See Sheet 81 of 112 for the Bill of Material.

CLEANING AND PAINTING DETAILS AT WEST ABUTMENT, PIERS 2, 4, 5, AND WEST SIDE OF JOINT AT PIER 7



USER NAME =	DESIGNED - RLM	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

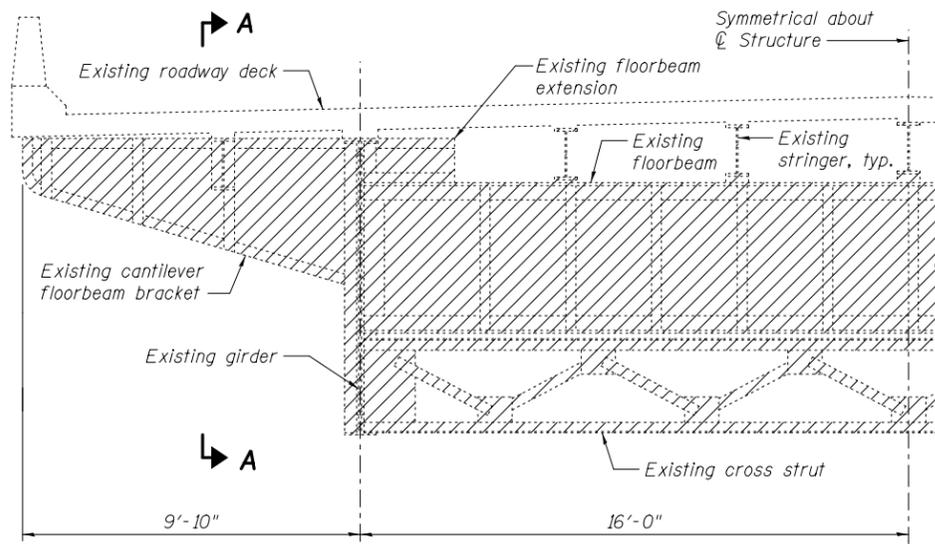
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CLEANING AND PAINTING DETAILS - 2
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	150
CONTRACT NO. 68A93				

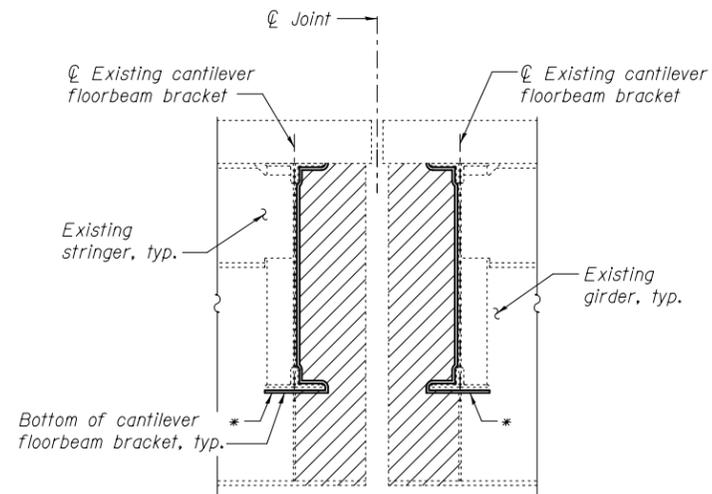
SHEET NO. 82 OF 112 SHEETS

ILLINOIS FED. AID PROJECT



ELEVATION AT GIRDER SPANS

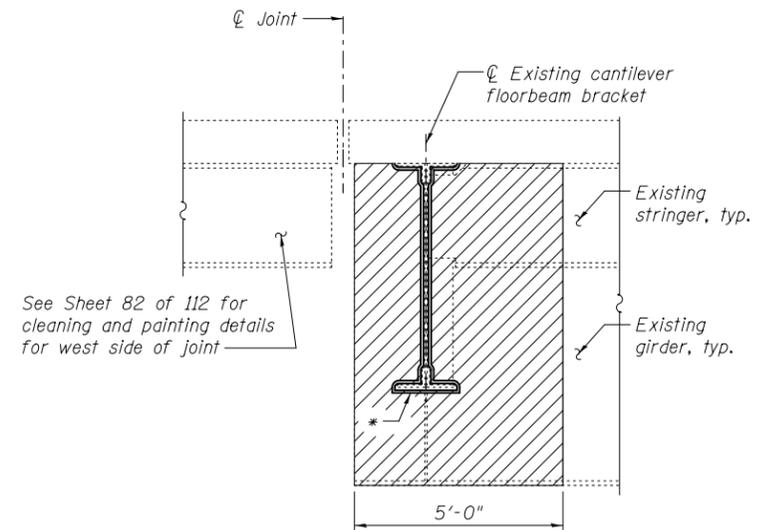
Concrete haunch or steel expansion joint supports not shown for clarity.



SECTION A-A

AT PIERS 8, 9 (WEST SIDE), 19 (EAST SIDE), 20, 22, 24, 26, 27, 29, 31, 33 AND EAST ABUTMENT (WEST SIDE)

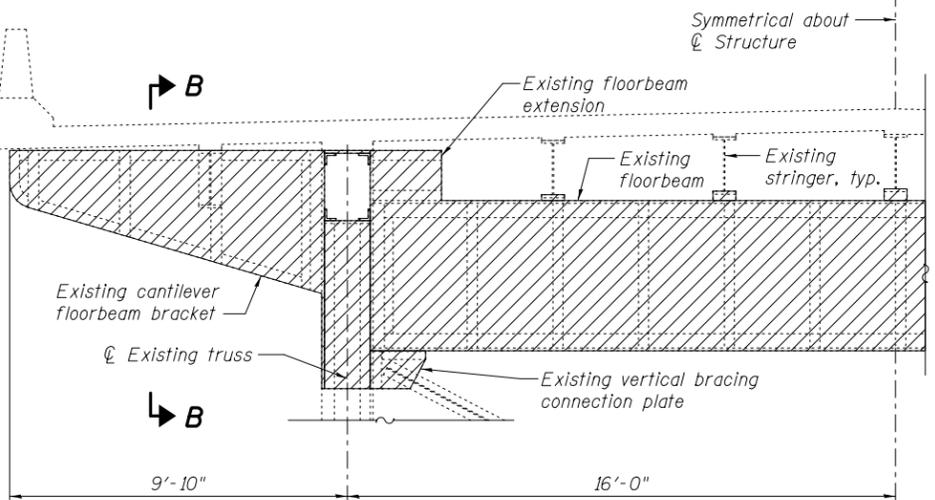
Clean and paint all exposed steel surfaces from the centerline of the joint to the centerline of the adjacent floorbeams/floorbeam cantilever brackets including the entire bottom surface of the floorbeams, floorbeam cantilever brackets and cross struts.



SECTION A-A

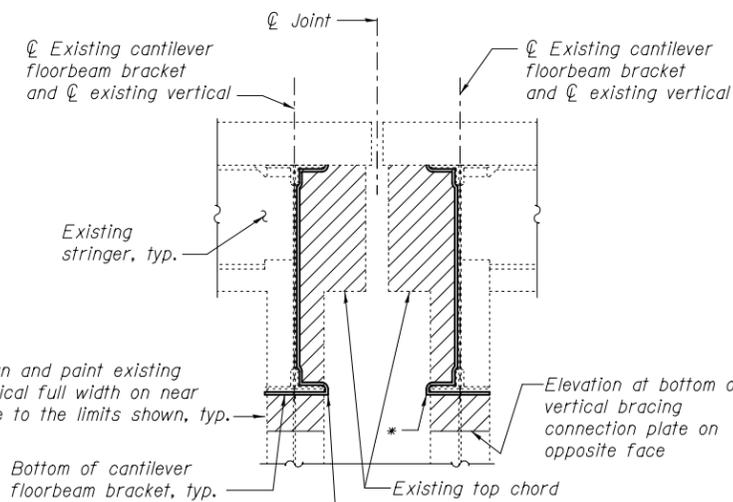
AT PIER 7 (EAST SIDE)

Steel expansion joint support members not shown for clarity. Clean and paint all exposed steel surfaces including the top and bottom surfaces of the floorbeams and cross struts, the bottom surface of the girders, cantilever floorbeam brackets and stringers, and all additional steel members within the limits shown.



ELEVATION AT TRUSS SPANS

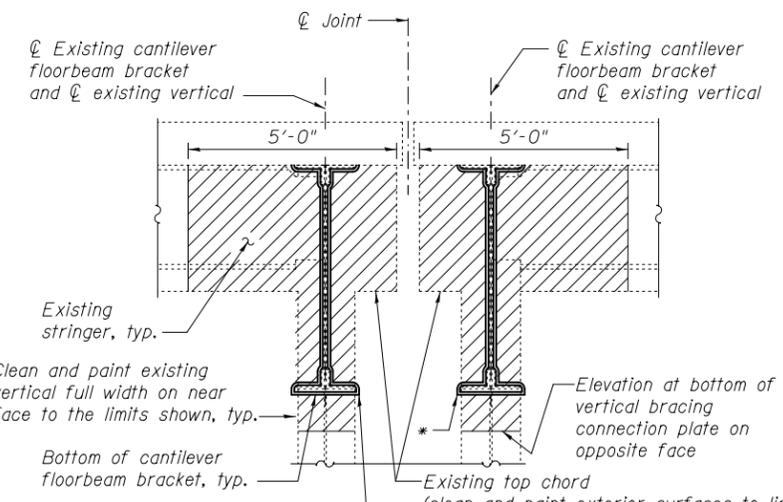
Concrete haunch or steel expansion joint supports not shown for clarity.



SECTION B-B

AT PIERS 9 (EAST SIDE), 10, 11, 12, 15, 16, 17 AND 19 (WEST SIDE)

Clean and paint all exposed steel surfaces from the centerline of the joint to the centerline of the adjacent floorbeams/floorbeam cantilever brackets to the limits shown including the entire bottom surface of the floorbeams and cantilever floorbeam brackets.



SECTION B-B

AT PIER 18 (SHOWN) MIDSPAN 14 (SIMILAR)

Steel expansion joint support members not shown for clarity. Clean and paint all exposed steel surfaces including the top and bottom surface of the floorbeams, the bottom surface of the stringers and cantilever floorbeam brackets and all additional steel members within the limits shown.

Notes:

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures, except at the locations of structural repairs or new structural installations. The designated areas for cleaning and painting existing structural steel at expansion joints, as shown on this sheet, shall be cleaned per Near White Blast Cleaning SSPC-SP10 and painted according to the requirements of Paint System 1 OZ/E/U. The cost for cleaning and painting the existing structural steel as shown on this sheet shall be included with the pay item Cleaning and Painting Steel Bridge, No. 1.

Cleaning and painting existing structural steel in the areas of structural repairs or new structural installations shall be in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures and included in the cost of Structural Steel Repair.

The existing structural steel coating contains lead. Removal and disposal of the existing lead paint shall be in accordance with the special provision for Containment and Disposal of Lead Paint Cleaning Residues.

See the existing structural plans for more information about the size and geometry of members to be cleaned and painted.

See Sheet 81 of 112 for the Bill of Material.

CLEANING AND PAINTING DETAILS
AT PIERS 7 (EAST SIDE), 8, 9, 10, 11, 12, MIDSPAN 14, 15, 16, 17, 18, 19, 20, 22, 24, 26, 27, 29, 31, 33 AND EAST ABUTMENT (WEST SIDE)

LEGEND

Limits of cleaning and painting steel members

* Bold faces to be cleaned and painted.



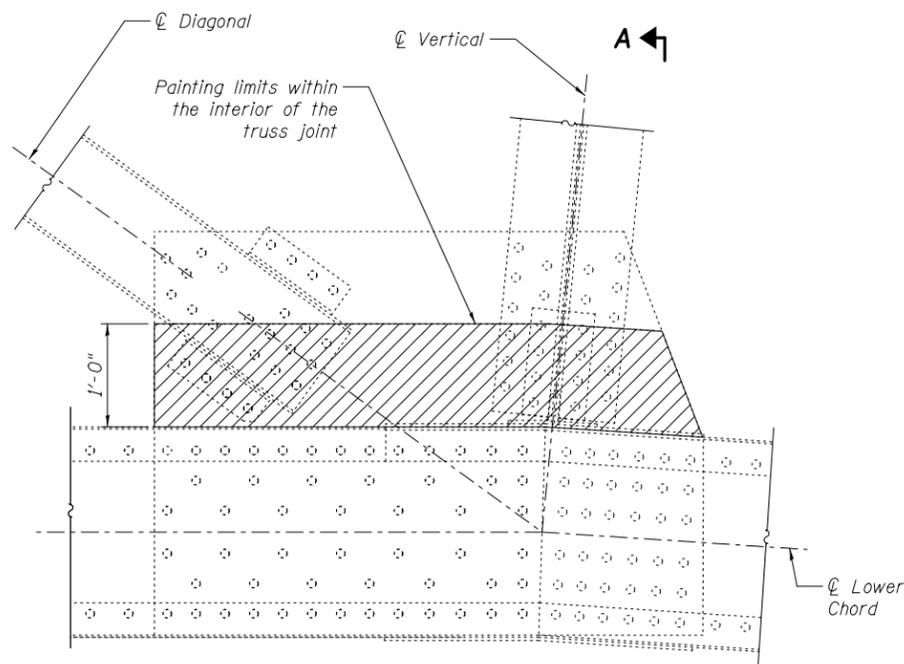
USER NAME =	DESIGNED - RLM	REVISED
	CHECKED - APL	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

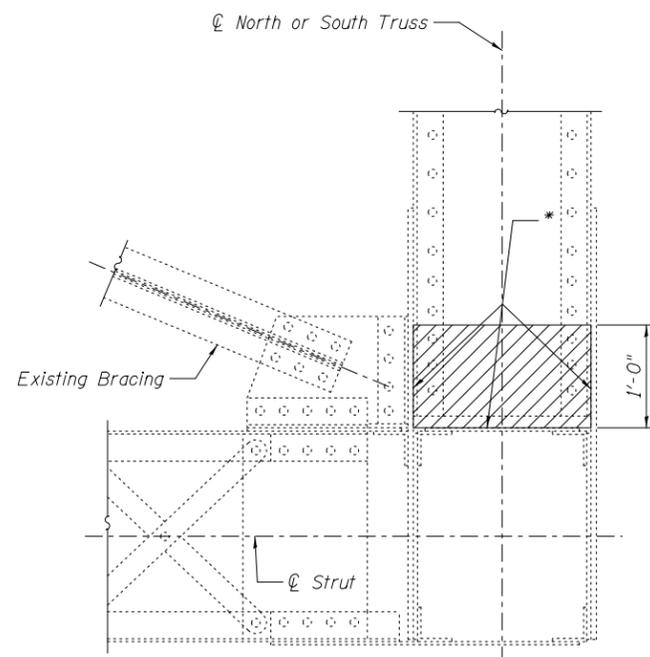
CLEANING AND PAINTING DETAILS - 3
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 83 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	151
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



**ELEVATION AT SECTION
THRU TRUSS JOINT**

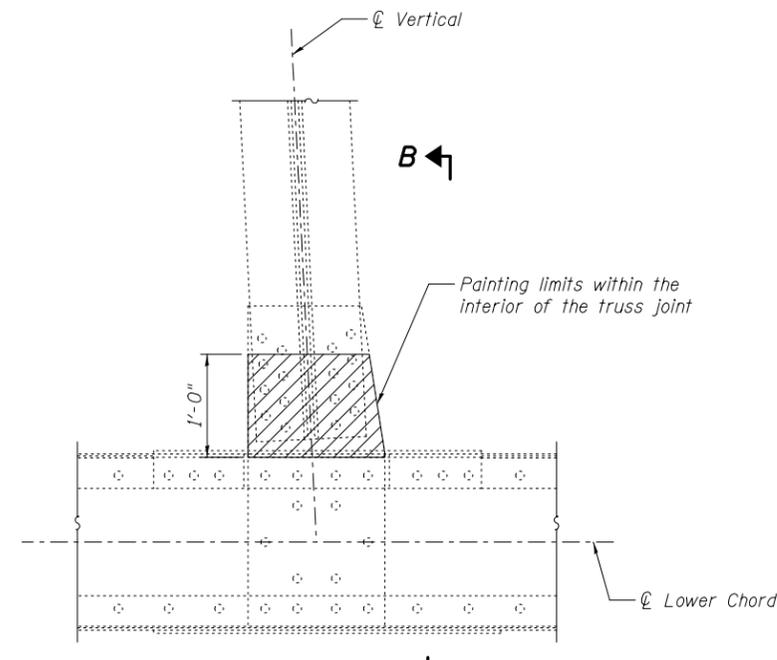


**SECTION A-A
DECK TRUSS JOINT
CLEANING AND PAINTING DETAILS
TYPE I**

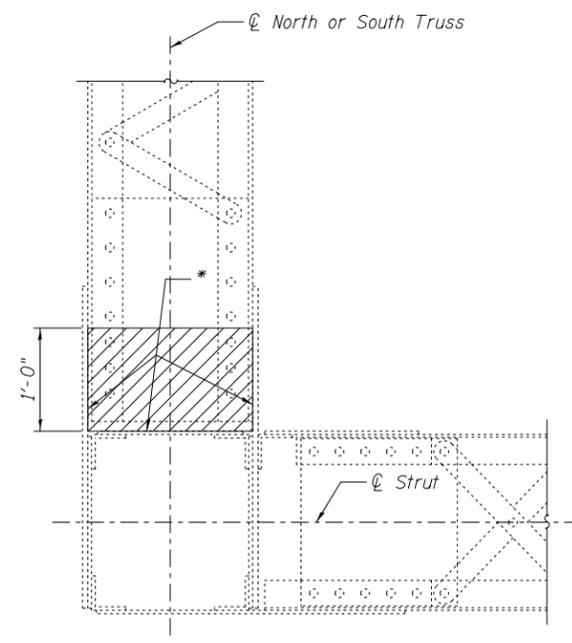
**TYPE I
PAINTING LOCATIONS**

Span	Joint	Truss
10	L8	North
10	L8	South
11	L0	North
11	L0	South
11	L8	South
12	L0	South
12	L8	South
13	L16	North
13	L16	South
14	L5	North
14	L4	North
14	L3	North
14	L3	South
14	L2	North
14	L1	North
14	L1	South
14	L0	North
14	L0	South
14	L0'	North
14	L0'	South
14	L1'	North
14	L1'	South
14	L2'	North
14	L2'	South
14	L3'	North
14	L3'	South
14	L4'	North
14	L4'	South
14	L5'	North
14	L5'	South
14	L6'	North
15	L16'	North
15	L16'	South
16	L0	North
16	L8	North
16	L8	South
17	L0	North
17	L0	South
17	L8	North
17	L8	South
18	L0	North
18	L8	North
18	L8	South
19	L0	North
19	L0	South
19	L8	North
19	L8	South

*Clean and paint the top surface of the lower chord and all exposed steel surfaces within the interior of the truss joint to the limits shown.



**ELEVATION AT SECTION
THRU TRUSS JOINT**



**SECTION B-B
DECK TRUSS JOINT
CLEANING AND PAINTING DETAILS
TYPE II**

**TYPE II
PAINTING LOCATIONS**

Span	Joint	Truss
10	L7	South
11	L1	South
11	L3	North
11	L3	South
11	L5	North
11	L7	South
12	L3	South
12	L5	South
12	L7	North
12	L7	South
13	L15	North
13	L15	South
13	L13	North
13	L13	South
13	L11	North
13	L11	South
13	L9	North
13	L9	South
15	L9'	North
15	L9'	South
15	L11'	South
15	L13'	North
15	L13'	South
15	L15'	North
15	L15'	South
16	L1	North
16	L3	North
16	L3	South
16	L5	North
16	L7	South
17	L7	South
18	L1	North
18	L1	South
18	L3	South

LEGEND

Limits of cleaning and painting steel members

Notes:

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures, except at the locations of structural repairs or new structural installations. The designated areas for cleaning and painting existing structural steel at the interior faces of truss joints, as shown on this sheet, shall be cleaned per Near White Blast Cleaning SSPC-SP10 and painted according to the requirements of Paint System 1 - OZ/E/U. The cost for cleaning and painting the existing structural steel as shown on this sheet shall be included with the pay item Cleaning and Painting Steel Bridge, No. 1.

Cleaning and painting existing structural steel in the areas of structural repairs or new structural installations shall be in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures and included in the cost of Structural Steel Repair.

The existing structural steel coating contains lead. Removal and disposal of the existing lead paint shall be in accordance with the special provision for Containment and Disposal of Lead Paint Cleaning Residues.

See the existing structural plans for more information about the size and geometry of members to be cleaned and painted.

See Sheet 81 of 112 for the Bill of Material.



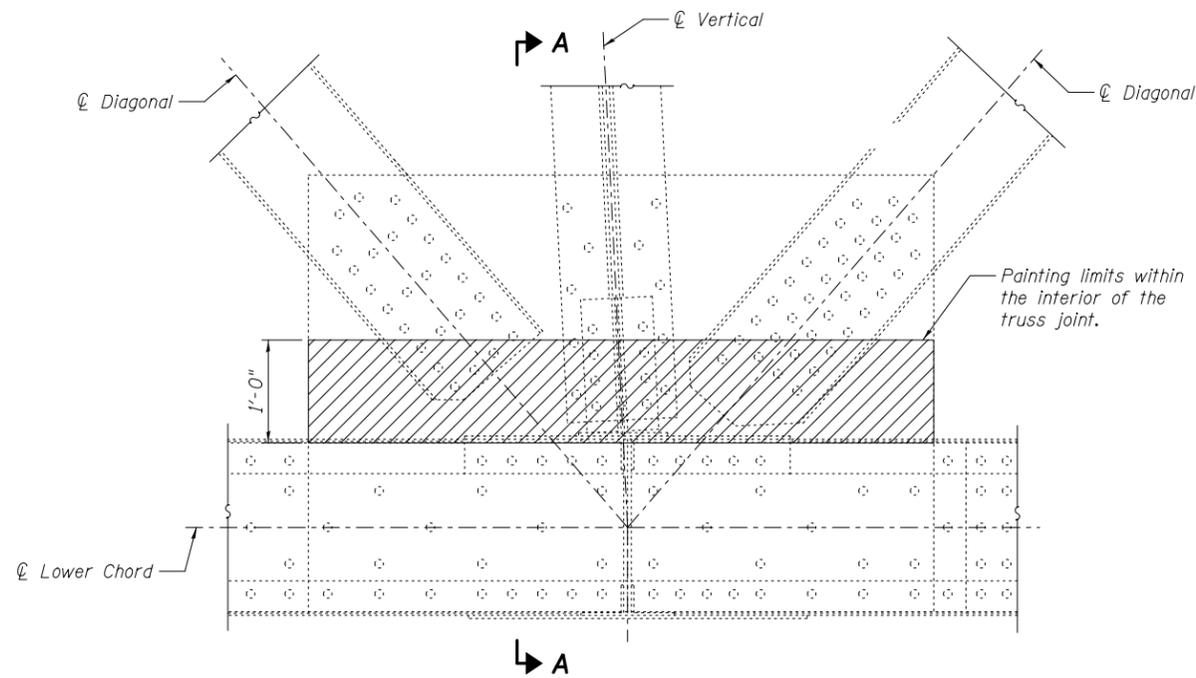
USER NAME =	DESIGNED - RLM	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

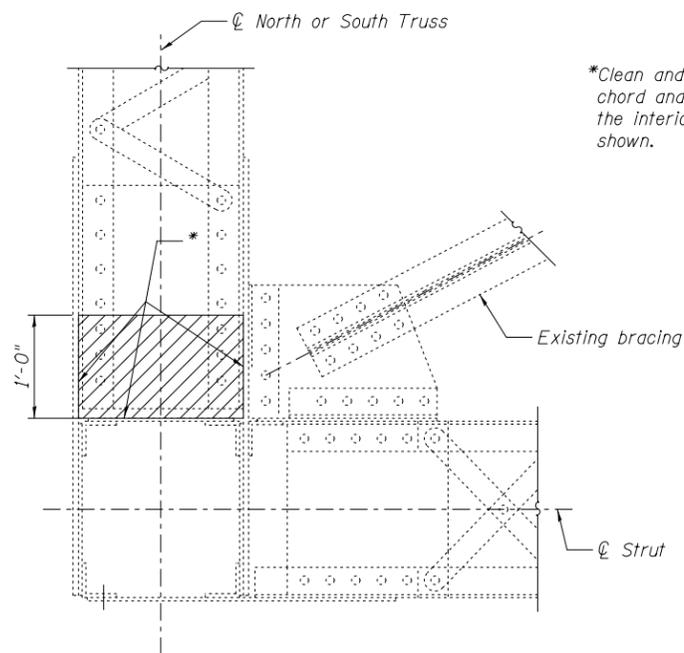
**CLEANING AND PAINTING DETAILS - 4
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

SHEET NO. 84 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	152
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



**ELEVATION AT SECTION
THRU TRUSS JOINT**



SECTION A-A

**DECK TRUSS JOINT
CLEANING AND PAINTING DETAILS
TYPE III**

*Clean and paint the top surface of the lower chord and all exposed steel surfaces within the interior of the truss joint to the limits shown.

**TYPE III
PAINTING LOCATIONS**

Span	Joint	Truss
10	L2	North
10	L2	South
10	L4	North
10	L4	South
10	L6	South
11	L2	North
11	L2	South
11	L4	North
11	L4	South
11	L6	North
11	L6	South
12	L2	North
12	L2	South
12	L4	North
12	L4	South
12	L6	North
12	L6	South
13	L14	North
13	L14	South
13	L12	North
13	L12	South
13	L10	North
13	L10	South
13	L8	North
13-14	L7	South
15	L8'	South
15	L10'	North
15	L12'	North
15	L12'	South
15	L14'	North
15	L14'	South
16	L2	North
16	L2	South
16	L4	North
16	L4	South
16	L6	North
16	L6	South
17	L2	North
17	L2	South
17	L4	North
17	L4	South
17	L6	North
18	L2	North
18	L4	South
18	L6	North
19	L2	North
19	L2	South
19	L4	North
19	L6	North

LEGEND

 Limits of cleaning and painting steel members

Notes:

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures, except at the locations of structural repairs or new structural installations. The designated areas for cleaning and painting existing structural steel at the interior faces of truss joints, as shown on this sheet, shall be cleaned per Near White Blast Cleaning SSPC-SP10 and painted according to the requirements of Paint System 1 - OZ/E/U. The cost for cleaning and painting the existing structural steel as shown on this sheet shall be included with the pay item Cleaning and Painting Steel Bridge, No. 1.

Cleaning and painting existing structural steel in the areas of structural repairs or new structural installations shall be in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures and included in the cost of Structural Steel Repair.

The existing structural steel coating contains lead. Removal and disposal of the existing lead paint shall be in accordance with the special provision for Containment and Disposal of Lead Paint Cleaning Residues.

See the existing structural plans for more information about the size and geometry of members to be cleaned and painted.

See Sheet 81 of 112 for the Bill of Material.



USER NAME =	DESIGNED - RLM	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

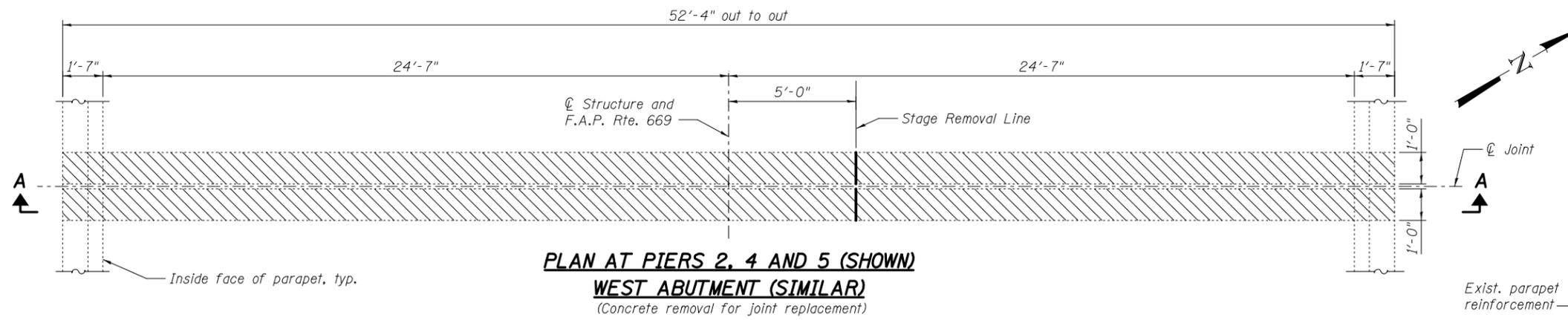
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CLEANING AND PAINTING DETAILS - 5
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

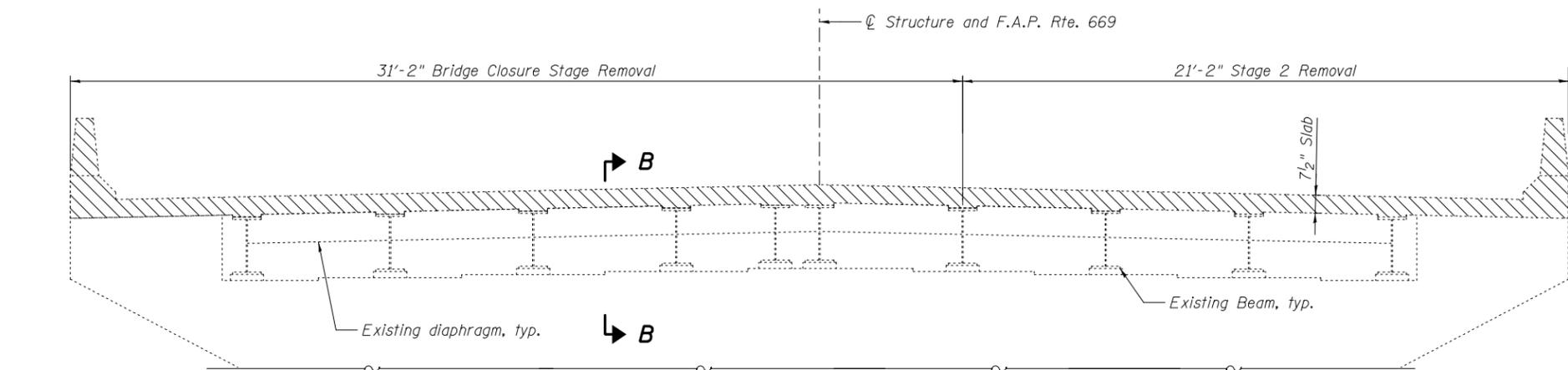
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	153
CONTRACT NO. 68A93				

SHEET NO. 85 OF 112 SHEETS

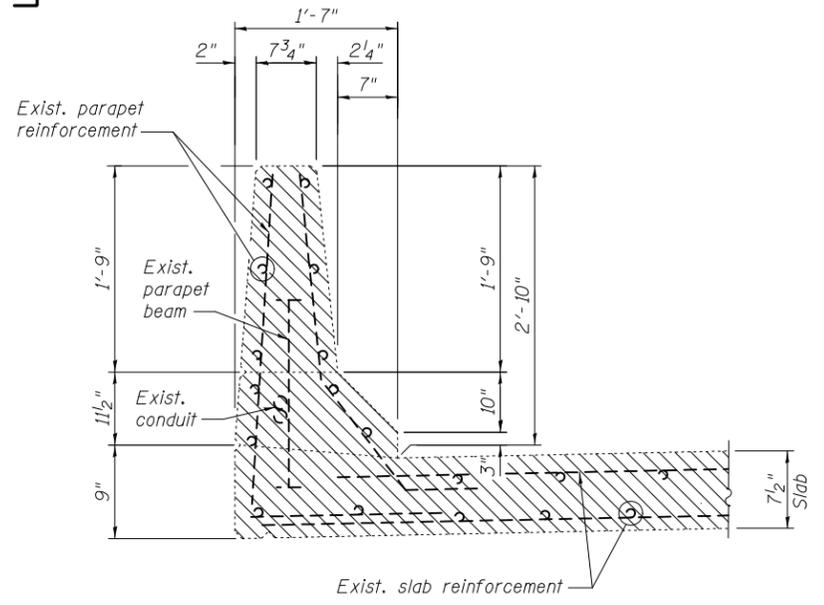
ILLINOIS FED. AID PROJECT



PLAN AT PIERS 2, 4 AND 5 (SHOWN)
WEST ABUTMENT (SIMILAR)
 (Concrete removal for joint replacement)

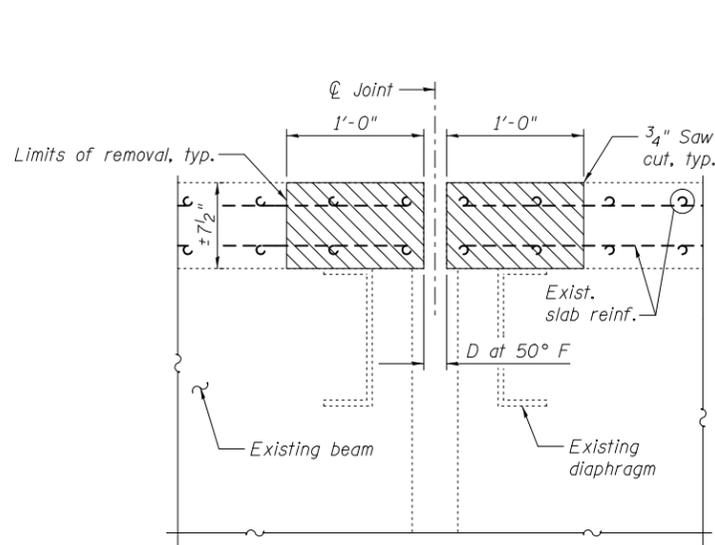


SECTION A-A
 (Looking West)

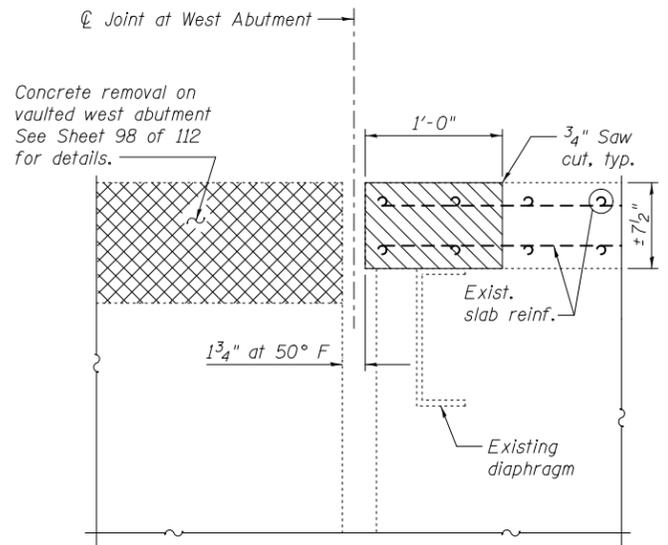


SECTION THRU PARAPET AT JOINT

LOCATION	D
Pier 4	1 ³ / ₄ "
Piers 2 and 5	2 ³ / ₄ "



SECTION B-B
AT PIERS 2, 4, AND 5



SECTION B-B
AT WEST ABUTMENT

Notes:
 Hatched area indicates concrete removal for joint replacement.
 Existing slab and parapet reinforcement within the concrete removal area that are shown to remain in place and be incorporated into the new construction shall be cleaned and reused. See Sheet 87 of 112. Cost included with Concrete Removal.
 Existing reinforcement identified for reuse that is damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system, in accordance with IDOT Standards Specifications Article 501.03 at the expense of the Contractor.
 Existing conduit within parapets shall remain functional throughout construction. Provide temporary support during construction. Cost included with Concrete Removal.
 The Contractor shall perform the concrete removal with care to prevent damage to the existing steel members. If the Contractor damages any existing members which are to remain in place, the damaged members shall be repaired in a manner satisfactory to the Engineer at the expense of the Contractor.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	10.0



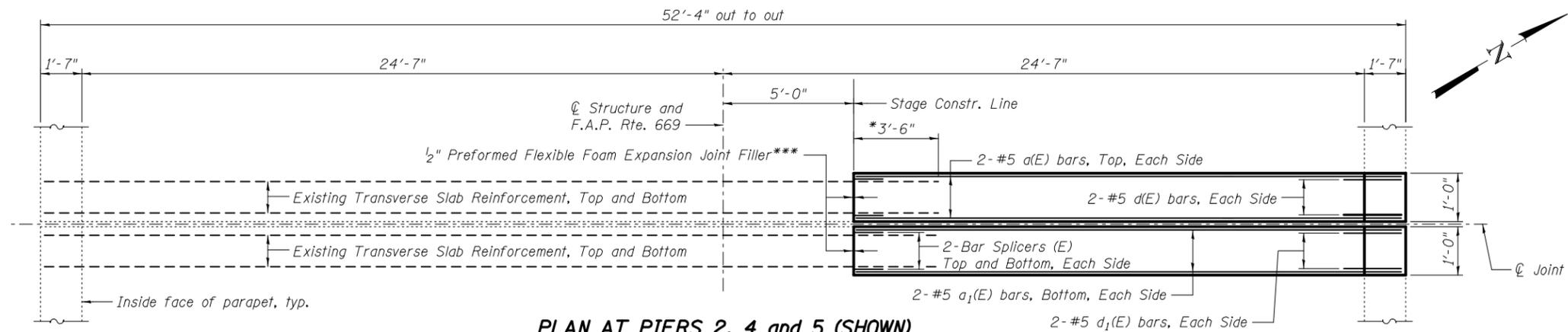
USER NAME =	DESIGNED - APL	REVISED
	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JT REPLACEMENT - CONC REMOVAL - SPANS 1-7
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 86 OF 112 SHEETS

F.A.P. RTE. 669	SECTION (103B)I-7	COUNTY PEORIA/TAZEWELL	TOTAL SHEETS 180	SHEET NO. 154
				CONTRACT NO. 68A93
ILLINOIS FED. AID PROJECT				

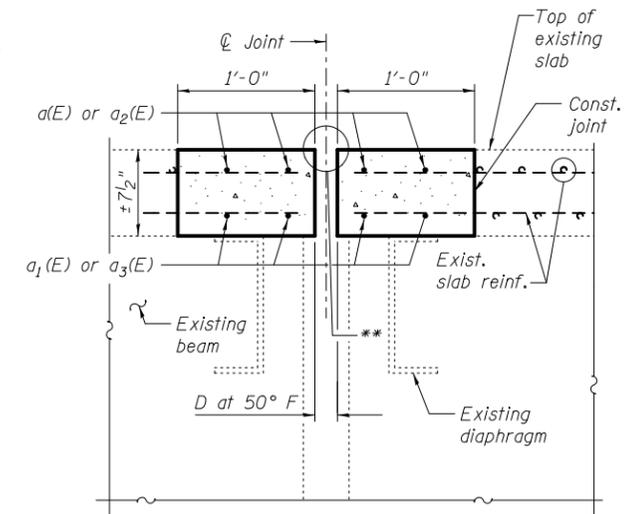


**PLAN AT PIERS 2, 4 and 5 (SHOWN)
WEST ABUTMENT (SIMILAR)
STAGE 2 CONSTRUCTION**

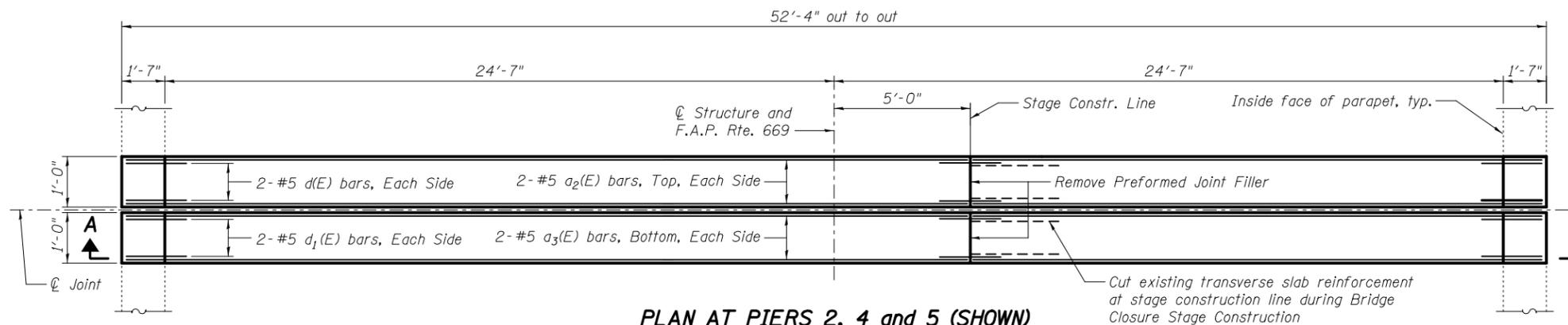
* Existing transverse slab reinforcement shall extend 3'-6" minimum into the new construction.

*** Install preformed flexible foam expansion joint filler at interface between existing and new concrete along Stage Construction Line to prevent damage to new concrete during Bridge Closure concrete removal. Remove preformed joint filler during Bridge Closure concrete removal.

**See Sheet 94 of 112 for preformed joint strip seal details

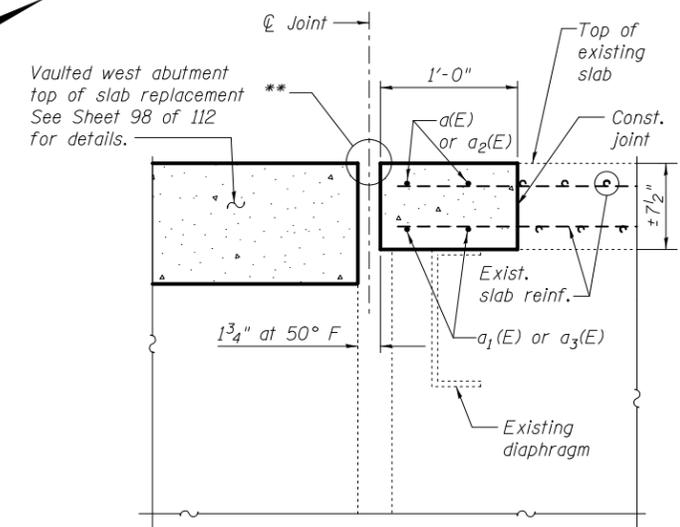


**SECTION B-B
AT PIERS 2, 4 AND 5**

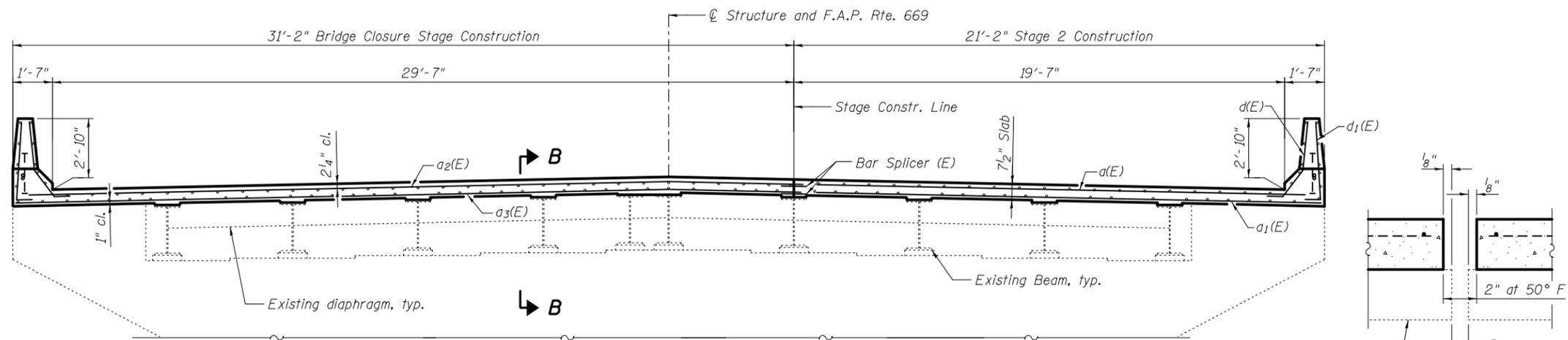


**PLAN AT PIERS 2, 4 and 5 (SHOWN)
WEST ABUTMENT (SIMILAR)
BRIDGE CLOSURE STAGE CONSTRUCTION**

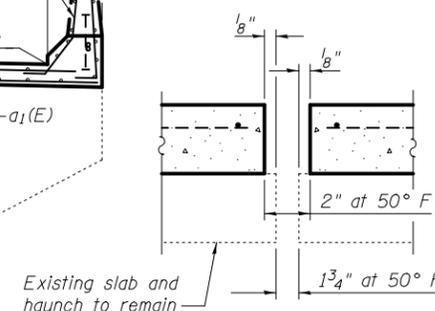
Vaulted west abutment top of slab replacement See Sheet 98 of 112 for details.



**SECTION B-B
AT WEST ABUTMENT**



**SECTION A-A
(Looking West)**



**DETAIL D
(Pier 4 only)**

LOCATION	D
Pier 4	2"
Piers 2 and 5	2 3/4"

Notes:
The preformed joint strip seal shall be continuous across the full width of the structure. After Stage 2 construction, the joint shall remain open until the full length strip seal is installed during the Bridge Closure Stage.
Protective coat shall be applied to the top of slab at repair locations.
Preformed flexible foam expansion joint filler shall be according to Section 1051.09 of the Standard Specifications. Cost included with Concrete Superstructure.
See Sheet 92 of 112 for section thru parapet, bar details and bill of material.



USER NAME =	DESIGNED - APL	REVISED
	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

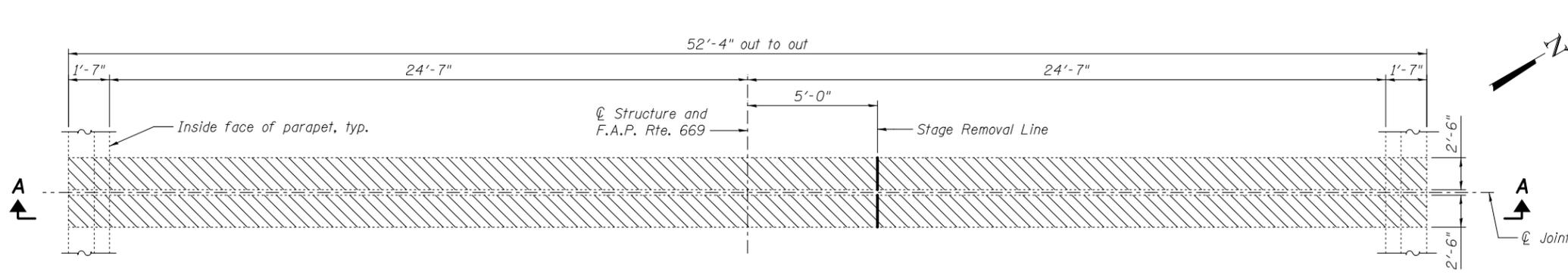
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JT REPLACEMENT - CONC DETAILS - SPANS 1-7
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

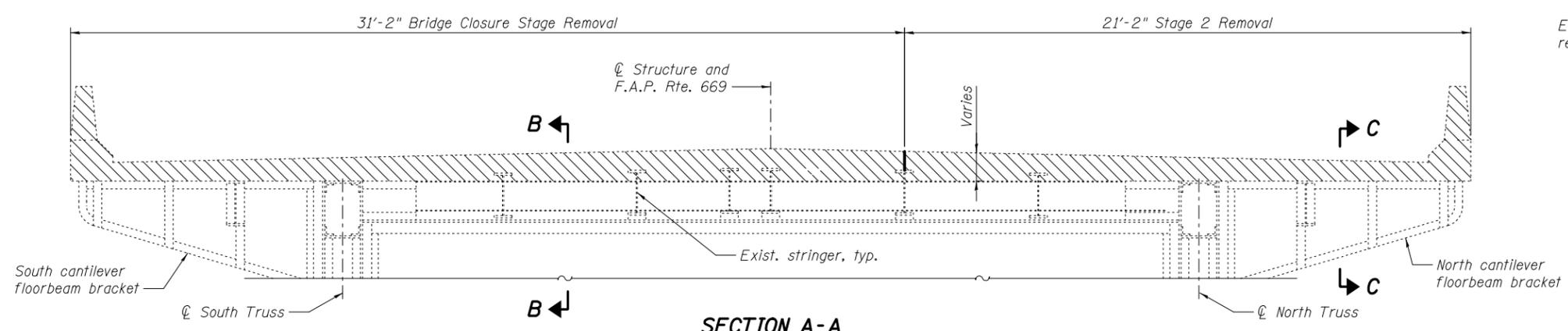
SHEET NO. 87 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	155
CONTRACT NO. 68A93				

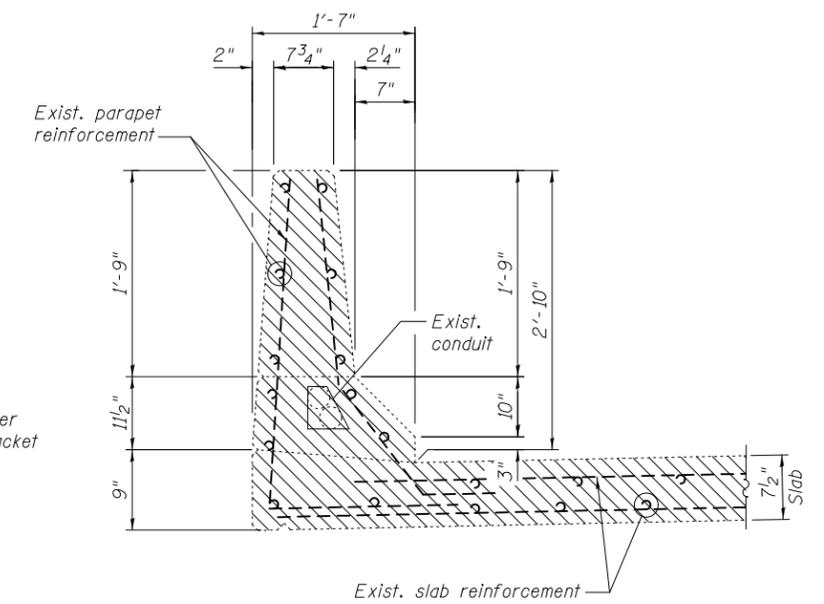
ILLINOIS FED. AID PROJECT



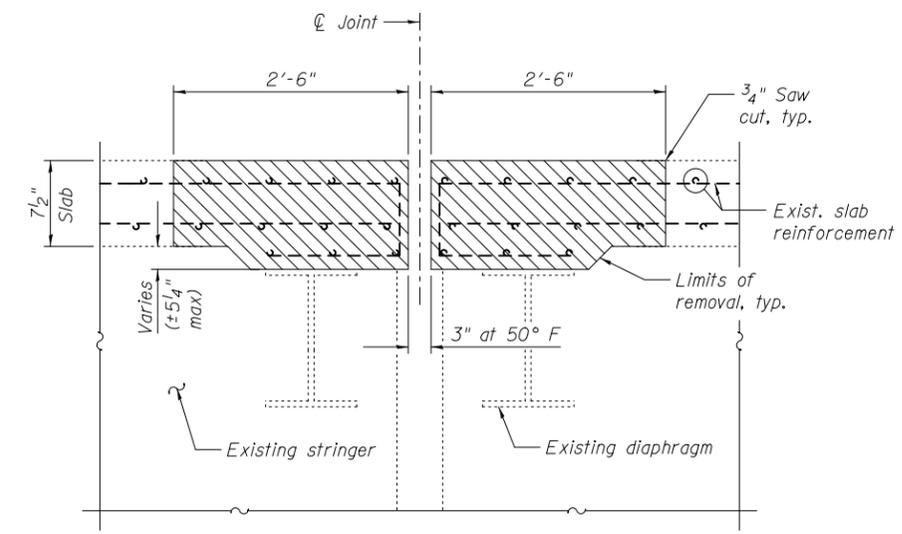
PLAN AT MIDSPAN 14
(Concrete Removal for Joint Replacement)



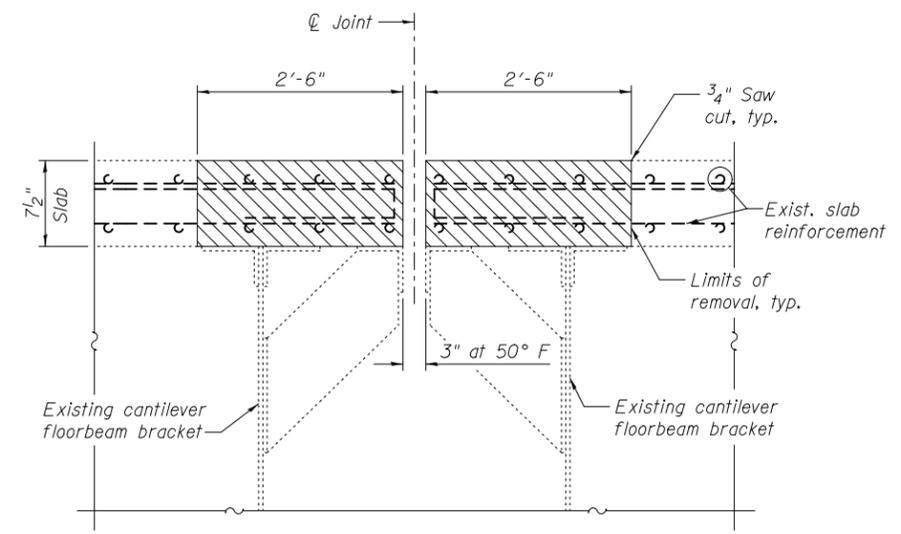
SECTION A-A
(Looking West)



SECTION THRU PARAPET AT JOINT



SECTION B-B



SECTION C-C

Notes:
 Hatched area indicates concrete removal for joint replacement.
 Existing slab and parapet reinforcement within the concrete removal area that are shown to remain in place and be incorporated into the new construction shall be cleaned and reused. See Sheet 89 of I12. Cost included with Concrete Removal.
 Existing reinforcement identified for reuse that is damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system, in accordance with IDOT Standards Specifications Article 501.03 at the expense of the Contractor.
 Existing conduit within parapets shall remain functional throughout construction. Provide temporary support during construction. Cost included with Concrete Removal.
 The Contractor shall perform the concrete removal with care to prevent damage to the existing steel members. If the Contractor damages any existing members which are to remain in place, the damaged members shall be repaired in a manner satisfactory to the Engineer at the expense of the Contractor.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	8.3



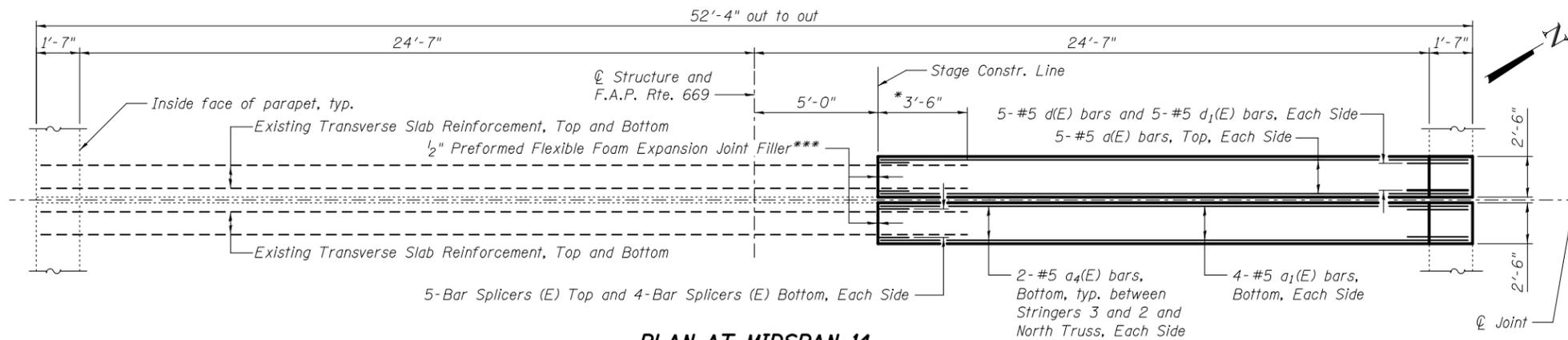
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	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - APL	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JT REPLACEMENT - CONC REMOVAL - MIDSPAN 14
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 88 OF 112 SHEETS

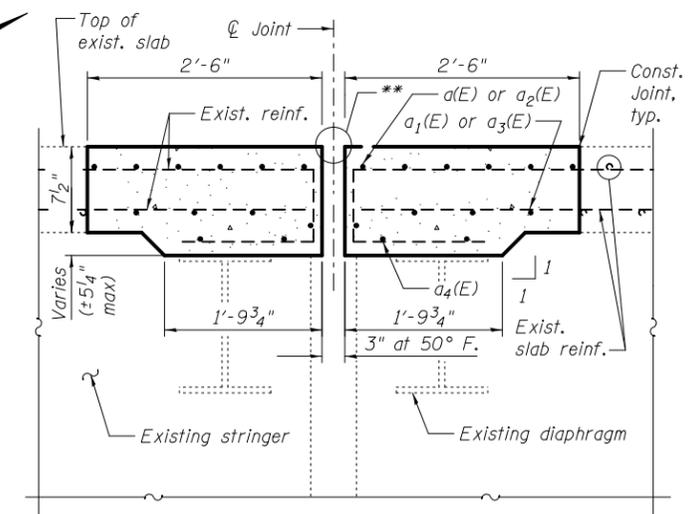
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	156
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



* Existing transverse slab reinforcement shall extend 3'-6" minimum into the new construction.

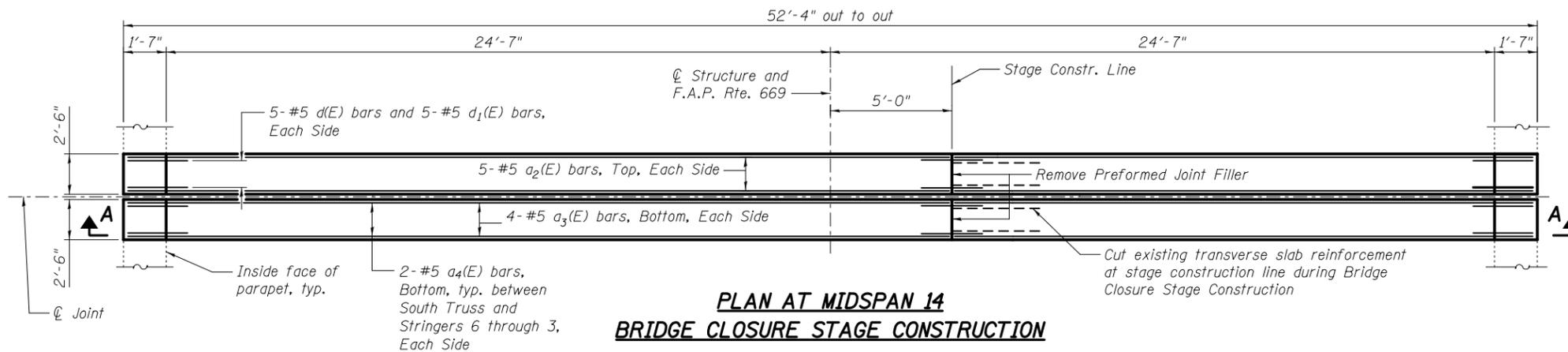
**PLAN AT MIDSPAN 14
STAGE 2 CONSTRUCTION**

*** Install preformed flexible foam expansion joint filler at interface between existing and new concrete along Stage Construction Line to prevent damage to new concrete during Bridge Closure concrete removal. Remove preformed joint filler during Bridge Closure concrete removal.

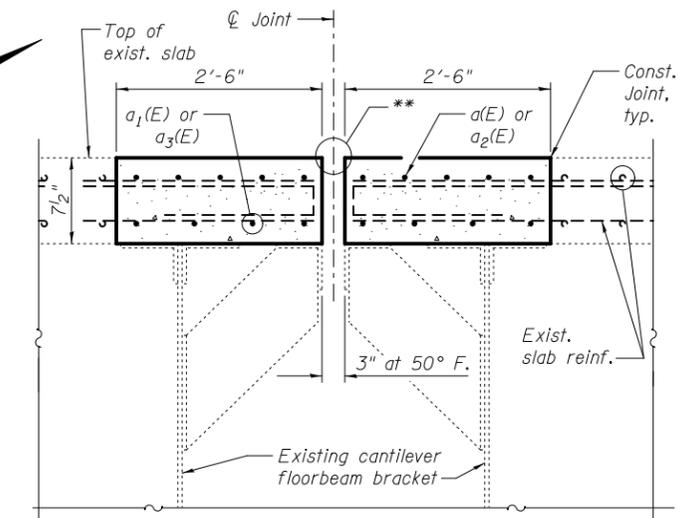


** See Sheet 94 of 112 for preformed joint strip seal details.

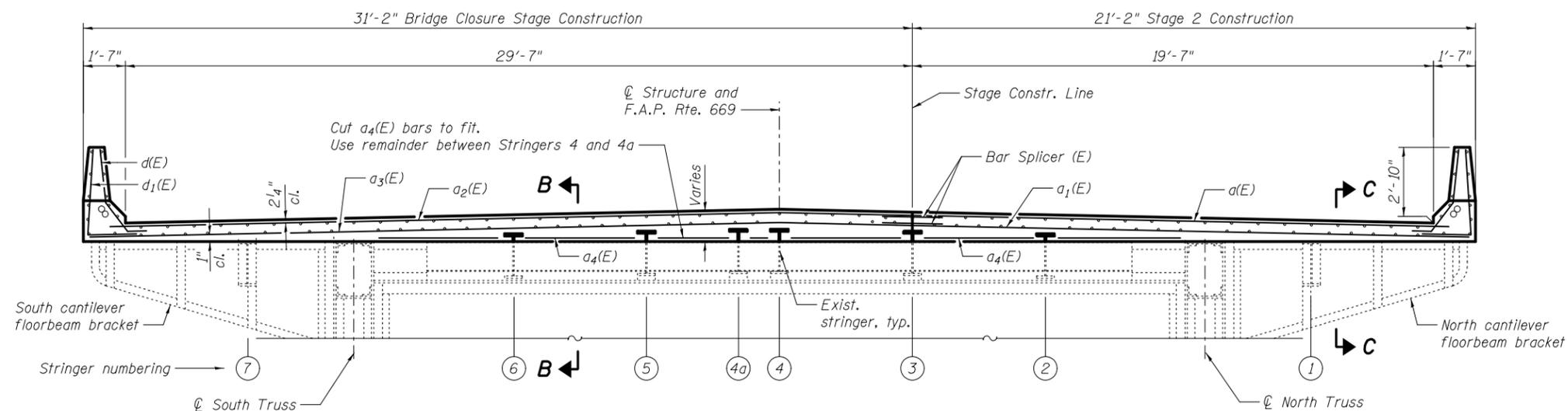
SECTION B-B



**PLAN AT MIDSPAN 14
BRIDGE CLOSURE STAGE CONSTRUCTION**



SECTION C-C



**SECTION A-A
(Looking West)**

Notes:
 The preformed joint strip seal shall be continuous across the full width of the structure. After Stage 2 construction, the joint shall remain open until the full length strip seal is installed during the Bridge Closure Stage.
 Protective coat shall be applied to the top of slab at repair locations.
 Preformed flexible foam expansion joint filler shall be according to Section 1051.09 of the Standard Specifications. Cost included with Concrete Superstructure.
 See Sheet 92 of 112 for section thru parapet, bar details and bill of material.



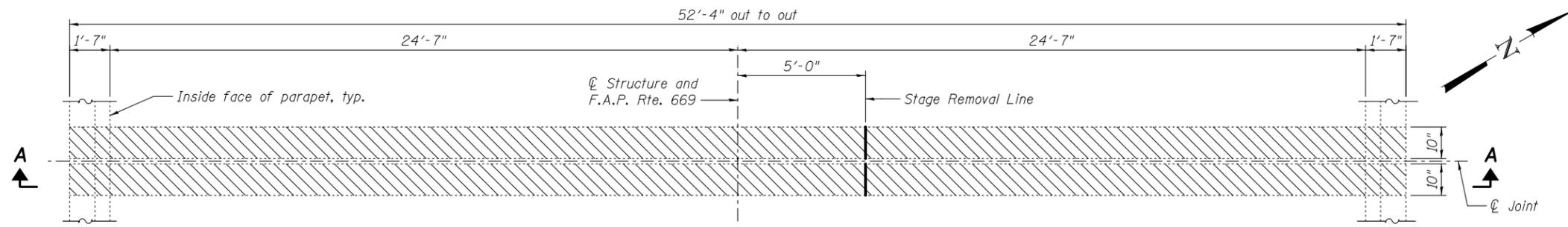
USER NAME =	DESIGNED - APL	REVISED
	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - APL	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JT REPLACEMENT - CONC DETAILS - MIDSPAN 14
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 89 OF 112 SHEETS

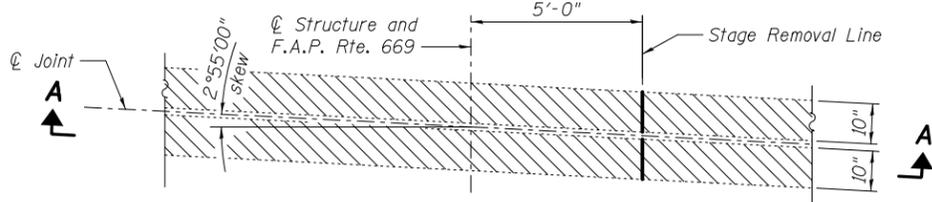
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	157
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



PLAN AT PIERS 9, 10, 11, 12, 15, 16, 17, 19, 20, 22, 24, 26, 27, 29, 31, 33 AND EAST ABUTMENT (SHOWN)

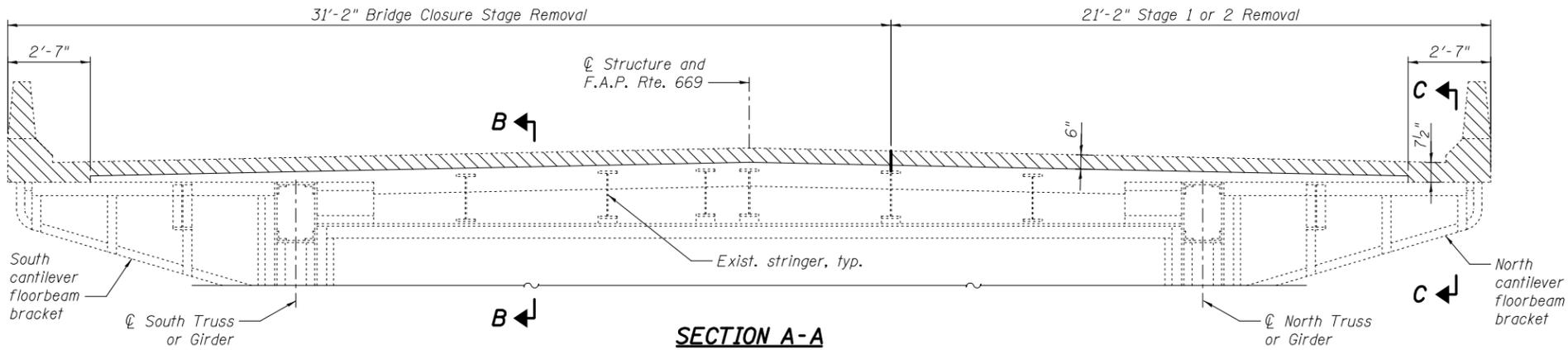
PIER 8 (SIMILAR)

(Concrete Removal for Joint Replacement)



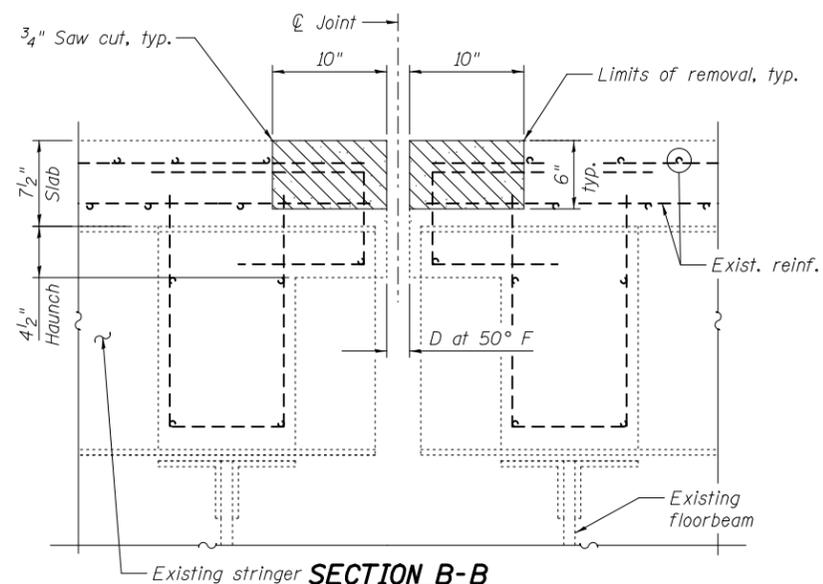
SKEW AT PIER 8

Joints in parapet are not skewed.

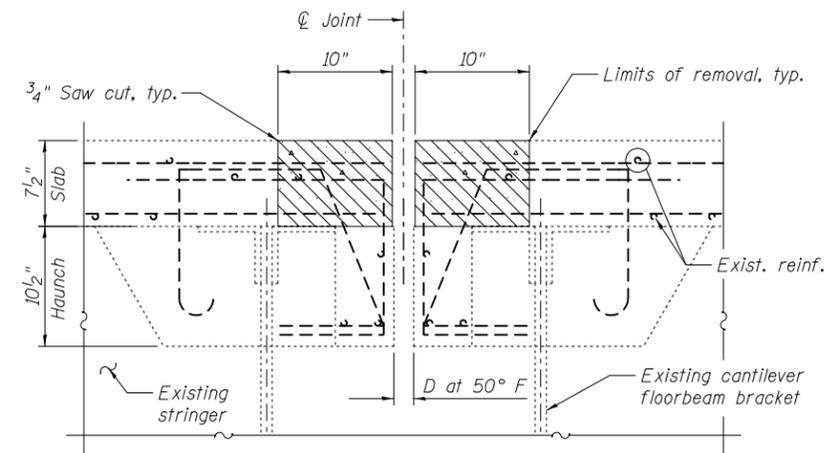


SECTION A-A

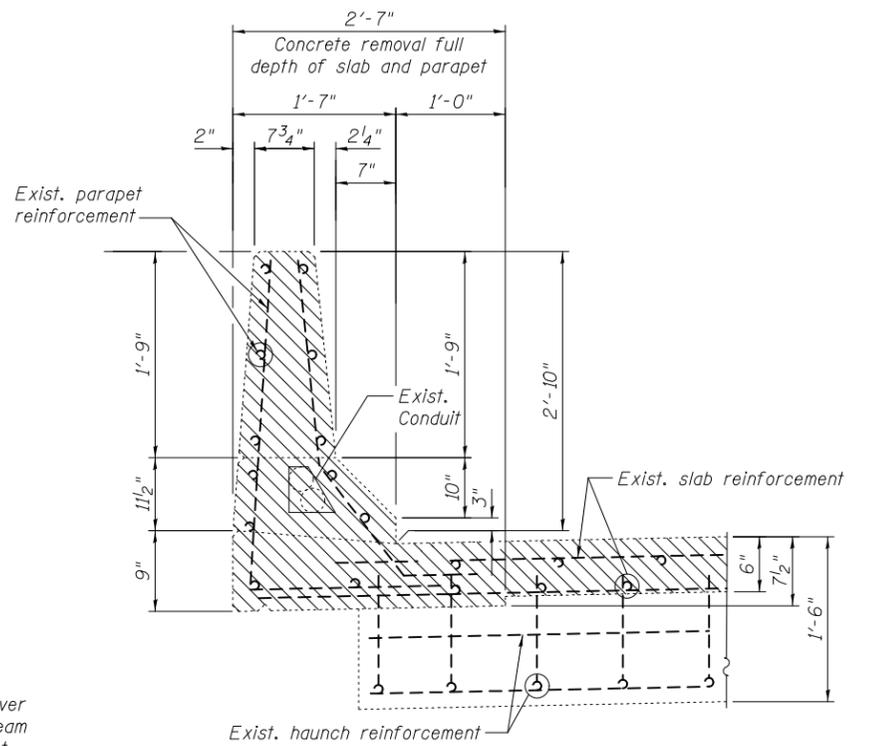
(Looking West)



SECTION B-B



SECTION C-C



SECTION THRU PARAPET AT JOINT

LOCATION	D
Piers 8 and 9	1 ³ / ₄ "
Piers 10, 11, 16, 17, 22, 24, 26, 31 and 33	2 ¹ / ₂ "
Piers 19, 20 and 27	2 ³ / ₄ "
Piers 12 and 15	3"
Pier 29	2"
East Abutment	1"

Notes:
 Hatched area indicates concrete removal for joint replacement.
 Existing slab and parapet reinforcement within the concrete removal area that are shown to remain in place and be incorporated into the new construction shall be cleaned and reused. See Sheet 91 of 112. Cost included with Concrete Removal.
 Existing reinforcement identified for reuse that is damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system, in accordance with IDOT Standards Specifications Article 501.03 at the expense of the Contractor.
 Existing conduit within parapets shall remain functional throughout construction. Provide temporary support during construction. Cost included with Concrete Removal.
 The Contractor shall perform the concrete removal with care to prevent damage to the existing steel members. If the Contractor damages any existing members which are to remain in place, the damaged members shall be repaired in a manner satisfactory to the Engineer at the expense of the Contractor.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	36.1



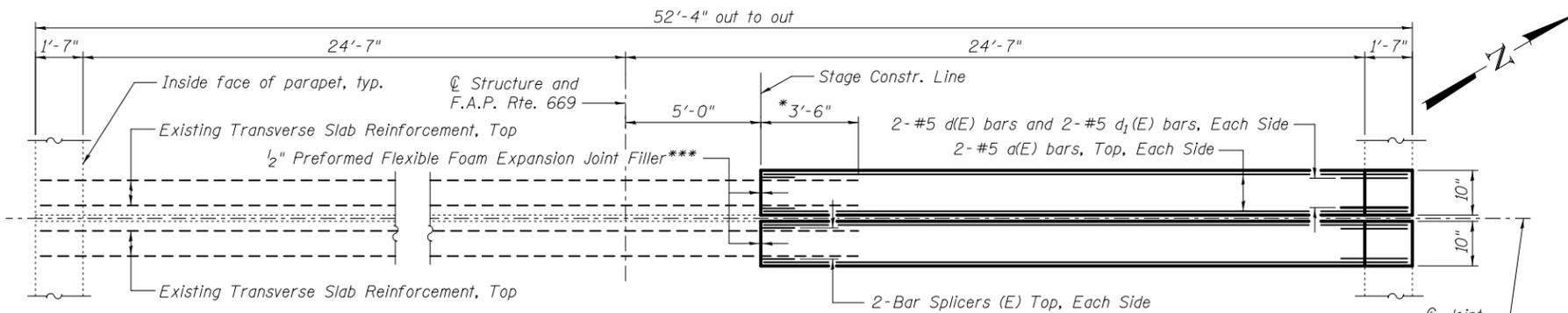
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	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - APL	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EXPANSION JT REPLACEMENT - CONC REMOVAL - SPANS 8-13, 15-34
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

SHEET NO. 90 OF 112 SHEETS

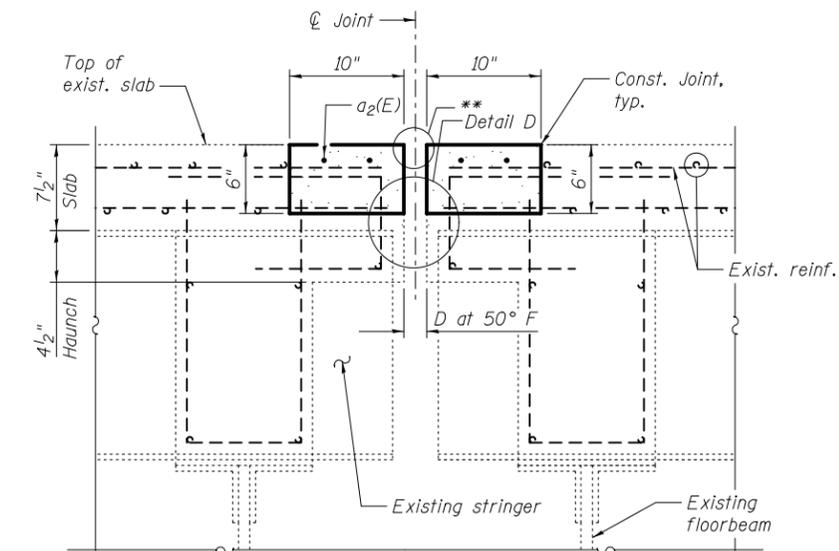
F.A.P. RTE. 669	SECTION (103B)I-7	COUNTY PEORIA/TAZEWELL	TOTAL SHEETS 180	SHEET NO. 158
				CONTRACT NO. 68A93
ILLINOIS FED. AID PROJECT				



PLAN AT PIERS 9, 10, 11, 12, 15, 16, 17, 19, 20, 22, 24, 26, 27, 29, 31, 33 AND EAST ABUTMENT (SHOWN)
PIER 8 (SIMILAR)
STAGE 1 OR 2 CONSTRUCTION

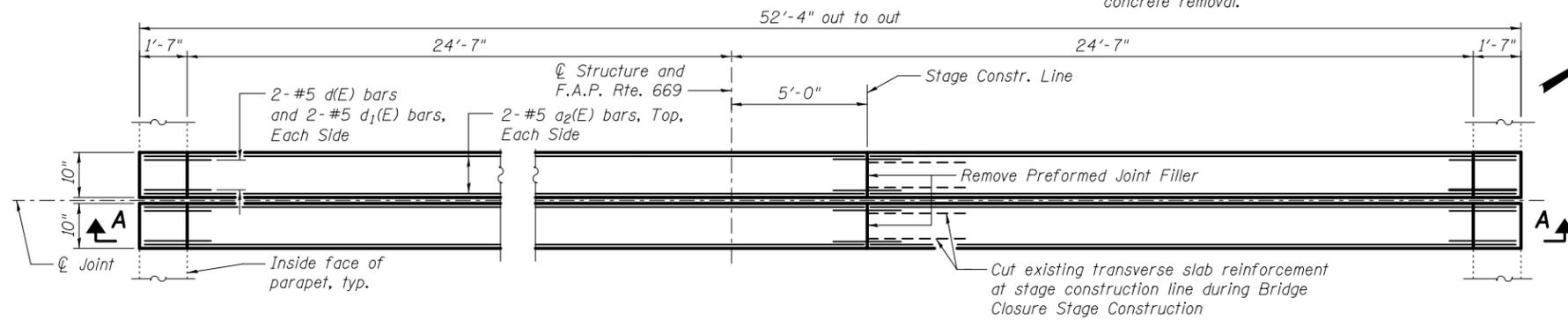
* Existing transverse slab reinforcement shall extend 3'-6" minimum into the new construction.

*** Install preformed flexible foam expansion joint filler at interface between existing and new concrete along Stage Construction Line to prevent damage to new concrete during Bridge Closure concrete removal. Remove preformed joint filler during Bridge Closure concrete removal.

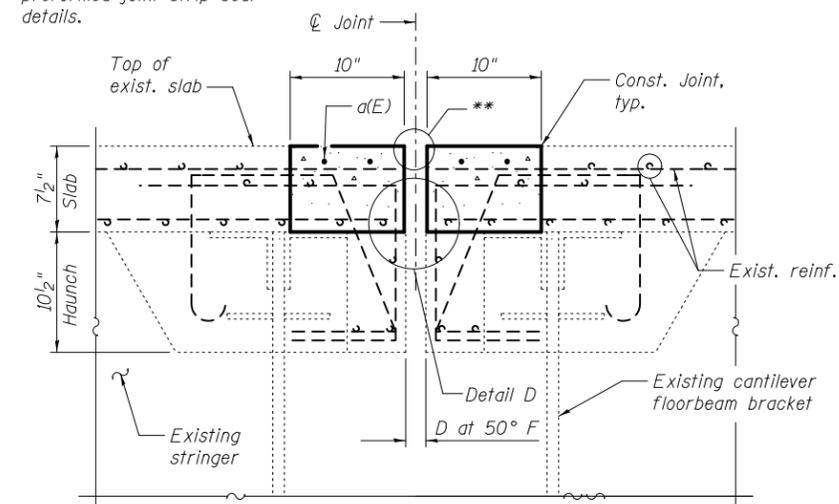


SECTION B-B

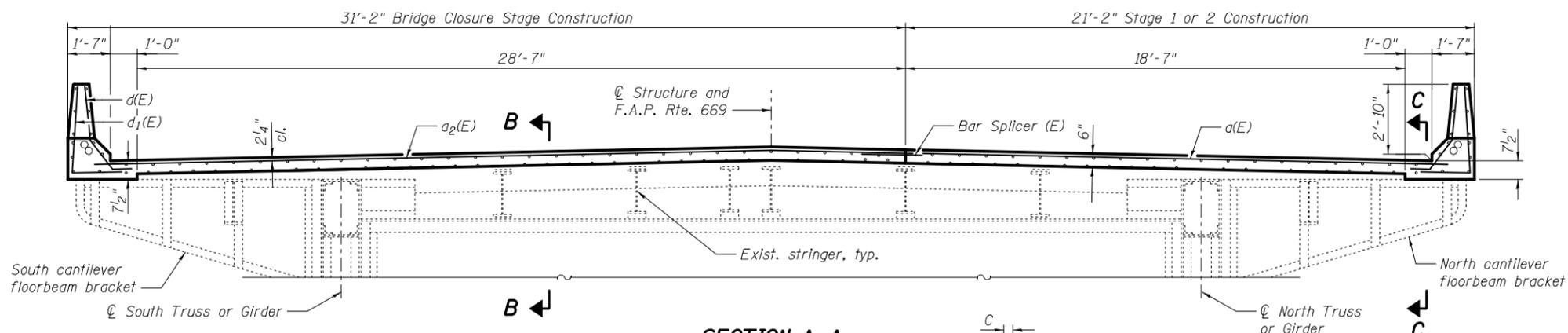
**See Sheet 95 of 112 for preformed joint strip seal details.



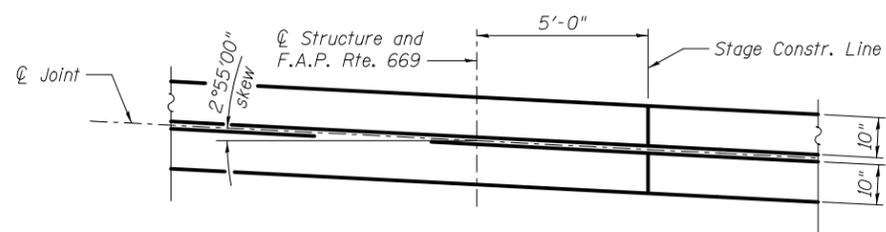
PLAN AT PIERS 9, 10, 11, 12, 15, 16, 17, 19, 20, 22, 24, 26, 27, 29, 31, 33 AND EAST ABUTMENT (SHOWN)
PIER 8 (SIMILAR)
BRIDGE CLOSURE STAGE CONSTRUCTION



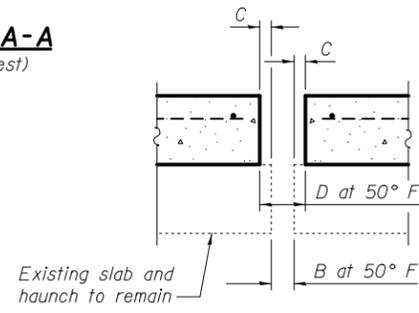
SECTION C-C



SECTION A-A
(Looking West)



SKEW AT PIER 8
 Joints in parapet are not skewed.



DETAIL D

(Piers 8, 9, 22, 29 and East Abutment only)

LOCATION	D
Piers 8 and 9	2"
Piers 10, 11, 16, 17, 24, 26, 31 and 33	2 1/2"
Piers 19, 20, 22 and 27	2 3/4"
Piers 12 and 15	3"
Pier 29	2 1/4"
East Abutment	2"

LOCATION	B	C
Piers 8 and 9	1 3/4"	1/8"
Pier 22	2 1/2"	1/8"
Pier 29	2"	1/8"
East Abutment	1"	1/2"

Notes:
 The preformed joint strip seal shall be continuous across the full width of the structure. After Stage 1 or 2 construction, the joint shall remain open until the full length strip seal is installed during the Bridge Closure Stage.
 Protective coat shall be applied to the top of slab at repair locations.
 Preformed flexible foam expansion joint filler shall be according to Section 1051.09 of the Standard Specifications. Cost included with Concrete Superstructure.
 See Sheet 92 of 112 for section thru parapet, bar details and bill of material.

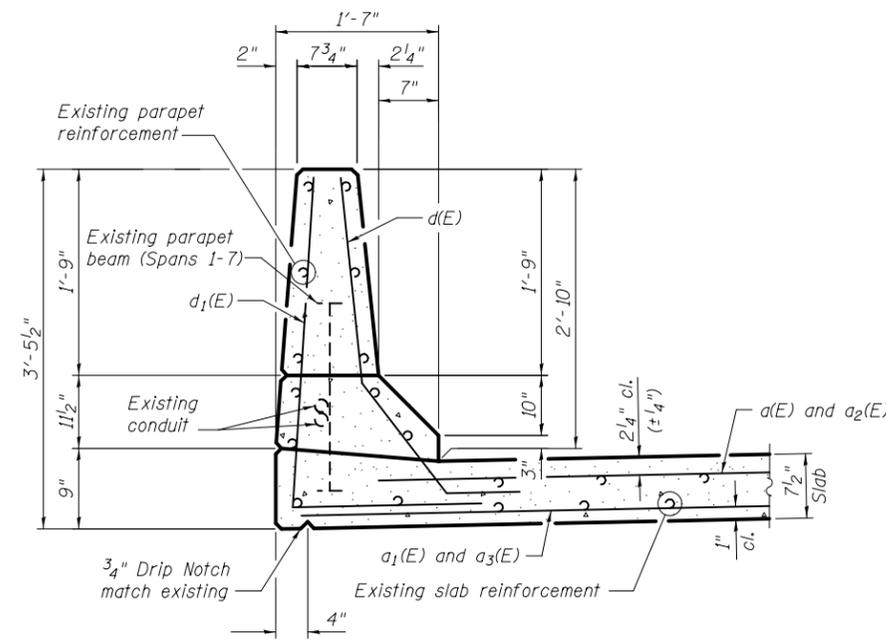


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	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - APL	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

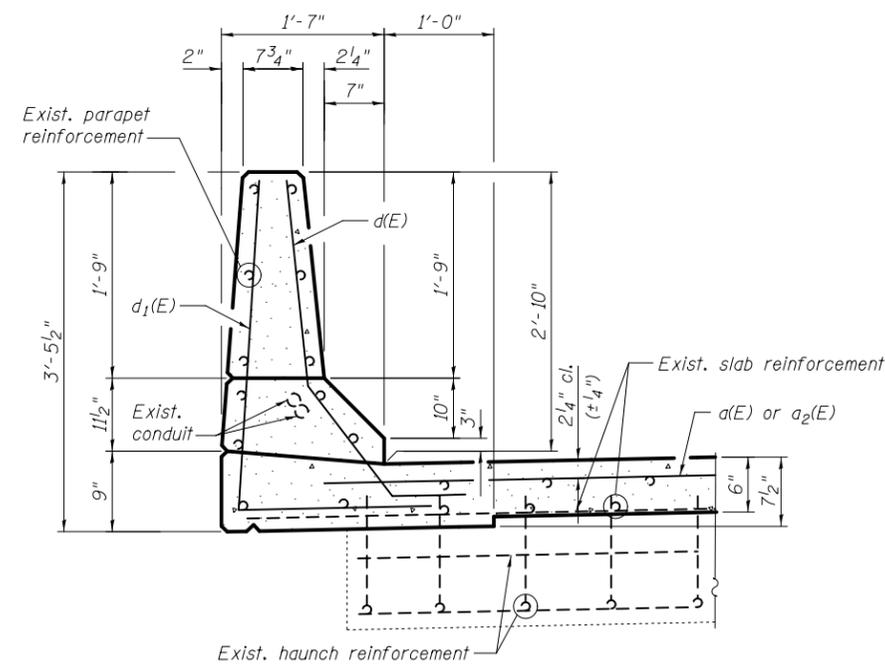
EXPANSION JT REPLACEMENT - CONC DETAILS - SPANS 8-13, 15-34
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

F.A.P. RTE. 669	SECTION (103BI-7)	COUNTY PEORIA/TAZEWELL	TOTAL SHEETS 180	SHEET NO. 159
				CONTRACT NO. 68A93



**TYPICAL SECTION THRU PARAPET
SPANS 1-7 AND MIDSPAN 14**

All edges shall have 3/4" chamfer.



**TYPICAL SECTION THRU PARAPET
SPANS 8-13, 15-34**

All edges shall have 3/4" chamfer.

**BILL OF MATERIAL
SPANS 1-7**
(Total for 4 joints)

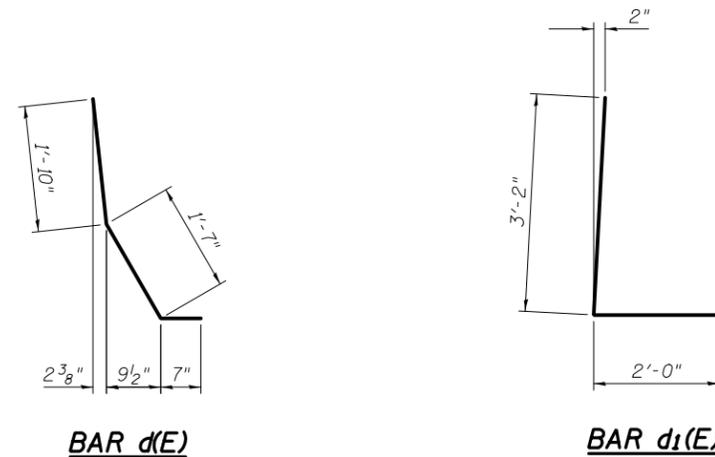
Bar	No.	Size	Length	Shape
d(E)	14	#5	20'-3"	—
a1(E)	14	#5	20'-9"	—
a2(E)	14	#5	30'-4"	—
a3(E)	14	#5	30'-11"	—
d(E)	28	#5	4'-0"	L
d1(E)	28	#5	5'-2"	L
Concrete Superstructure			Cu. Yd.	10.0
Protective Coat			Sq. Yd.	39
Reinforcement Bars, Epoxy Coated			Pound	1,770

**BILL OF MATERIAL
MIDSPAN 14**
(Total for 1 joint)

Bar	No.	Size	Length	Shape
d(E)	10	#5	20'-3"	—
a1(E)	8	#5	20'-9"	—
a2(E)	10	#5	30'-4"	—
a3(E)	8	#5	30'-11"	—
a4(E)	24	#5	4'-8"	—
d(E)	20	#5	4'-0"	L
d1(E)	20	#5	5'-2"	L
Concrete Superstructure			Cu. Yd.	8.3
Protective Coat			Sq. Yd.	28
Reinforcement Bars, Epoxy Coated			Pound	1,270

**BILL OF MATERIAL
SPANS 8-13, 15-34**
(Total for 18 joints)

Bar	No.	Size	Length	Shape
d(E)	72	#5	20'-3"	—
a2(E)	72	#5	30'-4"	—
d(E)	144	#5	4'-0"	L
d1(E)	144	#5	5'-2"	L
Concrete Superstructure			Cu. Yd.	36.1
Protective Coat			Sq. Yd.	164
Reinforcement Bars, Epoxy Coated			Pound	5,180



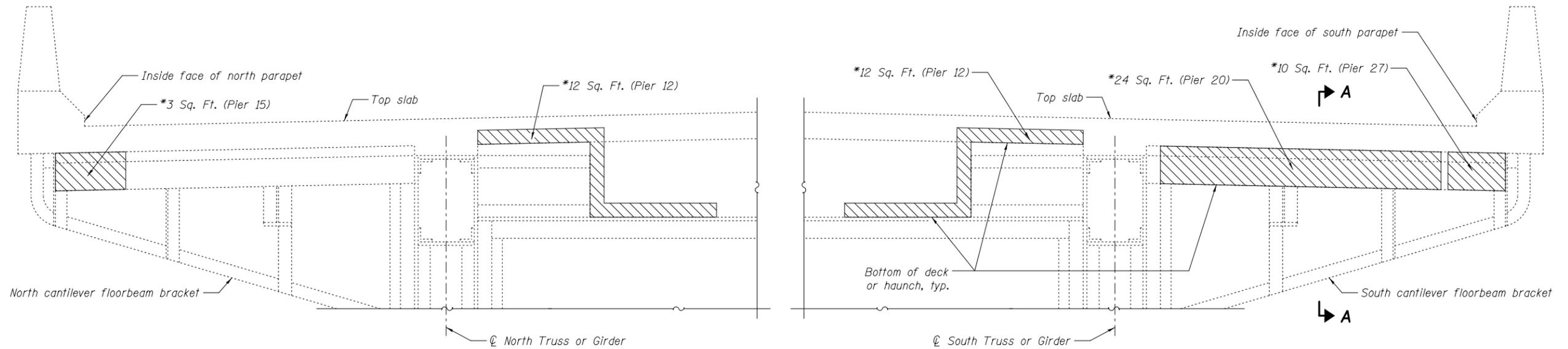
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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JT REPLACEMENT - CONC DETAILS - MISCELLANEOUS 1
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

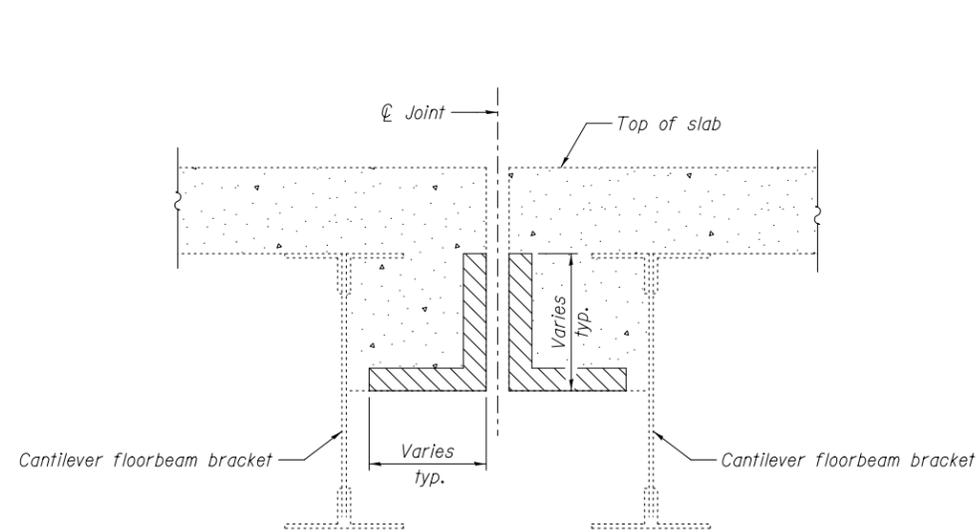
SHEET NO. 92 OF 112 SHEETS

F.A.P. RTE. 669	SECTION (103B)I-7	COUNTY PEORIA/TAZEWELL	TOTAL SHEETS 180	SHEET NO. 160
CONTRACT NO. 68A93			ILLINOIS FED. AID PROJECT	

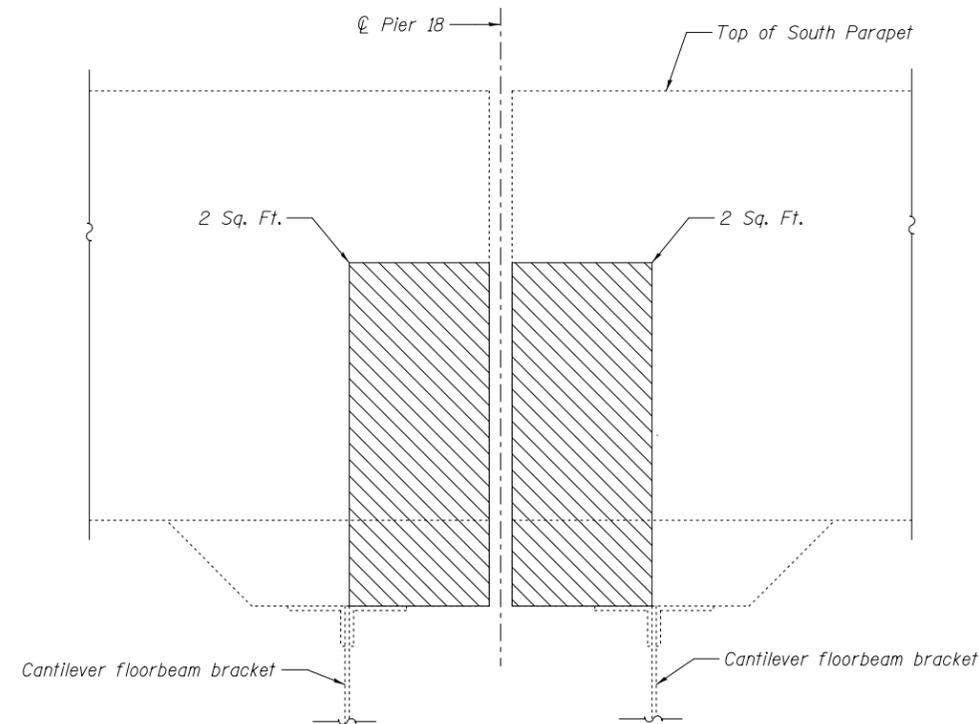


EDGE OF DECK AT EXPANSION JOINT - PIERS 12, 15, 20 AND 27
(Looking East)

* Total combined repair area both sides of joint



SECTION A-A



EXPANSION JOINT AT PIER 18

(Looking North)

LEGEND

Structural Repair of Concrete (Depth equal to or less than 5 inches)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	65



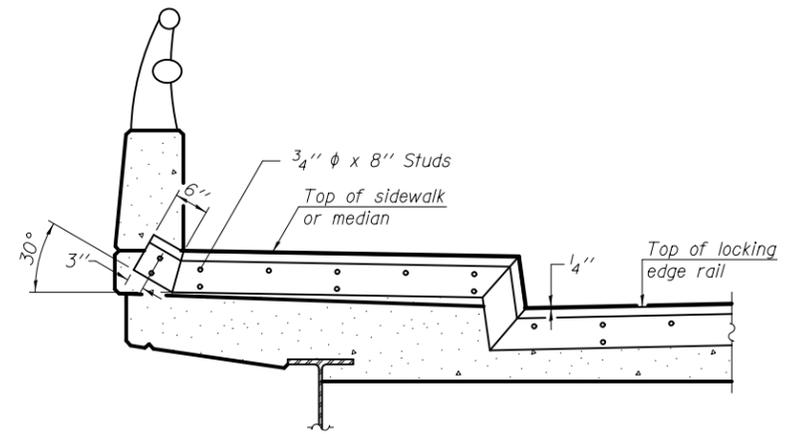
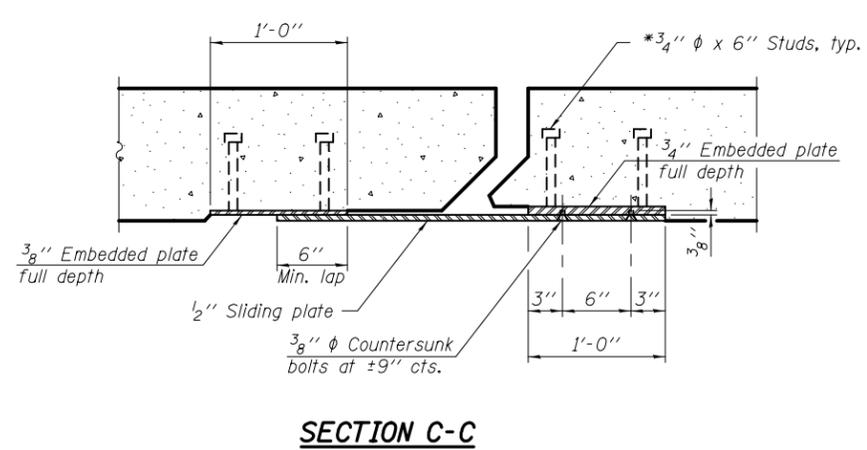
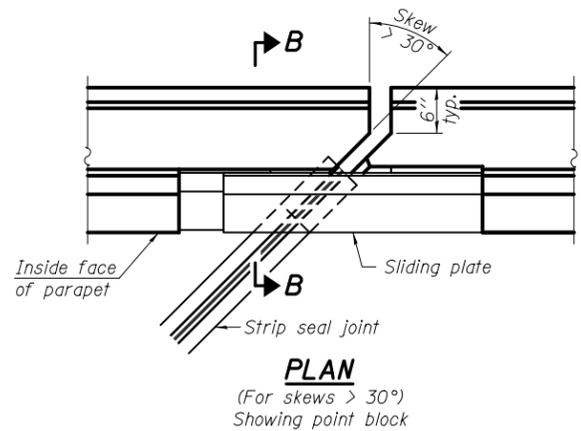
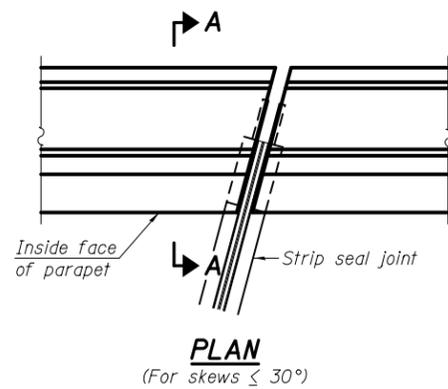
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PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXPANSION JT REPLACEMENT - CONC DETAILS - MISCELLANEOUS 2
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

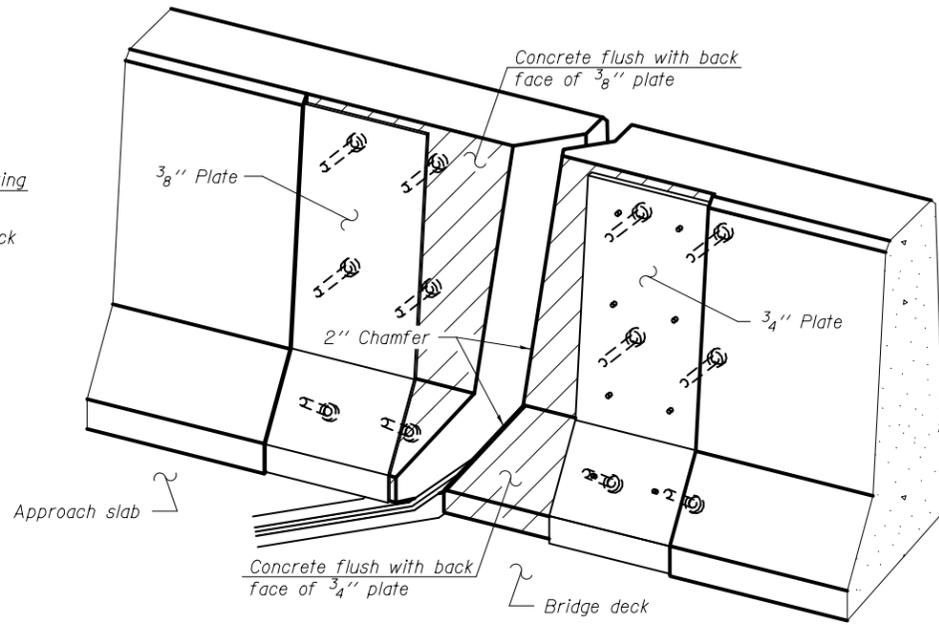
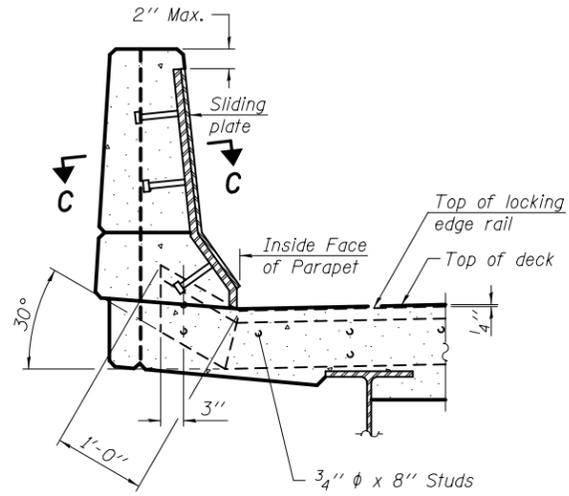
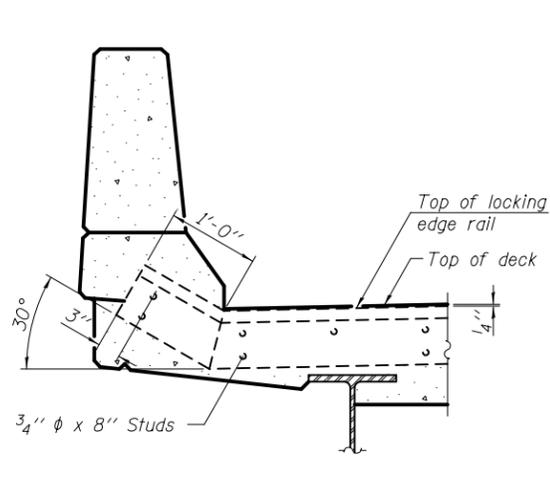
SHEET NO. 93 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	161
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



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 at the west abutment and piers 2, 4, and 5. The gland shall be sized for a maximum rated movement of 5 inches at Midspan 14.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

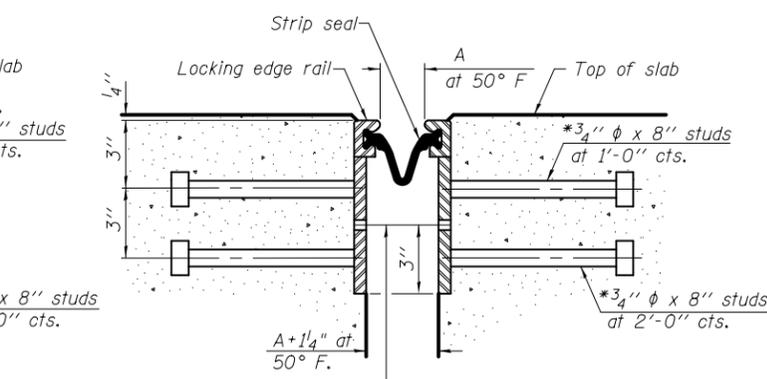
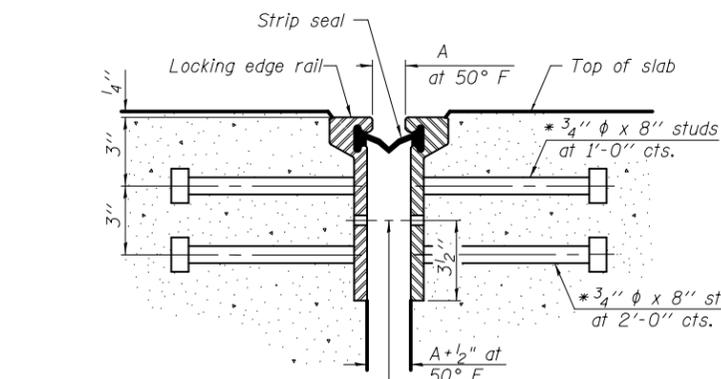
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

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

Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

For joint opening, see table on Sheets 87 and 89 of 112.



7/16" phi holes at 4'-0" cts. for 3/8" phi bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

7/16" phi holes at 4'-0" cts. for 3/8" phi bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

ROLLED EXTRUDED RAIL

WELDED RAIL

LOCKING EDGE RAIL SPLICE

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

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

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	256



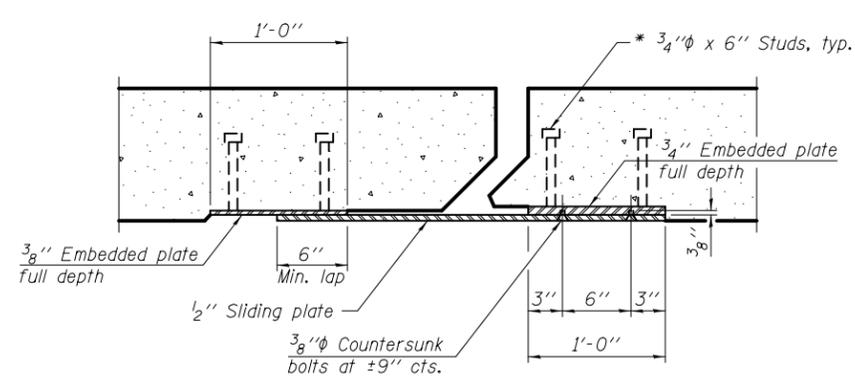
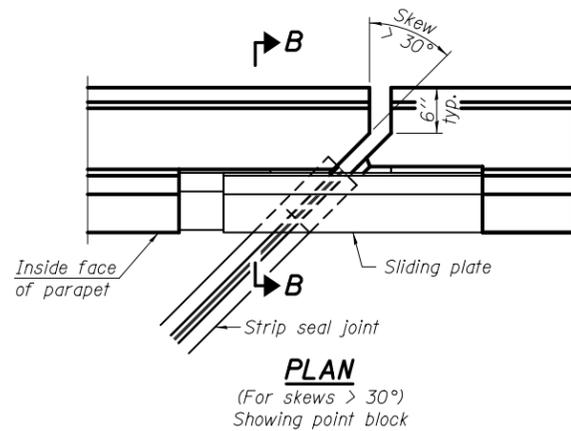
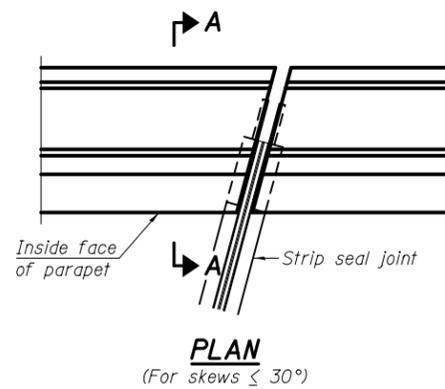
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

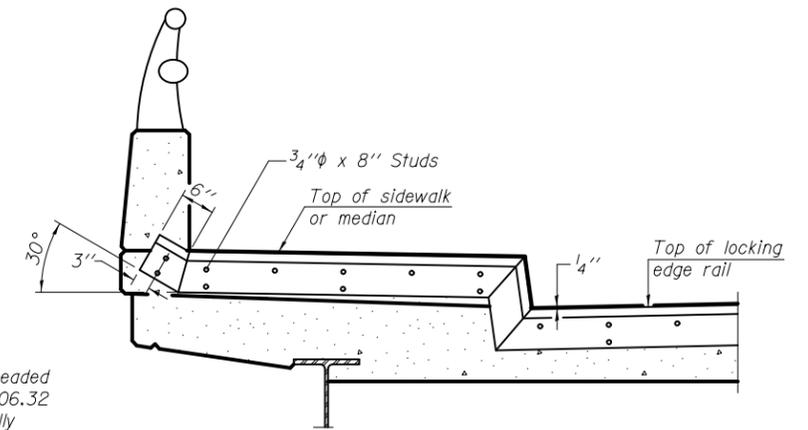
PREFORMED JOINT STRIP SEAL - SPANS 1-7 AND MIDSPAN 14
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 94 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	162
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				

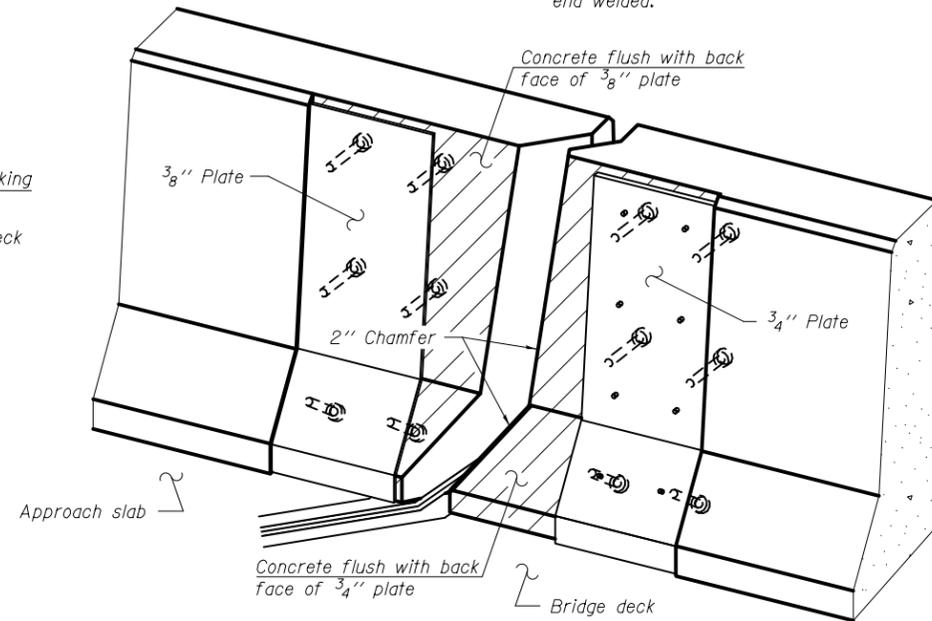
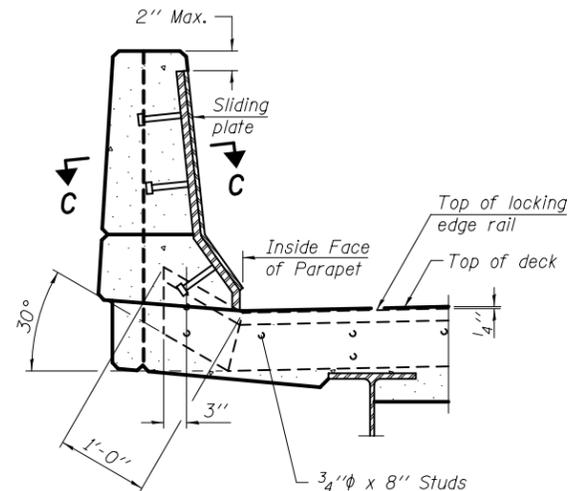
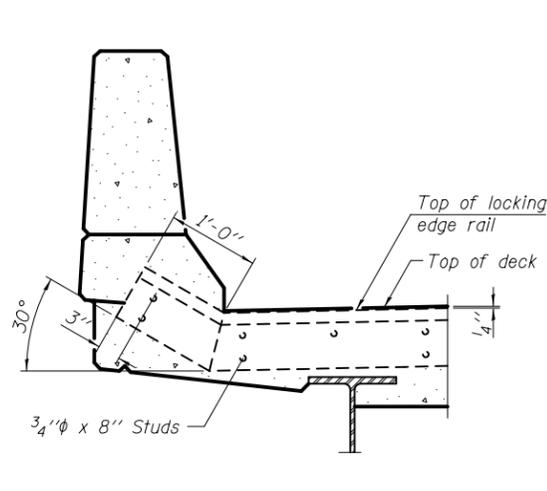


* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



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 conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

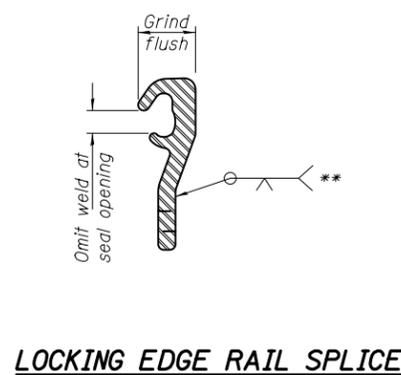
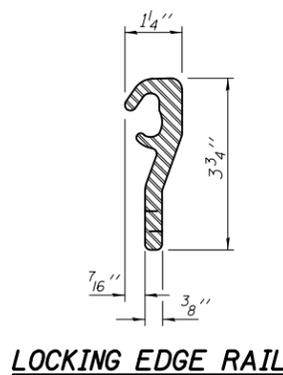
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

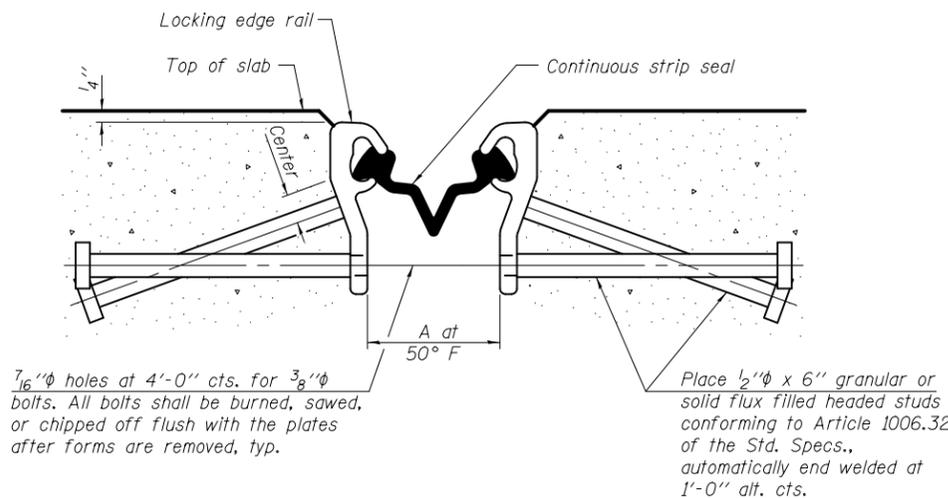
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30 degrees included in the cost of Preformed Joint Strip Seal.



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



7/16" holes at 4'-0" cts. for 3/8" bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

Place 1/2" x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" alt. cts.

SECTION THRU STRIP SEAL JOINT
For joint opening, see table on Sheet 91 of 112.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	922



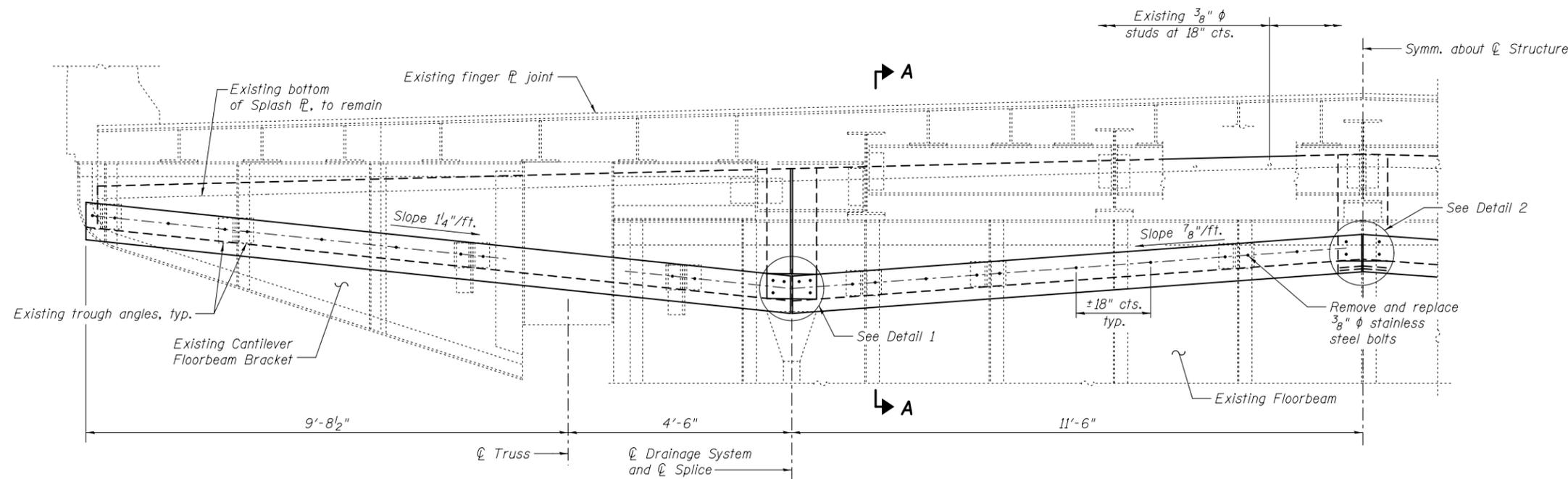
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PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

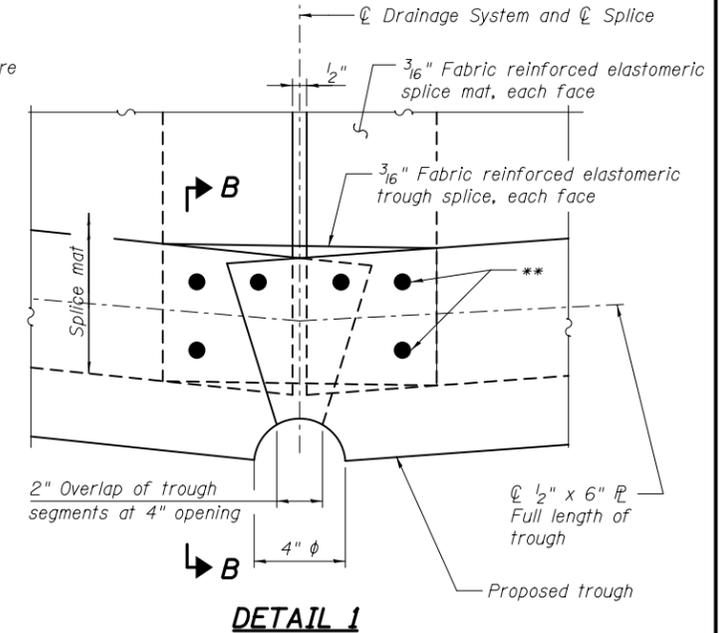
PREFORMED JOINT STRIP SEAL - SPANS 8-13, 15-34
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 95 OF 112 SHEETS

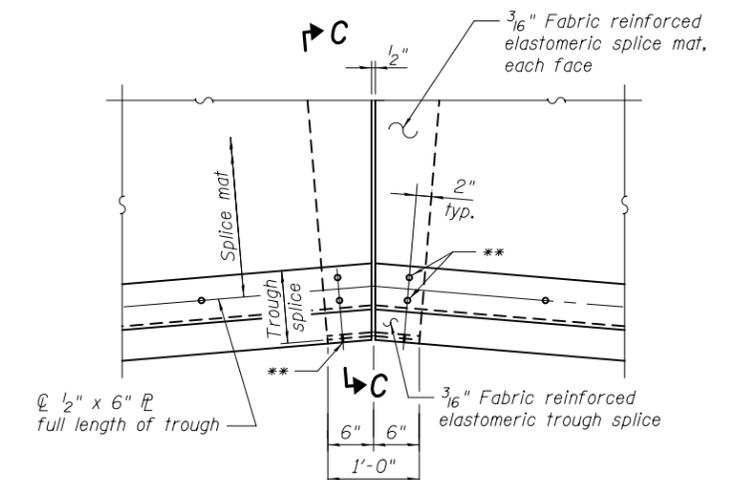
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	163
			CONTRACT NO. 68A93	
ILLINOIS FED. AID PROJECT				



ELEVATION AT PIER 18 SHOWING TROUGH



DETAIL 1



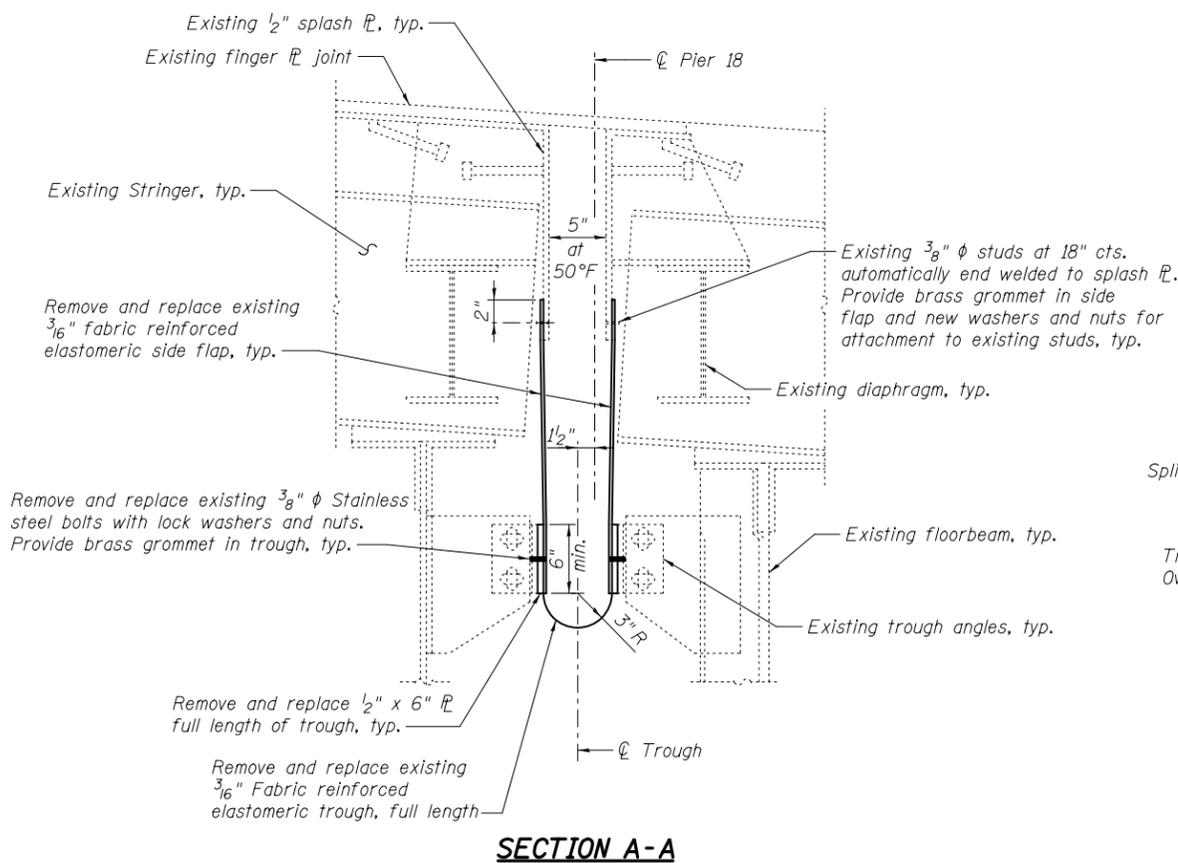
DETAIL 2

** 3/8" phi Stainless Steel bolts with washers and nuts. Provide brass grommet in trough.

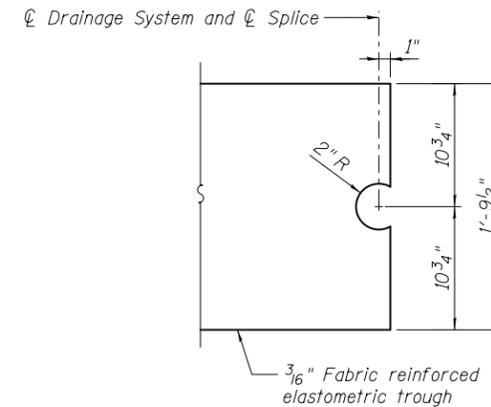
BILL OF MATERIAL

Item	Unit	Total
Fabric Reinforced Elastomeric Trough	Foot	52

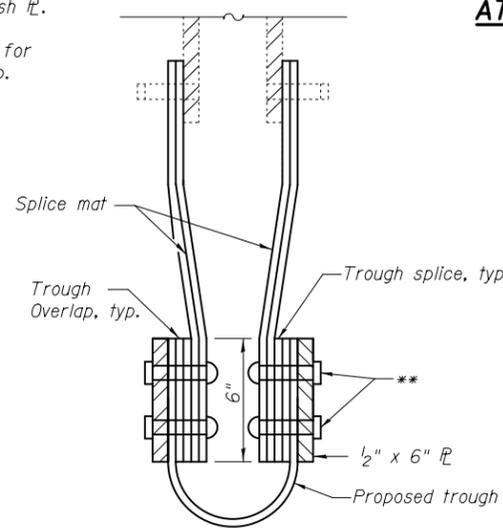
Notes:
 Fabric reinforced material for trough and side flap shall be in accordance with Section 520 of the Standard Specifications.
 All new steel shall be hot dipped galvanized in accordance with Section 520.04 of the Standard Specifications.
 Cost for fasteners and plates required to complete the work shall be included with the cost for Fabric Reinforced Elastomeric Trough.
 Cost to remove existing trough shall be included with the cost for Fabric Reinforced Elastomeric Trough.
 Extreme care shall be taken while replacing existing trough as not to damage any part of the existing joint assembly. Any damaged parts shall be replaced at Contractor's expense.
 All the bolts required to connect the elastomeric trough to the existing floorsystem shall be located in existing holes.



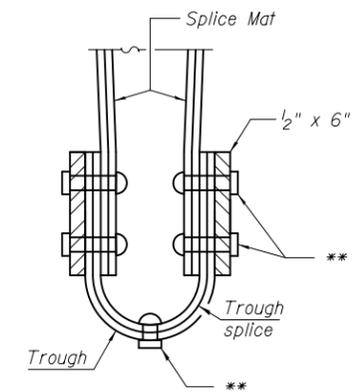
SECTION A-A



TROUGH CUTTING DETAIL AT DRAINAGE SYSTEM



SECTION B-B



SECTION C-C

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TROUGH REPLACEMENT DETAILS AT PIER 18
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 96 OF 112 SHEETS

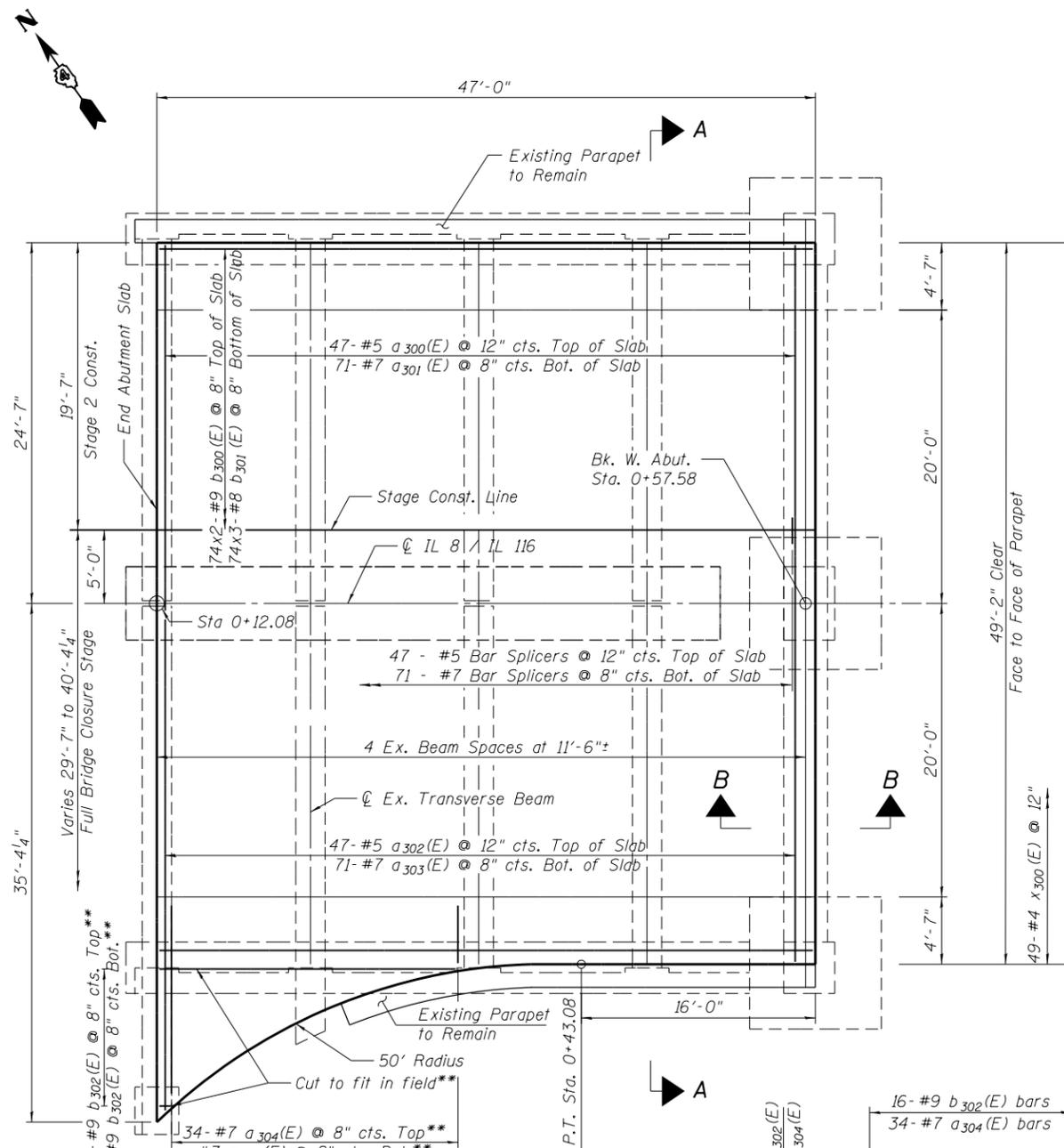
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	164
				CONTRACT NO. 68A93

ILLINOIS FED. AID PROJECT

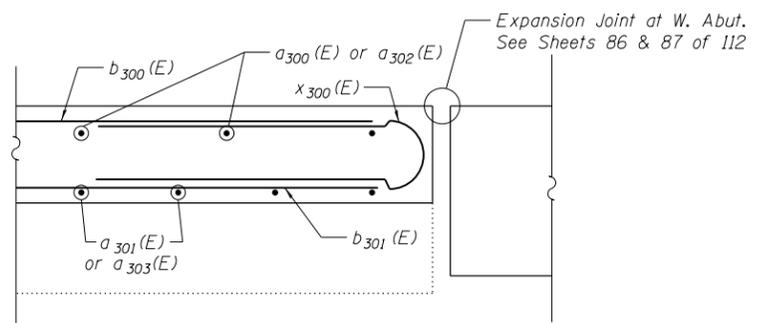


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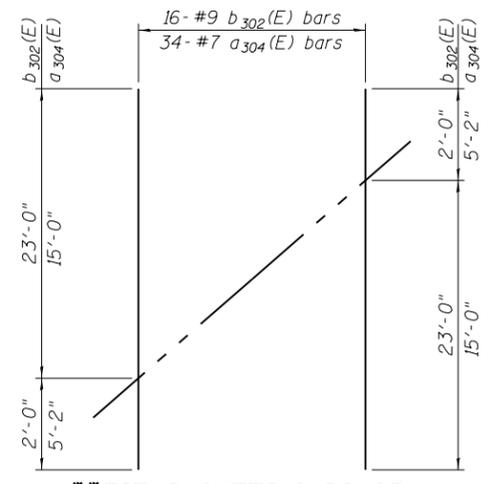
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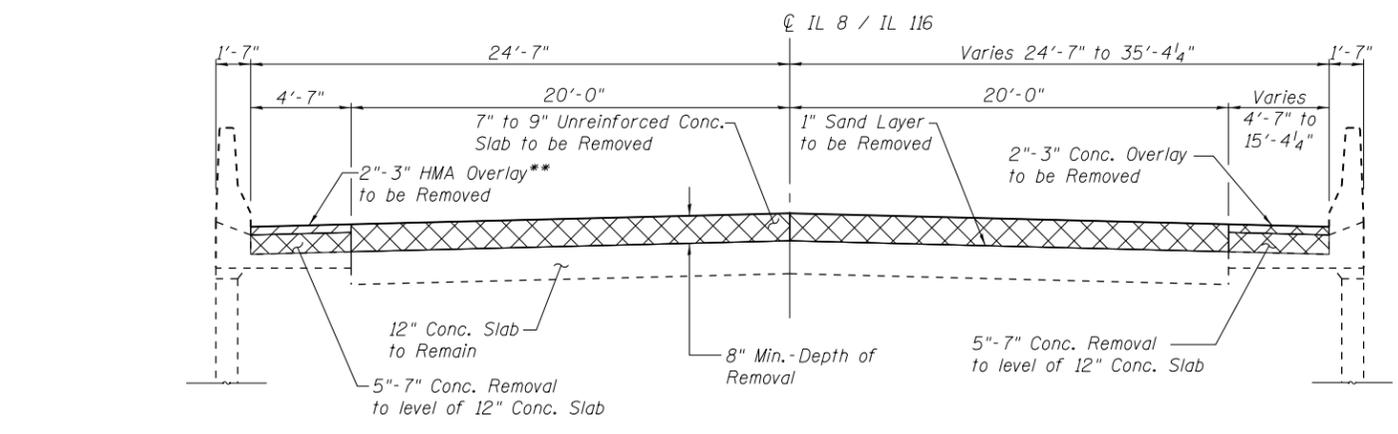
PLAN
West Abutment Slab



SECTION B-B

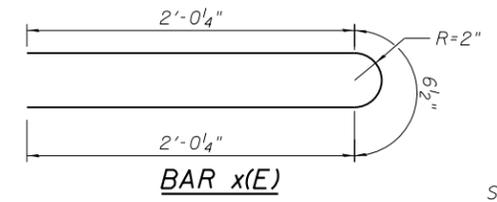


****FIELD CUTTING DIAGRAM**
Order $b_{302}(E)$ and $a_{304}(E)$ Full length. Cut as shown and use remainder of bars in bottom of slab in flare.

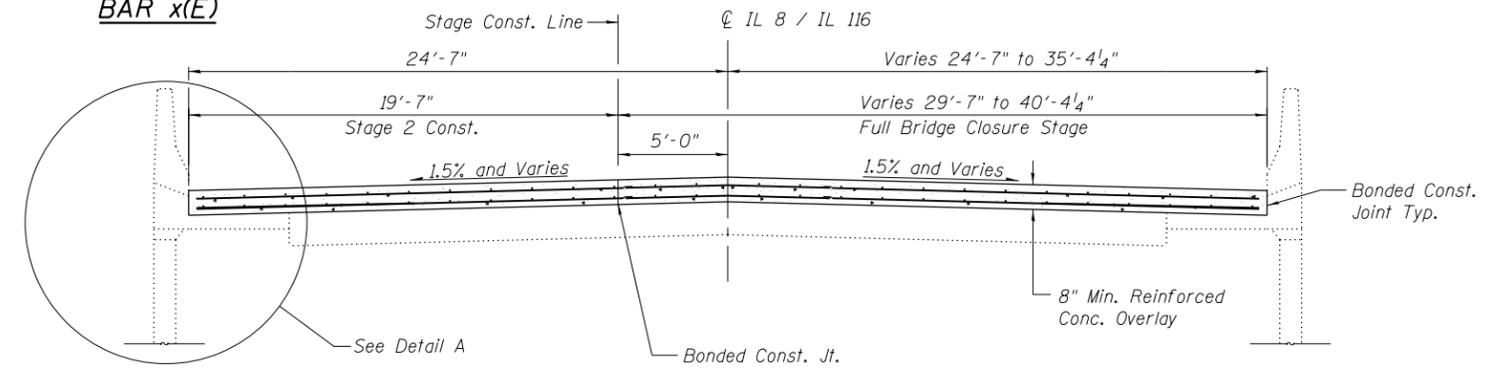


SECTION A-A-EXISTING
HMA Overlay - North side
Conc. Overlay - South side

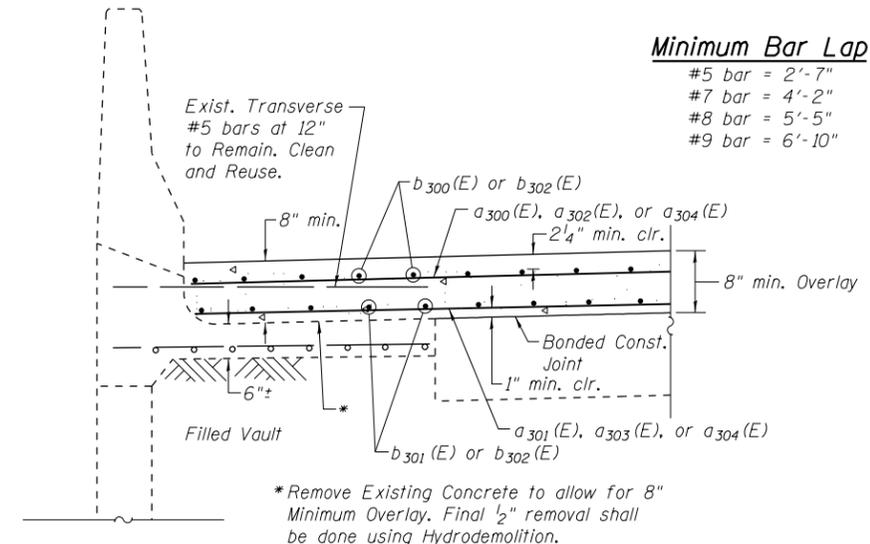
**HMA overlay removal will be measured and included for payment as CONCRETE REMOVAL.



BAR x(E)



SECTION A-A-PROPOSED



DETAIL A

Minimum Bar Lap
 #5 bar = 2'-7"
 #7 bar = 4'-2"
 #8 bar = 5'-5"
 #9 bar = 6'-10"

**WEST ABUTMENT
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
$a_{300}(E)$	47	#5	19'-4"	—
$a_{301}(E)$	71	#7	19'-4"	—
$a_{302}(E)$	47	#5	29'-4"	—
$a_{303}(E)$	71	#7	29'-4"	—
$a_{304}(E)$	34	#7	20'-2"	—
$b_{300}(E)$	148	#9	26'-9"	—
$b_{301}(E)$	222	#8	19'-2"	—
$b_{302}(E)$	16	#9	25'-0"	—
$x_{300}(E)$	49	#4	4'-7"	—
ITEM	UNIT	QUANTITY		
Concrete Removal	Cu. Yd.	62		
Concrete Superstructure	Cu. Yd.	61.5		
Bridge Deck Grooving	Sq. Yd.	276		
Protective Coat	Sq. Yd.	276		
Reinforcement Bars, Epoxy Coated	Pound	37,190		



USER NAME = cstokes	DESIGNED - DRB	REVISED
0900030-68A93-166-WAbutSlabRepair.dgn	CHECKED - SDM	REVISED
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PLOT DATE = 10/05/2015	CHECKED - DRB	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

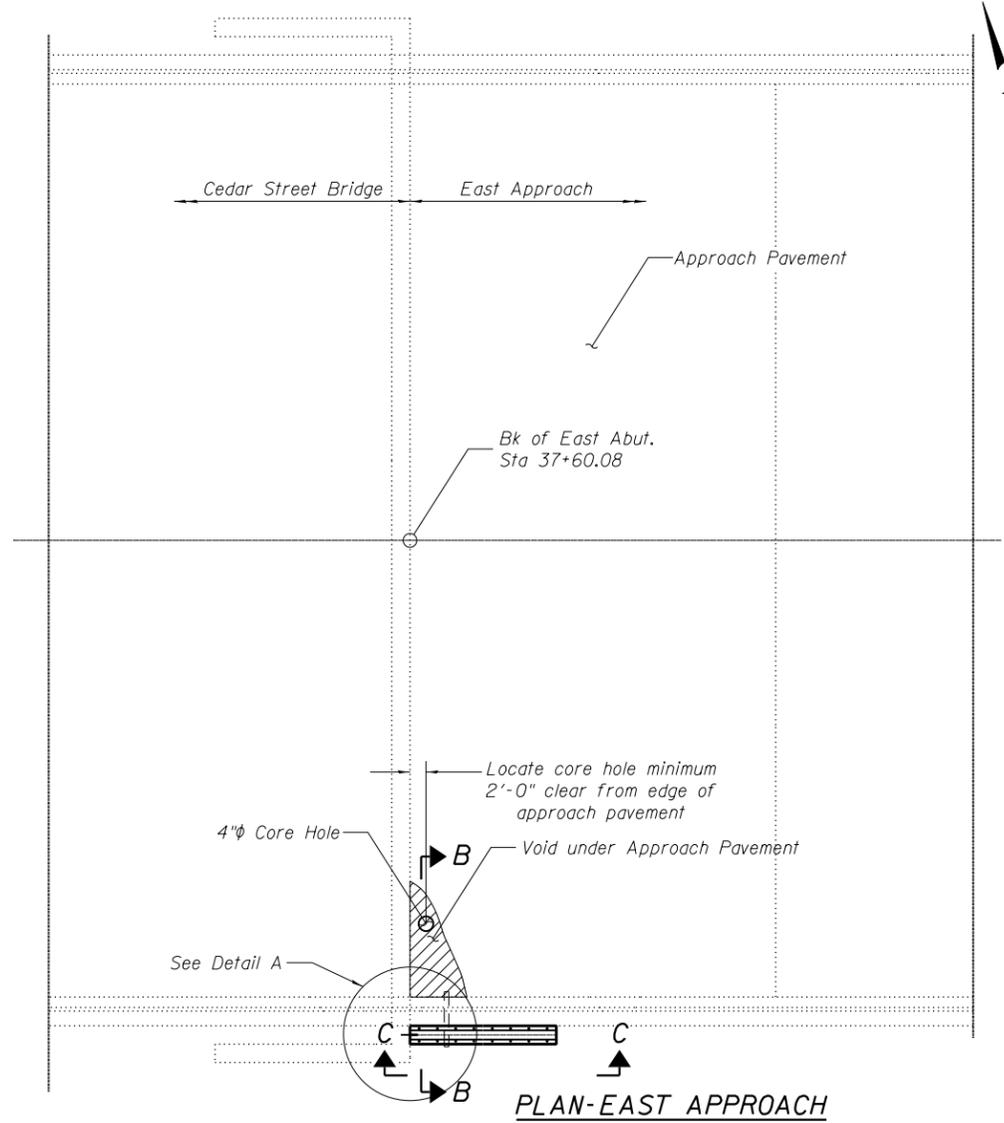
**VAULTED WEST ABUTMENT TOP SLAB REPLACEMENT
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

SHEET NO. 98 OF 112 SHEETS

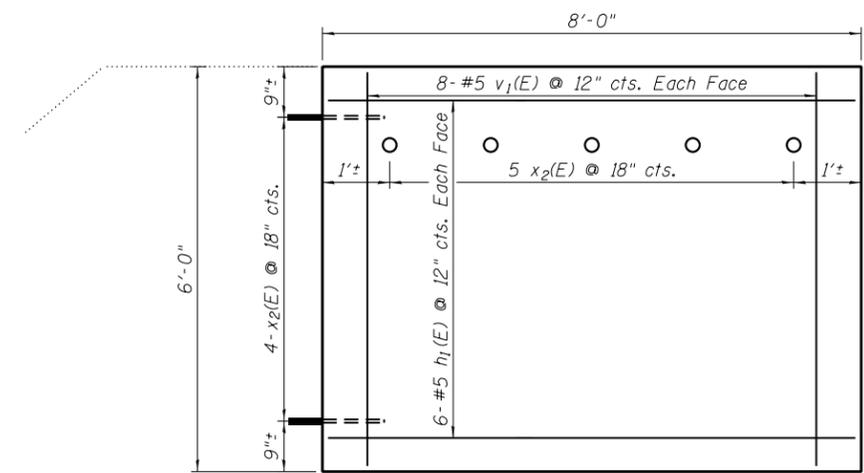
F.A.P. RTE. 669	SECTION (103B)I-7	COUNTY (*)	TOTAL SHEETS 180	SHEET NO. 166
			CONTRACT NO. 68A93	
ILLINOIS FED. AID PROJECT				

(*) Peoria / Tazewell

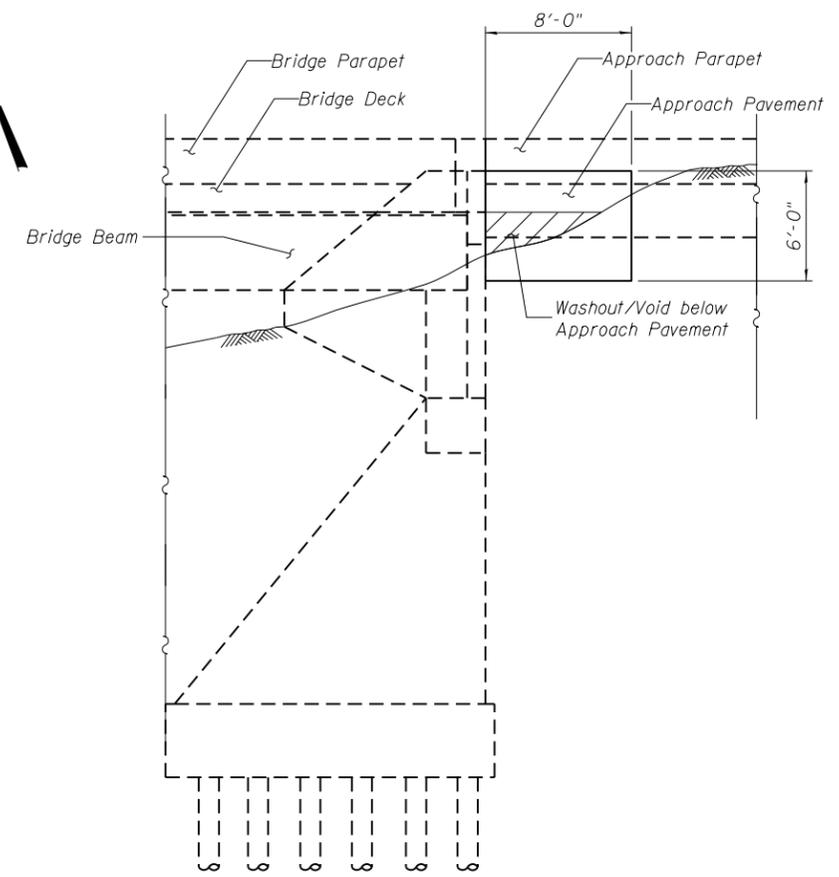
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PLAN-EAST APPROACH

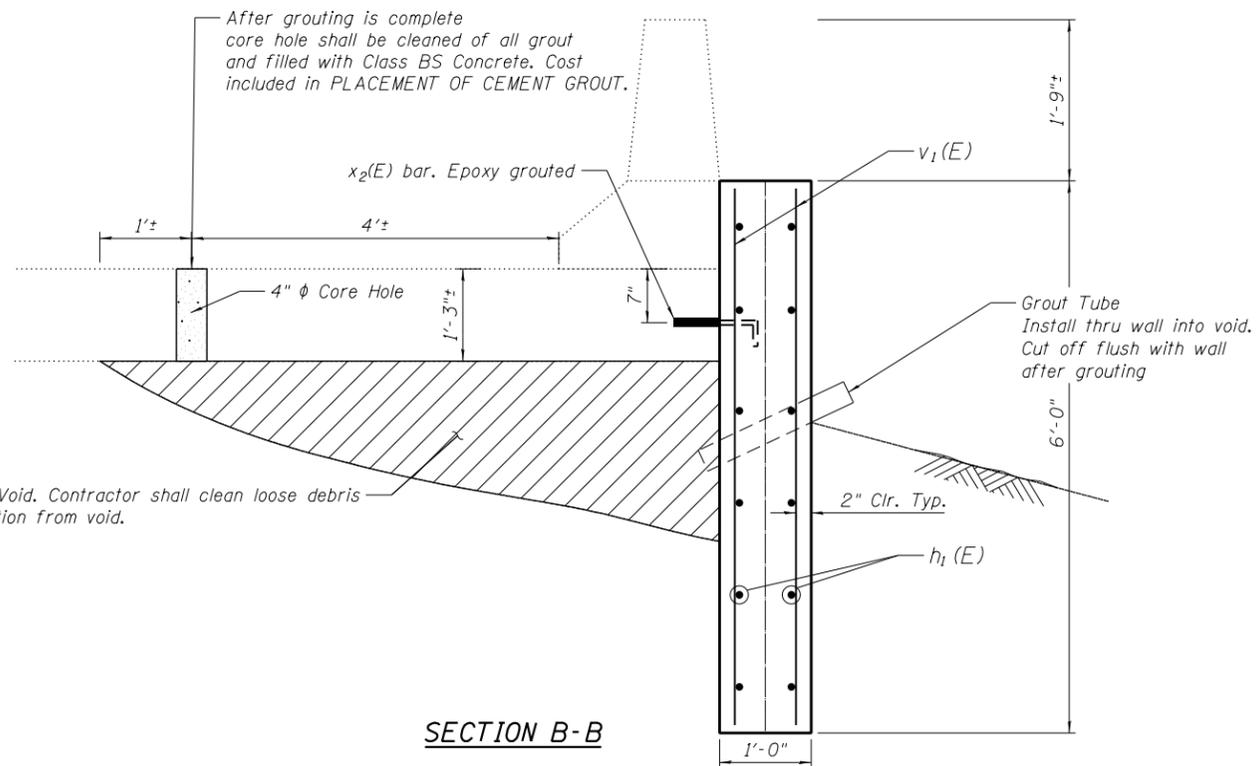


VIEW C-C



EAST ABUTMENT REPAIR

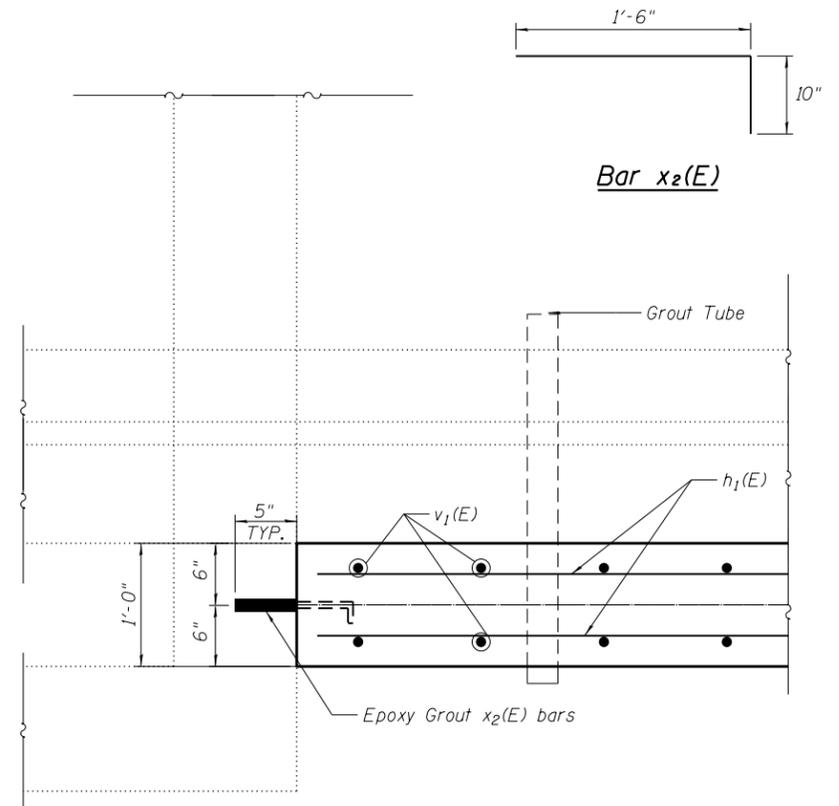
Repair at South Wingwall



SECTION B-B

Existing Void. Contractor shall clean loose debris & vegetation from void.

After grouting is complete core hole shall be cleaned of all grout and filled with Class BS Concrete. Cost included in PLACEMENT OF CEMENT GROUT.



DETAIL A

- Notes:
1. Contractor shall clean and measure void prior to beginning work.
 2. 4" ϕ Core in pavement shall be located within 1' of transverse limit of void. If void limit is greater than 8', then a second hole will be required.
 3. After wall is cured, grout shall be pumped into void thru grout tube until it fills core hole(s). See Special Provision.
 4. Cost of grout tube, coring of the hole(s) and measuring void will not be paid for separately, but will be included in the cost of PLACEMENT OF CEMENT GROUT.
 5. $x_2(E)$ shall be drilled and grouted in place according to Sec. 584 of IDOT Std. Specifications.

EAST ABUTMENT BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
$h_1(E)$	12	#5	7'-8"	—
$v_1(E)$	16	#5	5'-8"	—
$x_2(E)$	9	#5	2'-4"	└
ITEM		UNIT	QUANTITY	
Concrete Structures		Cu. Yd.	1.8	
Reinforcement Bars, Epoxy Coated		Pound	220	
Placement of Cement Grout		Cu. Ft.	40	



USER NAME = cstokes	DESIGNED - DRB	REVISED
0900030-68A93-167-EastAbut.dgn	CHECKED - SDM	REVISED
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

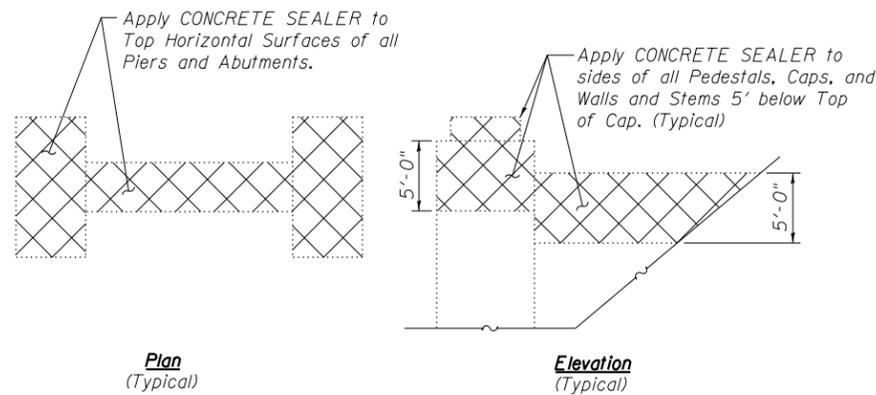
EAST APPROACH SLAB FILL DETAILS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 99 OF 112 SHEETS

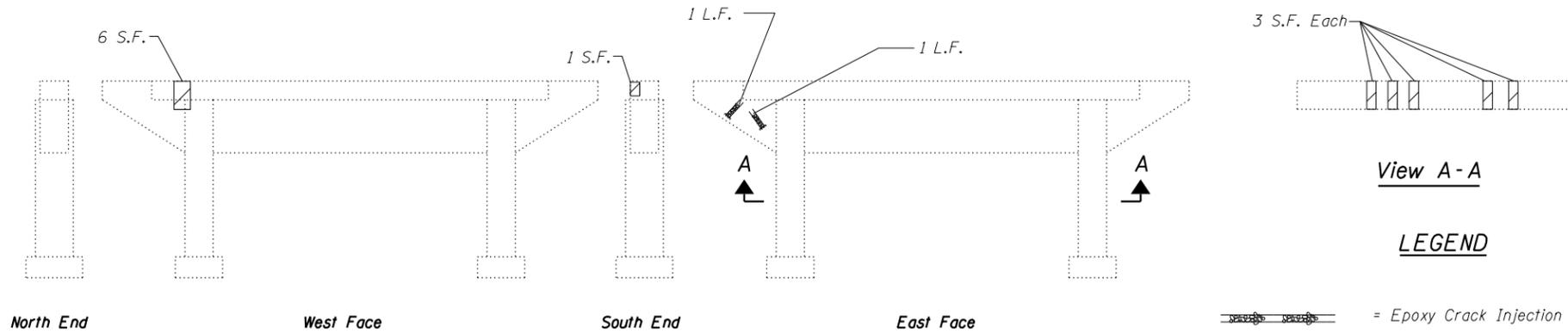
F.A.P. RTE. 669	SECTION (103B)I-7	COUNTY (*)	TOTAL SHEETS 180	SHEET NO. 167
			CONTRACT NO. 68A93	

ILLINOIS FED. AID PROJECT

(*) Peoria / Tazewell



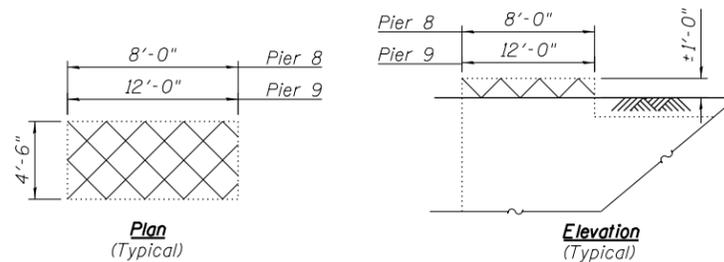
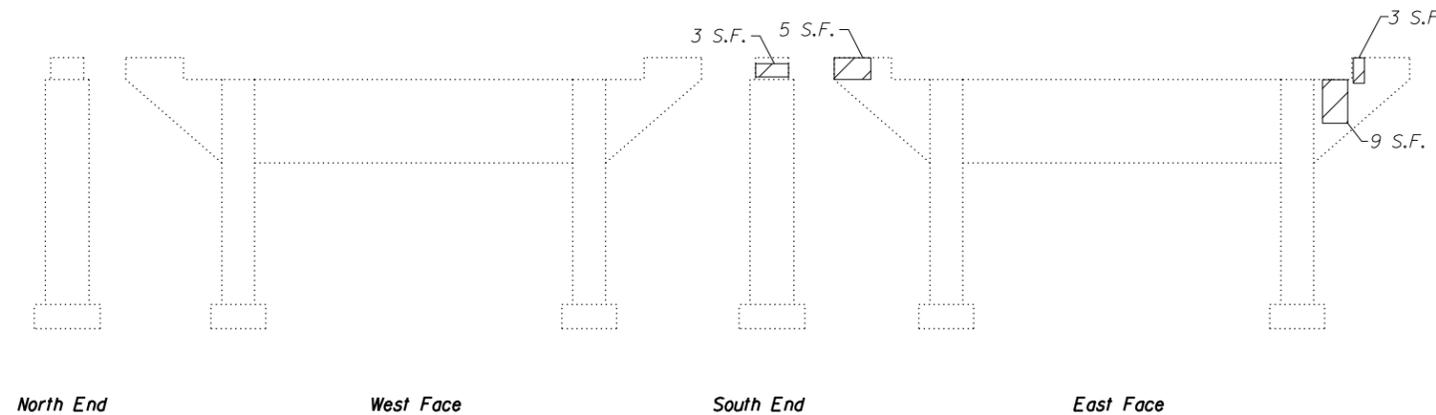
Bridge Seat Sealer
(Typical Abutments, Piers 1-7, & Piers 10-33)



- LEGEND**
- = Epoxy Crack Injection
 - = Structural Repair of Concrete (Depth Equal to or Less than 5")
 - S.F. = Square Feet
 - L.F. = Linear Feet

CONCRETE SEALER - SCHEDULE

LOCATION	LENGTH (FOOT)	WIDTH (FOOT)	HORIZ. AREA (SQ FT)	PERIMETER (FOOT)	VERT. DIM. (FOOT)	VERT. AREA (SQ FT)	TOTAL AREA (SQ FT)
W. ABUT	50.33	1.50	75.50	50.33	5.00	251.67	327
PIER 1	52.50	4.00	210.00	113.00	5.00	565.00	775
PIER 2	52.50	4.00	210.00	113.00	5.00	565.00	775
PIER 3	52.50	4.00	210.00	113.00	5.00	565.00	775
PIER 4	52.50	4.00	210.00	113.00	5.00	565.00	775
PIER 5	52.50	4.00	210.00	113.00	5.00	565.00	775
PIER 6	52.50	4.00	210.00	113.00	5.00	565.00	775
PIER 7	52.67	5.50	289.67	116.33	5.00	581.67	871
PIER 8	8.00	4.50	36.00	25.00	1.00	25.00	61
PIER 8	8.00	4.50	36.00	25.00	1.00	25.00	61
PIER 9	12.00	4.50	54.00	33.00	1.00	33.00	87
PIER 9	12.00	4.50	54.00	33.00	1.00	33.00	87
PIER 10	37.67	3.33	125.55	82.00	5.00	410.00	536
PIER 11	37.67	3.33	170.93	103.67	5.00	518.34	689
PIER 12	39.50	4.22	187.55	103.67	5.00	518.34	706
PIER 13	39.50	4.22	166.50	87.43	5.00	437.15	604
PIER 14	39.50	4.22	166.50	87.43	5.00	437.15	604
PIER 15	39.50	4.22	166.50	87.43	5.00	437.15	604
PIER 16	38.00	3.86	146.50	83.71	5.00	418.55	565
PIER 17	38.00	3.86	146.50	83.71	5.00	418.55	565
PIER 18	38.50	3.73	143.73	84.47	5.00	422.33	566
PIER 19	38.50	3.73	143.73	84.47	5.00	422.33	566
PIER 20	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 21	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 22	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 23	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 24	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 25	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 26	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 27	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 28	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 29	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 30	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 31	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 32	37.25	2.63	98.00	79.76	5.00	398.81	497
PIER 33	37.25	2.63	98.00	79.76	5.00	398.81	497
E. ABUT.	56.00	2.25	126.00	56.00	5.00	280.00	406
TOTAL							19,513



Bridge Seat Sealer
(Typical Piers 8 & 9)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Sealer	SQ. FT.	19,513
Epoxy Crack Injection	FOOT	2
Structural Repair of Concrete (Depth Equal to or Less than 5")	SQ. FT.	42

FILE NAME : S:\Projects\2015\JOBS\1511004-00 OEI PTB 168-17 D4 Cedar St Bridge\CAD\CADD Sheets\0900030-68A93-168-PierRepair-01.dgn
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 PLOT DRIVER : IODT_PDF.plt



USER NAME : cstokes
 0900030-68A93-168-PierRepair-01.dgn
 PLOT SCALE : 0.1667 / 1"
 PLOT DATE : 10/05/2015

DESIGNED - DRB
 CHECKED - SDM
 DRAWN - TRF
 CHECKED - DRB

REVISED
 REVISED
 REVISED
 REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 3 & PIER 4 REPAIR DETAILS
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

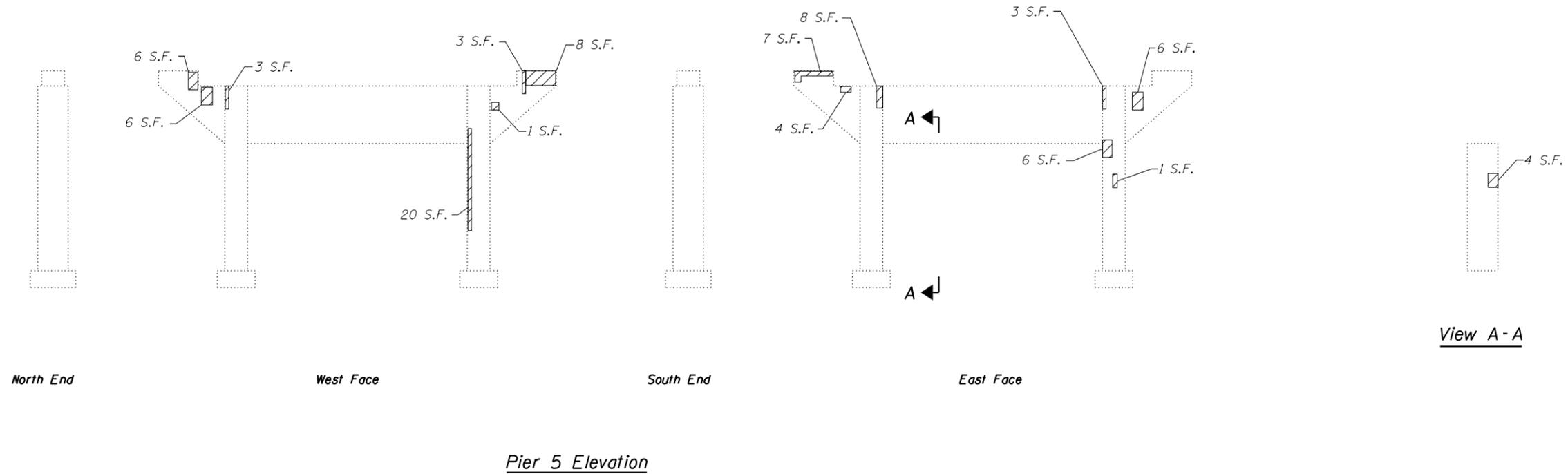
SHEET NO. 100 OF 112 SHEETS

F.A.P. RT. 669 SECTION (103B)I-7 COUNTY (+) TOTAL SHEETS 180 SHEET NO. 168 CONTRACT NO. 68A93

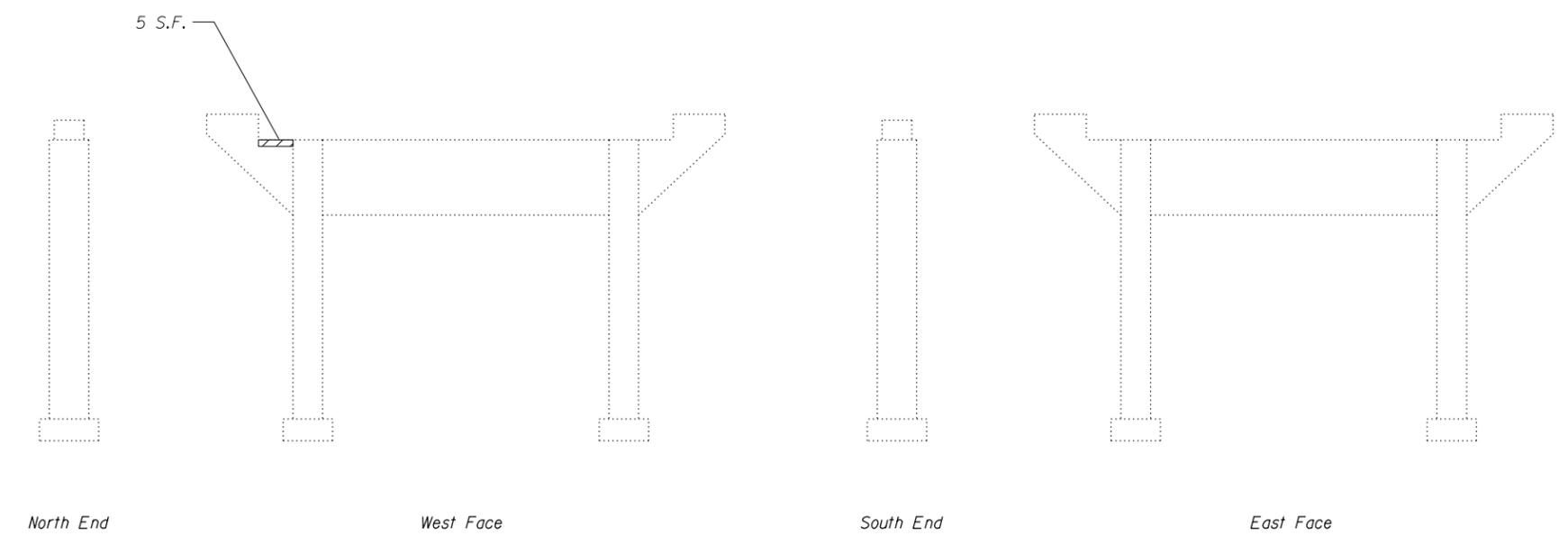
ILLINOIS FED. AID PROJECT

(*) Peoria / Tazewell

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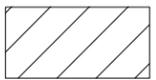


Pier 5 Elevation



Pier 6 Elevation

LEGEND

 = Structural Repair of Concrete (Depth Equal to or Less than 5")

S.F. = Square Feet

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5")	SQ. FT.	91



USER NAME : rgoertz	DESIGNED - DRB	REVISED
0900030-68A93-169-PierRepairs02.dgn	CHECKED - SDM	REVISED
PLOT SCALE : 0.1667' / 1"	DRAWN - TRF	REVISED
PLOT DATE : 10/05/2015	CHECKED - DRB	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 5 & PIER 6 REPAIR DETAILS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

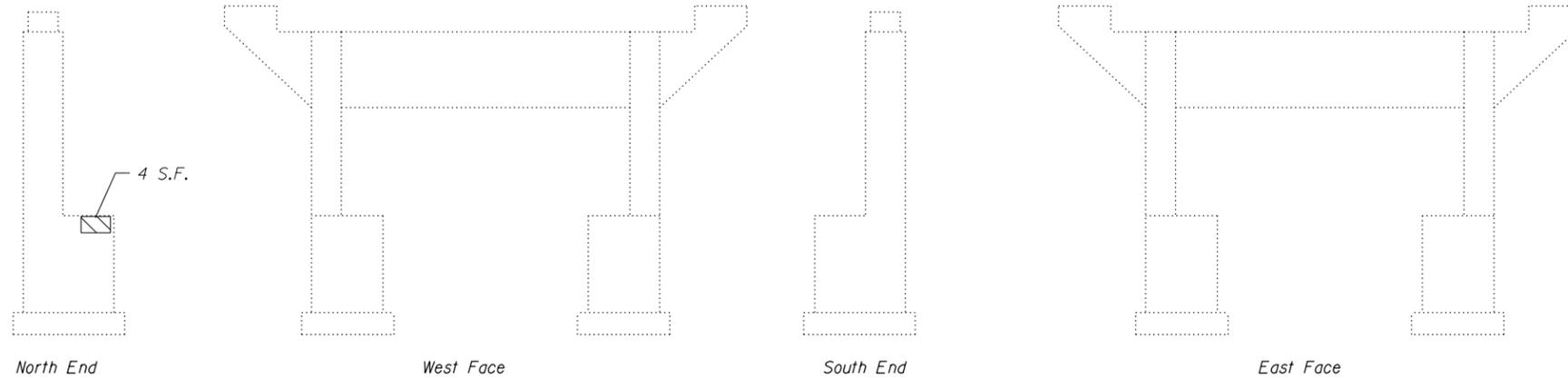
SHEET NO. 101 OF 112 SHEETS

(*) Peoria / Tazewell

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	(*)	180	169

CONTRACT NO. 68A93
ILLINOIS FED. AID PROJECT

FILE NAME : S:\Projects\2015 JOBS\151L004-00 OEI PTB 168-17 D4 Cedar St Bridge\CADD\CADD Sheets\0900030-68A93-170-PierRepair-03.dgn
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 PLOT DRIVER : 151L004 PDF-plotter



North End

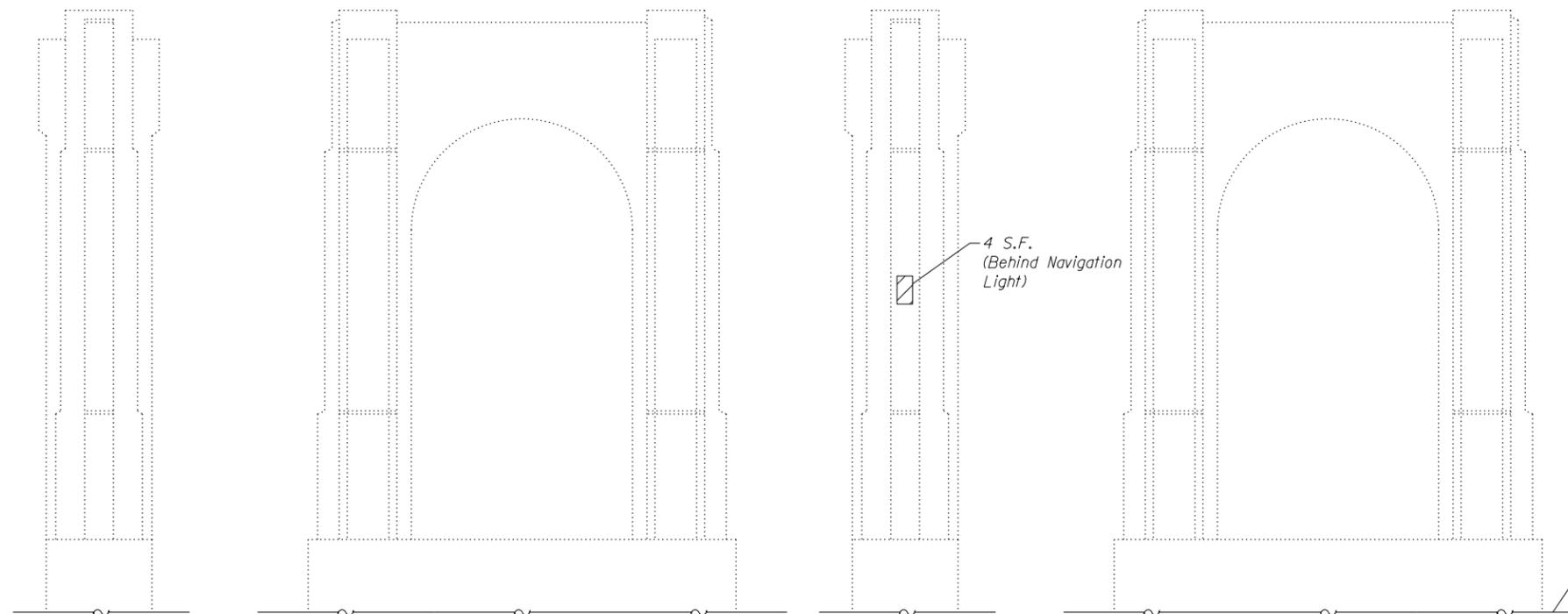
West Face

South End

East Face

Pier 7 Elevation

Note:
 Concrete repairs may be located adjacent to drainage or navigation light brackets and supports. Contractor shall protect brackets and supports during repair operations and will be responsible for damage and replacement of bracket or bracket connections if needed. Cost included in STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5").



North End

West Face

South End

East Face

Pier 13 Elevation

LEGEND



= Structural Repair of Concrete (Depth Equal to or Less than 5")

S.F. = Square Feet

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5")	SQ. FT.	8



USER NAME : rgoertz	DESIGNED - DRB	REVISED
0900030-68A93-170-PierRepair-03.dgn	CHECKED - SDM	REVISED
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PLOT DATE : 10/05/2015	CHECKED - DRB	REVISED

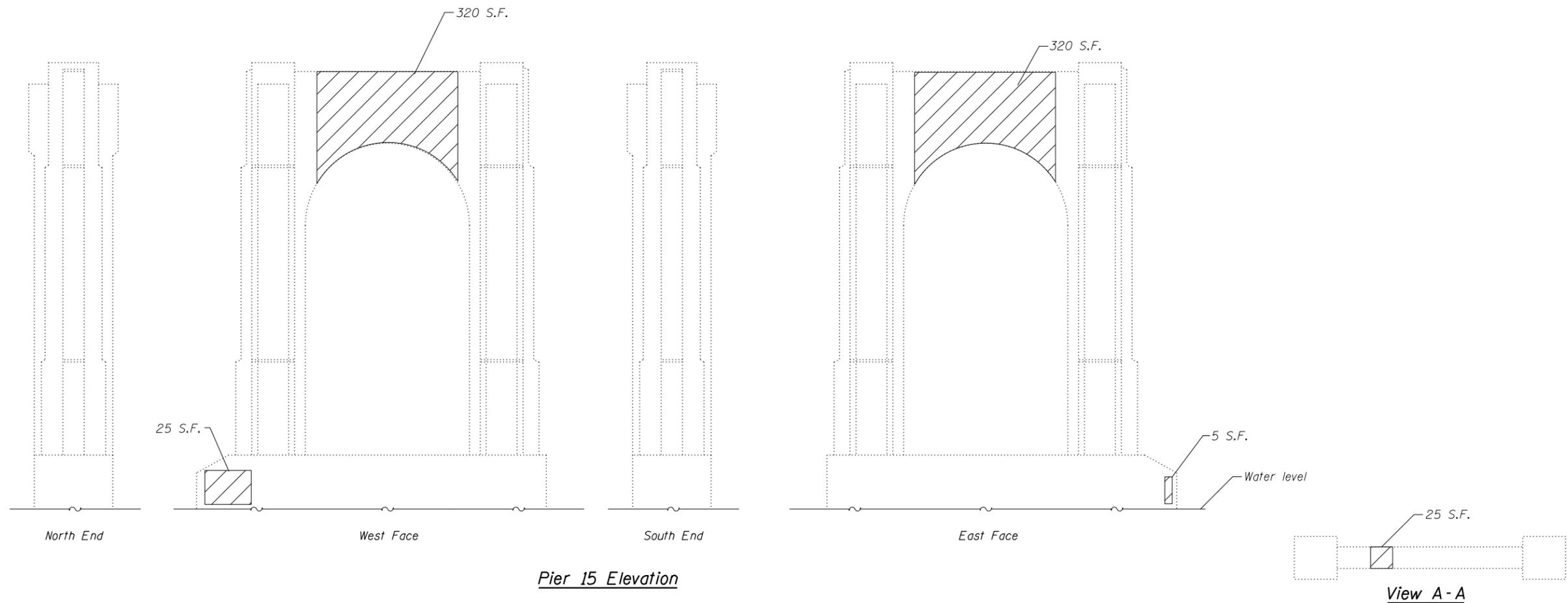
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 7 & PIER 13 REPAIR DETAILS
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

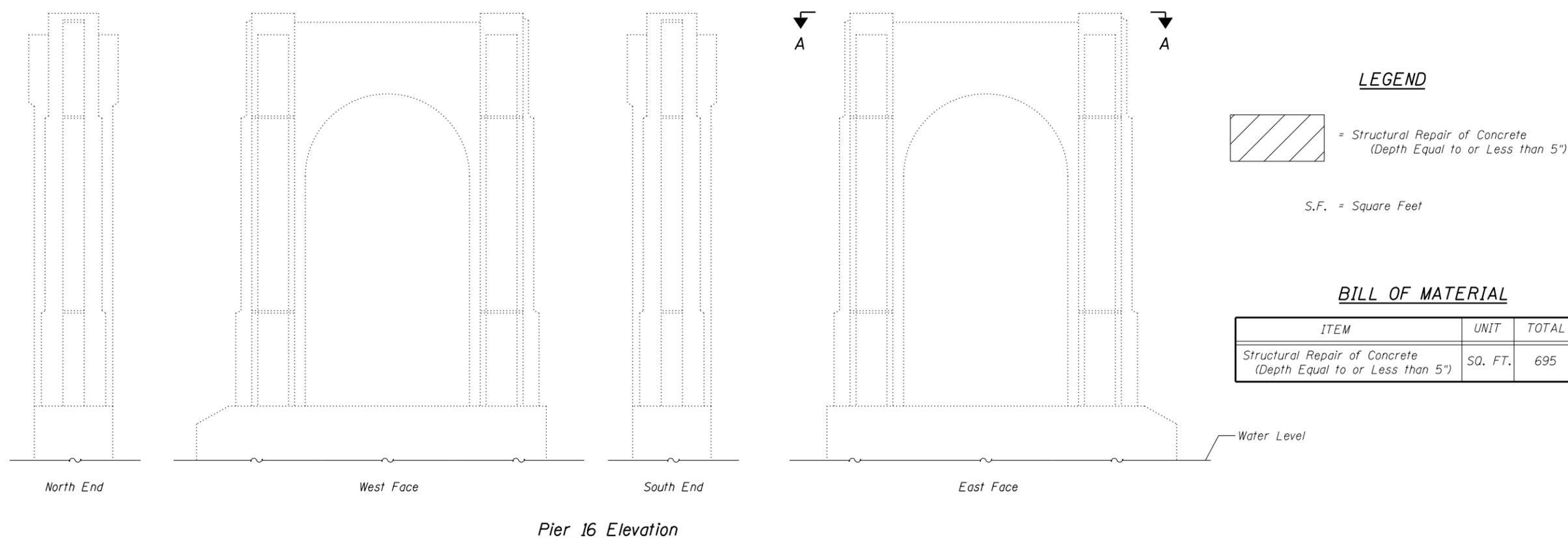
SHEET NO. 102 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	(*)	180	170
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				

(*) Peoria / Tazewell



Pier 15 Elevation



Pier 16 Elevation

LEGEND

= Structural Repair of Concrete (Depth Equal to or Less than 5")

S.F. = Square Feet

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5")	SQ. FT.	695

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USER NAME : rgoertz	DESIGNED - DRB	REVISED
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PLOT DATE : 10/05/2015	CHECKED - DRB	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

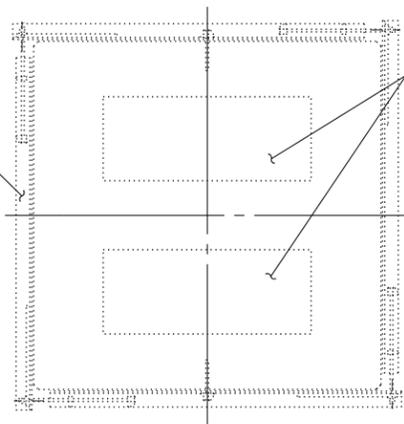
**PIER 15 & PIER 16 REPAIR DETAILS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

SHEET NO. 103 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	(*)	180	171
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				

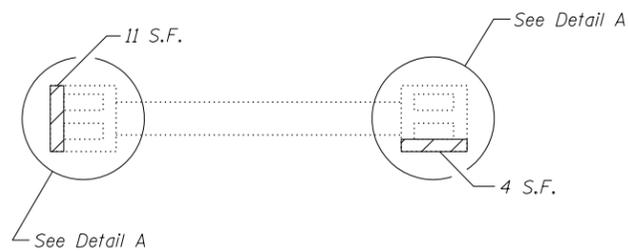
(*) Peoria / Tazewell

Steel Encapsulation Frame to remain in place during and after repair.

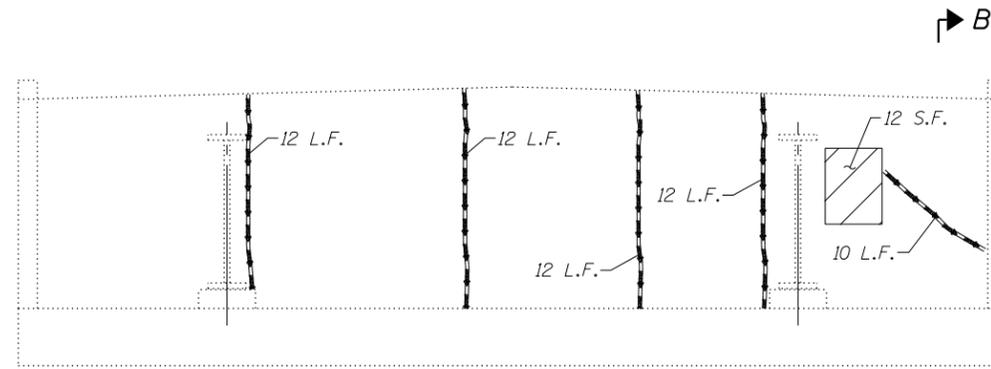


Detail A
Typical at Brg Seats - Pier 19

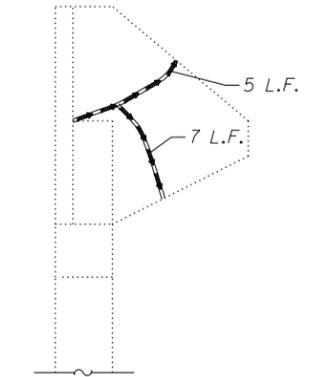
Bearing Sole Plate



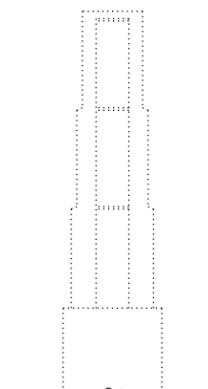
View A-A



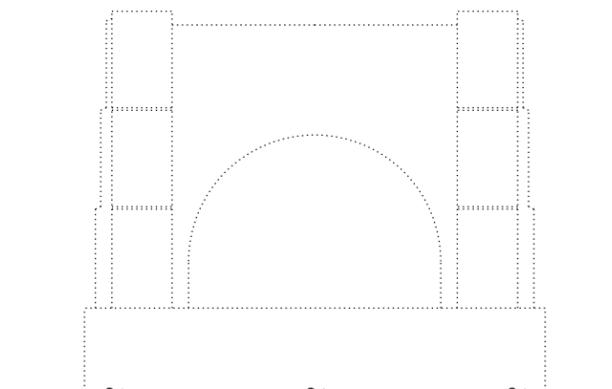
East Abutment
Looking East



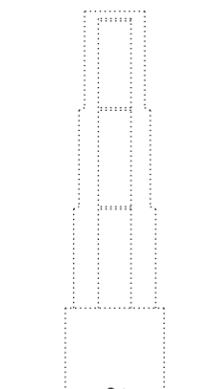
View B-B
Looking South



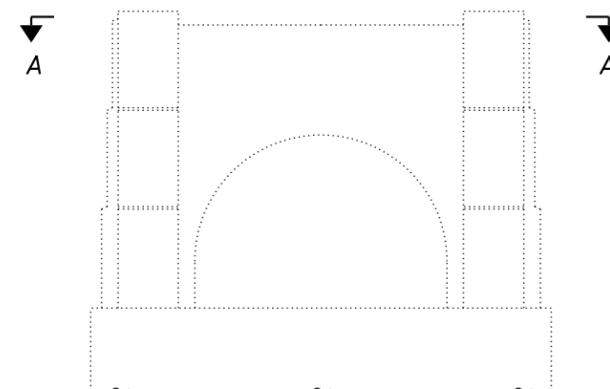
North End



West Face



South End



East Face

Pier 19 Elevation

LEGEND

- = Epoxy Crack Injection
- = Structural Repair of Concrete (Depth Equal to or Less than 5")

S.F. = Square Feet
L.F. = Linear Feet

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Epoxy Crack Injection	FOOT	70
Structural Repair of Concrete (Depth Equal to or Less than 5")	SQ. FT.	27

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USER NAME : rgoertz	DESIGNED - DRB	REVISED
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PLOT SCALE : 0.1667' / 1"	DRAWN - TRF	REVISED
PLOT DATE : 10/05/2015	CHECKED - DRB	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

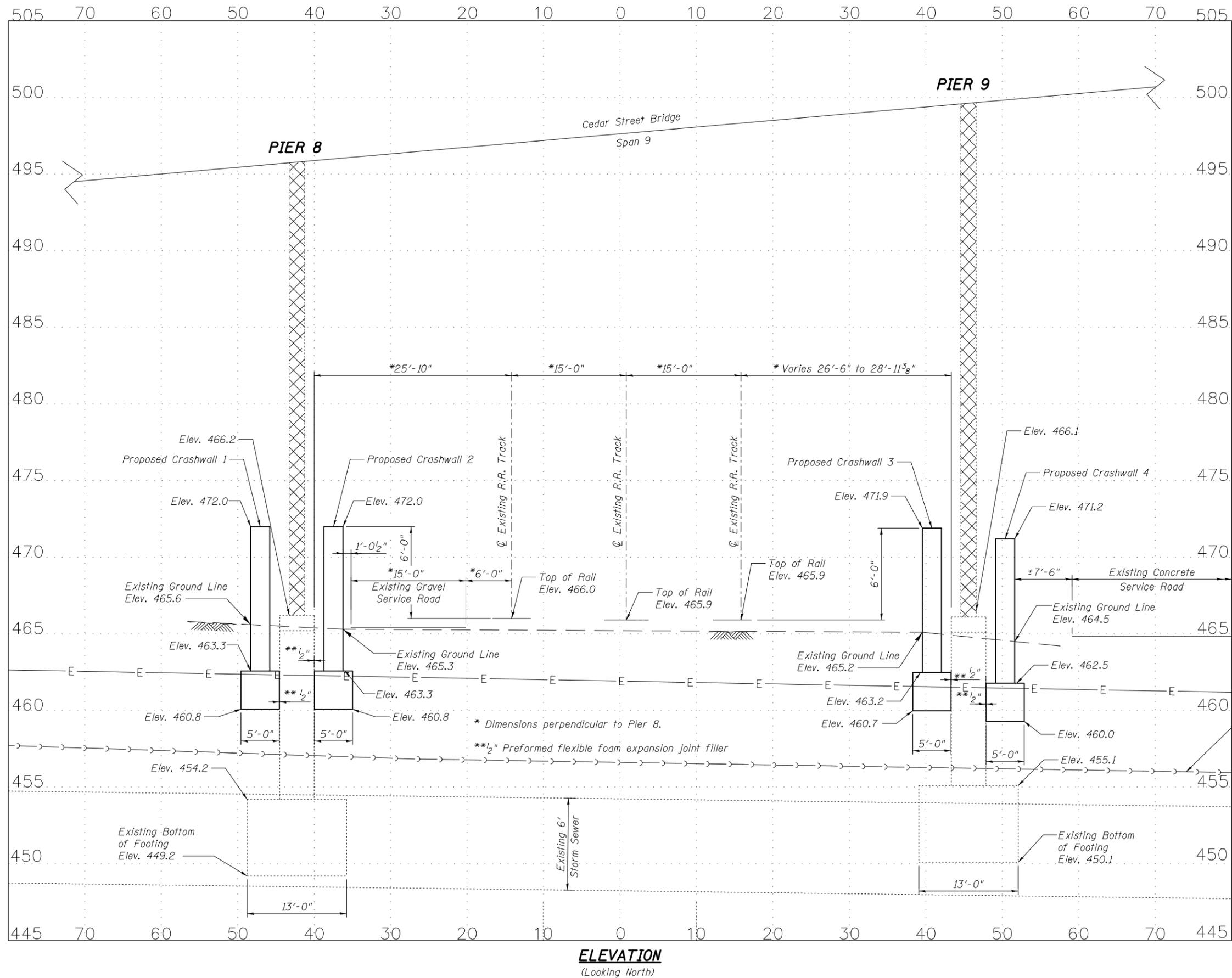
PIER 19 & EAST ABUTMENT REPAIR DETAILS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 104 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	(*)	180	172
CONTRACT NO. 68A93				

ILLINOIS FED. AID PROJECT

(*) Peoria / Tazewell



Location of 8" water main and fiber optic lines (southwest) and 27" sanitary sewer (northeast) unknown.

Notes:
 Existing storm sewer and underground electric duct locations shown are approximate.
 Provide traffic control and protection in accordance with Highway Standards 701006 and 701501 as required by the Engineer.
 Temporary shoring may be required in accordance with Tazewell and Peoria Railroad requirements. The Contractor shall coordinate with the Railroad regarding shoring requirements. Coordination documentation shall be provided to the Engineer. If required, the Contractor shall submit temporary shoring design calculations and plan details to the Railroad and the Engineer for review and approval prior to performing the structure excavation. Cost for temporary shoring shall be included with Structure Excavation.



USER NAME =	DESIGNED - ZWV	REVISED
	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

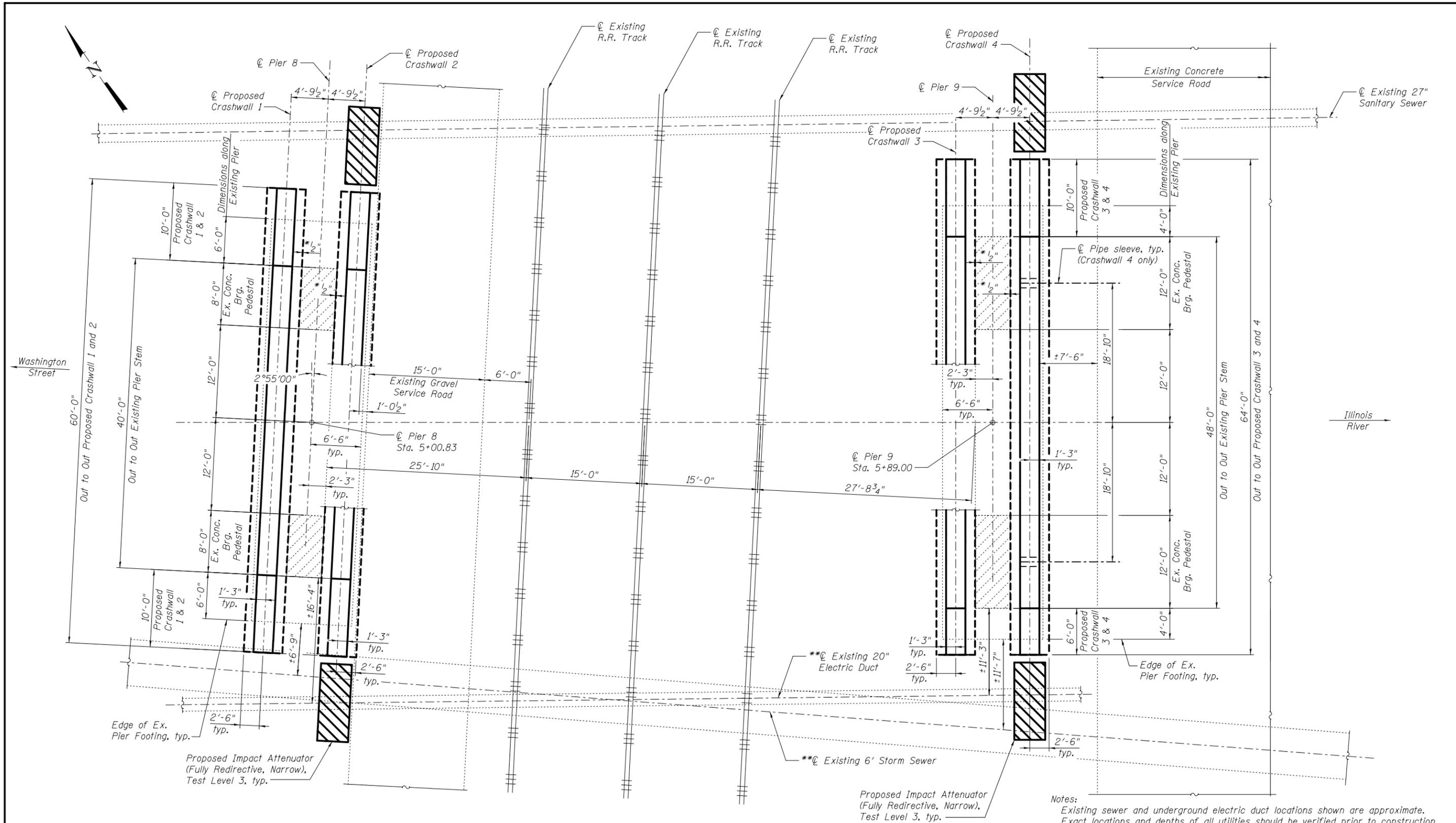
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CRASHWALL ELEVATION
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	173
CONTRACT NO. 68A93				

SHEET NO. 105 OF 112 SHEETS

ILLINOIS FED. AID PROJECT



PLAN

- * 1/2" x 2'-6" Preformed flexible foam expansion joint filler installed at the interface between the existing pier stem and the proposed crashwall footing.
- ** Additional utilities noted along the southwest side of Piers 8 and 9 include an 8" water main and fiber optic lines. Exact locations are unknown.

Notes:
 Existing sewer and underground electric duct locations shown are approximate. Exact locations and depths of all utilities should be verified prior to construction and caution used for construction in proximity of the utilities.
 Preformed flexible foam expansion joint filler shall be according to Section 1051.09 of the Standard Specifications and shall be paid for at the contract unit price per foot for Preformed Joint Filler.
 Provide traffic control and protection in accordance with Highway Standards 701006 and 701501 as required by the Engineer.
 The Contractor shall return the existing service roads to their original condition after the crashwalls are constructed. Cost included with Concrete Structures.



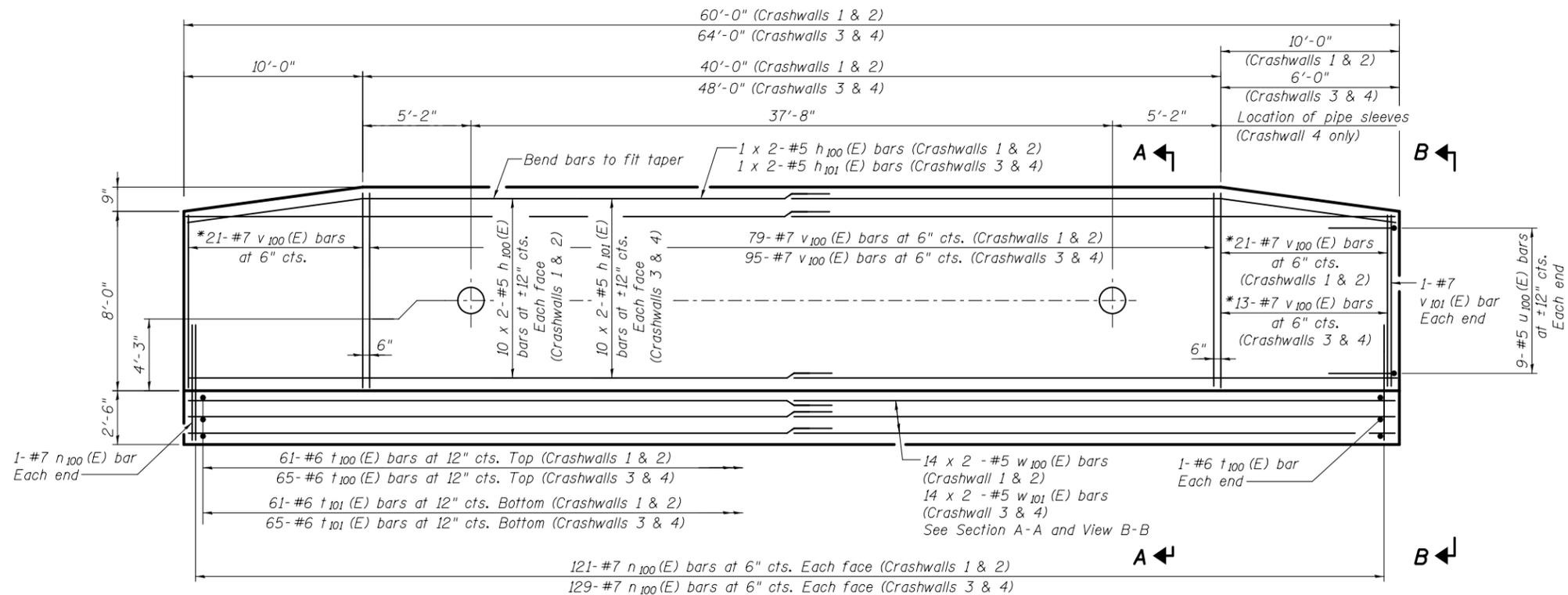
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	CHECKED - RLM	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CRASHWALL PLAN
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

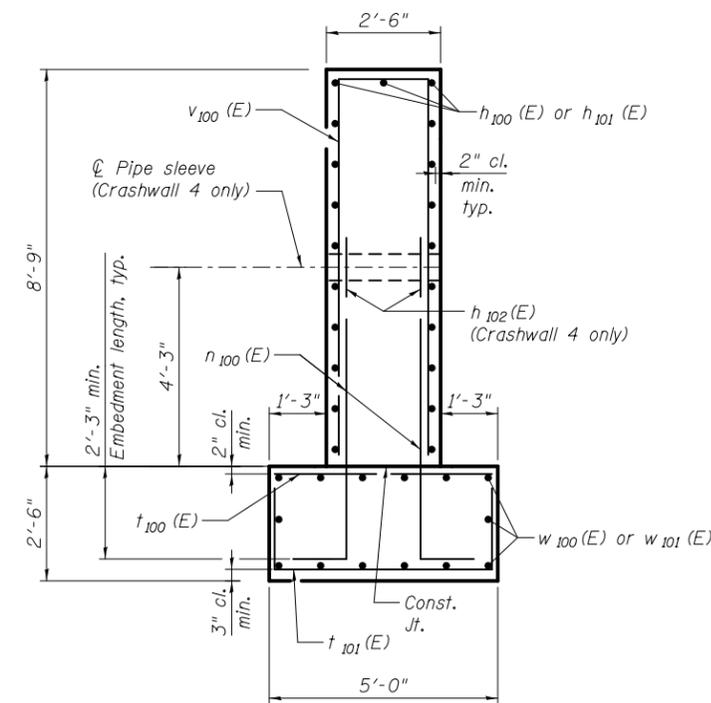
SHEET NO. 106 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	174
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



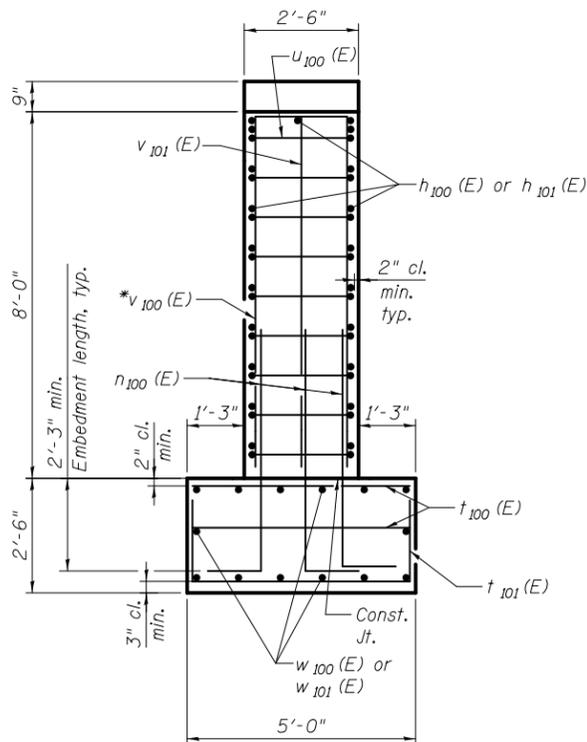
ELEVATION

* Field cut to fit

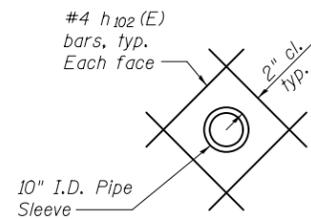


SECTION A-A

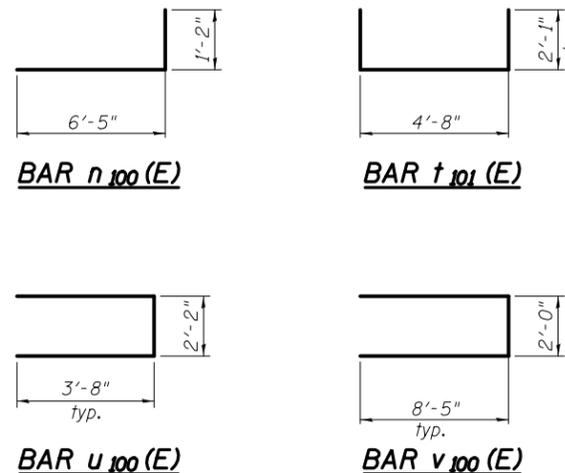
Adjust horizontal and vertical bars to provide 2" minimum clearance around pipe sleeves.



VIEW B-B



PIPE SLEEVE DETAIL
(Crashwall 4 only)



CRASHWALLS 1 & 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_{100} (E)	84	#5	31'-8"	—
n_{100} (E)	488	#7	7'-7"	┘
t_{100} (E)	126	#6	4'-8"	—
t_{101} (E)	122	#6	8'-10"	—
u_{100} (E)	36	#5	9'-6"	—
v_{100} (E)	242	#7	18'-10"	—
v_{101} (E)	4	#7	7'-8"	—
w_{100} (E)	56	#5	31'-8"	—
Structure Excavation		Cu. Yd.	172	
Concrete Structures		Cu. Yd.	154.2	
Reinforcement Bars, Epoxy Coated		Pound	24,430	
Impact Attenuator (Fully Redirective, Narrow), Test Level 3		Each	2	
Performed Joint Filler		Foot	80	

CRASHWALLS 3 & 4
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_{101} (E)	84	#5	33'-8"	—
h_{102} (E)	16	#4	2'-0"	—
n_{100} (E)	520	#7	7'-7"	┘
t_{100} (E)	134	#6	4'-8"	—
t_{101} (E)	130	#6	8'-10"	—
u_{100} (E)	36	#5	9'-6"	—
v_{100} (E)	258	#7	18'-10"	—
v_{101} (E)	4	#7	7'-8"	—
w_{101} (E)	56	#5	33'-8"	—
Structure Excavation		Cu. Yd.	173	
Concrete Structures		Cu. Yd.	161.8	
Reinforcement Bars, Epoxy Coated		Pound	26,020	
Impact Attenuators (Fully Redirective, Narrow), Test Level 3		Each	2	
Performed Joint Filler		Foot	96	

MINIMUM BAR LAP

#5 bar = 3'-8"

Notes:
 Bars indicated thus 10x2-#5 etc. indicates 10 lines of bars with 2 lengths per line.
 Contractor may combine v_{100} (E) bars or v_{101} (E) bars with n_{100} (E) bars to eliminate lap. Combined bars shall be fabricated to accommodate end taper.
 Install pipe sleeves at Crashwall 4 to accommodate drainage system repairs in Span 9. See Sheet 109 of 112 for drainage system details.
 The pipe sleeve shall be reinforced fiberglass according to ASTM D 2996 RTRP. Cost included with Concrete Structures.



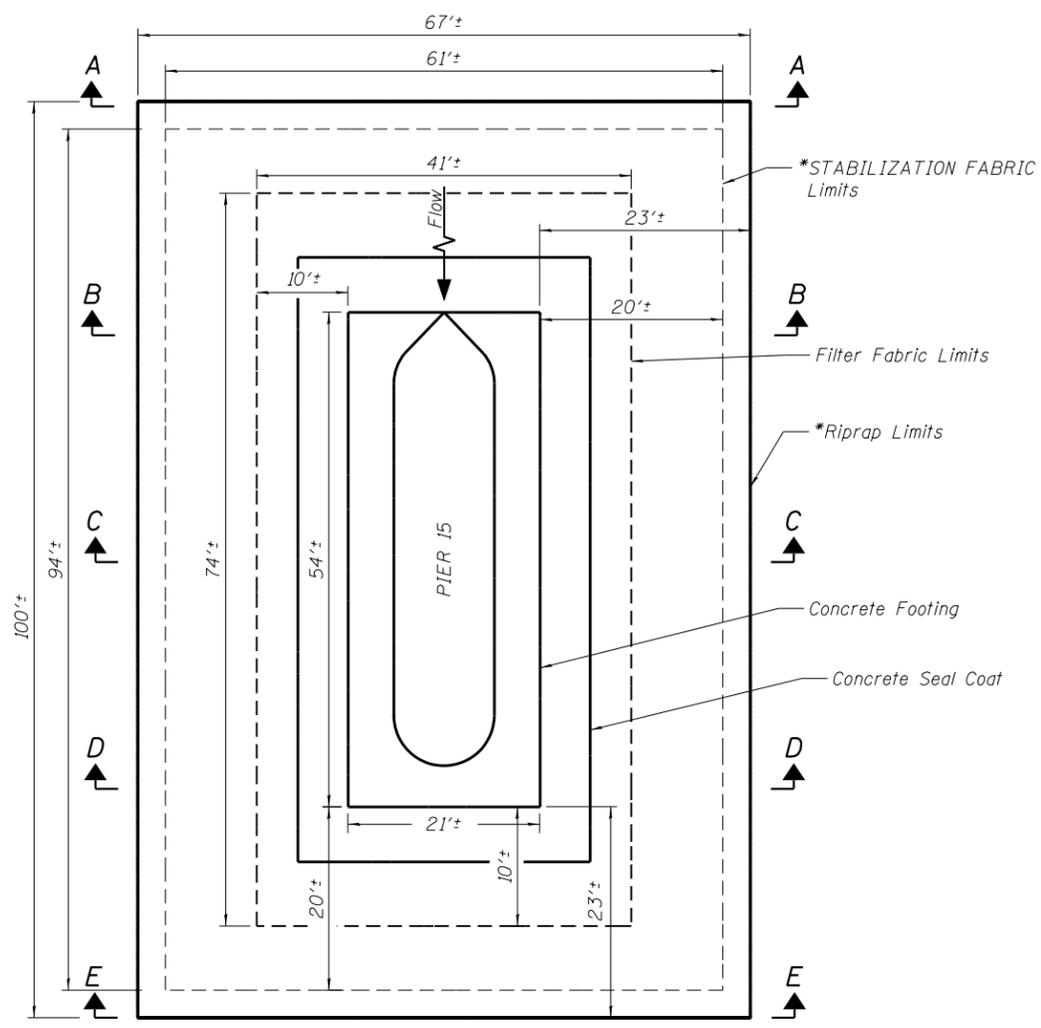
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CHECKED - RLM	REVISIONS	
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CRASHWALL DETAILS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 107 OF 112 SHEETS

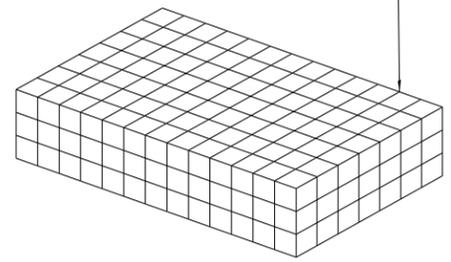
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	175
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				



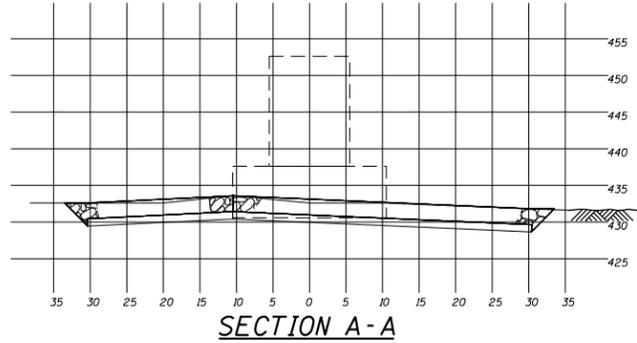
PLAN VIEW

*Riprap & Stabilization Fabric to be centered around Pier

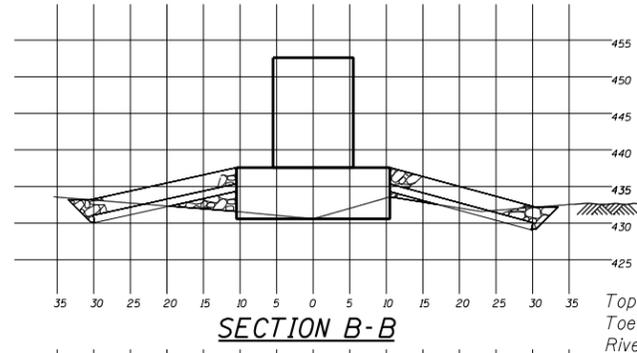
Structural Geogrid Baskets for Bedding Stone. To be sized and designed by supplier to ensure accurate placement and stability. Shop drawings to be submitted prior to fabrication for IDOT approval.



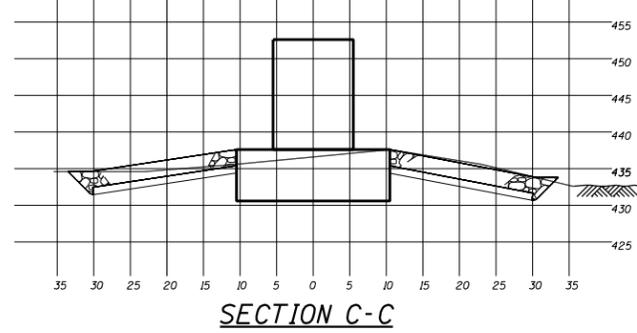
GEOGRID BASKET / STABILIZATION FABRIC



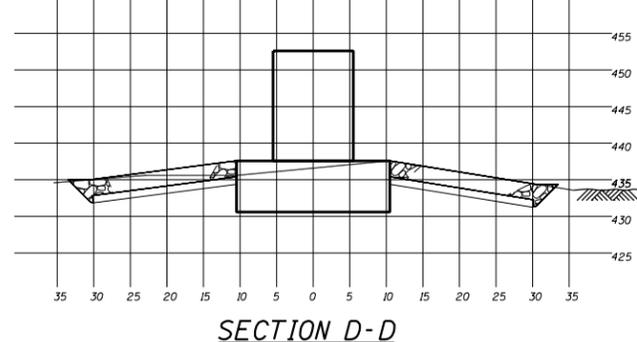
SECTION A-A



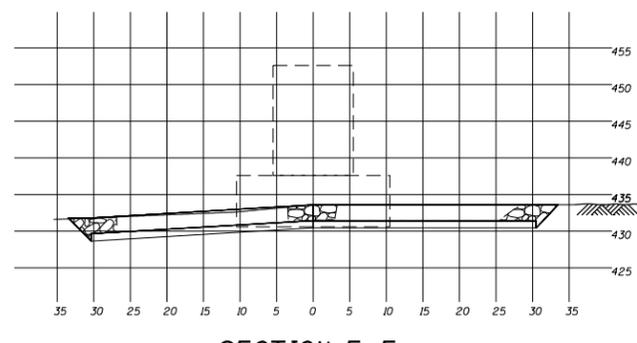
SECTION B-B



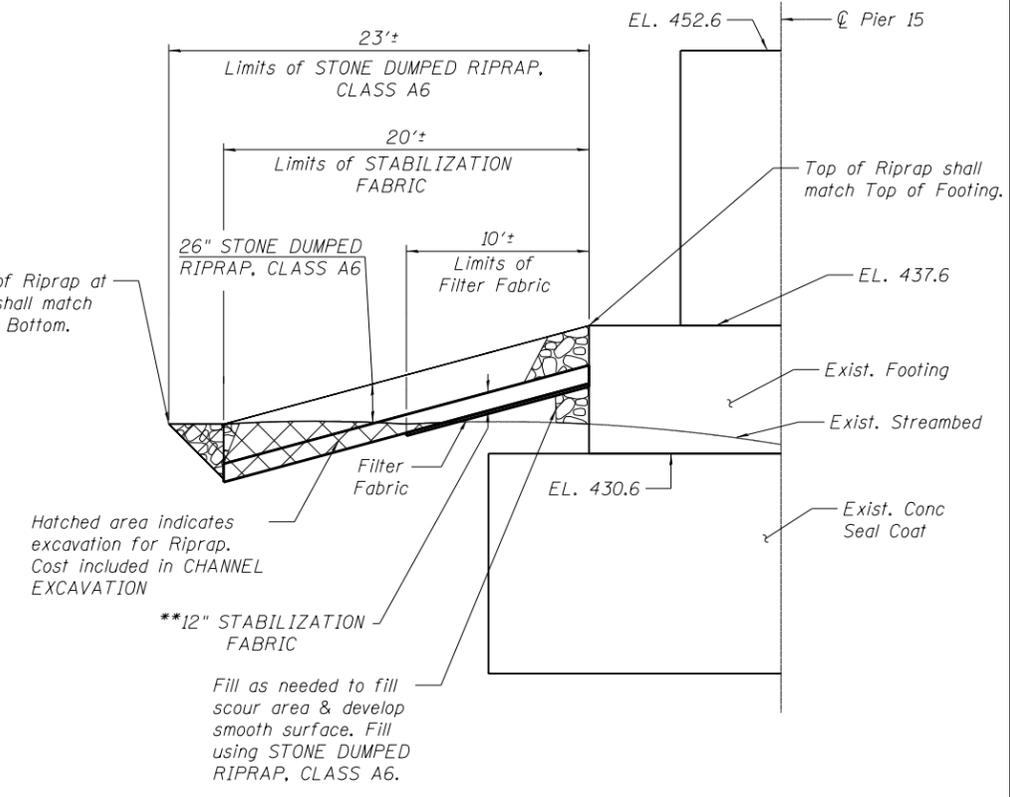
SECTION C-C



SECTION D-D



SECTION E-E



TYPICAL SECTION-PIER 15

**PIER 15
BILL OF MATERIAL**

Item	Unit	Quantity
Channel Excavation	CU YD	439
Stone Dumped Riprap, Class A6	TON	835
Stabilization Fabric	TON	511

**FILTER MATTRESS shall be in accordance with the Special Provision for STABILIZATION FABRIC.

FILE NAME : S:\Projects\2015 JOBS\1511L004-00 OEI PTB 168-17 D4 Cedar St Bridge\CADD\CADD Sheets\0900030-68A93-176-Pier15Riprap.dgn
 MODEL : Default
 PLOT DRIVER : IDOT_PDF.plt



USER NAME : cstokes	DESIGNED - DRB	REVISED
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PLOT SCALE : 0:2.0000 '1' / in.	DRAWN - TRF	REVISED
PLOT DATE : 10/05/2015	CHECKED - DRB	REVISED

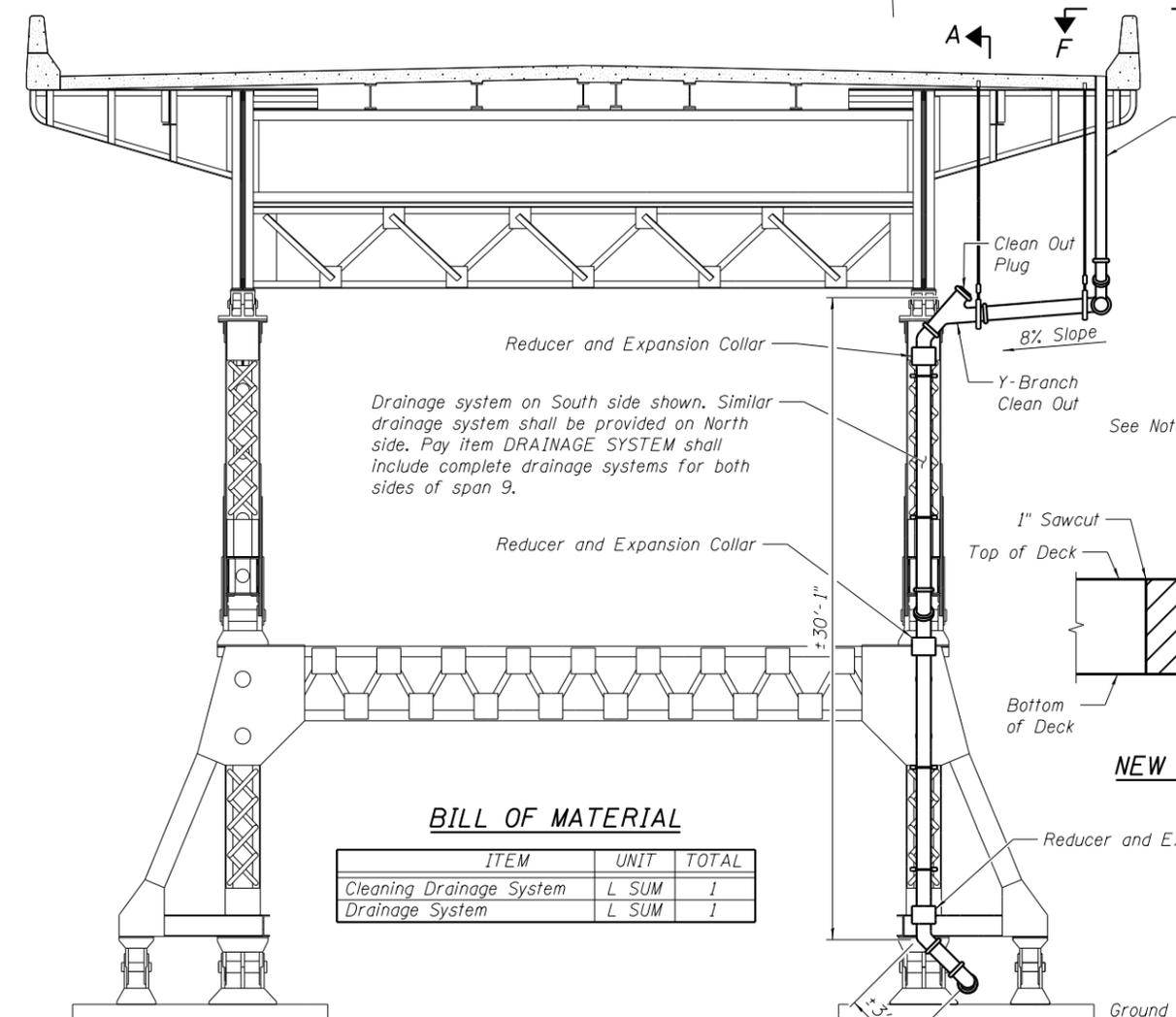
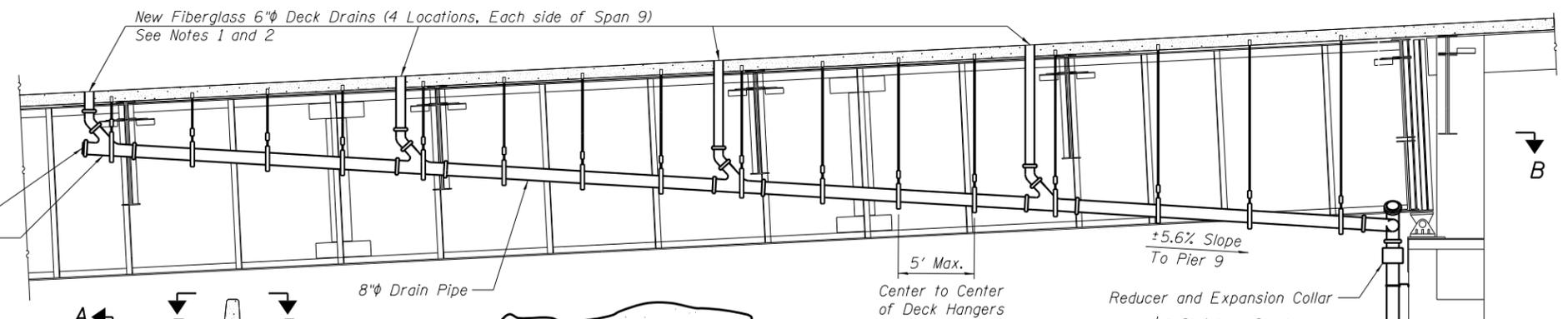
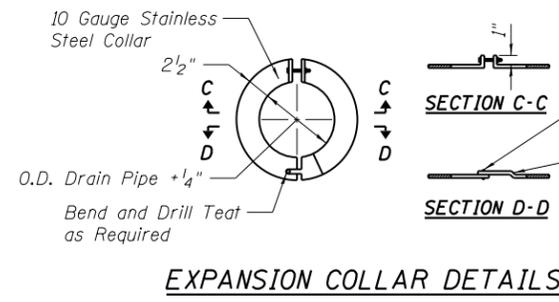
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER 15 SCOUR MITIGATION
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

SHEET NO. 108 OF 112 SHEETS

F.A.P. RTE. 669	SECTION (103B)I-7	COUNTY (*)	TOTAL SHEETS 180	SHEET NO. 176
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				

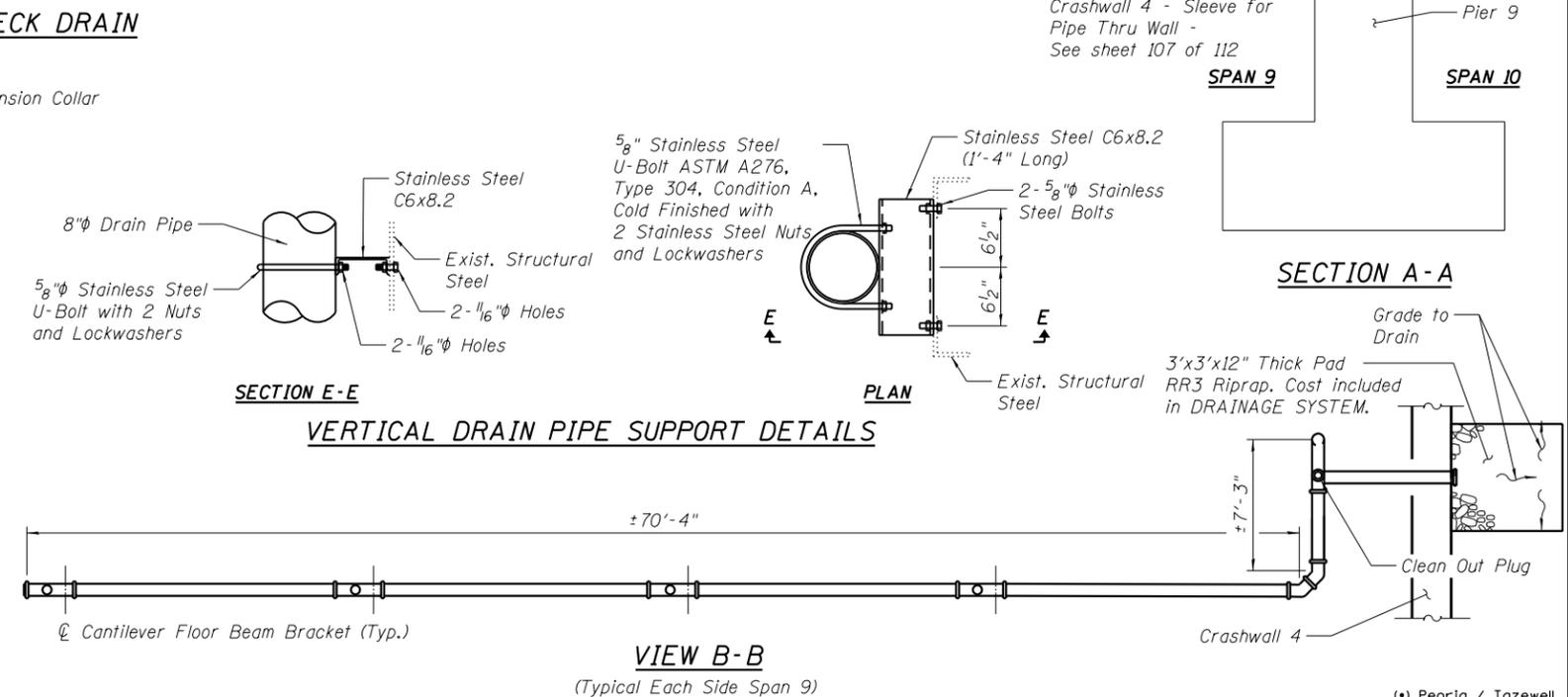
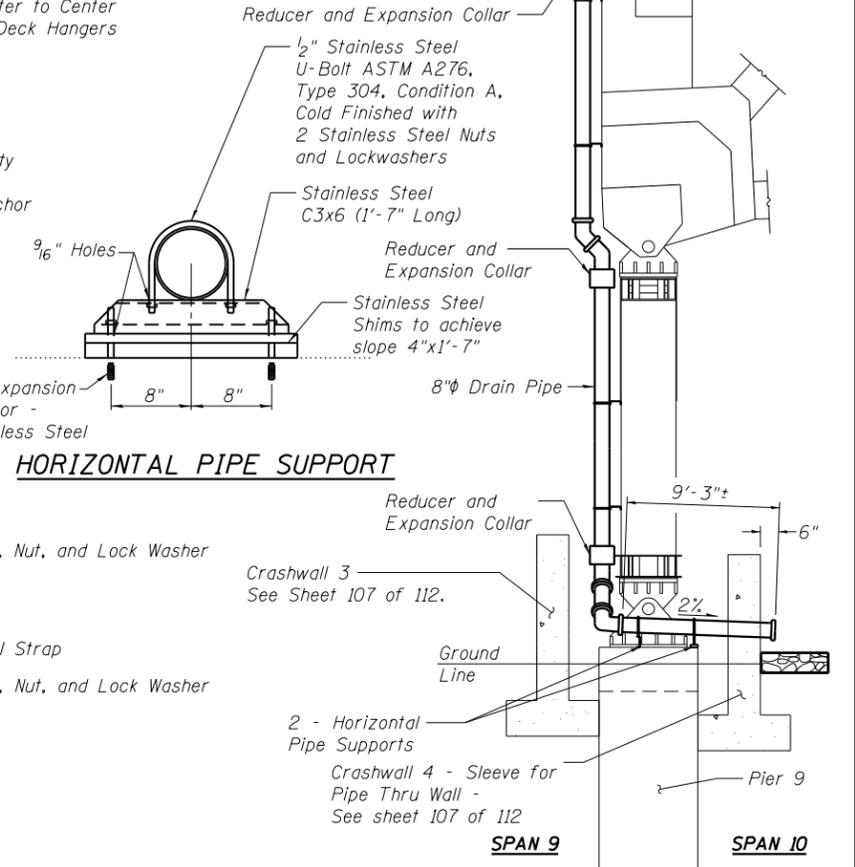
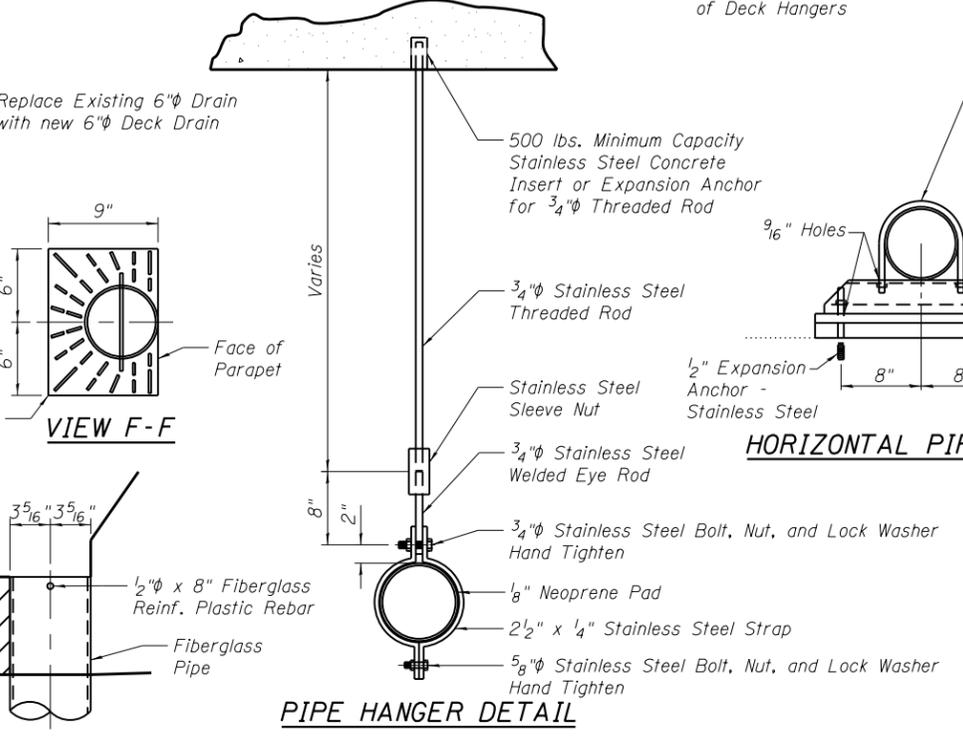
(*) Peoria / Tazewell



BILL OF MATERIAL

ITEM	UNIT	TOTAL
Cleaning Drainage System	L SUM	1
Drainage System	L SUM	1

- Notes:**
- Existing Deck Drains have been plugged with concrete. Contractor shall replace Deck Drains. Cost included in DRAINAGE SYSTEM.
 - New 6" downspouts shall be incorporated into new drainage system. Cost included in DRAINAGE SYSTEM.
 - The entire bridge deck drainage system including scuppers, drain piping, and finger plate joint drainage shall be cleaned. Cost included in CLEANING DRAINAGE SYSTEM. See Special Provisions.
 - All dimensions are approximate, Contractor should verify all dimensions before ordering materials.
 - Sawcut 1" all around. Remove Deck Concrete full depth. Install new fiberglass deck drain. Fill deck hole with concrete material used for Deck Slab Repair. Replacing Deck Drains shall not be paid for separately, but shall be included in the price for DRAINAGE SYSTEM.



FILE NAME = S:\Projects\2015\JOBS\1511L004-00 OEI PTB 168-17 D4 Cedar St Bridge\CADD\CADD Sheets\0900030-68A93-177-Pier-9\DrainSystem.dgn
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 PLOT DATE = 10/05/2015



USER NAME = cstokes	DESIGNED - DRB	REVISED
0900030-68A93-177-Pier-9\DrainSystem.dgn	CHECKED - SDM	REVISED
PLOT SCALE = 0:2.0000 '1' = in.	DRAWN - TRF	REVISED
PLOT DATE = 10/05/2015	CHECKED - DRB	REVISED

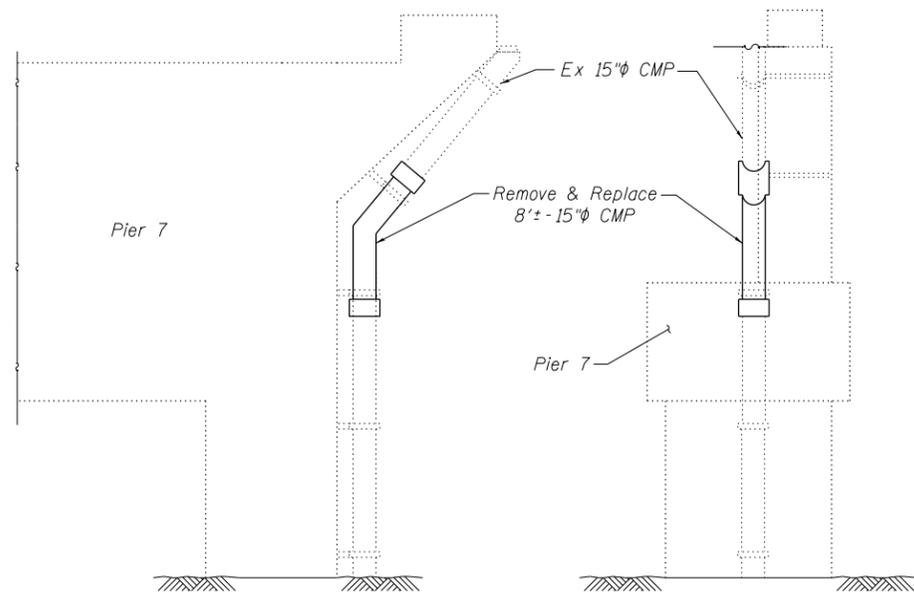
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SYSTEM REPAIR - SPAN 9
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

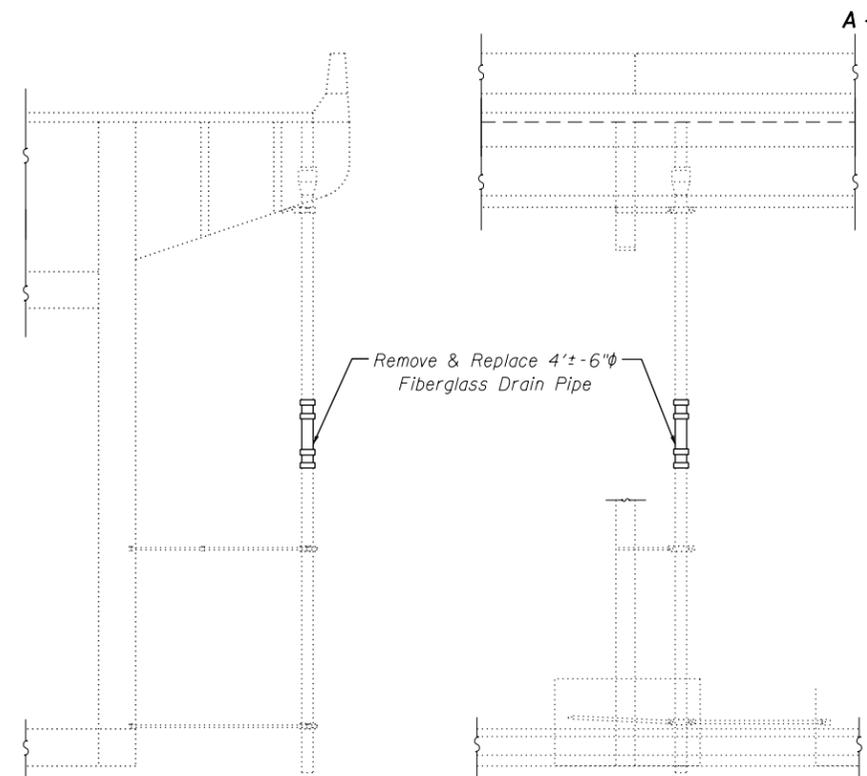
SHEET NO. 109 OF 112 SHEETS

F.A.P. RTE. 669	SECTION (103B)I-7	COUNTY (*)	TOTAL SHEETS 180	SHEET NO. 177
CONTRACT NO. 68A93				

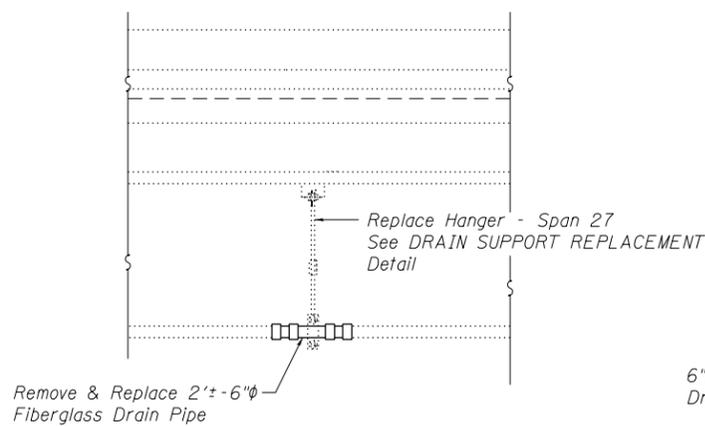
ILLINOIS FED. AID PROJECT



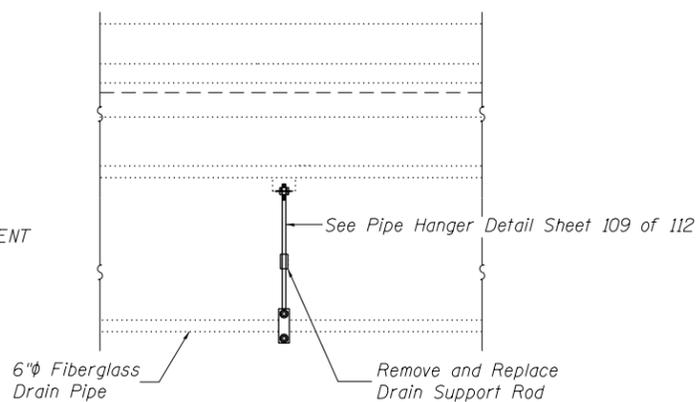
BROKEN DRAIN PIPE @ PIER 7
 (N. End of Pier 7 = 1)



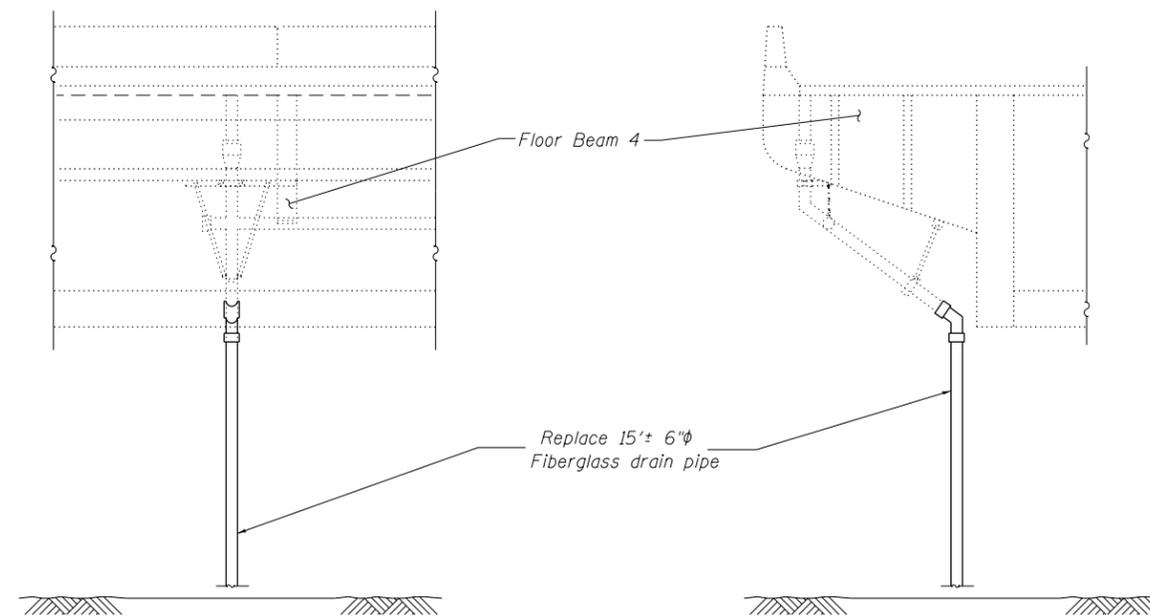
BROKEN DRAIN PIPE
 (Span 15, 2' from U8' South = 1)
 (Span 14, @ U6 North = 1)



CRACKED DRAIN PIPE
 (Span 24 under S. Girder between Floor Beam 0&1 = 1)
 (Span 27, S. Girder @ Floor Beam 4 = 1)
 (Span 34, @ Floor Beam 2 near South Cantilever Bracket = 1)



DRAIN SUPPORT REPLACEMENT
 (Span 17, 5' West of L6N = 1)
 (Span 27, S. Girder @ Floor Beam 4 = 1)
 (Span 31 N. Drain System 3rd Support Hanger from E. End = 1)



REPLACE EXTENSION ON DRAIN PIPE @ SPAN 34
 (Span 34 N. Side 1st Drain W. of E. Abutment = 1)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Bridge Drainage System Repair	EACH	10

Note:
 Contractor shall protect and re-use existing pipe hangers and supports, unless noted on plans or approved by Engineer.

FILE NAME = S:\Projects\2015 JOBS\151L004-00 OEI PTB 168-17 D4 Cedar St Bridge\CADD\CADD Sheets\0900030-68A93-178-DrainPipeRepair.dgn
 MODEL = Default
 PLOT DRIVER = 151L004 PDF.plt



USER NAME = rgoertz	DESIGNED - DRB	REVISED
0900030-68A93-178-DrainPipeRepair.dgn	CHECKED - SDM	REVISED
PLOT SCALE = 10.0000' / in.	DRAWN - TRF	REVISED
PLOT DATE = 10/05/2015	CHECKED - DRB	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

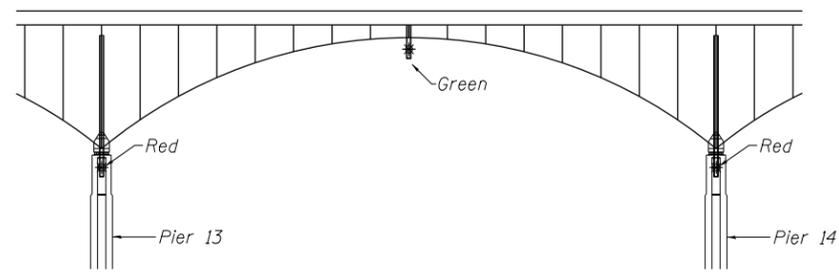
**DRAINAGE SYSTEM REPAIRS
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER**

SHEET NO. 110 OF 112 SHEETS

F.A.P. RTE. = 669	SECTION = (103B)I-7	COUNTY = (*)	TOTAL SHEETS = 180	SHEET NO. = 178
CONTRACT NO. 68A93				

ILLINOIS FED. AID PROJECT

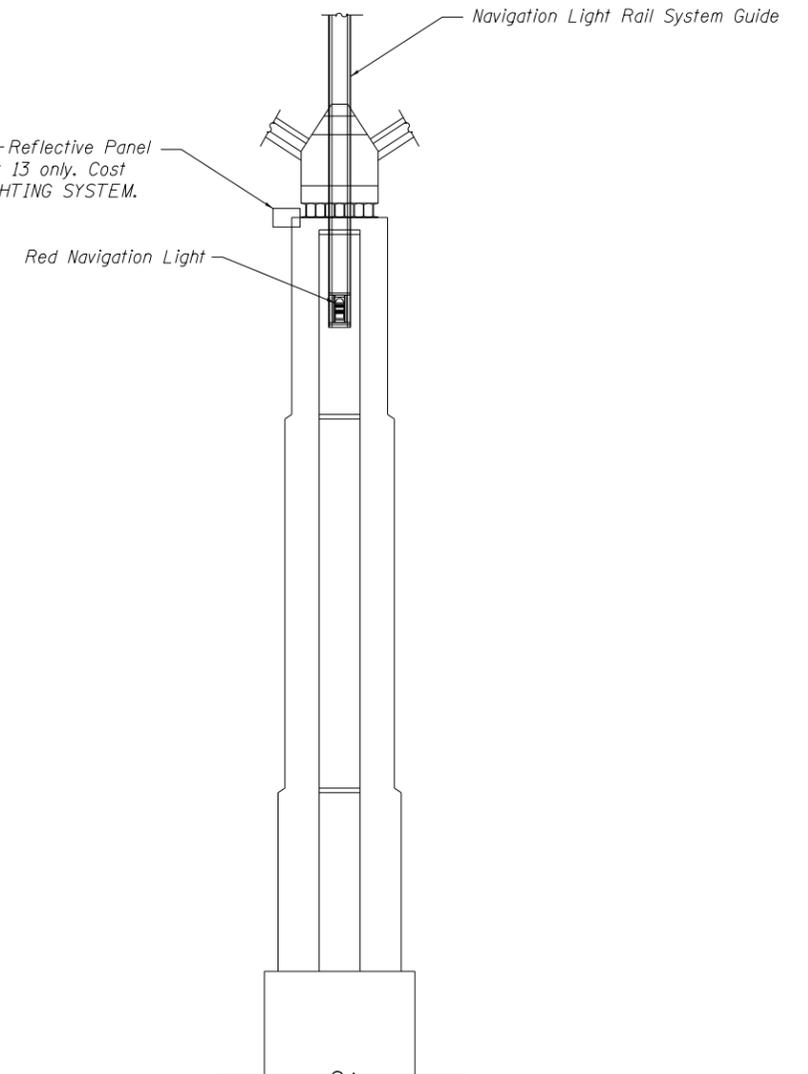
(*) Peoria / Tazewell



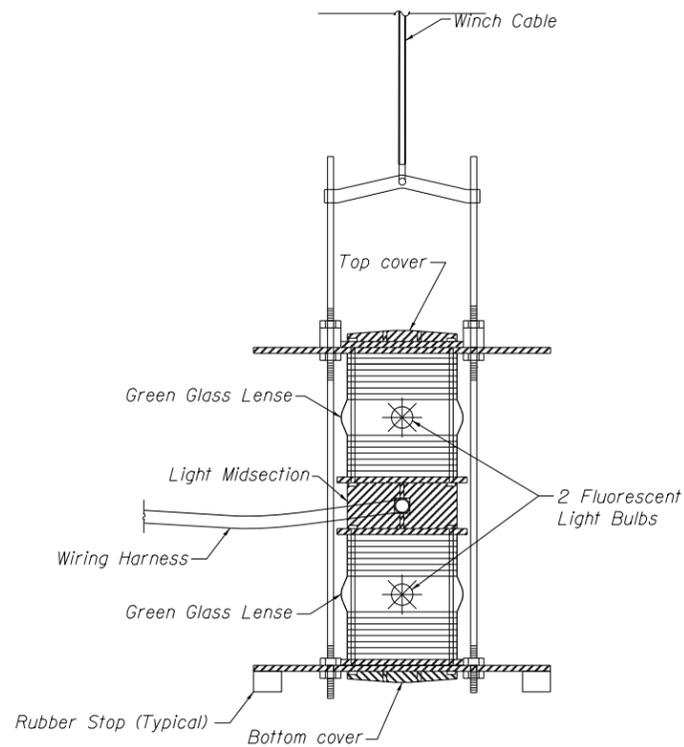
NAVIGATIONAL LIGHTS LOCATION

South Elev. Looking North-Shown
North Elevation Similar

Replace Damaged Red Retro-Reflective Panel 24"x24", upstream side Pier 13 only. Cost included in NAVIGATION LIGHTING SYSTEM.



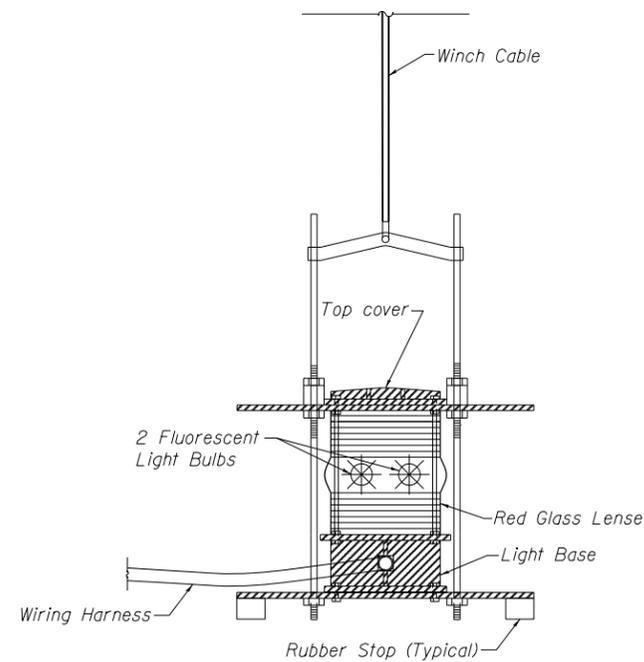
NAVIGATIONAL LIGHT



GREEN NAVIGATIONAL LIGHT

AT MID-SPAN

Typical- 2 Locations



RED NAVIGATIONAL LIGHT

AT PIERS

Typical- 4 Locations

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Navigation Lighting System	L. SUM	1

Note:
Refurbish Navigational Lighting as needed. See Special Provision.
Cost included in NAVIGATION LIGHTING SYSTEM.

FILE NAME = S:\Projects\2015 JOBS\151L004-00 OEI PTB 168-17 D4 Cedar St Bridge\CADD\CADD Sheets\0900030-68A93-179-NavLightRepair.dgn
MODEL = Default
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PLOT DATE = 10/05/2015

DESIGNED - DRB
CHECKED - SDM
DRAWN - TRF
CHECKED - DRB

REVISED
REVISED
REVISED
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

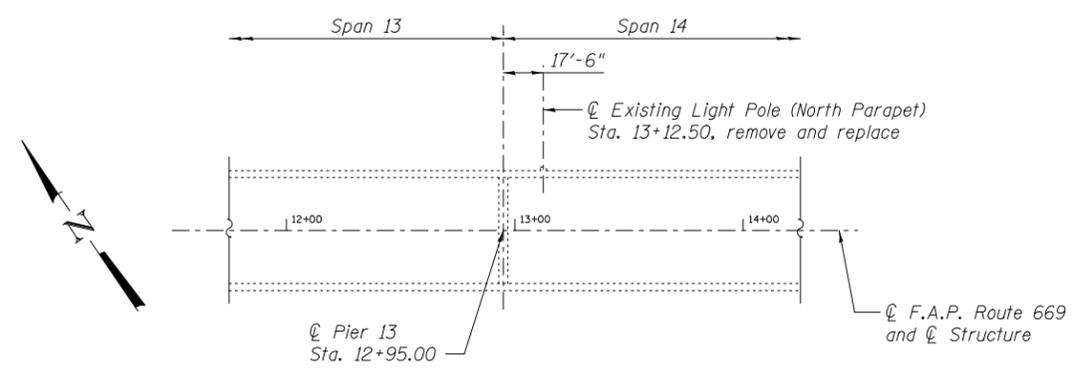
NAVIGATION LIGHT REPAIRS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 111 OF 112 SHEETS

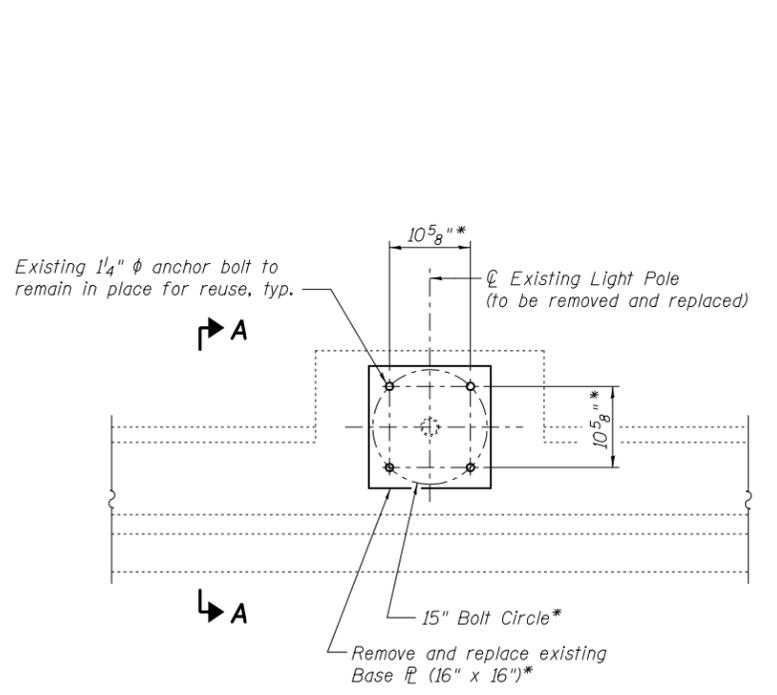
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	(*)	180	179
CONTRACT NO. 68A93				

ILLINOIS FED. AID PROJECT

(*) Peoria / Tazewell

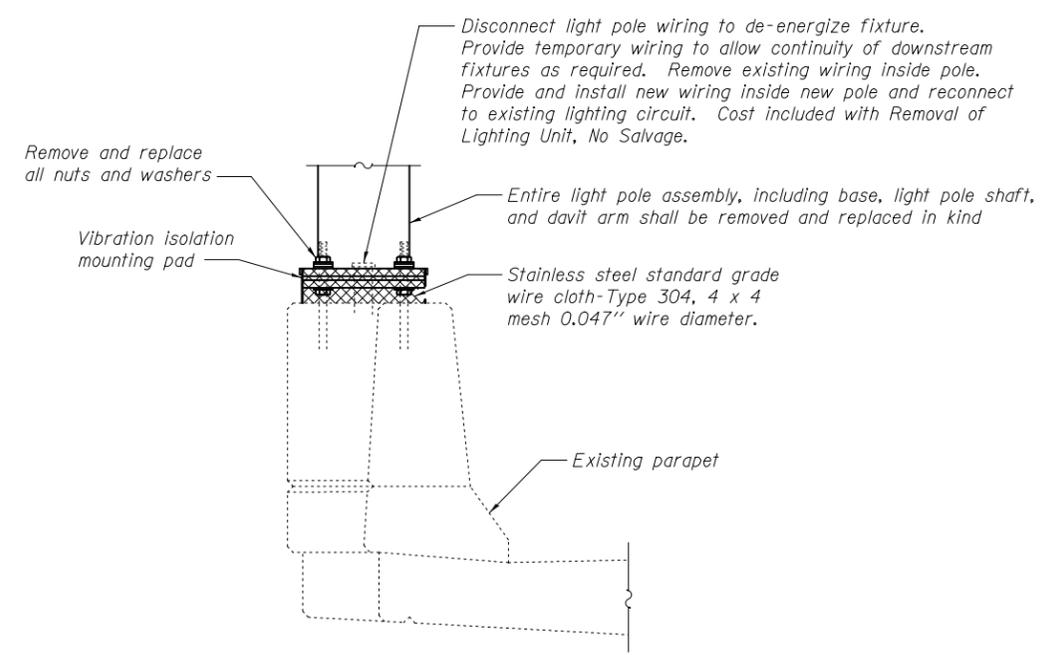


PARTIAL PLAN
EXISTING LIGHT POLE REPLACEMENT



TOP VIEW

* Contractor shall field verify dimensions



SECTION A-A

Notes:
 Existing luminaire shall be removed and replaced with a new LED luminaire. See Sheets L1 to L7 for more details.
 Pole lower shaft and base shall be sized according to 45 foot mounting height requirements. Contractor shall verify mounting height in field.
 New light pole assembly shall be in accordance with IDOT Highway Standard No. 830006-03 Light Pole Aluminum Davit Arm and Section 830 of the Standard Specifications.
 Apply ASTM A780 (galvanized finish) approved paint to exposed surface of corroded existing anchor bolts.
 Remove and store existing roadway signs attached to pole and reinstall on new light pole.
 Work on this sheet to be completed in coordination with lighting repairs shown on Sheets L1 to L7.

LIGHT POLE REPLACEMENT DETAIL

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Light Pole, Aluminum, 45 Ft. M.H., 6 Ft. Davit Arm	Each	1
Removal of Lighting Unit, No Salvage	Each	1



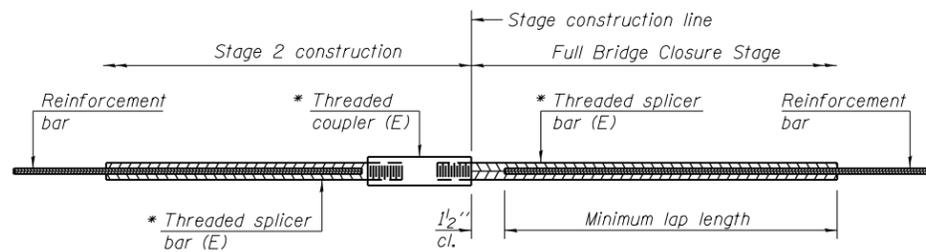
USER NAME =	DESIGNED - KMG	REVISED
	CHECKED - JGS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 10/05/2015	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE REPLACEMENT DETAILS
S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 111A OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	PEORIA/TAZEWELL	180	179A
CONTRACT NO. 68A93				
ILLINOIS FED. AID PROJECT				

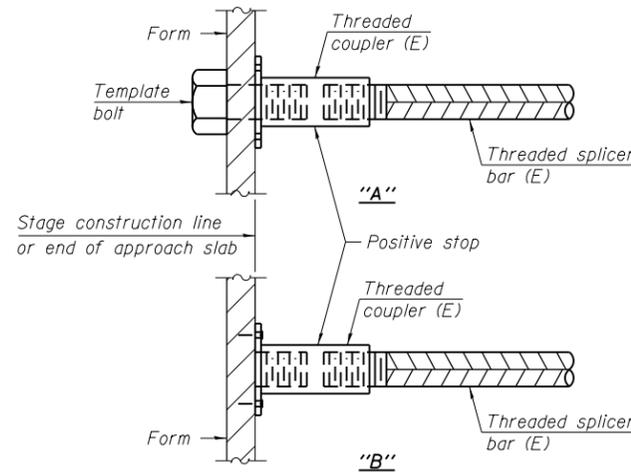


STANDARD BAR SPLICER ASSEMBLY

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

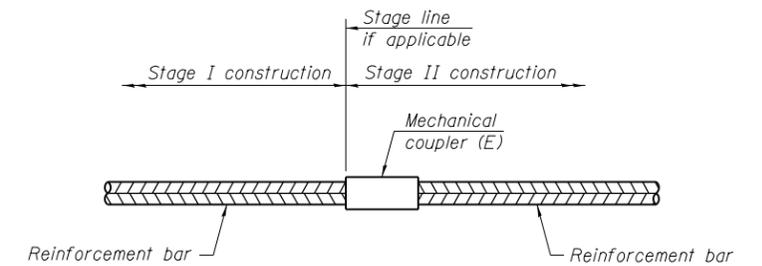
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
W. Abut Slab	#5	47	3'-6"
W. Abut Slab	#7	71	4'-11"
Slab at West Abutment	#5	4	3'-6"
Slab at Pier 2	#5	8	3'-6"
Slab at Pier 4	#5	8	3'-6"
Slab at Pier 5	#5	8	3'-6"
Slab at Pier 8	#5	4	3'-6"
Slab at Pier 9	#5	4	3'-6"
Slab at Pier 10	#5	4	3'-6"
Slab at Pier 11	#5	4	3'-6"
Slab at Pier 12	#5	4	3'-6"
Slab at Midspan 14	#5	18	3'-6"
Slab at Pier 15	#5	4	3'-6"
Slab at Pier 16	#5	4	3'-6"
Slab at Pier 17	#5	4	3'-6"
Slab at Pier 19	#5	4	3'-6"
Slab at Pier 20	#5	4	3'-6"
Slab at Pier 22	#5	4	3'-6"
Slab at Pier 24	#5	4	3'-6"
Slab at Pier 26	#5	4	3'-6"
Slab at Pier 27	#5	4	3'-6"
Slab at Pier 29	#5	4	3'-6"
Slab at Pier 31	#5	4	3'-6"
Slab at Pier 33	#5	4	3'-6"
Slab at East Abutment	#5	4	3'-6"
Total		236	



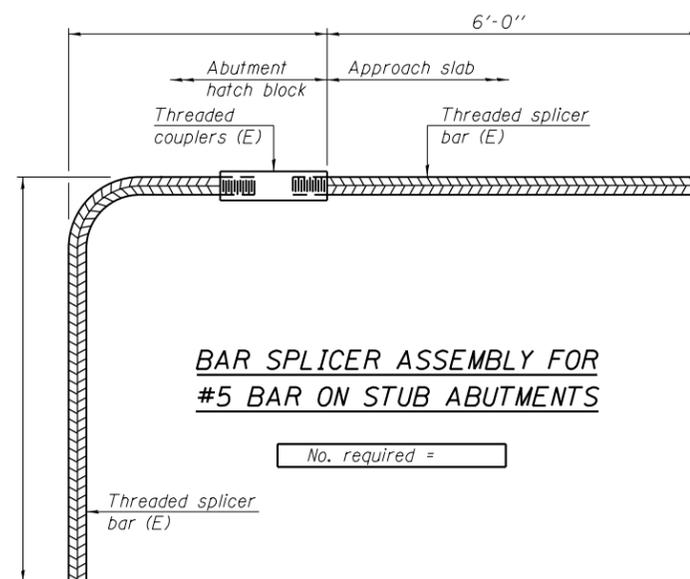
INSTALLATION AND SETTING METHODS

"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

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.

FILE NAME : S:\Projects\2015 JOBS\151L004-00 OEI PTB 188-17 D4 Cedar St Bridge\CADD\CADD Sheets\0900030-68A93-180-Bar-SplicerDet.dgn
 MODEL : Default
 PLOT DRIVER : 151L004 PDF.plt

BSD-1

6-8-15



USER NAME : rgoertz
 0900030-68A93-180-BarSplicerDet.dgn
 PLOT SCALE : 0:2.0000 '1' / in.
 PLOT DATE : 10/05/2015

DESIGNED - DRB
 CHECKED - SDM
 DRAWN - TRF
 CHECKED - DRB
 REVISED
 REVISED
 REVISED
 REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER DETAILS (BASE SHEET)
 S.N. 090-0030 CEDAR STREET BRIDGE OVER ILLINOIS RIVER

SHEET NO. 112 OF 112 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	(103B)I-7	(*)	180	180
CONTRACT NO. 68A93				

ILLINOIS FED. AID PROJECT

(*) Peoria / Tazewell

GENERAL NOTES:

1. LEVELING PLATES FOR BRIDGE MOUNTED LIGHT POLES SHALL BE ACCORDING TO THE PLANS AND SHALL BE GALVANIZED STEEL. IF ANCHOR BOLTS ARE TOO SHORT TO ACCOMMODATE LEVELING PLATES AND ISOLATION PADS THEN REINSTALL POLES ON AN ANCHOR BASE AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
2. ONCE POLES ARE REMOVED, THE GROUT SHALL BE REMOVED FROM ANCHOR BOLTS. BOLTS SHALL BE CLEANED, WIRE BRUSHED, AND PAINTED WITH GALVANOX. REINSTALLED POLES SHALL NOT BE GROUTED AND THE OPENING SHALL BE SEALED WITH STAINLESS STEEL SCREEN OR PERFORATED ALUMINUM SCREEN.
3. ANCHOR BOLTS FOUND TO BE BADLY CORRODED SHALL BE CUT OFF AND REPLACED AS DIRECTED BY THE ENGINEER. CONCRETE SHALL BE REMOVED TO SUFFICIENT DEPTH TO ALLOW COUPLING NUTS TO BE FULLY ENCASED IN NEW CONCRETE WITH A 3 INCH MINIMUM COVER. COUPLING NUTS, BOLT EXTENSIONS, AND NEW CONCRETE SHALL BE ADDED. THIS WORK SHALL BE PAID FOR BY AN AGREED UNIT PRICE FOR REPLACEMENT OF CORRODED ANCHOR BOLTS.
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING LUMINAIRES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND ALL APPLICABLE EPA REGULATIONS.
5. THE CONTRACTOR SHALL DISCONNECT THE EXISTING ELECTRIC CABLE FROM LIGHT POLES AND REMOVE IT FROM THE CONDUIT ATTACHED TO OR EMBEDDED IN STRUCTURE BEFORE THE REMOVAL OF CONCRETE STRUCTURE. INSTALL TEMPORARY WIRING AS NEEDED TO KEEP THE ROADWAY LIGHTING SYSTEM OPERATIONAL DURING THE REPAIR AND REPLACEMENT OF THE PARAPET WALL SECTIONS. INSTALL NEW CONDUIT AS NEEDED AND SPLICE IT TO EXISTING CONDUIT IN A MANNER APPROVED BY THE ENGINEER. AFTER THE PARAPET WALL HAS BEEN REPLACED, THE CONTRACTOR SHALL REINSTALL THE CABLE, RECONNECT THE LIGHT POLES, AND PERFORM ALL WORK REQUIRED TO MAKE THE ROADWAY LIGHTING SYSTEM OPERATIONAL. ANY DAMAGE CAUSED BY THE REMOVAL AND REINSTALLATION OF THE CONDUCTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER OR NEW CONDUCTOR SHALL BE INSTALLED AT THE CONTRACTOR'S EXPENSE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE OF THE "RELOCATE EXISTING LIGHTING UNIT" PAY ITEM.
6. THE CONTRACTOR SHALL TAKE INSULATION RESISTANCE MEASUREMENTS OF THE EXISTING ROADWAY LIGHTING CIRCUITS BEFORE ANY MODIFICATIONS ARE MADE AND PROVIDE WRITTEN RESULTS TO THE ENGINEER. EXISTING CIRCUITS NOT TESTED AND PROPERLY DOCUMENTED SHALL BE SUBJECT TO THE INSULATION RESISTANCE REQUIREMENTS OF ARTICLE 801.13. AFTER THE PROPOSED ROADWAY LUMINAIRES ARE INSTALLED AND ALL NEEDED MODIFICATIONS ARE MADE, THE CONTRACTOR SHALL TAKE INSULATION RESISTANCE MEASUREMENTS ACCORDING TO ARTICLE 801.13 AND PROVIDE WRITTEN RESULTS TO THE ENGINEER. IF THE TEST RESULTS DO NOT MEET OR EXCEED THE ORIGINAL READINGS, THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR REQUIRED TO BRING THE CIRCUITS BACK UP TO THAT LEVEL AT HIS OWN EXPENSE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE "RELOCATE EXISTING LIGHTING UNIT" PAY ITEM.
7. THE CONTRACTOR SHALL NOTIFY THE UNITED STATES COAST GUARD SECTOR UPPER MISSISSIPPI RIVER TWO WEEKS PRIOR TO ANY PLANNED NAVIGATION LIGHTING OUTAGE.
8. PROPOSED NAVIGATION OBSTRUCTION WARNING LUMINAIRE LOCATIONS ARE BASED ON THE AS-BUILT PLANS. CONTRACTOR SHALL VERIFY EXACT LOCATIONS IN THE FIELD.
9. EXISTING NAVIGATION OBSTRUCTION WARNING LUMINAIRES AT THE LOCATIONS SHOWN ON THE AS-BUILT PLANS SHALL BE REMOVED AND REPLACED. SEE NAVIGATION LIGHTING SYSTEM SPECIAL PROVISION FOR MORE INFORMATION.
10. THE CONTRACTOR'S CONSTRUCTION SEQUENCING SHALL MINIMIZE OUTAGE DURATION OF THE EXISTING NAVIGATION LIGHTING. THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY CABLE AND TEMPORARY NAVIGATION LIGHTS AS NEEDED TO KEEP THE NAVIGATIONAL LIGHTING SYSTEM OPERATIONAL DURING THE REPAIR AND REPLACEMENT OF THE PARAPET WALL SECTIONS. AFTER THE PARAPET WALL HAS BEEN REPLACED, THE CONTRACTOR SHALL REINSTALL THE CABLE, RECONNECT THE LUMINAIRES, AND PERFORM ALL WORK REQUIRED TO MAKE THE NAVIGATIONAL LIGHTING SYSTEM OPERATIONAL. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE OF THE "NAVIGATION LIGHTING SYSTEM" PAY ITEM.
11. THE CONTRACTOR SHALL TAKE INSULATION RESISTANCE MEASUREMENTS OF THE EXISTING NAVIGATION LIGHTING CIRCUITS BEFORE ANY MODIFICATIONS ARE MADE AND PROVIDE WRITTEN RESULTS TO THE ENGINEER. EXISTING CIRCUITS NOT TESTED AND PROPERLY DOCUMENTED SHALL BE SUBJECT TO THE INSULATION RESISTANCE REQUIREMENTS OF ARTICLE 801.13. AFTER THE PROPOSED NAVIGATION LUMINAIRES ARE INSTALLED AND ALL NEEDED MODIFICATIONS ARE MADE, THE CONTRACTOR SHALL TAKE INSULATION RESISTANCE MEASUREMENTS ACCORDING TO ARTICLE 801.13 AND PROVIDE WRITTEN RESULTS TO THE ENGINEER. IF THE TEST RESULTS DO NOT MEET OR EXCEED THE ORIGINAL READINGS, THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR REQUIRED TO BRING THE CIRCUITS BACK UP TO THAT LEVEL AT HIS OWN EXPENSE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE "NAVIGATION LIGHTING SYSTEM" PAY ITEM.
12. THE COST OF REMOVAL AND REPLACEMENT OF LIGHT POLE FOUNDATIONS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "CONCRETE SUPERSTRUCTURE".

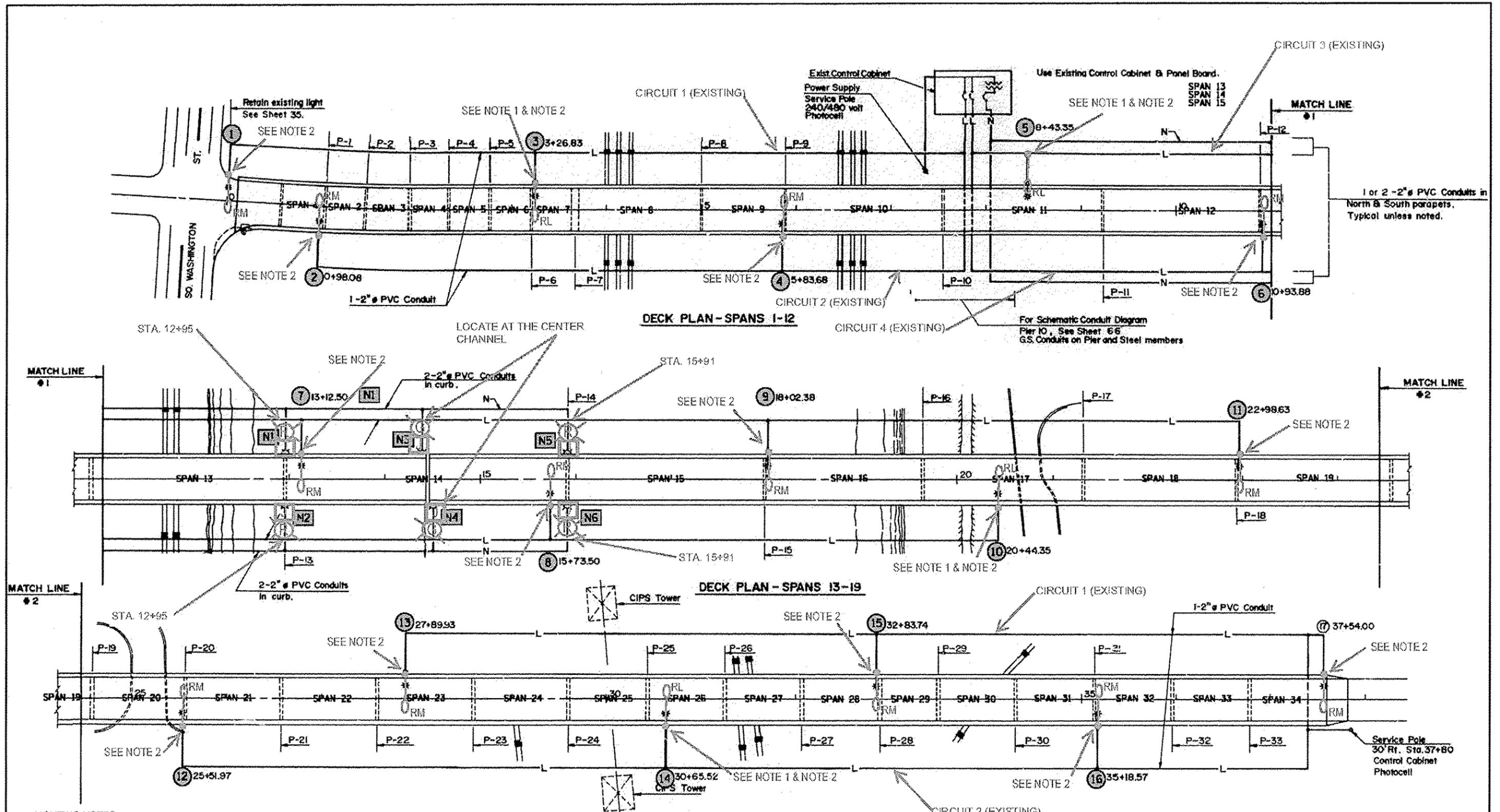
SCHEDULE OF QUANTITIES - LIGHTING		
ITEM DESCRIPTION	UNIT	TOTAL QTY.
CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	420.0
LUMINAIRE, LED, HORIZONTAL MOUNT, MEDIUM WATTAGE	EACH	17.0
RELOCATE EXISTING LIGHTING UNIT	EACH	4.0
NAVIGATION LIGHTING SYSTEM	L SUM	1.0

LEGEND

- EXISTING LIGHTING UNIT TO BE REMOVED AND REINSTALLED (REPLACE LUMINAIRE ON REINSTALLED POLE)
- EXISTING LIGHTING UNIT TO REMAIN (REPLACE LUMINAIRE ON EXISTING POLE)
- PROPOSED NAVAGATIONAL OBSTRUCTION WARNING LUMINAIRE, 360 DEGREE GREEN CENTER CHANNEL, LED
- PROPOSED NAVAGATIONAL OBSTRUCTION WARNING LUMINAIRE, 180 DEGREE RED CHANNEL MARGIN, LED
- EXISTING JUNCTION BOX ATTACHED TO STRUCTURE

INDEX OF SHEETS

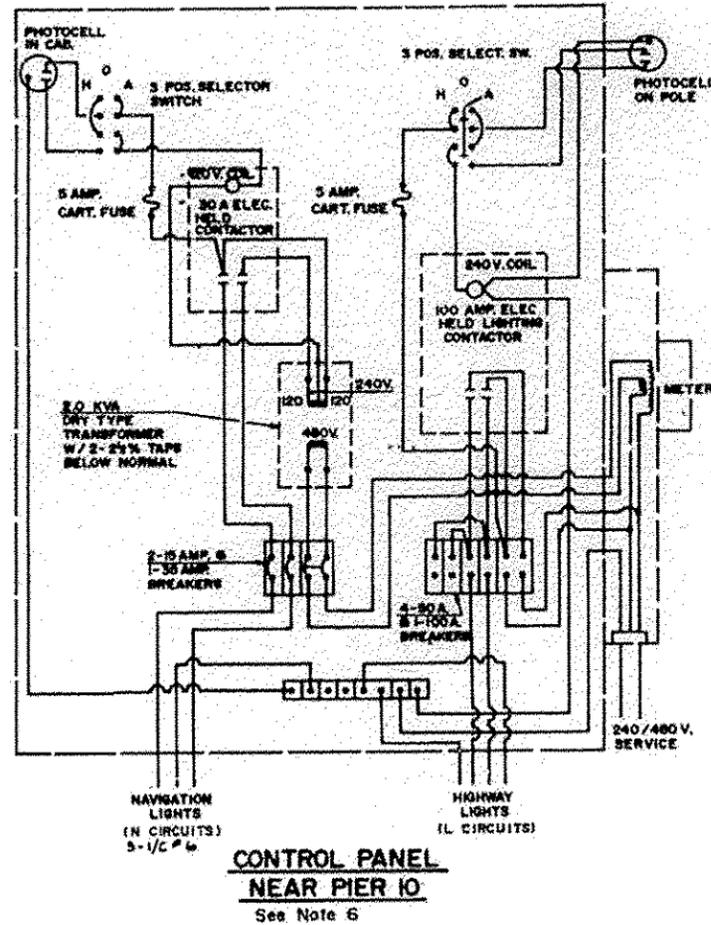
- L1 GENERAL NOTES, SCHEDULES AND INDEX OF SHEETS
- L2 PROPOSED LIGHTING PLANS
- L3-L6 DETAIL DRAWINGS
- L7 WIRING DIAGRAM AND LUMINAIRE PERFORMANCE TABLE



LIGHTING NOTES:

1. LIGHT POLE SHALL BE REMOVED DURING CONSTRUCTION AND STORED. REINSTALL LIGHT POLE AT THE PROPOSED FOUNDATION ACCORDING TO ARTICLE 844.03(b) OF STANDARD SPECIFICATIONS. THE COST IS INCLUDED IN "RELOCATE EXISTING LIGHTING UNIT".
2. REMOVE EXISTING LUMINAIRE AND INSTALL NEW MEDIUM WATTAGE HORIZONTAL MOUNT LED LUMINAIRE, TYPE III. INSTALL POLE WIRING AND FUSE KIT. THE COST OF THE NEW POLE WIRING AND FUSE KIT ARE INCLUDED IN THE COST OF THE NEW LUMINAIRE.

FILE NAME *	USER NAME * Kowalder	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING PLANS CEDAR STREET BRIDGE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PV26283 - Controller Replacement & BRG	Project/REV/3 - Cedar Street Bridge Lightin	DRAWN/mentelgn	REVISED -		SCALE:	STA. _____ TO STA. _____	669	(1038)I-7	PEORIA-TAZEWELL	180	180B
PLOT SCALE = 3/8" = 1'-0"	CHECKED -	REVISED -	REVISED -				CONTRACT NO. 68A93		[ILLINOIS] FED. AID PROJECT		
PLOT DATE = 11/24/2015	DATE -	REVISED -	REVISED -								



**CONTROL PANEL
NEAR PIER 10**
See Note 6

**HIGHWAY LIGHTING
BILL OF MATERIAL (See Sheet 64 of 70)**

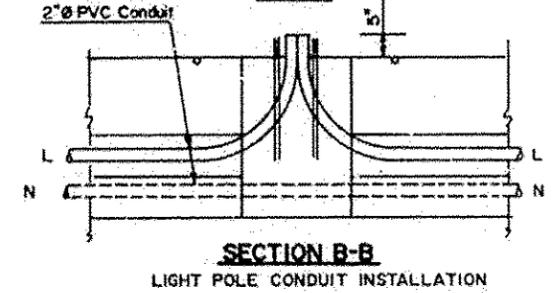
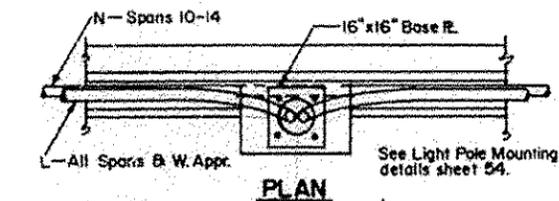
ITEM	UNIT	QUANTITY
* Electrical Cable in Conduit, 600V (XLP-Type USE) 1/C NO. 12	Lin. Ft.	1734
** ELCBL C 600V (XLP) 1/C NO. 6	Lin. Ft.	13,510
** Bare Copper Wire, 1/C NO. 6	Lin. Ft.	6748
Conduit in Trench, 2" Dia. Galvanized Steel	Lin. Ft.	54
Conduit Attached to Structure, 2" Dia. Galv. Steel	Lin. Ft.	144
Conduit Attached to Structure, 2" Dia. PVC	Lin. Ft.	6,440
Light Pole Aluminum, 45" M.H. 6 Ft. Davit Arm	Each	16
Luminare, Sodium Vapor, Rectilinear Type 150 Watt	Each	One
Luminare, Sodium Vapor, Rectilinear Type 250 Watt	Each	16
Removal of Existing Lighting System, Complete	Lump Sum	One
Modify Existing Control Installation	Each	One
Adjust Existing Light Standard	***	***

* Internal wiring in 17 light poles, 2-1/C #12.
** L circuit (2-1/C #6 & 1-C #6 bare)

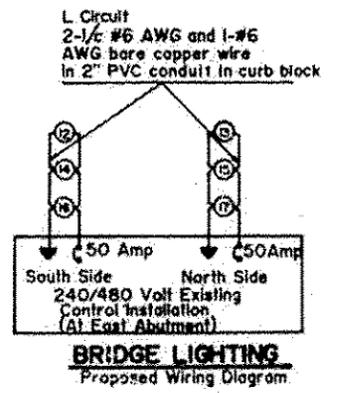
NOTES - BRIDGE ELECTRICAL WORK
SEE SHEET 64

- NOTE 1: POWER FOR THE BRIDGE ROADWAY LIGHTING SYSTEM IS SUPPLIED FROM TWO SERVICE SOURCES, ONE NEAR PIER 10, THE OTHER NEAR THE EAST ABUTMENT.
- NOTE 2: THIS CONTRACT INCLUDES THE REWIRING OF A COMPLETE LIGHTING SYSTEM INCLUDING, BUT NOT LIMITED TO, PROVIDING SERVICE FROM EXISTING CONTROL CABINETS TO SIXTEEN (16) PROPOSED LIGHT POLES, ONE (1) EXISTING LIGHT POLE AND SIX (6) NAVIGATION LIGHTS, REPLACED IN A PRECEDING CONTRACT.
- NOTE 3: PAYMENT FOR THE PROPOSED REWIRING IS PROVIDED FOR IN BID ITEMS FOR GALVANIZED STEEL AND PVC CONDUITS AND ELECTRIC CABLE. NAVIGATION LIGHTING IS ON A LUMINA BASIS.
- NOTE 4: IMBEDDED CONDUITS IN PARAPET CURB BLOCKS SHALL BE 2" DIA. PVC PIPE, SCHEDULE 40, OR APPROVED SUBSTITUTE, UNLESS OTHERWISE DESIGNATED. CONDUITS NOT PROTECTED BY CONCRETE SHALL BE GALVANIZED STEEL OF A SIZE SHOWN IN THE PLANS.
- NOTE 5: PAYMENT FOR FURNISHING AND INSTALLING JUNCTION BOXES, CONDUITS, HANGERS, ATTACHMENT DEVICES, EXPANSION SLEEVES, PULL BOXES AND ACCESSORIES REQUIRED BY THE NATIONAL ELECTRIC CODES AND/OR SHOWN IN, BUT NOT LIMITED TO THE PLANS, IS INCIDENTAL TO THE COST OF THE APPROPRIATE CONDUIT, LINEAL FEET.
- NOTE 6: MODIFICATION OF EXISTING CONTROL CABINET TO REPLACE EXISTING OVERHEAD WIRING CONNECTION TO PIER 10 WITH BURIED GALVANIZED STEEL CONDUIT CONNECTION IS BILLED AS "MODIFY EXISTING CONTROL INSTALLATION, EACH".
- NOTE 7: REHABILITATION OF EXISTING LIGHT POLE AT WEST APPROACH INCLUDES ITEM "ADJUST EXISTING LIGHT STANDARD". INSTALLATION OF 150 WATT LUMINARE AND REWIRING WITHIN THE POLE.

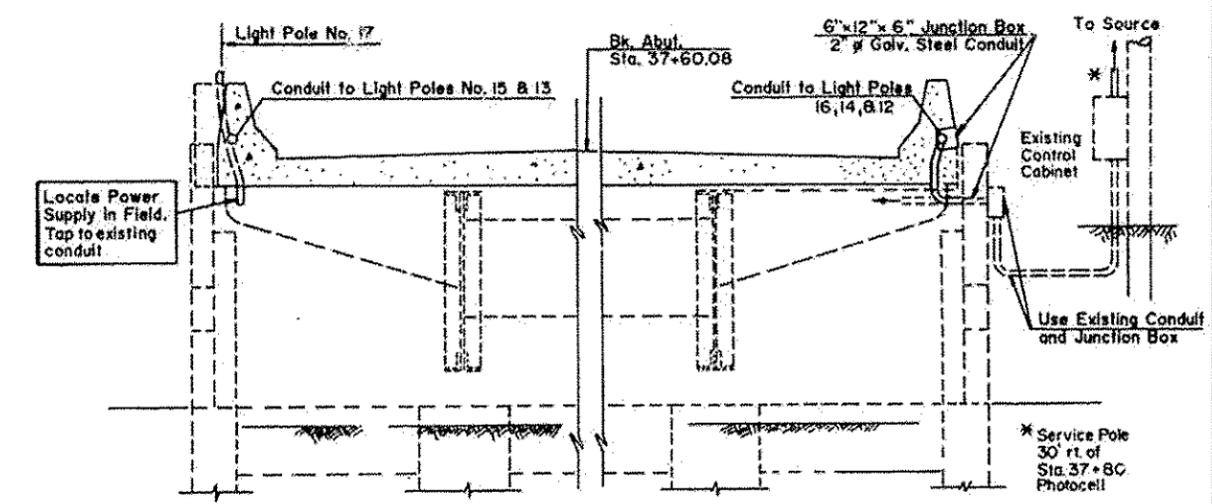
FOR INFORMATION ONLY



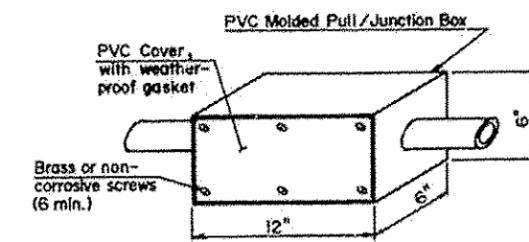
SECTION B-B
LIGHT POLE CONDUIT INSTALLATION



BRIDGE LIGHTING
Proposed Wiring Diagram



EAST ABUTMENT CONNECTIONS



PULL/JUNCTION BOX
Outside Parapet Curb Installation
L & N Circuits

CIRCUIT IDENTIFICATION
L=Bridge Roadway Lighting
N=Navigation Lighting

For box locations see Deck Plan Sheets

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

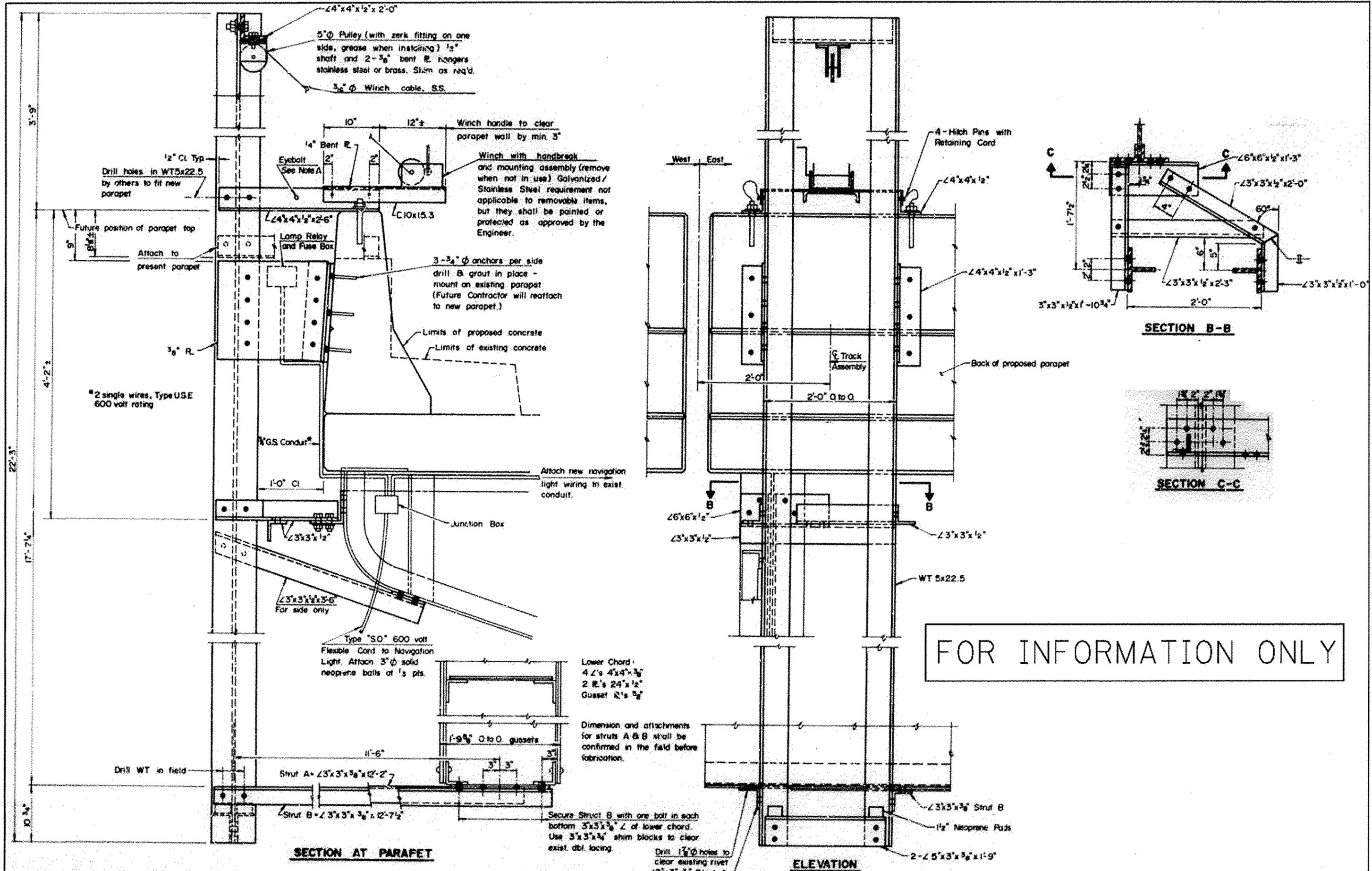
EXISTING ROADWAY LIGHTING
CEDAR STREET BRIDGE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	103B1-7	PEORIA-TAZEWELL	180	180C
CONTRACT NO. 68A93				

FILE NAME *	USER NAME *	DESIGNED -	REVISED -
PROJECT *	PROJECT *	CHECKED -	REVISED -
PLOT SCALE *	PLOT DATE *	DATE -	REVISED -

SCALE: _____ STA. _____ TO STA. _____

ILLINOIS FED. AID PROJECT



FILE NAME *	USER NAME * hvalder	DESIGNED -	REVISED -
PROJECT * Controller Replacement & 025	PROJECT * Q8W13 - Cedar Street Bridge Lighting	DRAWN * hvalder	REVISED -
PLOT SCALE * 3/8" = 1' - 0"	CHECKED -	REVISIONS	REVISED -
PLOT DATE * 11/24/2016	DATE -		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

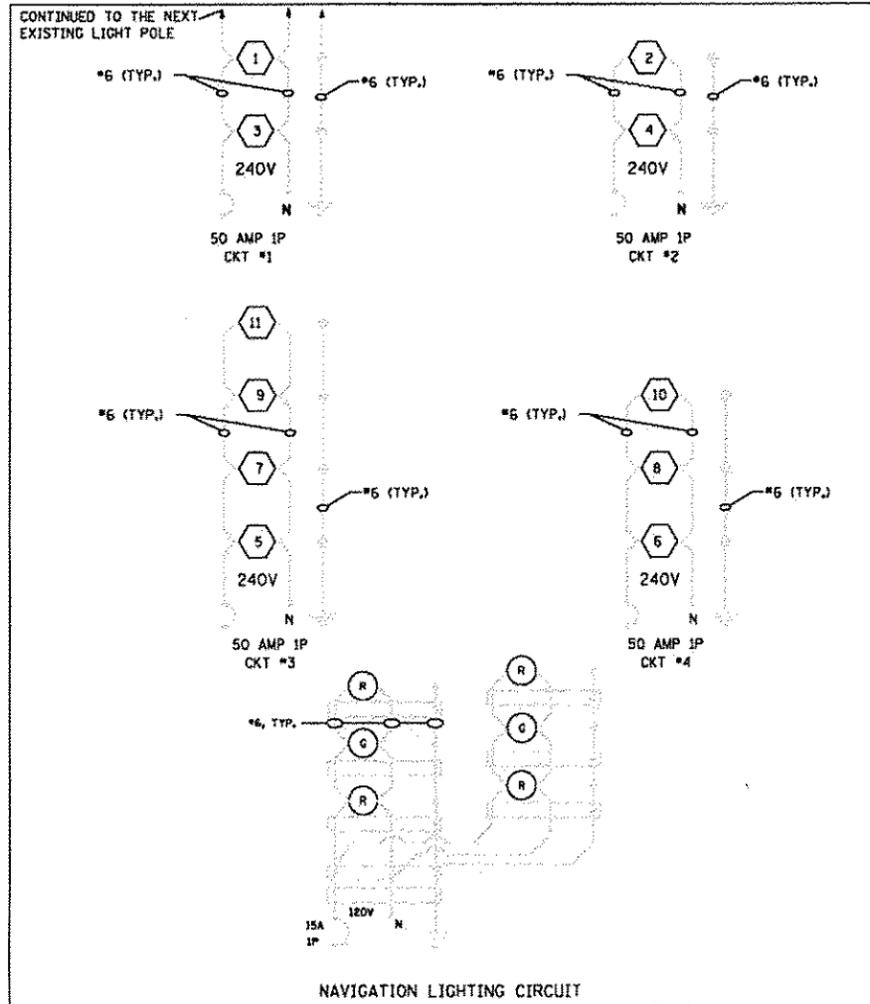
EXISTING NAVIGATIONAL LIGHTING
CEDAR STREET BRIDGE

SCALE: _____

STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
669	1038H-7	PEORIA-TAZEWELL	100	100D
CONTRACT NO. 68A93				
ILLINOIS FUEL AID PROJECT				

EXISTING CONTROLLER 1
(NEAR PIER 10)



LEGEND

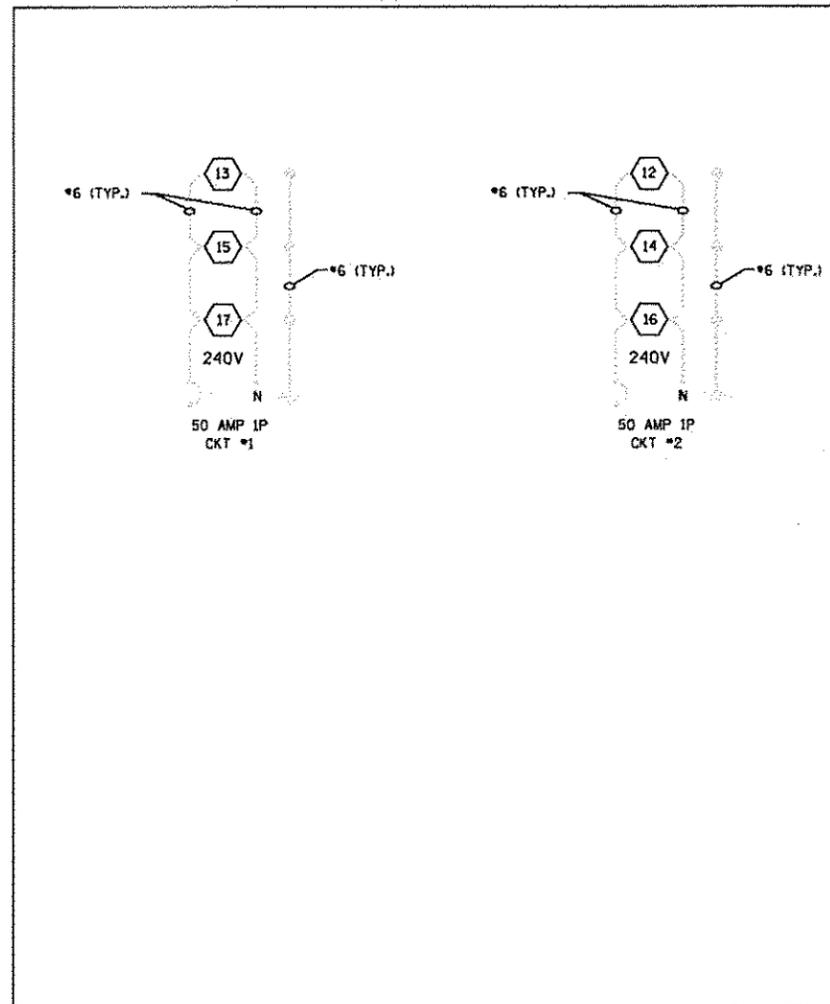
- RED 180 DEGREE CHANNEL MARGIN LED NAVIGATION LUMINAIRE
- GREEN 360 DEGREE CHANNEL CENTER LED NAVIGATION LUMINAIRE
- MEDIUM WATTAGE LED LUMINAIRE
- JUNCTION BOX

NOTES:

1. ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.
2. EXISTING CIRCUIT SHOWN IN SHADED COLOR

WIRING DIAGRAM

EXISTING CONTROLLER 2
(AT EAST ABUTMENT STA.37+80)



ILLINOIS DEPARTMENT OF TRANSPORTATION
LUMINAIRE PERFORMANCE TABLE - PROPOSED LIGHTING

GIVEN CONDITIONS		
ROADWAY DATA:	PAYMENT WIDTH	24 (FT.)
	NUMBER OF LANES (IN DIRECTION OF TRAVEL)	2
	I.E.S. SURFACE CLASSIFICATION	R3
	Q-ZERO VALUE	.07
LIGHT POLE DATA:	MOUNTING HEIGHT	47 (FT.)
	MAST ARM LENGTH	6 (FT.)
	POLE SET-BACK FROM EDGE OF PAVEMENT	0 (FT.)
LUMINAIRE DATA:	LUMINAIRE TYPE	LED
	LUMINAIRE LUMENS	20,000 MINIMUM
	LUMEN DEPRECIATION FACTOR	0.90
	DIRT DEPRECIATION FACTOR	0.80
	EQUIPMENT FACTOR	0.95
	TOTAL LIGHT LOSS FACTOR	0.684
LAYOUT DATA:	SPACING	515 (FT.)
	CONFIGURATION	STAGGERED
	LUMINAIRE OVERHANG OVER EDGE OF PAVEMENT LANE	0 (FT.)

NOTE: VARIATIONS FROM THE ABOVE SPECIFIED I.E.S. DISTRIBUTION PATTERN MAY BE REQUESTED AND ACCEPTANCE OF VARIATIONS WILL BE SUBJECT TO REVIEW BY THE ENGINEER BASED ON HOW WELL THE PERFORMANCE REQUIREMENTS ARE MET.

PERFORMANCE REQUIREMENTS		
LUMINANCE:	AVERAGE LUMINANCE: (L _{AVE})	0.6 Cd/m ²
	UNIFORMITY RATIOS: (L _{AVE} /L _{MIN})	3.5:1 (MAX)
	(L _{MAX} /L _{MIN})	6.0:1 (MAX)
	MAXIMUM VEILING LUMINAIRE RATIO: (L _V /L _{AVE})	0.3:1 (MAX)