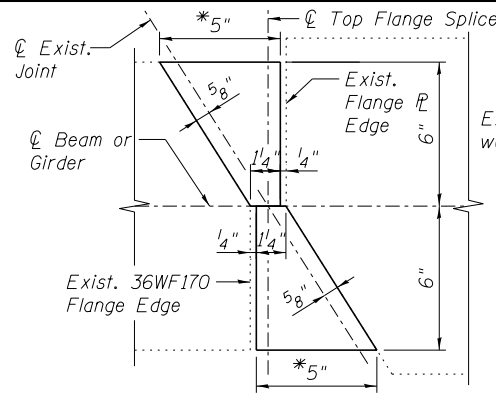


TOP FLANGE SPLICE

(Web splice PL's not shown for clarity)

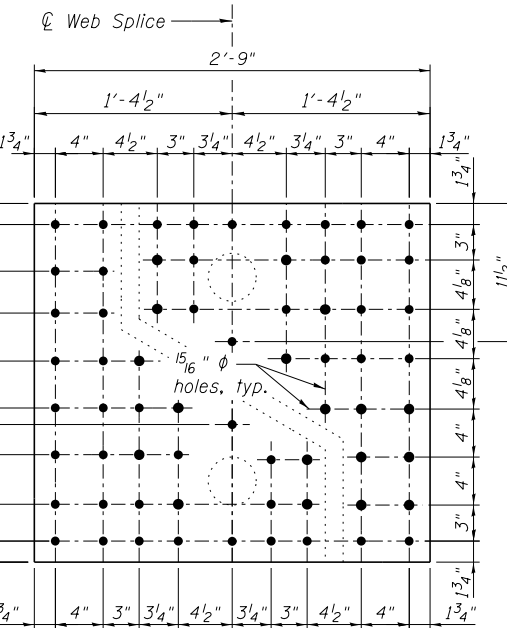


ADDITIONAL TOP FLANGE FILL PLATES

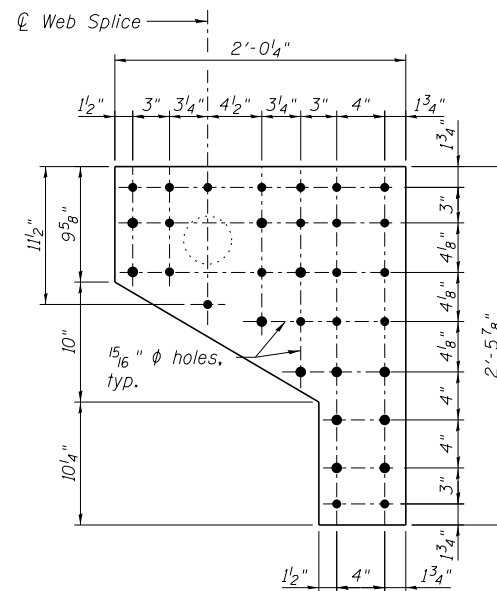
*Verify all dimensions in field.

BOLT HOLE LEGEND

- New bolt hole to be field drilled.
- Existing bolt hole to be reamed and reused.
- ⊙ Existing hole to be plugged with 3/4" φ high strength bolt.
- ⋯ Existing hole to remain.



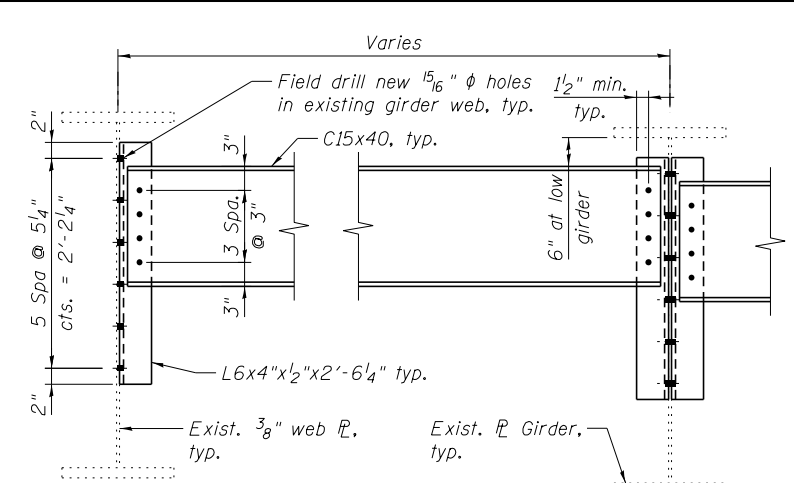
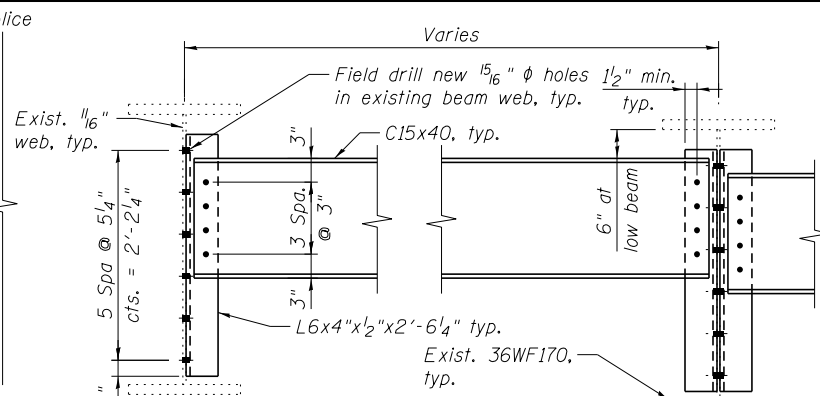
WEB SPLICE PLATE DETAIL



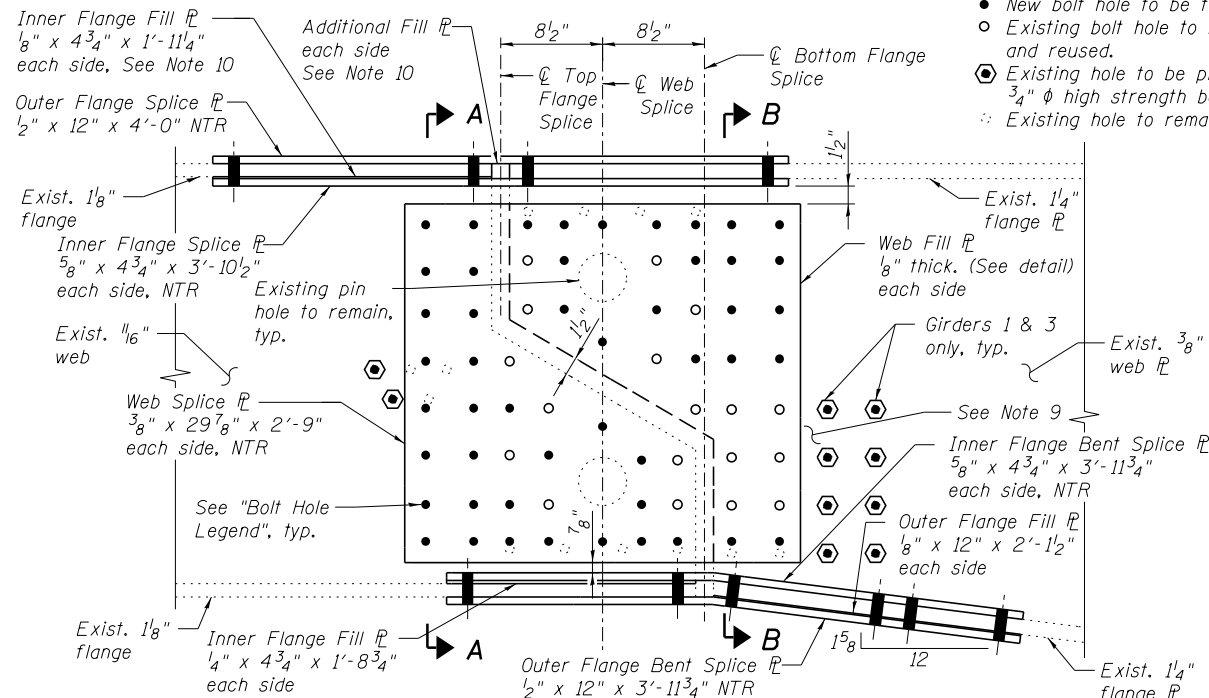
WEB FILL PLATE DETAIL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAIL
(3 Locations)

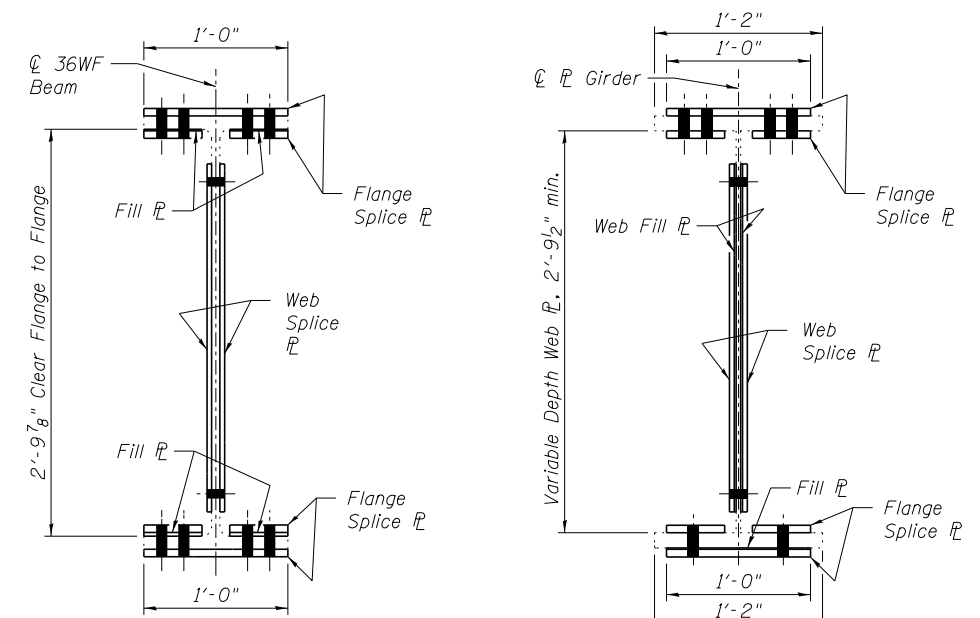


DIAPHRAGM DETAIL
(3 Locations)



ELEVATION - FIELD SPLICE

(4 Locations)



SECTION A-A

SECTION B-B

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Furnishing and Erecting Structural Steel	Pound	5,030

NOTES:

1. All Splice Plates shall be AASHTO M270 Grade 50 steel.
2. All Splice Bolts shall be 7/8" φ High Strength ASTM A325 Type 1, mechanically galvanized with 15/16" φ holes.
3. Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
4. Cost of field drilling included in Furnishing and Erecting Structural Steel.
5. All diaphragm bolts shall be ASTM A325 Type 1, mechanically galvanized 3/4" φ bolts with 15/16" φ holes. Two hardened washers required for each set of oversized holes.
6. The Contractor is responsible for verifying all dimensions of the existing bolt hole configuration before fabrication of the Splice Plates.
7. For details of existing pin and link connection removal, see Sheet SF11.
8. For partial framing plan and moment and reaction tables, see Sheet SF10.
9. For Girders 1 and 3, after removal of existing web repair PL's, the area around the existing cracks and arrester holes shall be inspected using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any additional cracking shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of inspecting and testing the existing webs shall be included with the cost of Furnishing and Erecting Structural Steel.
10. Additional 1/4" fill PL's shall be provided at both sides of each top flange splice to occupy space between the outer & inner flange splice PL's and the chamfered ends of the existing girder & 36WF. Dimensions of these fill PL's shall be determined in the field and fabricated such that a 1/4" maximum horizontal clear distance be maintained between the fill PL and the existing flange edges. Each of these fill PL's shall be fastened to the top flange splice PL's with a single bolt as shown. Holes for these bolts may be field drilled.

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engineers · scientists · planners

Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10093

FILE NAME =	USER NAME = tjjenicke	DESIGNED - TJJ	REVISED -
0161026_60J16_012_Struct_Steel_Details.dgn		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - RMG	REVISED -
	PLOT DATE = 12/20/2013	CHECKED - AJK	REVISED -

FIELD BOLTED SPLICE & DIAPHRAGM DETAILS
STRUCTURE NO. 016-1026

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-038B-R	COOK	821	555
CONTRACT NO. 60J16				
ILLINOIS FED. AID PROJECT				

SHEET NO. SF12 OF SF17 SHEETS

Y:\chicago\100005\100093\Eng_Docs\Phase 1\1\SN 016-1026-SB-1st-Ave-Ramp-over_Des_Plaines_River_Final\Final 1026\0161026_60J16_012_Struct_Steel_Details.dgn 5/12/14 PM 7/15/2014