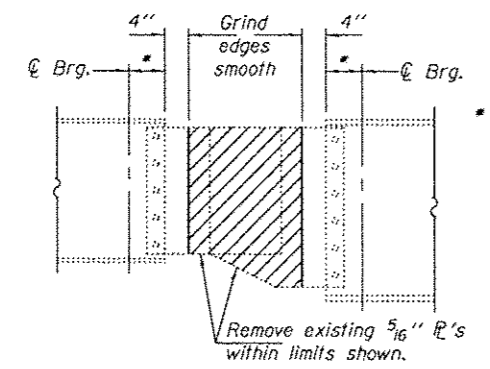


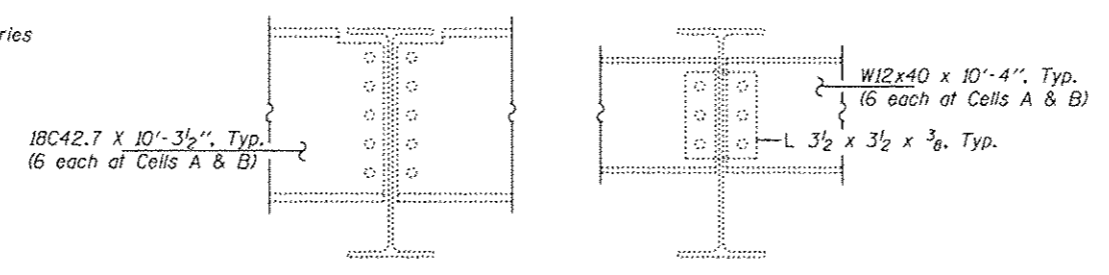
\*\* Existing Bent R's to be removed. Existing brackets to remain.



**VIEW G-G**

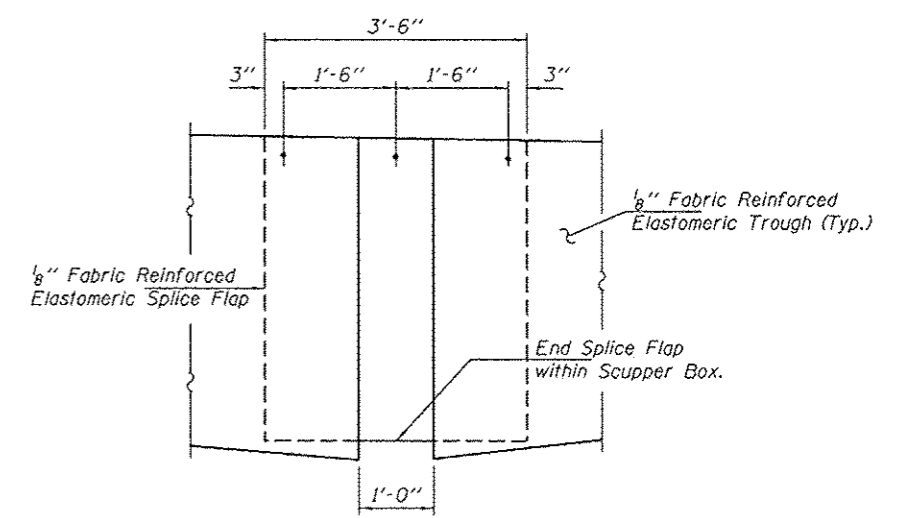
(Showing Removal, Fascia Beams only)  
Plate sizes vary. Cost included with Structural Steel Removal.

**CROSS-SECTION THRU TROUGH AT PIERS 3, 4, 8, 12 & 13**  
(Looking Eastbound / South)

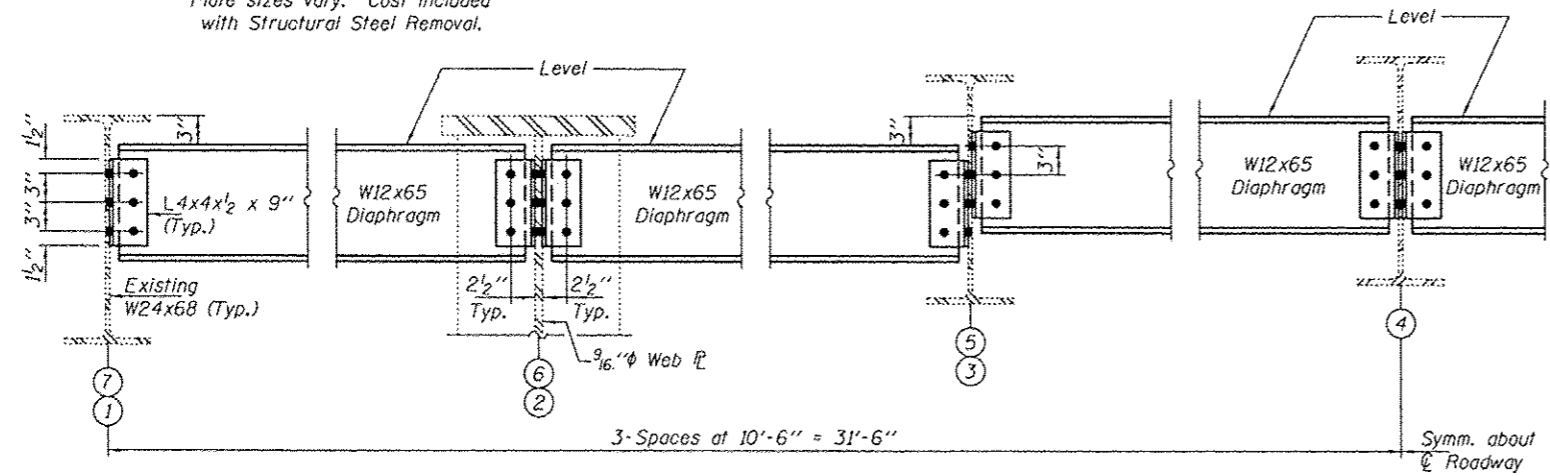


**TYPICAL EXISTING DIAPHRAGM & CHANNEL REMOVAL DETAILS**

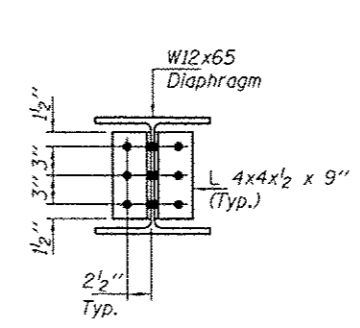
Plug All Open Holes with 7/8"φ H.S. Bolts.



**TROUGH SPLICE DETAIL**  
(Scupper Box not shown for clarity)



**DIAPHRAGM DETAILS AT CELLS A & B**



**TYPICAL SECTION THRU DIAPHRAGM**

Note:  
Diaphragm connection holes shall be 5/16"φ for 3/4"φ H.S. bolts.  
Two hardened washers shall be required at diaphragm connections.

DESIGNED ATH  
CHECKED SMR  
DRAWN Kyle M. Steffen  
CHECKED ATH SMR

EXAMINED  
PASSED  
DATE - MARCH 14, 2013  
ACTING ENGINEER OF STRUCTURAL SERVICES  
ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM AND TROUGH DETAILS  
SN 064-0035

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
24	BSMART 2013-1	MASSAC	23	18
CONTRACT NO. 78293			ILLINOIS FED. AID PROJECT	

SHEET NO. 10 OF 15 SHEETS