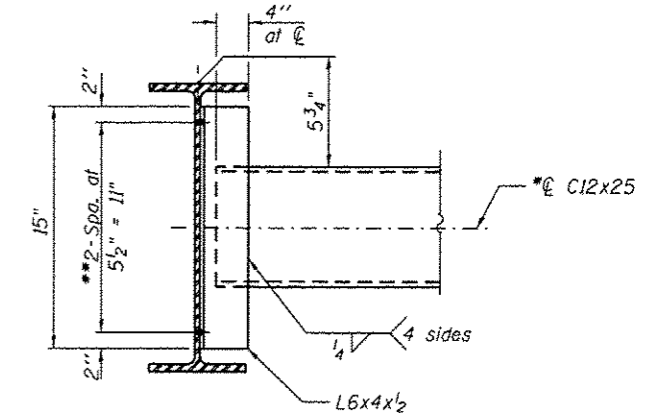


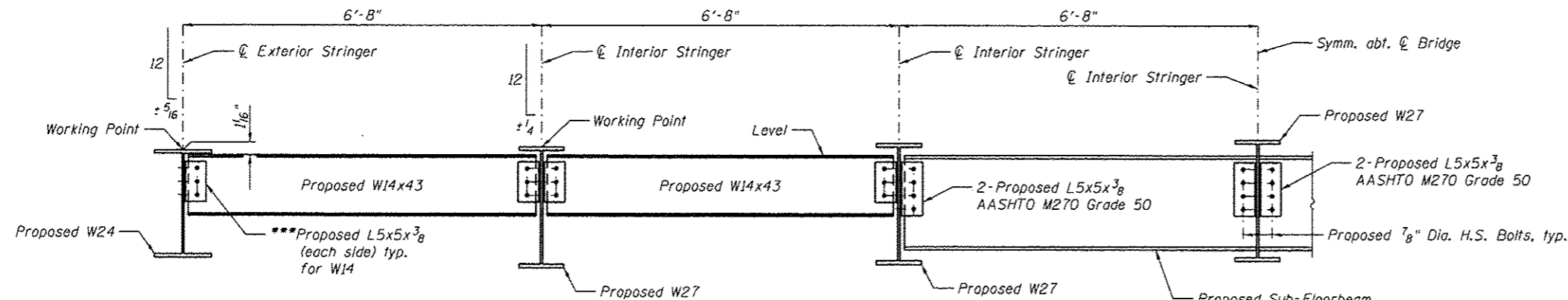
**TYPICAL INTERMEDIATE DIAPHRAGM  
PANEL POINTS L17 THRU L17'**



**INTERMEDIATE DIAPHRAGM DETAIL**

\*C12x30 can be used as an alternate channel size. Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.

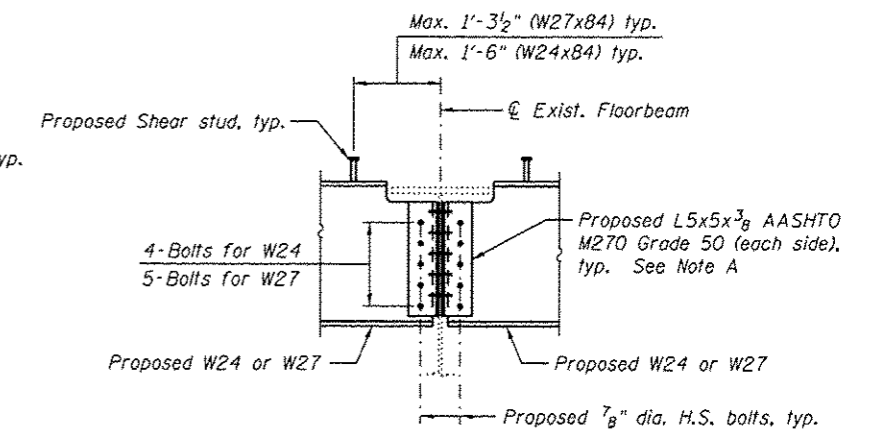
\*\*5/16" dia. holes for 3/4" dia. H.S. bolts with 2 hardened washers for each bolt.



**END DIAPHRAGM  
PANEL POINT L22'**

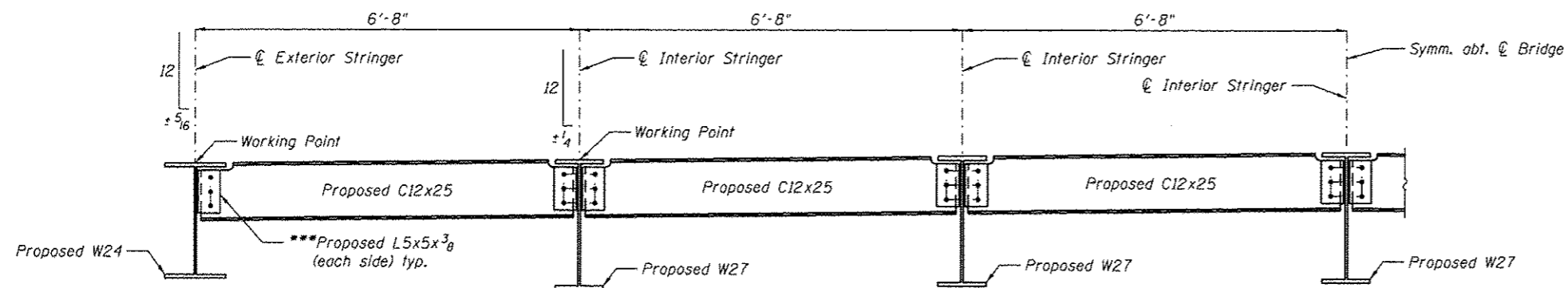
For expansion device stool mounting in top flange of proposed W14 and W21 use existing expansion device as template for field drilling of holes.

\*\*\* For connections to diaphragm webs provide 5/16" dia. holes in proposed angles and proposed diaphragm webs for 3/4" dia. H.S. bolts with 2 hardened washers for each bolt.



**STRINGER CONNECTION DETAIL  
AT PANEL POINTS L18, L19, L21, L23,  
L24, L26, L18', L19', L21', L23' AND L24'**

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



**TYPICAL END DIAPHRAGM  
SPAN 10 - PANEL POINTS L20, L22 AND L25  
SPAN 10 - PANEL POINTS L20' AND L25'**

Notes:  
End diaphragms to be located as shown on floorbeam details or to match existing.  
All bolted connections shown on this sheet shall be made with 3/4" dia. H.S. bolts unless otherwise noted.  
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.  
Cost of diaphragm, sub-floorbeam and connection angles shall be included in Furnishing and Erecting Structural Steel.



USER NAME *	DESIGNED - YSS	REVISED
PLOT SCALE *	CHECKED - ZJB	REVISED
PLOT DATE * 05/02/2014	DRAWN - PRC	REVISED
	CHECKED - YSS	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MAIN SPANS GRID DECK FRAMING DETAILS - 8  
S.N. 082-6001 MLK BRIDGE OVER MISSISSIPPI RIVER

SHEET NO. 524 OF 5138 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR, DRS-2	ST. CLAIR	156	42
CONTRACT NO. 76B03				
ILLINOIS FED. AID PROJECT				