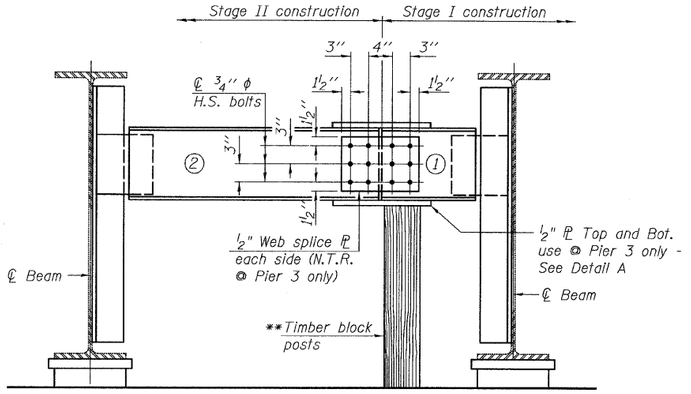
** Cost of Timber Block Posts is included with Erecting Structural Steel.



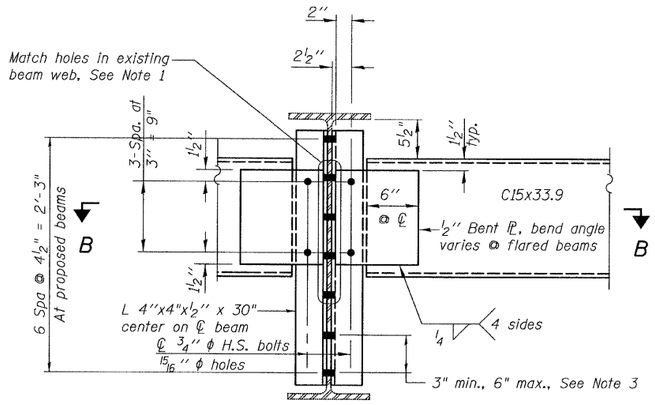
END DIAPHRAGM (D6)

END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE

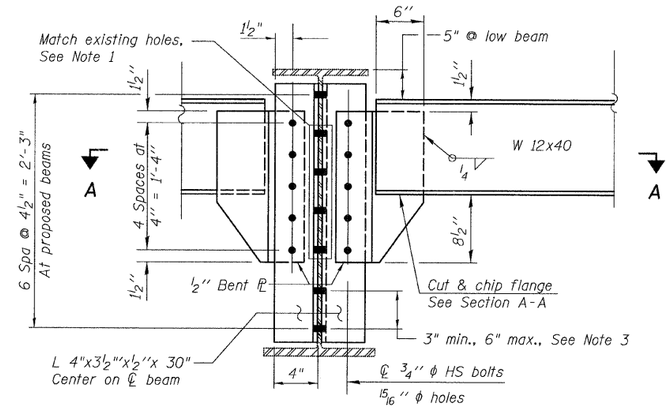
1.) Order diaphragm in two sections.
2.) Attach section ① of diaphragm to beam 9
3.) Place timber block posts between section ① of diaphragm and abutment bearing section.
4.) Attach section ② of diaphragm to both beam 8 and section ① of diaphragm during stage II construction with splice plates.
5.) Remove timber block posts.

Note:
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

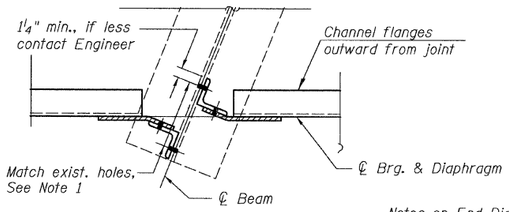


END DIAPHRAGM (D1)

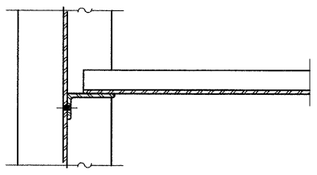


END DIAPHRAGM - (D5)

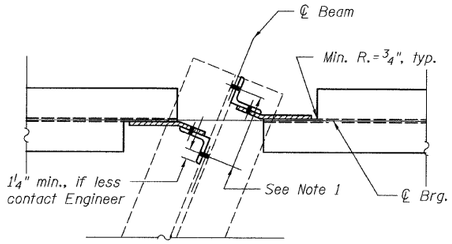
(Existing Beam shown)



SECTION B-B



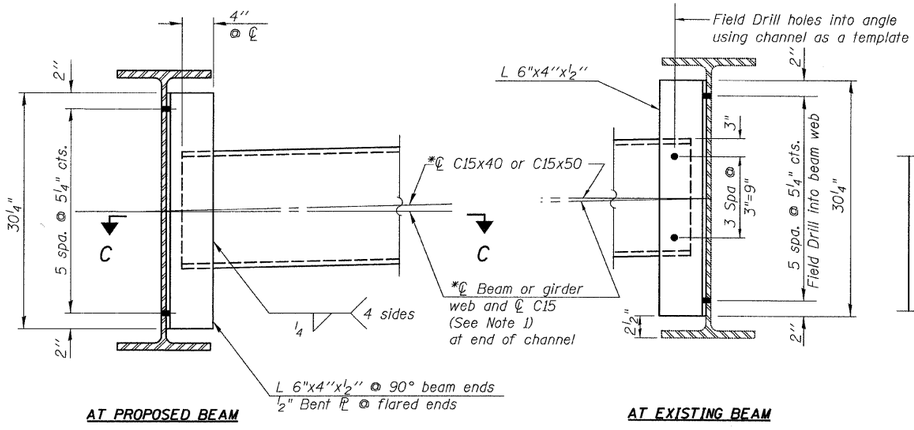
SECTION C-C



SECTION A-A

Notes on End Diaphragms (D1, D5):

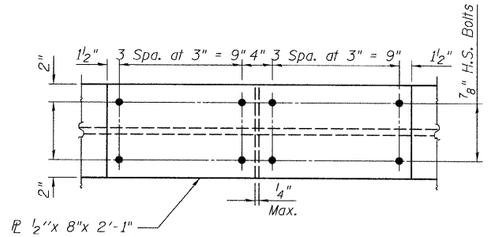
1. Location of existing holes shall be field verified. Cost included with "Field Measurements".
2. The details shown are similar at the proposed beams.
3. Place additional holes in existing beam web as necessary, use 7 bolts minimum.
4. All bolts in beam webs shall be ⅞" H.S. Bolts, 15/16" ϕ holes.
5. Two hardened washers required for each set of oversized holes.



INTERIOR DIAPHRAGMS (D2 THRU D4)

Notes on Interior Diaphragms (D2 thru D4):

1. Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
2. The alternate, if utilized, shall be provided at no additional cost to the Department.
3. ¾" H.S. Bolts, 15/16" ϕ holes.
4. Two hardened washers required for each set of oversized holes.



DETAIL A

FRAMING DETAILS 1
DIAPHRAGMS
STRUCTURE NO. 016-3241

TY·LIN INTERNATIONAL			
DESIGNED - JMA	REVISIONS		
CHECKED - AMD,	NAME	DATE	
DRAWN - JMA			
CHECKED - AMD,			
DATE - 08/02/10			

SHEET NO. 19	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
26 SHEETS	55	0711.2R & 1011.1BR	COOK	200	23
			CONTRACT NO. 60L39		
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

8/2/2010

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