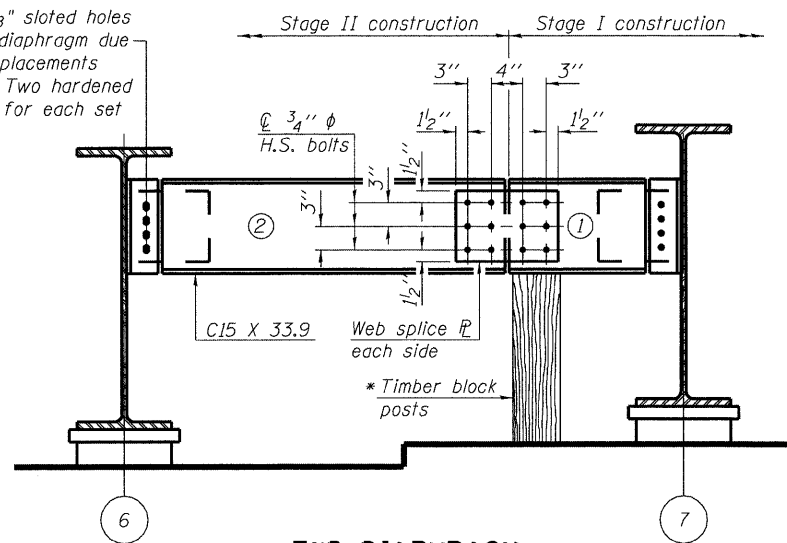


* Cost of Timber Block Posts is included with Structural Steel.

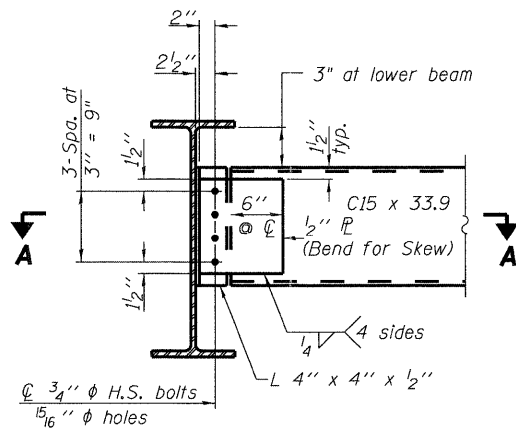
Provide $\frac{13}{16}$ " x $1\frac{7}{8}$ " slotted holes for stage const. diaphragm due to differential displacements on one side only. Two hardened washers required for each set of oversized holes.



END DIAPHRAGM

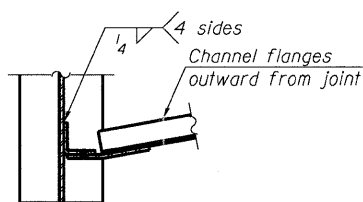
END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE

- 1.) Order diaphragm in two sections.
- 2.) Attach section ① of diaphragm to Beam 7.
- 3.) Place timber block posts between section ① of diaphragm and abutment bearing section.
- 4.) Attach section ② of diaphragm to both Beam 6 and section ① of diaphragm during stage II construction with splice plates.
- 5.) Remove timber block posts.

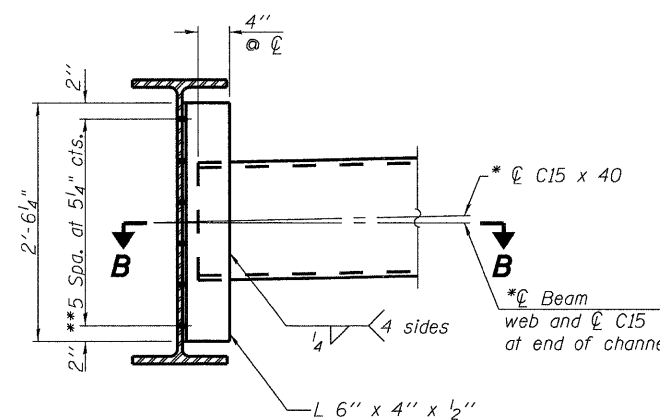


END DIAPHRAGM

Note:
Two hardened washers required for each set of oversized holes.

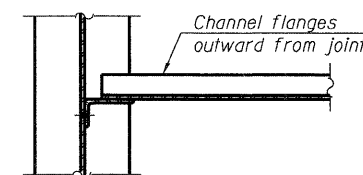


SECTION A-A

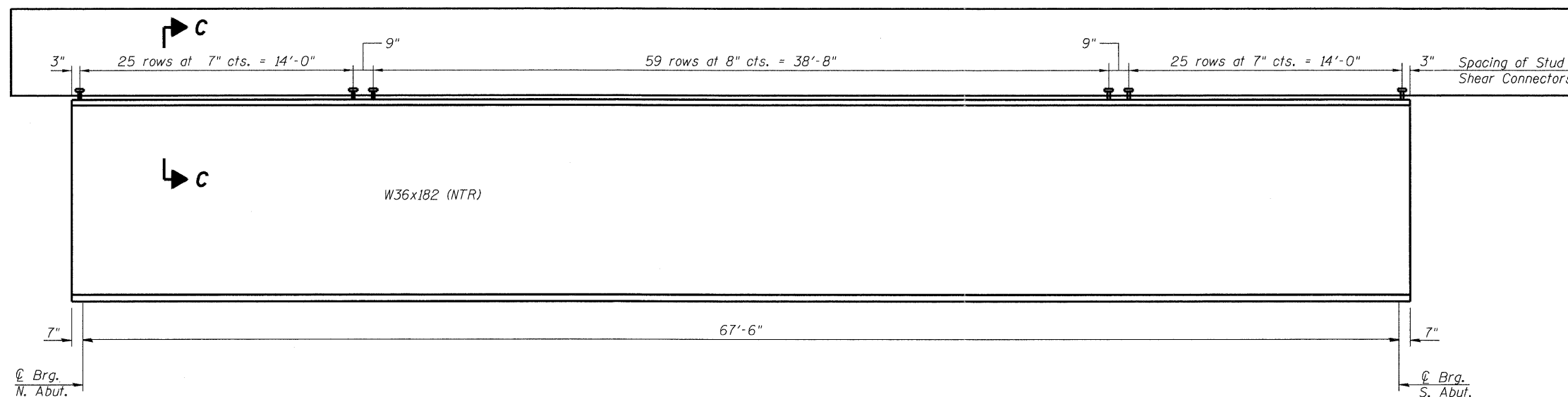


INTERIOR DIAPHRAGM

Note: (For Interior Diaphragm)
Two hardened washers required for each set of oversized holes.
*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.
** $\frac{3}{4}$ " ϕ HS bolts, $\frac{15}{16}$ " ϕ holes, except at stage construction line which shall have $\frac{13}{16}$ " ϕ x $1\frac{7}{8}$ " ϕ slotted holes on one side only.



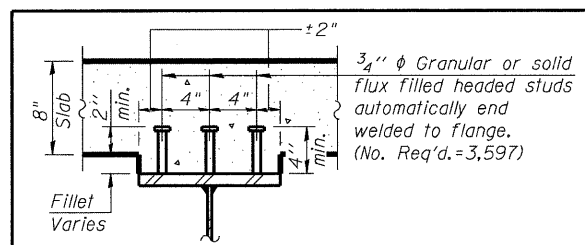
SECTION B-B



FOR INFORMATION ONLY

BEAM ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.



SECTION C-C

FOR INFORMATION ONLY

NOT INCLUDED IN THIS CONTRACT

Notes:
All diaphragms, connecting plates, and angles shall be AASHTO M270 Grade 50W.
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.



FILE NAME =	USER NAME =	DESIGNED - JY	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEAM ELEVATION, DIAPHRAGM AND STEEL DETAILS STRUCTURE NO. 049-0199	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		CHECKED - WPM	REVISED -			330	128R-2-F	LAKE	28	17	
	PLOT SCALE =	DRAWN - JY	REVISED -			CONTRACT NO. 60P54					
	PLOT DATE = 12/20/2010	CHECKED - WPM	REVISED -			SHEET NO. 27 OF 43 SHEETS					