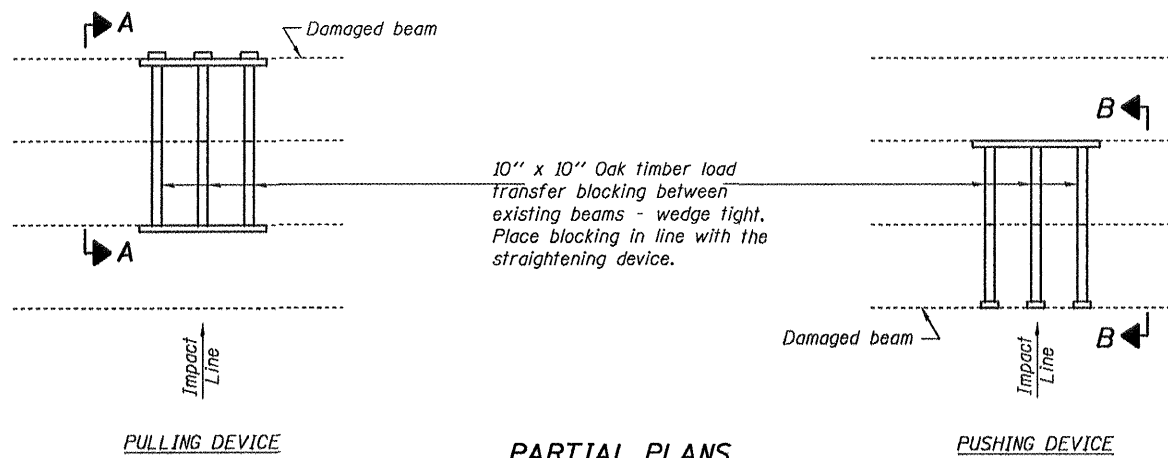
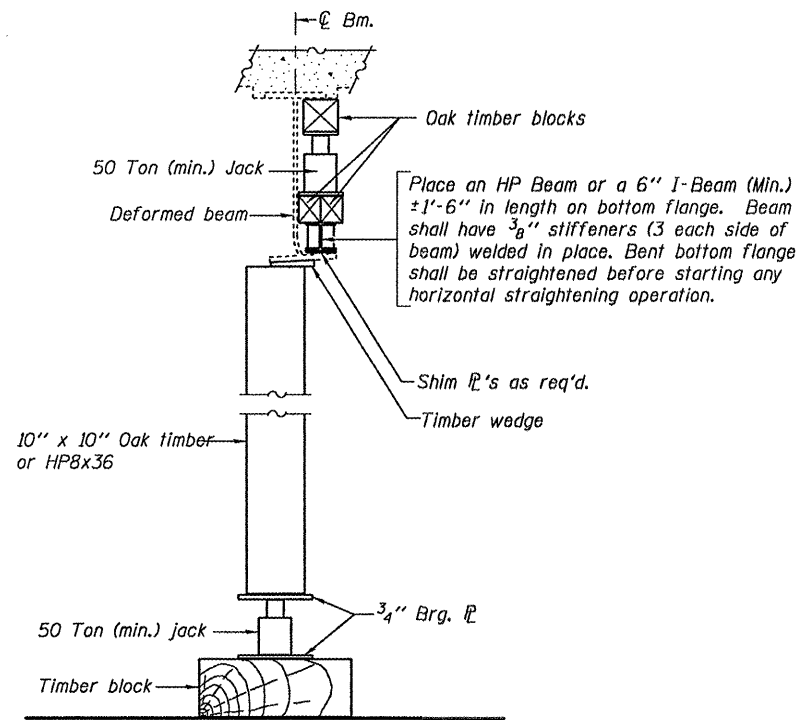


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DEPARTMENT OF TRANSPORTATION

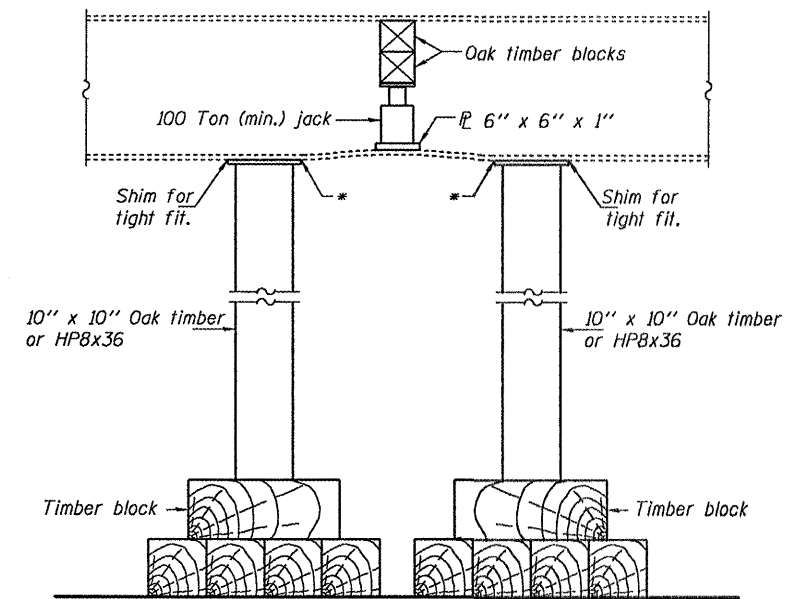


**PARTIAL PLANS**  
**SUGGESTED BEAM STRAIGHTENING METHODS**

Straightening force shall be maintained on all load transfer blocking during beam straightening.



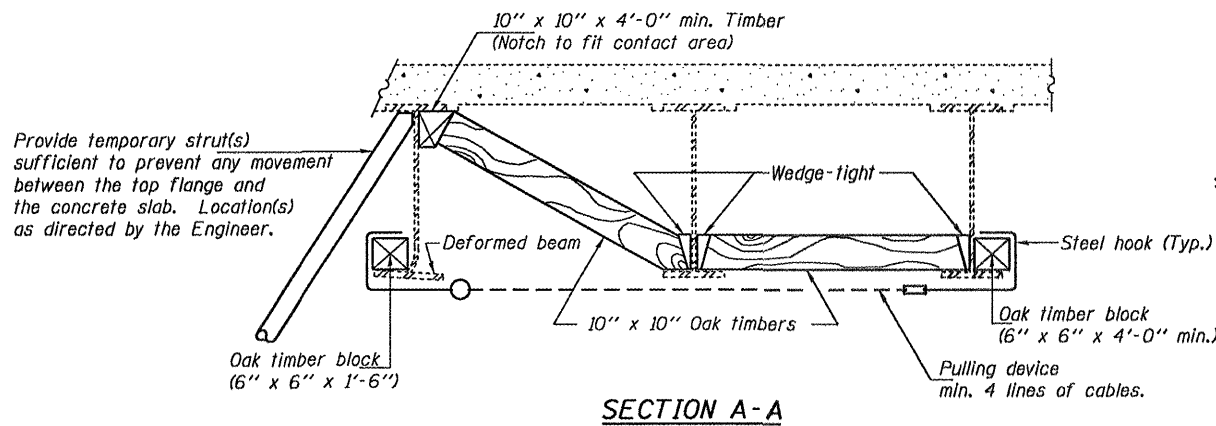
**SUGGESTED VERTICAL STRAIGHTENING DETAIL**  
(To correct localized vertical flange deformations.)



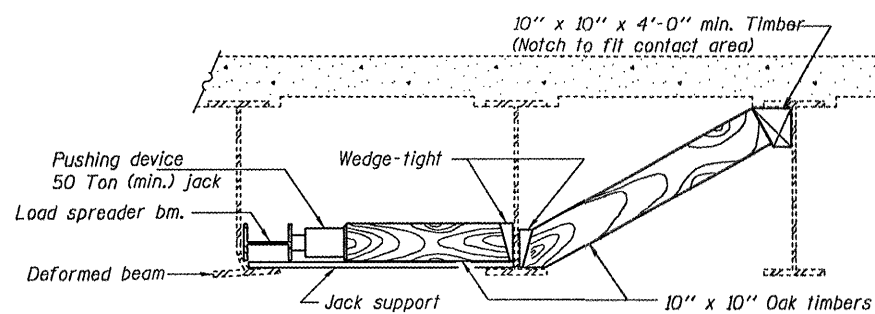
**SUGGESTED VERTICAL STRAIGHTENING DETAIL**  
(To correct localized vertical flange deformations.)

\* Edge of plate shall line up with edge of deformation.

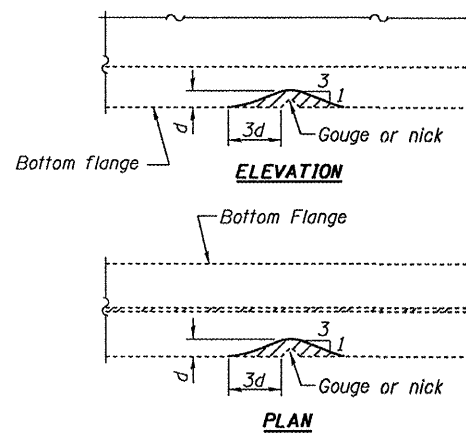
Note:  
Braces and jack assembly shall be placed on same side of web.  
Bent bottom flange shall be straightened before starting any horizontal straightening operations.



**SECTION A-A**

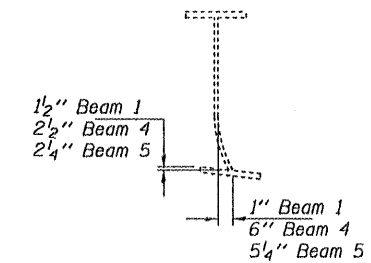


**SECTION B-B**



**GRINDING DETAIL**

Grind existing nicks, gouges and shallow cracks in the damaged beams as detailed. Ground surfaces shall be inspected for cracks using magnetic particle testing prior to initiating any beam straightening operations. Any cracks that cannot be removed by grinding approximately 1/4" deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. Ground surfaces shall be spot cleaned and painted with an aluminum epoxy mastic primer followed by a finish coat to match the color of the existing beam. Cost of grinding, testing and spot painting included with Beam Straightening.



**EXISTING DEFORMATION TO BE STRAIGHTENED**

(Looking East)  
(Approximate max. deflections)  
Deflected length of beam to be straightened is approximately 7'-0" (Beam 1), 11'-6" (Beam 4), and 9'-0" (Beam 5).

**BEAM STRAIGHTENING DETAILS**  
**SN 016-2121**

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

APRIL 27, 2009  
EXAMINED *A. Carl Poyner*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

REP-11-14-2005

SHEET NO. 4 5 SHEETS	F.A.P. RTE. 332	SECTION 0101.1 I-3	COUNTY COOK	TOTAL SHEETS 11	SHEET NO. 9
	CONTRACT NO. 60G33				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					