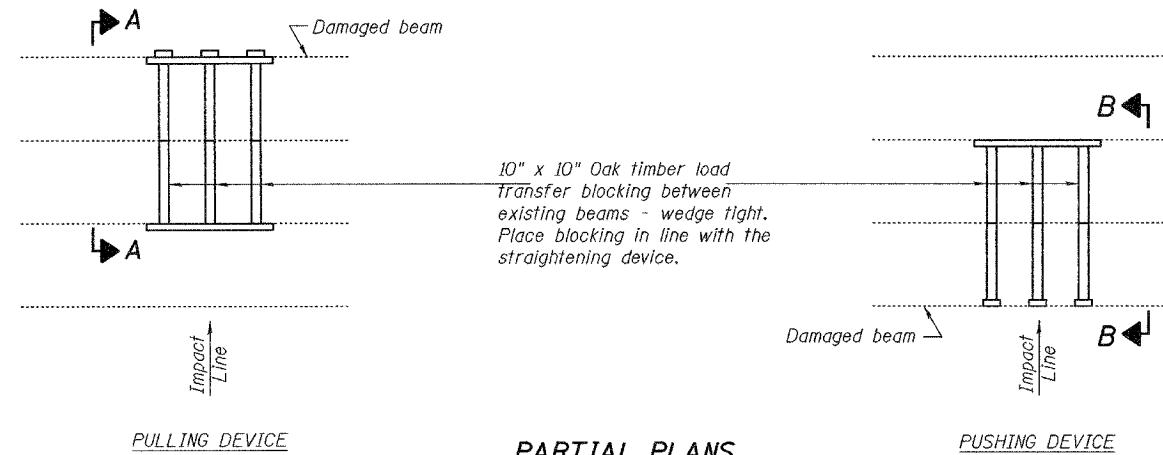


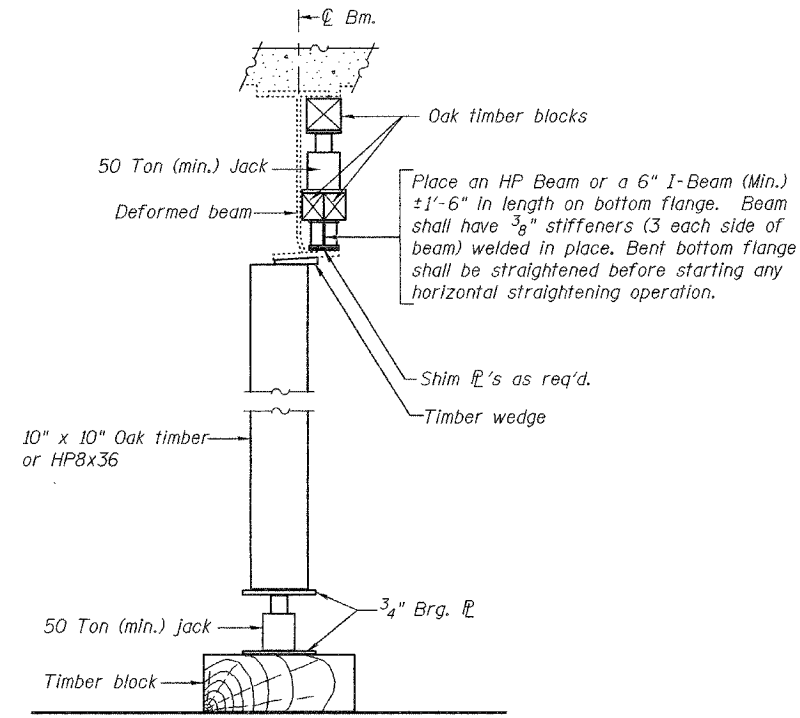
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		Cook	14	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

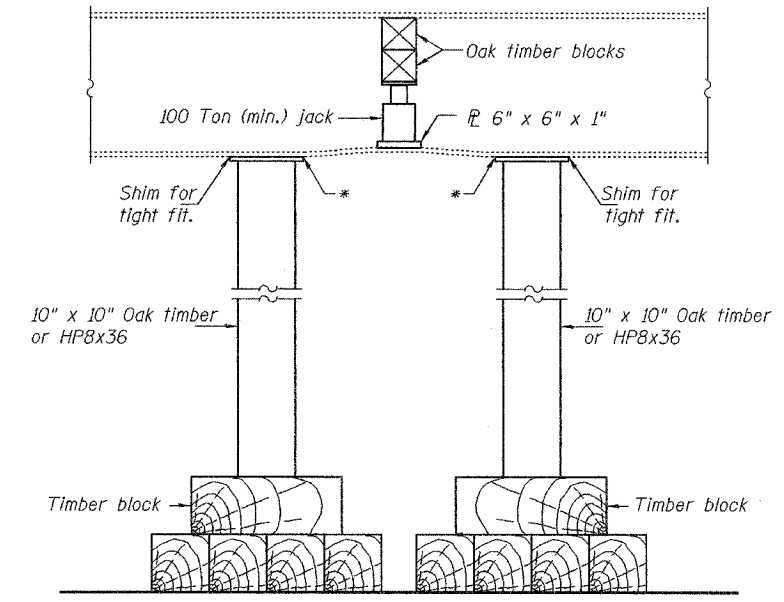
Contract Number: 60A60



**PARTIAL PLANS**  
**SUGGESTED BEAM STRAIGHTENING METHODS**  
Straightening force shall be maintained on all load transfer blocking during beam straightening.

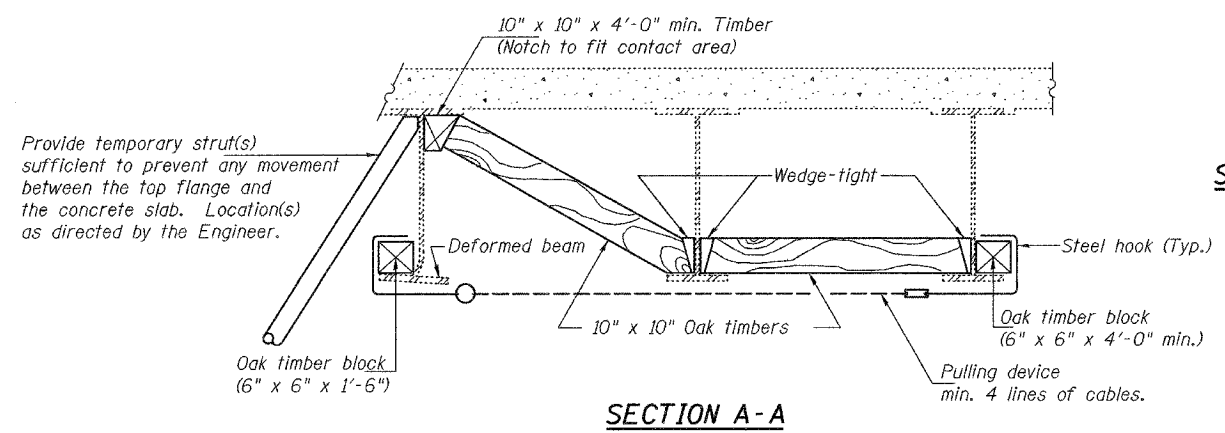


**SUGGESTED VERTICAL STRAIGHTENING DETAIL**  
(To correct flange rotation.)

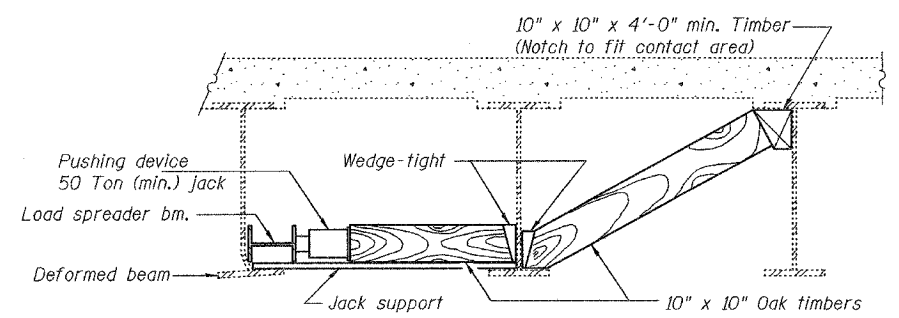


**SUGGESTED VERTICAL STRAIGHTENING DETAIL**  
(To correct localized vertical flange deformations.)

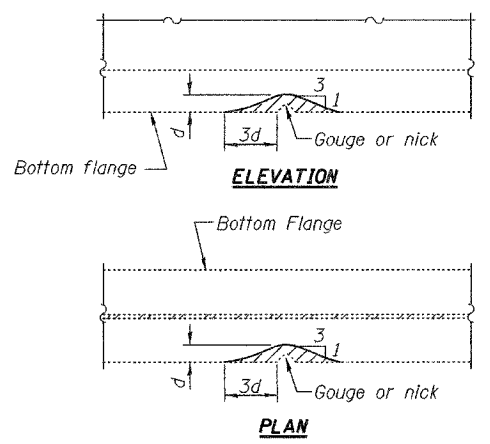
\* Edge of plate shall line up with edge of deformation.  
Note:  
Braces and jack assembly shall be placed on same side of web.  
Bent bottom flange shall be straightened before starting any horizontal straightening operations.



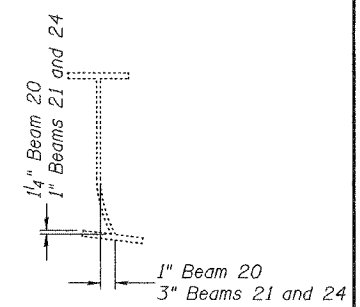
**SECTION A-A**



**SECTION B-B**



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 South)  
(Approximate max. deflections)  
Deflected length of beams 21 and 24 to be straightened is approximately 5'-0".  
Deflected length of beam 20 to be straightened is approximately 6'-0".

**BEAM STRAIGHTENING DETAILS**  
**HARLEM AVE / F.A.I. 55**  
**COOK COUNTY**  
**SN 016-0316**

DESIGNED	S.J.B.
CHECKED	V.H.V.
DRAWN	Drew Christopher
CHECKED	S.J.B. V.H.V.

EXAMINED	November 9, 2005
EXAMINED	John A. Morris ENGINEER OF STRUCTURAL SERVICES
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES