

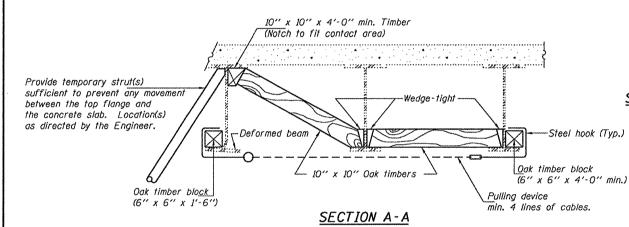
PULLING DEVICE

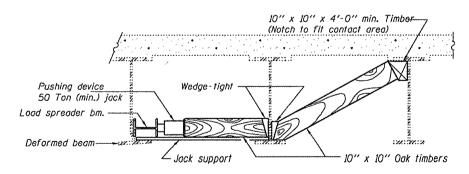
#### PARTIAL PLANS

#### PUSHING DEVICE

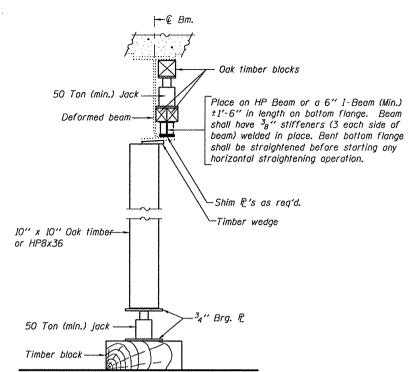
## SUGGESTED BEAM STRAIGHTENING METHODS

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



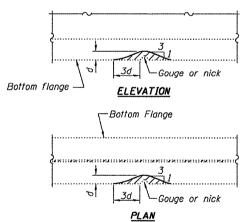


## SECTION B-B



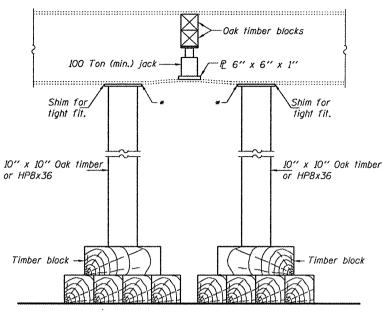
# SUGGESTED VERTICAL STRAIGHTENING DETAIL

(To correct flange rotation.)



# 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  $\frac{1}{4}$  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.



# 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.



LOCATION	Χ	Υ
Bm. 1 Sp. 2	34''	II <sub>16</sub> ′′
Bm. 3 Sp. 2	1316 ''	14"
Bm. 3 Sp. 3	516"	2"

# EXISTING DEFORMATION TO BE STRAIGHTENED

(Looking )
(Approximate max. deflections)
Deflected length of beam to be
straightened is approximately .

REP-1 1-14-2005						
DESIGNED - IJL	EXAMINED JOYNE F. A. III. DATE - JANUARY 27, 2011		BEAM STRAIGHTENING DETAILS	F.A.P. SECTION	COUNTY	TOTAL SHEET
CHECKED - GGE	ACTING ENGINEER OF STRUCTURAL BERVICES	STATE OF ILLINOIS	CM OVO DOCE	29 (21-HB-2)I-	5 KNOX	14 10
DRAWN - Kyle M. Steffen	PASSED Carl Vancer	DEPARTMENT OF TRANSPORTATION	3N 040-0003		CONTRACT	T NO. 68A08
CHECKED - IJL GGE	ACTING ENGINEER OF BRIDGES AND STRUCTURES		SHEET NO. 2 OF 6 SHEETS	ILLIN	OIS FED. AID PROJECT	