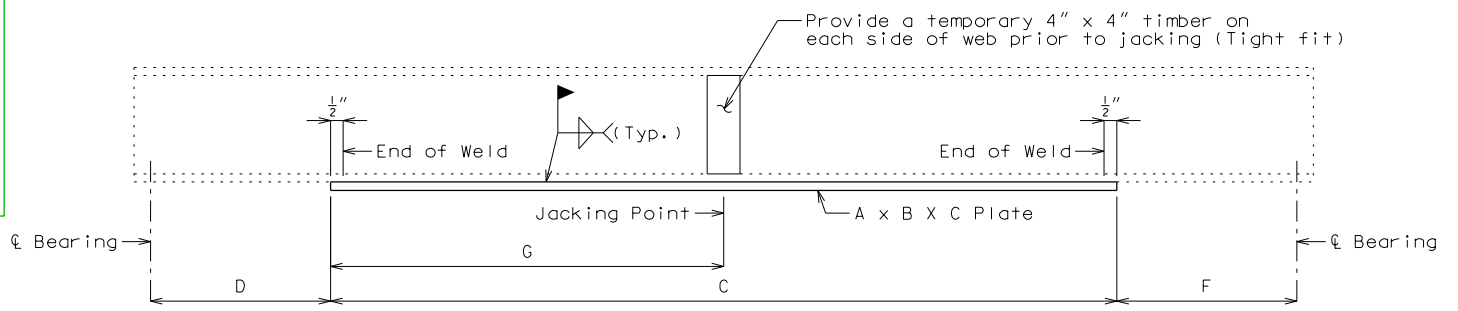
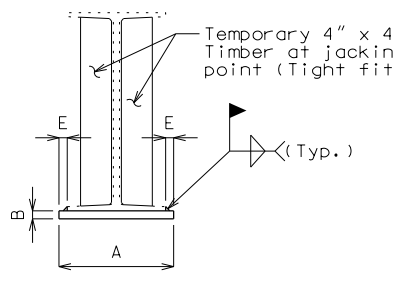


U.I.P., STRENGTHEN AND REHABILITATE EXISTING (X', X', X') WIDE FLANGE BEAM SPANS

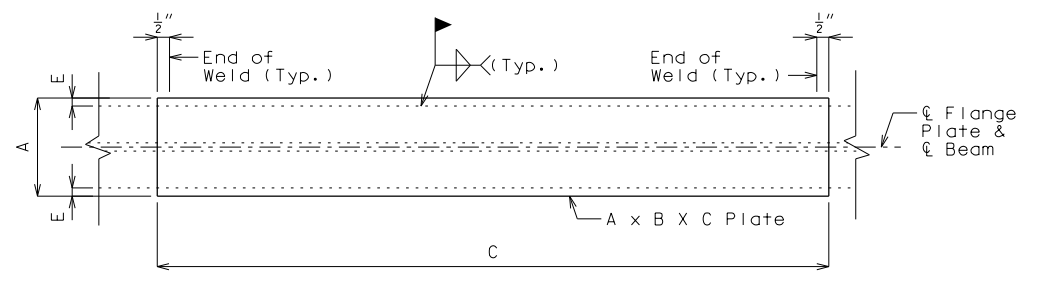
STANDARD DETAILING GUIDANCE
 (do not show on plans):
 Use for adding welded cover plates and applying a jacking load to increase capacity.
 A "no jack" option may be used by designer in lieu of "jacking" option. Welding in both cases should not be performed under live load, especially direct live load.



TYPICAL ELEVATION OF BEAM
 Span (-) and (-)



SECTION THRU BEAM



DETAIL OF FLANGE PLATE

Estimated Quantities		
Item	Lump Sum	Total
Strengthening Existing Beams		1

General Notes:
 Design Specifications:
 2002 AASTHO LFD (17th Ed.) Standard Specifications
 Design Loading:
 1993 Missouri Posting Loads (H20 & 3S2)
 No Future Wearing Surface
 Design Unit Stresses:
 Structural Carbon Steel Fy= 36,000 psi (New Steel)
 Existing Steel Fy = _____ psi
 Working Stress Design = 68% of Fy (Existing)
 Paint:
 Calcium Sulfonate (2 coats)
 Beam Support:
 All existing beams in the span being strengthened shall be raised simultaneously Dimension H at jacking point and supported during welding of new steel plates.
 The temporary supports must be capable of safely supporting a service load of approximately Load J tons per beam (factor of safety not included). See special provisions.
 Traffic Handling:
 One lane of traffic shall be maintained on structure during construction. See roadway plans for traffic control.
 Miscellaneous:
 Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.
 Longitudinal dimensions are based on the original design plans.

Table of Variables									
Beam Location	Dimensions								Load
	A	B	C	D	E	F	G	H	

REPAIRS TO BRIDGE: ROUTE *
 OVER *
 ROUTE * FROM * TO *
 ABOUT * MILES * OF *
 STA. _____# (Match Existing)

Designed
 Detailed
 Checked

DATE PREPARED: 9/8/2021
 ROUTE: * STATE: MO
 DISTRICT: BR SHEET NO.: 1
 COUNTY: *
 JOB NO.: *
 CONTRACT ID.: *
 PROJECT NO.:
 BRIDGE NO.: RHB05

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

REV. _____