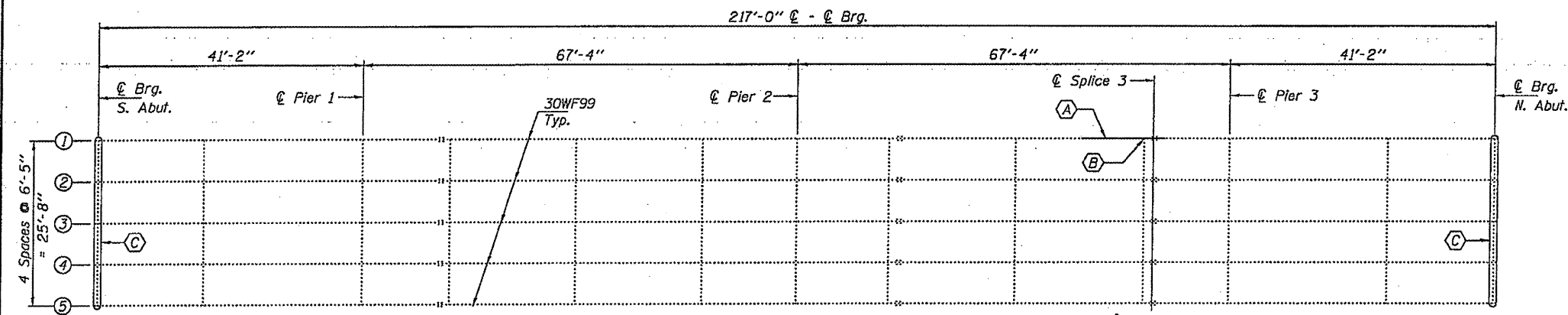


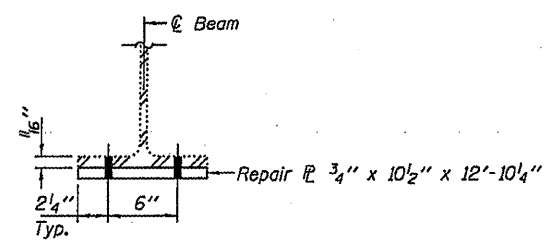
**ELEVATION**



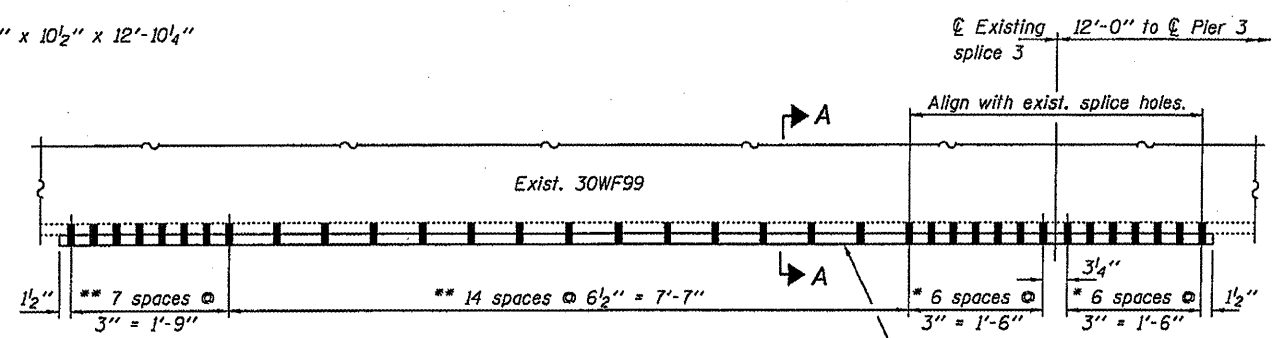
**PLAN**

- A** Straighten & strengthen existing beam.
- B** Replace bottom clip angle.
- C** Replace abutment bearings.

**Notes:**  
Fasteners shall be high strength bolts. Holes for Repair A shall be  $\frac{15}{16}$ "  $\phi$  for  $\frac{7}{8}$ "  $\phi$  bolts. Holes for Repair B shall be  $\frac{15}{16}$ "  $\phi$  for  $\frac{3}{4}$ "  $\phi$  bolts. Existing bolts shall not be re-used. The cost of field drilling required for installation of the steel members is included with Structural Steel Repair. Work to be done under road closure.



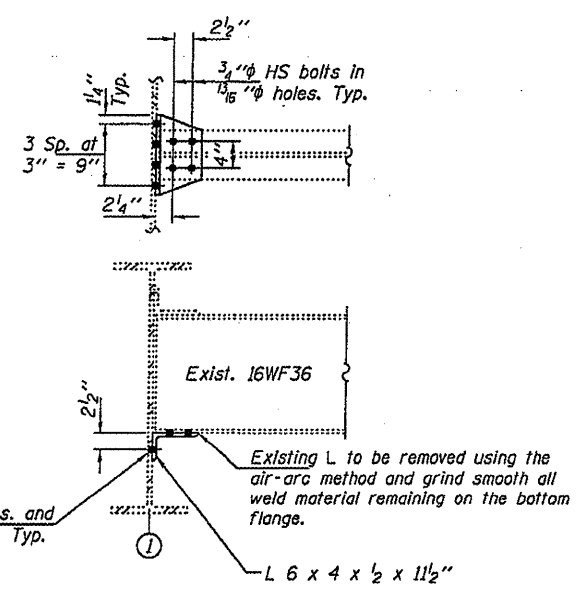
**SECTION A-A**



**REPAIR A - BEAM 1**

\* Use existing holes in bottom flange as template to field drill holes in new plate.  
\*\* Use holes in new plate as template to field drill holes in bottom flange plate.

**NOTES**  
All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.  
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.  
Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Structural Steel Repair.  
Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".  
All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Structural Steel Repair.  
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.  
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.  
After the new beam is in its final position and/or beam straightening operations have been completed, the Engineer in the field shall check to see that the top flange is tight against the slab. If not, the Contractor shall inject epoxy between the existing concrete deck and the top flange of the beam. See Special Provision "Epoxy Injection".



**REPAIR B CLIP ANGLE REPLACEMENT**

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	430
Beam Straightening	L.S.	1
Elastomeric Bearing Assembly, Type II	Each	10
Jack and Remove Existing Bearings	Each	10
Furnishing and Erecting Structural Steel	Pound	1090
Anchor Bolts 1" $\phi$	Each	20

DESIGNED VHV	EXAMINED	DATE	MARCH 11, 2011
CHECKED ATH	PASSED	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN baliva	ACTING ENGINEER OF BRIDGES AND STRUCTURES		
CHECKED VHV ATH			

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PLAN AND ELEVATION  
CH 19 OVER I-72  
SN 010-0146  
SHEET 1 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	110-71HBDR.B.R	CHAMPAIGN	14	7
CONTRACT NO. 70865			ILLINOIS FED. AID PROJECT	