STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION © Brg. — E. Abut. |---- € Brg. € Pier 1— € Pier 2 -€ Pier 3 -W. Abut. -€ S.B. IL 394 - € N.B. IL 394 Temporary shoring may be required to facilitate alignment of splice. Use 12"x12" Timbers or HP's to be paid for as Temporary Shoring and Cribbing. Remove and replace slopewall if required. Cost included with Temporary Shoring and Cribbing. The shoring shall be removed as soon as possible PLAN after the splice is completed to minimize traffic control. 19'-0" \widehat{B} (9)(6) (5) (4) 11'-6" - © Splice 2 11'-6" 11′-6″ Splice 1 € Brg. ---- € Brg. W. Abut. E. Abut. 56'-3" 56′-3" 45'-0" (Beams 1 - 8) 45'-1" (Beams 9 & 10) 45'-0" (Beams 1 - 8, 45'-1" (Beams 9 & 10 **ELEVATION** TOTAL BILL OF MATERIAL (A) Beam segment to be removed and replaced (B) Beam Straightening

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	6,010
Temporary Slab Support System	L.S.	1
Temporary Shoring and Cribbing	L.S.	1
Concrete Removal	Cu. Yd.	0.6
Concrete Superstructure	Cu. Yd.	0.6
Structural Steel Removal	Pound	5,600
Beam Straightening	L.S.	1
Remove Overhead Sign Structure -Bridge Mounted	Each	1
Overhead Sign Structure - Bridge Mounted	Foot	22
Re-Erect Sian Panel	Sq. Ft.	132

SHEET NO. 1 Cook 5 8 SHEETS 13

Contract Number: 60B16

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted

Cost of removal and/or 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 in the cost of Furnishing and Erecting Structural Steel.

The inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the acrylic finish coat shall be Reddish Brown, Munsell No. 2.5 YR 3/4 for the exterior and bottom flanges of the fascia beams and Gray 5B 7/1 for interior surfaces. See Special Provision "Cleaning and Painting New Metal Structures".

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". Diaphragm connection holes shall be $^{15}_{6}$ 19 for $^{3}_{4}$ 1 ϕ bolts. Two hardened washers shall be required at diaphragm connections.

Fasteners shall be high strength bolts. Flange splice holes shall be 15,6 "\$ for ${}^{7}_{8}$ " ϕ bolts. Web splice holes shall be ${}^{13}_{16}$ " ϕ for ${}^{3}_{4}$ " ϕ bolts, except

The Contractor shall provide support and/or shoring systems for the slab and beam in the area of existing beam removal. See Special Provisions "Temporary Shoring and Cribbing" and "Temporary Slab Support System."

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".

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

Prior to pouring the new concrete deck, all loose rust, loose mill scale and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.

Existing reinforcement extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Removal.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.

Field welding of construction accessories will not be permitted to beams. All construction joints shall be bonded.

See sheet 8 of 8 for existing sign structure details (For Information Only). Contractor should contact District 1 Office for storage location of existing

The cost of all field drilling required for installation of the steel members is included with Furnishing and Erecting Structural Steel.

> PLAN AND ELEVATION GLENWOOD-LANSING RD / IL 394 COOK COUNTY SN 016-0918

DESIGNED Stal RhoKE

CHECKED STR

Johnson

September 19, 2006

Expires: November 30, 2006

EXAMINED John a. Morris