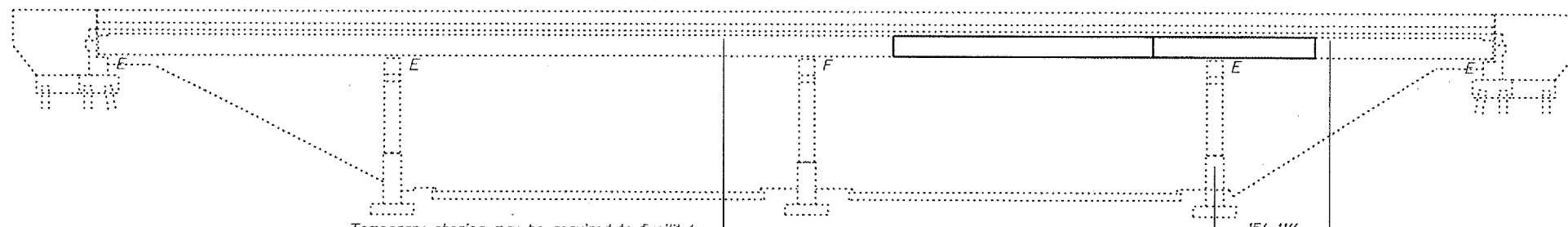


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.	SHEET NO. 1 3 SHEETS
		COOK	9	6	
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

Contract No. 60B21

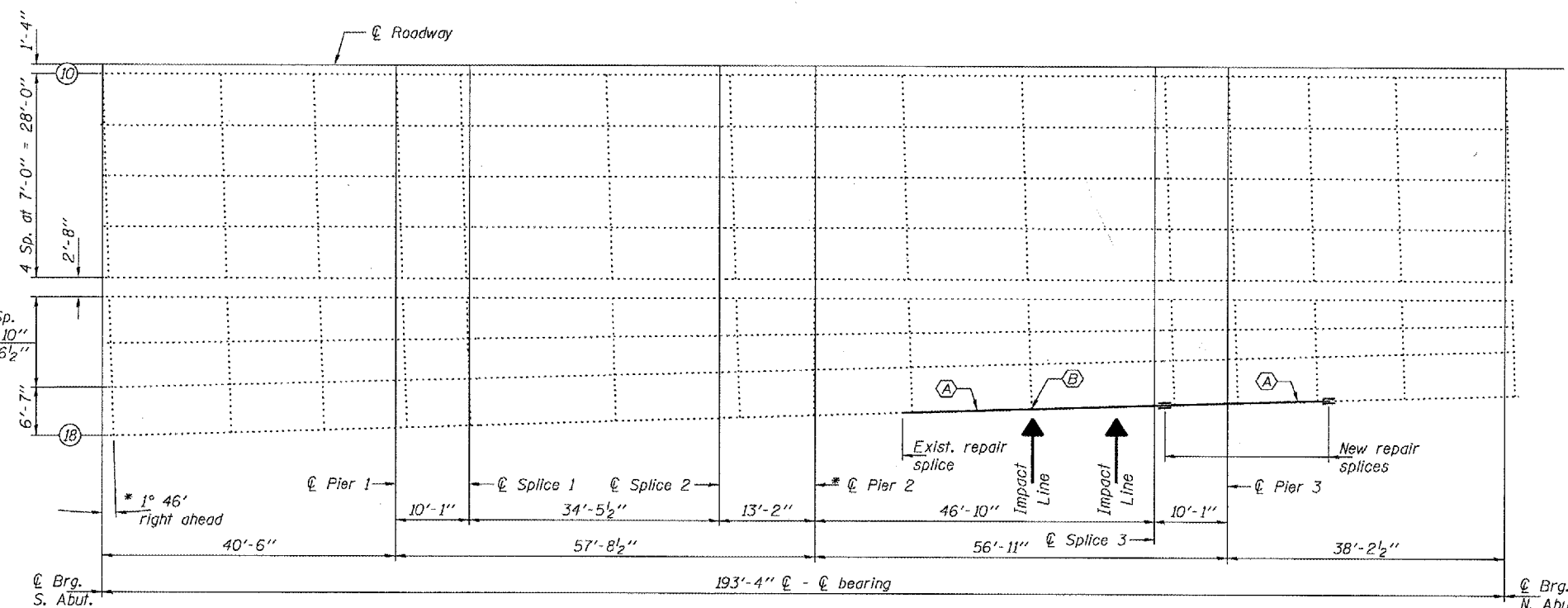


**ELEVATION**

Temporary shoring may be required to facilitate alignment of existing splice. Use 12" x 12" Timbers or HP's to be paid for as Temporary Shoring and Cribbing. The shoring shall be removed as soon as possible after the splice is completed to minimize Traffic Control.

Temporary shoring is required for Beam 18. Remove and replace slopewall, if required. Cost included with Temporary Shoring and Cribbing.

Q (k)	15.1
L (k)	34.2
Imp. (k)	10.3
Total (k)	59.6



**FRAMING PLAN**

- (A) Remove and replace existing 30W116 with new W30x116.
- (B) Remove and replace existing top and bottom clip angles.

\* Skew angle for Q Pier 2 and diaphragms at Pier 2 = 0° 7' left ahead.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	7570
Structural Steel Removal	Pound	7560
Temporary Slab Support System	L.S.	1
Concrete Removal	Cu. Yd.	0.8
Concrete Superstructure	Cu. Yd.	0.8
Temporary Shoring and Cribbing	L.S.	1

**GENERAL NOTES**

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

Fasteners shall be high strength bolts. Bolts 7/8"φ, open holes 15/16"φ, unless otherwise noted.

Diaphragm connection holes shall be 15/16"φ for 3/4"φ bolts. Two hardened washers shall be required at diaphragm connections.

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".

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.

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.

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

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".

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 for interior surfaces shall be Gray, Munsell No. 5B 7/1. The color of the acrylic finish coat for the exterior and bottom flange of the fascia beam shall be Interstate Green, Munsell No. 7.5G 4/8. See Special Provision "Cleaning and Painting New Metal Structures".

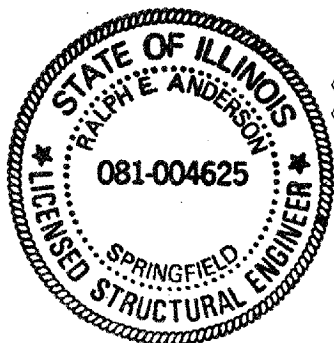
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.

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."

The deck surface shall have its final finish tined according to Article 420.1(k)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

All construction joints shall be bonded. 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.

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



EXPIRES 11-30-2006

DESIGNED	Paul J. Gorman
CHECKED	Lital Bhatt
DRAWN	baliva
CHECKED	PBJ SJB

EXAMINED July 17, 2006  
John A. Morris  
ENGINEER OF STRUCTURAL SERVICES  
PASSED  
Ralph E. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES

**BRIDGE REPAIRS**  
**IL 43 OVER US12/20**  
**COOK COUNTY**  
**SN 016-0320**