

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd		27.0	27.0
Slope Wall Removal	Sq Yd		8	8
Removal of Existing Concrete Deck No. 1	Each	1		1
Protective Shield	Sq Yd	1,904		1,904
Structure Excavation	Cu Yd		92	92
Concrete Structures	Cu Yd		53.7	53.7
Concrete Superstructure	Cu Yd	749.4		749.4
Bridge Deck Grooving	Sq Yd	2,300		2,300
Concrete Encasement	Cu Yd		0.7	0.7
Protective Coat	Sq Yd	2,765		2,765
Furnishing and Erecting Structural Steel	Pound	1,640		1,640
Stud Shear Connectors	Each	2,112		2,112
Reinforcement Bars, Epoxy Coated	Pound	187,060	8,340	195,400
Bar Splicers	Each		59	59
Slope Wall 4 Inch	Sq Yd		21	21
Furnishing Steel Piles HP12x53	Foot		76	76
Driving Piles	Foot		76	76
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	171.5		171.5
Anchor Bolts, 1 1/2"	Each	1		1
Concrete Sealer	Sq Ft		273	273
* Epoxy Crack Injection	Foot		6	6
Geocomposite Wall Drain	Sq Yd		45	45
Structural Steel Removal	Pound	12,970		12,970
Structural Steel Repair	Pound	4,620		4,620
Cleaning Bridge Seats	Sq Ft		942	942
* Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft		367	367
* Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft		19	19
Drainage Scuppers, DS-11	Each	2		2
Drainage Scuppers, DS-33	Each	3		3
Drainage System	L. Sum	1		1
Pipe Underdrains for Structures 4"	Foot		95	95
** Selective Clearing	Unit		1	1
Temporary Shoring and Cribbing	Each		9	9
Remove Conduit Attached to Structure	Foot	800		800
Granular Backfill for Structures	Cu Yd		78	78

* Quantity includes a contingency (above the amounts shown in the bills of material) to account for uncertainties associated with the condition of the existing substructure and the age of the original inspection (2008-9). Actual repair areas will be determined by the Engineer in the field.

** The quantity for this work is estimated. The intent for this work is to remove accumulations of rubbish, vegetation, etc., on the existing slopewalls and other areas.

STATION 65+07.80
 RE-BUILT 20__ BY
 STATE OF ILLINOIS
 FAP 372-SEC. 2013-038B-R
 LOADING HS-20
 STRUCTURE NO. 016-2455

SB NAME PLATE
 (See Std. 515001)

Existing Name Plate shall be cleaned and relocated next to the new Name Plate. Cost included with Name Plates.

GENERAL NOTES

- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 7/8" dia., holes 15/16" dia., unless otherwise noted.
- No field welding is permitted except as specified in the contract documents.
- The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant(PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.
- Reinforcement bars designated (E) shall be epoxy coated.
- Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete. As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4 in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- 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.
- Concrete Sealer shall be applied to the exposed faces of the reconstructed backwall and widened portions of the north abutment.
- The Inorganic Zinc Rich Primer/Acrylic/Acrylic Paint System shall be used for shop and field painting of new structural steel. Only Inorganic Zinc Rich Primer shall be applied to the new structural steel in the shop under this contract and is included in "Furnishing and Erecting Structural Steel". The intermediate and top coats shall be applied under a separate painting contract.
- The existing structural steel coating contains lead. The Contractor shall take all precautions to deal with the presence of lead on this project.
- Existing structural steel shall only be cleaned and painted as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
- Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Concrete Removal".
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutment.

INDEX OF SHEETS

- SC1 General Plan and Elevation
- SC2 General Notes, Index of Sheets and Total Bill of Material
- SC3 Stage Construction Details (1 OF 2)
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- SC6 Top of Slab Elevations Plan (1 of 2)
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- SC23 Pier Drainage System Details (1 of 2)
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- SC25 Framing Plan
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- SC28 North Abutment Concrete Removal and Repair Details
- SC29 North Abutment Modification Details (1 of 3)
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- SC32 HP Pile Details
- SC33 Piers 16 and 17 Concrete Repair Details
- SC34 Piers 18 and 19 Concrete Repair Details
- SC35 Bar Splicer Assembly and Mechanical Splicer Details

For existing bridge plans, see Sheets SCX1 thru SCX14, immediately following Sheet SC35.

SCOPE OF WORK

- Remove existing concrete deck and microsilica concrete overlay and replace with new 8" reinforced concrete deck.
- Make new deck composite in positive moment areas only by adding shear studs to all girders and beams where not already installed as shown.
- Remove and replace existing expansion joints.
- Remove and replace approach slab.
- Remove and replace backwall.
- Repair spalls, delaminations and open cracks in substructures using structural repair of concrete and epoxy crack injection as shown.
- Repair failed slopewall panel as shown.
- Modify wingwalls and slopewall as shown for the new deck width.
- Retrofit steel superstructure fatigue prone details at cover plates as shown.
- Remove wind bracing (bottom lateral angles and, where shown, the corresponding gusset plates).
- Replace one end cross frame at Pier 18 and three end cross frames at Pier 16 as shown.
- Remove and dispose of existing electrical conduits and junction boxes attached to the beams and/or deck.
- Remove and replace the existing closed drainage system at Pier 16.
- Remove the existing closed drainage systems at Piers 17 and 18.
- Perform miscellaneous repairs including repairing unseated anchor bolts, and removing debris and vegetation at slopewalls.
- Remove and replace existing roadway lighting.



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	PLOT SCALE =	DRAWN - MAK	REVISIED -			CONTRACT NO. 60J16					
	PLOT DATE = 12/20/2013	CHECKED - RDK	REVISIED -			ILLINOIS FED. AID PROJECT					
SHEET NO. SC2 OF SC35 SHEETS											

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