

GENERAL NOTES

- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 7/8" dia., holes 1 1/16" dia., unless otherwise noted.
 - Calculated weight of structural steel =
M270 Grade 36: 16,780 lbs.
M270 Grade 50: 104,590 lbs.
 - 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.
8. 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.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8" (0.01). Adjustment shall be made either by grinding the surface or shimming the bearings.
 - Concrete Sealer shall be applied to the designated areas of all abutments including Ramp F, and Piers 5 thru 7.
 - The existing structural steel coating contains lead. The Contractor shall take all precautions to deal with the presence of lead on this project.
 - The Inorganic Zinc Rich Primer/Acrylic/Acrylic Paint System shall be used for shop and field painting of new structural steel and the steel portions of new elastomeric bearings. Only Inorganic Zinc Rich Primer shall be applied to the new structural steel and the steel portions of the new elastomeric bearings in the shop under this contract and is included in "Furnishing and Erecting Structural Steel" and the elastomeric bearing pay items, respectively. The intermediate and top coats shall be applied under a separate painting contract.
 - 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".
 - The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

INDEX OF SHEETS

- SG1 Overall General Plan and Elevation
- SG2 General Plan and Elevation Spans 1 through 5
- SG3 General Plan and Elevation Spans 6 through 12
- SG4 General Notes, Bill of Material and Index of Sheets
- SG5 Foundation Layout (1 of 2)
- SG6 Foundation Layout (2 of 2)
- SG7 Stage Construction Details Spans 1 and 2
- SG8 Stage Construction Details Spans 3 thru 5
- SG9 Stage Construction Details Span 6
- SG10 Stage Construction Details Span 7
- SG11 Stage Construction Details Spans 8 thru 12
- SG12 Temporary Concrete Barrier for Stage Construction
- SG13 Top of Slab Elevations Plan Spans 1 thru 5
- SG14 Top of Slab Elevations Spans 1 and 2 (1 of 2)
- SG15 Top of Slab Elevations Spans 1 and 2 (2 of 2)
- SG16 Top of Slab Elevations Spans 3 through 5 (1 of 4)
- SG17 Top of Slab Elevations Spans 3 through 5 (2 of 4)
- SG18 Top of Slab Elevations Spans 3 through 5 (3 of 4)
- SG19 Top of Slab Elevations Spans 3 through 5 (4 of 4)
- SG20 Top of Slab Elevations Plan Spans 6 thru 12
- SG21 Top of Slab Elevations Spans 6 and 7 (1 of 4)
- SG22 Top of Slab Elevations Spans 6 and 7 (2 of 4)
- SG23 Top of Slab Elevations Spans 6 and 7 (3 of 4)
- SG24 Top of Slab Elevations Spans 6 and 7 (4 of 4)
- SG25 Top of Slab Elevations Spans 8 through 12 (1 of 3)
- SG26 Top of Slab Elevations Spans 8 through 12 (2 of 3)
- SG27 Top of Slab Elevations Spans 8 through 12 (3 of 3)
- SG28 Top of South Approach Slab Elevations
- SG29 Top of North Approach Slab Elevations
- SG30 Top of Ramp F Approach Slab Elevations
- SG31 Deck Plan and Cross Section Spans 1 and 2
- SG32 Deck Plan and Cross Section Spans 3 thru 5
- SG33 Deck Plan and Cross Section Span 6 Ramp F
- SG34 Deck Plan and Cross Section Span 7 Ramp F
- SG35 Deck Plan and Cross Section Spans 6 and 7
- SG36 Deck Plan and Cross Section Spans 8 thru 12
- SG37 Parapet Details Spans 1 and 2
- SG38 Parapet Details Spans 3 thru 5
- SG39 Parapet Details Spans 6 and 7
- SG40 Parapet Details Spans 8 thru 12
- SG41 Superstructure Details
- SG42 Reinforcing Bar Details and Bill of Material Spans 1 thru 5
- SG43 Reinforcing Bar Details and Bill of Material Spans 6 thru 12
- SG44 Concrete Parapet Slipforming Option
- SG45 Preformed Joint Strip Seal
- SG46 South Bridge Approach Slab Plan
- SG47 South Bridge Approach Slab Details
- SG48 North Bridge Approach Slab Plan
- SG49 North Bridge Approach Slab Details
- SG50 Ramp F Bridge Approach Slab Plan
- SG51 Ramp F Bridge Approach Slab Details
- SG52 Steel Removal and Repair Plan Unit A & B
- SG53 Steel Removal and Repair Plan Unit C & D
- SG54 Structural Steel Repair Details (1 of 2)
- SG55 Structural Steel Repair Details (2 of 2)
- SG56 Framing Plan Spans 6 and 7
- SG57 Girder Elevations and Details - Spans 6 and 7
- SG58 Framing Plan and Girder Elevation Spans 8 thru 12
- SG59 Steel Diaphragm Details Spans 6-12
- SG60 Girder Splice Details
- SG61 Moment and Reaction Tables (1 of 2)
- SG62 Moment and Reaction Tables (2 of 2)
- SG63 Bearing Details (1 of 2)
- SG64 Bearing Details (2 of 2)
- SG65 South Abutment Concrete Removal and Repair Details
- SG66 Ramp F Abutment Concrete Removal and Repair Details
- SG67 North Abutment Concrete Removal and Repair Details
- SG68 Pier 1 and 2 Repair Details
- SG69 Pier 3 and 4 Repair Details
- SG70 Pier 5 and 6 Repair Details
- SG71 Pier 7 and 8 Repair Details
- SG72 Pier 9 and 10 Repair Details
- SG73 Pier 11 Repair Details
- SG74 South Abutment Widening Details (1 of 3)
- SG75 South Abutment Widening Details (2 of 3)
- SG76 South Abutment Widening Details (3 of 3)
- SG77 Ramp F Abutment Widening Details (1 of 3)
- SG78 Ramp F Abutment Widening Details (2 of 3)

STATION 30+12.59
RE-BUILT 20... BY
STATE OF ILLINOIS
FAP 373-SEC. 2013-038B-R
LOADING HS-20
STRUCTURE NO. 016-0486

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.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd		59.4	59.4
Slope Wall Removal	Sq Yd		31.0	31.0
Removal of Existing Concrete Deck No. 5	Each	1		1
Protective Shield	Sq Yd	3,752		3,752
Structure Excavation	Cu Yd		495	495
Floor Drains	Each	71		71
Concrete Structures	Cu Yd		168.9	168.9
Concrete Superstructure	Cu Yd	1,692.6		1,692.6
Bridge Deck Grooving	Sq Yd	5,075.0		5,075
Concrete Encasement	Cu Yd		2.1	2.1
Protective Coat	Sq Yd	6,213		6,213
Furnishing and Erecting Structural Steel	L Sum	0.13		0.13
Stud Shear Connectors	Each	12,577		12,577
Reinforcement Bars, Epoxy Coated	Pound	431,120	130,260	461,380
Bar Splicers	Each	139		139
Slope Wall 4 Inch	Sq Yd		150	150
Furnishing Steel Piles HP12x53	Foot		660	660
Driving Piles	Foot		660	660
Test Pile Steel HP12x53	Each		3	3
Pile Shoes	Each		18	18
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	353.5		353.5
Elastomeric Bearing Assembly, Type I	Each	11		11
Elastomeric Bearing Assembly, Type II	Each	4		4
Anchor Bolts, 3/4"	Each	43		43
Anchor Bolts, 1"	Each	4		4
Anchor Bolts, 1 1/2"	Each	2		2
Concrete Sealer	Sq Ft		1,271	1,271
Epoxy Crack Injection	Foot		102	102
Geocomposite Weir Drain	Sq Yd		112	112
Structural Steel Removal	Pound	125,740		125,740
Structural Steel Repair	Pound	7,270		7,270
Cleaning Bridge Seats	Sq Ft		2,300	2,300
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft		301	301
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft		16	16
Silicone Joint Sealer, 1"	Foot	58		58
Pipe Underdrains for Structures 4"	Foot		180	180
Selective Clearing	Unit		3	3
Remove Conduit Attached to Structure	Foot	1,950		1,950
Fender System	L Sum		1	1
Granular Backfill For Structures	Cu Yd		280	280

* 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 (2008-2009). Actual repair areas will be determined by the Engineer in the field.

INDEX OF SHEETS (CONT'D)

- SG79 Ramp F Abutment Widening Details (3 of 3)
- SG80 North Abutment Widening Details (1 of 3)
- SG81 North Abutment Widening Details (2 of 3)
- SG82 North Abutment Widening Details (3 of 3)
- SG83 Abutment Bar Bends and Bill of Material
- SG84 Pier 7 Widening Details
- SG85 Pier 8 Widening Details
- SG86 Pier 9 Widening Details
- SG87 Piers 7, 8 & 9 Sections
- SG88 Piers 7, 8 & 9 Bar Bends and Bill of Material
- SG89 Pier 5 & 6 Cap Details
- SG90 Pier 10 & 11 Cap Details
- SG91 Piers 5, 6, 10 & 11 Bar Bends and Bill of Material
- SG92 Bar Splicer Assembly and Mechanical Splicer Details
- SG93 HP Pile Details
- SG94 Soil Boring Logs South Abutment
- SG95 Soil Boring Logs Ramp F Abutment
- SG96 Soil Boring Logs Pier 7
- SG97 Soil Boring Logs Pier 8
- SG98 Soil Boring Logs Pier 9
- SG99 Soil Boring Logs Pier 10
- SG100 Soil Boring Logs North Abutment

For existing bridge plans, see Sheets SGX1 thru SGX48 immediately following Sheet SG100.

SCOPE OF WORK

- Remove existing concrete deck and microsilica concrete overlay and replace with new 8" reinforced concrete deck.
- Retrofit steel superstructure fatigue prone details.
- Remove wind bracing in spans 3 through 5 (bottom lateral angles).
- Perform miscellaneous repairs including repairing unseated or missing anchor bolts and side retainers, and removing debris.
- Replace or repair damaged or corroded cross frames, diaphragms and connection plates.
- Install new girders, diaphragms and cross frames for widening.
- Remove and replace selected existing girders and cross frames.
- Make new deck composite in positive moment areas only by adding shear studs to all girders and beams where not already installed.
- Remove and dispose of abandoned electrical conduits and junction boxes attached to the beams and/or deck.
- Strengthen beam ends and replace diaphragms at expansion joints.
- Repair spalls, delaminations and open cracks in substructure using structural repair of concrete and epoxy crack injection.
- Widen Piers 7, 8 & 9 and all abutments.
- Construct additions to caps at Piers 5, 6, 10 & 11.
- Remove and replace existing abutment backwalls.
- Widen and repair existing stopwalls.
- Remove and replace existing expansion joints.
- Remove and replace approach slabs and drainage at abutments.
- Fix conduit and exposed wires at Ramp F abutment.
- Repair timber fenders at Piers 3 and 4.
- Remove and replace navigational lighting.



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PL01 SCALE:	CHECKED: KJN	REVISION:	
PL01 DATE: 9/11/2014	DRAWN: RMG	REVISION:	
	CHECKED: KJN	REVISION:	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, BILL OF MATERIAL AND INDEX OF SHEETS
STRUCTURE NO. 016-0486**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-038B-R	COOK	821	594
CONTRACT NO.			60J16	
ILLINOIS FED. AID PROJECT				

SHEET NO. SG4 OF 50100 SHEETS

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