

GENERAL NOTES

- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 7/8" dia., holes 15/16" 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.
- 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.

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STATION 30+72.59
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		429	429
Floor Drains	Each	71		71
Concrete Structures	Cu Yd		161.0	161.0
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	29,570	460,690
Bar Splicers	Each		139	139
Slope Wall 4 Inch	Sq Yd		150	150
Furnishing Steel Piles HPI2x53	Foot		660	660
Driving Piles	Foot		660	660
Test Pile Steel HPI2x53	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 Wall 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.

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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 slopewalls.
- 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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FILE NAME =	USER NAME = jsurber	DESIGNED - DTS	REVISED -
		CHECKED - KJN	REVISED -
0160486_60J16_004_General_Notes.dgn		PLOT SCALE =	REVISED -
		DRAWN - RMG	REVISED -
		PLOT DATE = 8/6/2014	REVISED -
		CHECKED - KJN	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

SHEET NO. SG4 OF SG100 SHEETS

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