

GENERAL NOTES

- Fasteners shall be AASHTO M164 Type I, mechanically galvanized bolts. Bolts 3/8-in. ϕ , holes 1/2-in. ϕ , unless otherwise noted.
- Calculated weight of Structural Steel =
Grade 50 = 400,850lbs **
Grade 36 = 59,940 lbs **
- The Organic Zinc Rich Primer/Epoxy/Urethane paint system shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that the exterior surfaces and bottom of the bottom flange of the fascia beams, masked off connection surfaces, and field installed fasteners, all of which shall be touched up and finish coated in the field. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
- 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 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to the new bridge seats at the South Abutment and Pier 3.
- Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.
- Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings, and other structural steel within 5 ft (measured along the beam) on either side of the proposed deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC - SP15. All remaining structural steel shall be cleaned per Power Tool Cleaning - Modified SSPC-SP3.
- The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The designated areas cleaned per Power Tool Cleaning - Modified SSPC-SP3 shall be painted according to the requirements of Paint System 2 - PS/EM/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

- Any reinforcement bars that are damaged during concrete removal operations for abutments and piers shall be repaired or replaced using approved bar splicer or anchorage system. Cost included to "Concrete Removal".
- 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 inch 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.
- 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.
- All information (layout, details, quantities) for C. Abutment 1 is included in sheets 181 thru 184 for S.N. 016-0724.
- Details and quantities for the Strip Seal Joint at C. Abutment 1 are presented in Central Avenue/I-55 Mainline (S.N. 016-0724).
- Slipforming of the Parapets is not allowed.
- Reinforcement bars designated (E) shall be epoxy coated.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as 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.
- A minimum of one air monitor will be required to monitor abrasive blasting operations at this site. See special provisions for "Containment and Disposal of Lead Paint Cleaning Residues."
- The Contractor shall retain the services of an engineering firm prequalified in the IDOT consultant selection category of Highway Bridges Complex, for preparation of the Structural Assessment Report. Contractor's pre-approval shall not be applicable for this project. See Special Provision.

TOTAL BILL OF MATERIAL

ITEM	SOUTH APPROACH			TOTAL
	UNIT	SUPER	SUB	
POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD		342	342
CONCRETE REMOVAL	CU YD		469.7	469.7
PROTECTIVE SHIELD	SQ YD	5642.1		5642.1
STRUCTURE EXCAVATION	CU YD		956	956
CONCRETE STRUCTURES	CU YD	9.3	908.5	917.8
CONCRETE SUPERSTRUCTURE	CU YD	1551.2		1551.2
BRIDGE DECK GROOVING	SQ-YD	4309		4309
PROTECTIVE COAT	SQ-YD	6005		6005
ERECTING STRUCTURAL STEEL	L SUM	0.08		0.08
STUD SHEAR CONNECTORS	EACH	23570		23570
JACK AND REMOVE EXISTING BEARINGS	EACH	32		32
STRUCTURAL STEEL REMOVAL	L SUM	0.45		0.45
CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1		1
CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1		1
REINFORCEMENT BARS, EPOXY COATED	POUND	452,750	140,780	593,530
BAR SPLICERS	EACH	1559	159	1718
ALUMINUM RAILING, TYPE L	FOOT	971.4		971.4
FURNISHING METAL SHELL PILES 12"X 0.250"	FOOT		2799	2799
DRIVING PILES	FOOT		2799	2799
TEST PILE METAL SHELLS	EACH		6	6
TEMPORARY SOIL RETENTION SYSTEM	SQ-FT		745	745
NAME PLATES	EACH	1		1
ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	82		82
ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	38		38
CONCRETE SEALER	SQ-FT		7910	7910
FIELD MEASUREMENTS	L SUM		0.18	0.18
DRAINAGE SCUPPERS, DS-12	EACH	22		22
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ-FT		161	161
ERECTING MODULAR EXPANSION JOINT 6"	FOOT	99		99
REMOVAL OF EXISTING CONCRETE DECK NO. 1	EACH	1		1
DRAINAGE SYSTEM	L SUM	0.18		0.18
JACKING EXISTING SUPERSTRUCTURE	L SUM	0.55		0.55
ANCHOR BOLTS, 1"	EACH	252		252
GEOCOMPOSITE WALL DRAIN	SQ YD		268	268
PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT		133	133
BRACED EXCAVATION	CU YD		116	116
MECHANICAL SPLICERS	EACH		96	96
REMOVAL OF EXISTING BEARINGS	EACH	66		66
STRUCTURAL STEEL REPAIR	POUND	45090		45090
PREFORMED JOINT STRIP SEAL	FOOT	110		110
DRAINAGE SCUPPERS, DS-II	EACH	2		2
BRIDGE RAIL REMOVAL	FOOT	953		953

** Structural steel furnished under a separate contract shall be erected under pay item Erecting Structural Steel. The listed weights include structural steel framing comprised of beams, diaphragms, fill plates, connection plates, bolts and steel extensions.

Current Ratings on File for Existing Structure

Inventory: HS 20
Operating: HS 27.3
Live Load Restrictions: No

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

INDEX OF SHEETS

1 GENERAL PLAN AND ELEVATION	21 SUPERSTRUCTURE PARAPET ELEVATIONS	36 GIRDER ELEVATIONS FLARED GIRDERS	53 PIER 2 WIDENING
2 GENERAL NOTES, INDEX OF SHEETS & BILL OF MATER.	22 SUPERSTRUCTURE DETAILS - 1	37 EXIST. GIRDER ELEVATIONS	54 PIER 2 DETAILS
3 STAGE I CONSTRUCTION	23 SUPERSTRUCTURE DETAILS - 2	38 FRAMING DETAILS 1 DIAPHRAGMS	55 PIER 3 WIDENING - EAST
4 STAGE II CONSTRUCTION	23A STRUCTURE-MOUNTED HANDHOLE DETAILS	39 FRAMING DETAILS 2 CONNECTIONS - EAST	56 PIER 3 WIDENING - WEST
5 STAGE III CONSTRUCTION	24 SOUTH APPROACH SLAB PLAN	40 FRAMING DETAILS 3 CONNECTIONS - WEST	57 PIER 3 DETAILS
6 REMOVAL PLAN	25 SOUTH APPROACH SLAB DETAILS	41 FRAMING DETAILS 4 FIELD SPLICES	58 PIER 4 WIDENING
7 TEMPORARY CONCRETE BARRIER	26 PREFORMED JOINT STRIP SEAL DETAILS	42 ELASTOMERIC BEARINGS TYPE I	59 PIER 4 DETAILS
8 TOP OF SLAB ELEVATIONS - LAYOUT SPANS 1, 2 & 3	27 MODULAR EXPANSION JOINT DETAILS AT PIER 3	43 ELASTOMERIC BEARINGS TYPE II	60 PIER 5 WIDENING - EAST
9 TOP OF SLAB ELEVATIONS - LAYOUT SPANS 4, 5 & 6	28 DRAINAGE SYSTEM	44 STEEL EXTENSION DETAILS	61 PIER 5 WIDENING - WEST
10-12 TOP OF SLAB ELEVATIONS SPANS 1-3	29 DRAINAGE SCUPPER DS-12	45 COVER PLATE RETROFIT	62 PIER 5 WIDENING - SECTIONS & DETAILS
13-15 TOP OF SLAB ELEVATIONS SPANS 4-6	29A DRAINAGE SCUPPER DS-II	46 SOUTH ABUTMENT WIDENING - EAST	63 SUBSTRUCTURE REPAIRS
16 TOP OF SLAB ELEVATIONS AND LAYOUT SOUTH APPROACH SLAB	30 TYPE L ALUMINUM RAILING	47 SOUTH ABUTMENT WIDENING - WEST	64 BAR SPLICER (COUPLER) DETAILS
17 SUPERSTRUCTURE SPANS 1, 2 & 3	31 FRAMING PLAN - SPANS 1, 2 & 3	48 SOUTH ABUTMENT FOOTING PLAN	65 CONCRETE METAL SHELL PILE DETAILS
18 SUPERSTRUCTURE SPANS 4, 5 & 6	32 FRAMING PLAN - SPANS 4, 5 & 6	49 SOUTH ABUTMENT SECTIONS AND DETAILS - 1 OF 2	66-71 BORING LOGS
18A SUPERSTRUCTURE FLARED DECK	33 MOMENT & REACTION TABLES	50 SOUTH ABUTMENT SECTIONS AND DETAILS - 2 OF 2	
19 SUPERSTRUCTURE CROSS SECTION - SPANS 1, 2 & 3	34 GIRDER ELEVATIONS SPANS 1, 2 & 3	51 PIER 1 WIDENING	
20 SUPERSTRUCTURE CROSS SECTION - SPANS 4, 5 & 6	35 GIRDER ELEVATIONS SPANS 4, 5 & 6	52 PIER 1 DETAILS	

**GENERAL NOTES, INDEX OF SHEETS & BILL OF MATERIAL
STRUCTURE NO. 016-3241**

TYLIN INTERNATIONAL	DESIGNED - MAU	REVISIONS		SHEET NO. 2	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED - AMD,	NAME	DATE		55				
	DRAWN - MAU								
	CHECKED - AMD,								
	DATE - 03/25/2011			71 SHEETS	CONTRACT NO. 60999		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		