STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

1. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$-in. ϕ, holes $\frac{15}{16}$-in. ϕ, unless otherwise noted.

2. Calculated weight of Structural Steel =
   Grade 50 = 589,460 lbs. **
   Grade 36 = 130,850 lbs. **

3. 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".

4. No field welding is permitted except as specified in the contract documents.

5. Anchor bolts shall be set before bolting diaphragms and cross frames over supports.

6. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.

7. 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.

8. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

9. Concrete Sealer shall be applied to the designated areas of the all new exposed surfaces of pier 9.

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

11. 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.

** 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 girders, diaphragms, fill plates, connection plates, bolts and steel extensions.

12. 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.

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

14. Any reinforcement bars that are damaged during concrete removal operations for piers shall be repaired or replaced using approved bar splicer or anchorage system. Cost included to "Concrete Removal".

15. All information (layout, details, quantities) for C. Abut. 4 is included in plans for S.N. 016-0724.

16. 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 $\frac{1}{4}$ 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.

17. Details and quantity for the Strip Seal Joint at C. Abut. 4 are presented in Central Ave./I-55 Mainline (S.N. 016-0724).

18. Reinforcement bars designated (E) shall be epoxy coated.

19. 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 if these additional bracket locations.

20. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

21. 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.

22. Slipforming of the parapets is not allowed.

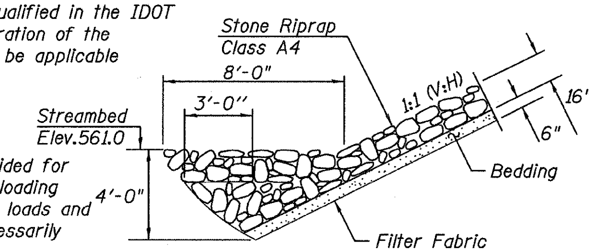
TOTAL BILL OF MATERIAL

NORTH APPROACH

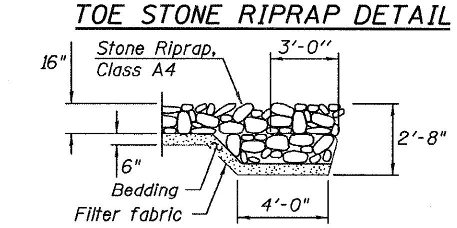
ITEM	UNIT	SUPER	SUB	TOTAL
STONE RIPRAP, CLASS A4	SQ YD		278	278
FILTER FABRIC	SQ YD		306	306
PROTECTIVE COAT	SQ YD	8,375		8,375
CONCRETE REMOVAL	CU YD	10.8	171.6	182.4
BRIDGE RAIL REMOVAL	FOOT	1,292.4		1,292.4
REMOVAL OF EXISTING BEARINGS	EACH	30		30
PROTECTIVE SHIELD	SQ YD	3,886.3		3,886.3
STRUCTURE EXCAVATION	CU YD		196.8	196.8
COFFERDAM EXCAVATION	CU YD		368.3	368.3
COFFERDAM (LOCATION-1)	EACH		1	1
COFFERDAM (LOCATION-2)	EACH		1	1
CONCRETE STRUCTURES	CU YD		616.5	616.5
CONCRETE SUPERSTRUCTURE	CU YD	2,242.7		2,242.7
BRIDGE DECK GROOVING	SQ YD	5,800		5,800
ERECTING STRUCTURAL STEEL	L SUM	0.11		0.11
STUD SHEAR CONNECTORS	EACH	9,533		9,533
STRUCTURAL STEEL REMOVAL	L SUM	0.55		0.55
CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1.0		1.0
CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1.0		1.0
REINFORCEMENT BARS, EPOXY COATED	POUND	465,830	221,170	687,000
BAR SPLICERS	EACH	770		770
ALUMINUM RAILING, TYPE L	FEET	1,334.3		1,334.3
NAME PLATES	EACH	1		1
FINGER PLATE EXPANSION JOINT, 6" (ERECT ONLY)	FOOT	116.0		116.0
DRILLED SHAFT IN SOIL	CU YD		611.9	611.9
ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	46		46
ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	20		20
ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE III	EACH	17		17
HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 450 K (ERECT ONLY)	EACH	17		17
ANCHOR BOLTS, 1"	EACH	132		132
ANCHOR BOLTS, $1\frac{1}{4}$"	EACH	8		8
ANCHOR BOLTS, $1\frac{1}{2}$"	EACH	76		76
CONCRETE SEALER	SQ FT		4,368.0	4,368.0
EPOXY CRACK INJECTION	FEET		66.0	66.0
DRAINAGE SCUPPERS, DS-12	EACH	26		26
STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT		88.0	88.0
DRAINAGE SYSTEM	L SUM	0.54		0.54
REMOVAL OF EXISTING CONCRETE DECK NO. 2	EACH	1		1
JACK AND REMOVE EXISTING BEARINGS	EACH	31		31
JACKING EXISTING SUPERSTRUCTURE	L SUM	0.45		0.45
DRAINAGE SCUPPER, DS-11	EACH	3		3
DRAINAGE SCUPPER, DS-33	EACH	12		12
FIELD MEASUREMENTS	L SUM		0.52	0.52
DRILLED SHAFT IN ROCK	CU YD		8.1	8.1
MECHANICAL SPLICERS	EACH		34	34

23. 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 Provisions.

<u>Current Ratings on File for Existing Structure</u>
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.



TOE STONE RIPRAP DETAIL



FLANK STONE RIPRAP TREATMENT

INDEX OF SHEETS

GENERAL NOTES, INDEX OF SHEETS AND BILL OF MATERIAL
STRUCTURE NO. 016-3240

TY·LIN INTERNATIONAL	DESIGNED - DY, LS	
	CHECKED - AMD, LS	
	DRAWN - DY, LS	
	CHECKED - AMD, LS	
	DATE - 03/25/2011	

REVISIONS	
NAME	DATE

SHEET NO. 2
73 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	0711.2R & 1011.1BR	COOK	741	605
		CONTRACT NO. 60999		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		