

**GENERAL NOTES:**

1. All new Structural Steel shall be AASHTO M270 Grade 36 unless otherwise noted.
2. All new fasteners shall be high strength bolts. Holes shall be <sup>15</sup>/<sub>16</sub>" dia. for <sup>7</sup>/<sub>8</sub>" dia. bolts, unless otherwise noted.
3. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts, unless otherwise noted.
4. Calculated weight of Structural Steel = 7,880 lbs. (M270 Grade 36)  
8,360 lbs. (M270 Grade 50)
5. No field welding is permitted except as specified in the contract documents.
6. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
7. Reinforcement bars designated (E) shall be epoxy coated.
8. 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 <sup>1</sup>/<sub>4</sub> 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.
9. 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.
10. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
11. The Contractor shall obtain all necessary permits from the Coast Guard and shall be per Maintenance of Navigation Special Provision. All channel clearances and free navigation shall not be unreasonably interfered with. The Contractor shall submit a plan of operations to the Coast Guard which shall include a schedule of construction site activities.
12. Concrete Sealer shall be applied to the designated areas of the pier and abutment repairs and the proposed backwall.
13. Cleaning and painting of the existing structural steel shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures." All existing steel shall be cleaned per Near White Blast Cleaning - SSPC-SP10. All existing steel shall be painted according to the requirement of Paint System 1 -OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Light Gray, Munsell No. 5B 7/1. The color of the final finish coat for truss members shall be Blue, Munsell No. 10B 3/6.
14. The Contractor shall submit calculations and details demonstrating the structural integrity of the bridge is maintained under the additional imposed loads of the containment system. See Special Provisions.
15. A minimum of 4 air monitors will be required to monitor abrasive blasting operations at the site. See Special Provision for "Containment and Disposal of Lead Paint Cleaning Residues".
16. All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type 1. Cost included in Structural Steel Repair.
17. Any steel repair work on the steel superstructure except work on the railing posts, shall take place on the portion of the structure without stage construction traffic. For repair sequence, see notes on repair sheets.
18. Existing structural steel that will be in contact with new structural steel and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
19. Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

**INDEX OF SHEETS**


- S-1 General Plan & Elevation
- S-2 General Notes & Bill of Material
- S-3 Stage Construction
- S-4 Deck Repair Plan
- S-5 Temporary Concrete Barrier for Stage Construction
- S-6 Joint Construction, North & South Abutments
- S-7 Joint Construction, Spans 1-2 & 2-3
- S-8 Prefarmed Joint Strip Seal
- S-9 Framing Plan
- S-10 Steel Repairs I
- S-11 Steel Repairs II
- S-12 Steel Repairs III
- S-13 Steel Repairs IV
- S-14 Steel Repairs V
- S-15 Steel Repairs VI
- S-16 Steel Repairs VII
- S-17 Steel Repairs VIII
- S-18 Steel Repairs IX
- S-19 Steel Repairs X
- S-20 Steel Repairs XI
- S-21 Steel Repairs XII
- S-22 Abutment Repairs
- S-23 Pier 1 Repairs
- S-24 Pier 2 Repairs
- S-25 Existing Truss Details I
- S-26 Existing Truss Details II
- S-27 Bar Splicer Assembly and Mechanical Splicer Details

**TOTAL BILL OF MATERIALS**

DESCRIPTION	UNIT	SUB	SUPER	TOTAL
Concrete Removal	Cu Yd		26.1	26.1
Protective Shield	Sq Yd		60	60
Concrete Superstructure	Cu Yd		26.1	26.1
Protective Coat	Sq Yd		91	91
Reinforcement Bars, Epoxy Coated	Pound		6040	6040
Bar Splicers	Each		70	70
Prefarmed Joint Strip Seal	Foot		241	241
Concrete Sealer	Sq Ft	195		195
Epoxy Crack Injection	Foot	6		6
Floor Drain Extension	Each		24	24
Structural Steel Repair	Pound		16240	16240
Containment And Disposal Of Lead Paint Cleaning Residues	L Sum		1	1
Cleaning And Painting Steel Bridge No. 1	L Sum		1	1
Concrete Bridge Deck Scarification (3/8 Inch)	Sq Yd		2300	2300
Bridge Deck Thin Polymer Overlay 3/8"	Sq Yd		2300	2300
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq Ft	408		408
Plug Existing Deck Drains	Each		8	8
Deck Slab Repair (Partial)	Sq Yd		3	3
Silicone Joint Sealer, 1/2"	Foot		22	22
Rivet Removal And Replacement	Each		240	240

\* Special Provision

N:\PROJ\103398\00\Design\Structural\CAD\03398.00 02 B.11 of Material and General Notes.dgn

 <b>Clorba Group, Inc.</b> <small>CONSULTING ENGINEERS                  1041 North Chestnut Avenue                  Suite 402 Chicago, Illinois 60688                  Tel: 773.775.4000                  Fax: 773.775.4016                  Email: clorba@clorba.com</small>	USER NAME = akhan	DESIGNED - BWS	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES &amp; BILL OF MATERIAL</b> <b>STRUCTURE NO. 016-0421</b>	F.A.P. RTE. 350	SECTION 3068 A-B-R-1	COUNTY COOK	TOTAL SHEETS 57	SHEET NO. 25
	PLOT SCALE = 8x1 1/4" = 1"	CHECKED - AMK	DRAWN - RD			REVISED -	SHEET NO. S-2 OF S-27 SHEETS		CONTRACT NO. 60N88	