

Bench Mark: Chiseled "□" on S.E. corner bridge wingwall Elev. = 191.137

Existing Structure: S.N. 081-3021 built for Illinois Department of Conservation in 1966, is a 2 span WF with a 165 mm R.C. deck, 19.61 m back to back abutment and 9.45 m out to out, on closed abutments. The existing deck shall be removed and replaced along with substructure repairs utilizing stage construction.

No salvage

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 204	*	ROCK ISLAND	31	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1  
14 SHEETS

GENERAL NOTES

\* 92-00297-00-BR  
Contract 85424

Fasteners shall be AASHTO M164M Type 1, Mechanically galvanized bolts. Bolts M20 φ, holes 22 mm φ, unless otherwise noted. The inorganic zinc rich primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. 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 Blue 10B 3/6. See Special Provision for "Cleaning and Painting New Metal Structures."

Cleaning and painting of the existing structural steel shall be as specified in the Special Provision for "Cleaning and Painting Existing Steel Structures". All existing structural steel within 1.5 m of beam ends shall be cleaned per near white blast cleaning SSPC-SP10. The exterior and the bottom flange of the fascia beams shall be cleaned per power tool cleaning - commercial grade. The aluminum epoxy mastic / acrylic paint system shall be used for painting of existing structural steel. The color of the final finish coat shall be Blue, Munsell No. 10B 3/6.

Reinforcement bars shall conform to the requirements of ASTM A 706M Gr 400 (IL Modified). See Special Provisions

Plan dimensions and details relative to existing plans are subject to routine 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 based upon the unit price bid for the work.

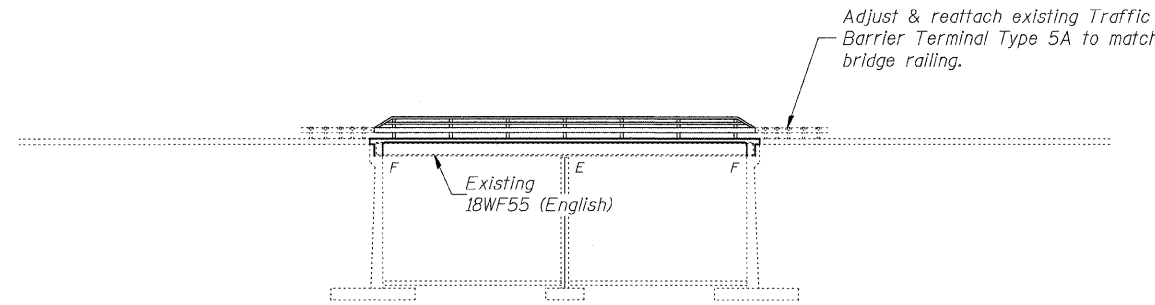
No field welding is permitted except as specified in the contract documents. The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

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 an individual acceptable to the Engineer. Any cracks that can not be removed by grinding 6mm 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.

All dimensions are in millimeters (mm) except as noted.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Concrete Deck	Each	1		1
Wall Restraining Anchors	Each		22	22
Steel Railing, Type TP-1 (Special)	m	40		40
Furnishing and Erecting Structural Steel	kg	2090	5060	7150
Concrete Superstructure	m <sup>3</sup>	45.6		45.6
Concrete Structures	m <sup>3</sup>		4.4	4.4
Reinforcement Bars, Epoxy Coated	kg	6290	430	6720
Protective Coat	m <sup>2</sup>	200		200
Stud Shear Connectors	Each	868		868
Epoxy Crack Injection	m		50	50
Name Plates	Each	1		1
Containment and Disposal of Lead Paint Cleaning Residue	L.S.	1		1
Bridge Deck Grooving	m <sup>2</sup>	189		189
Cleaning and Painting Steel Bridge	L.S.	1		1
Bar Splicers	Each	188		188
Anchor Bolts, M24	Each	0	44	44



ELEVATION

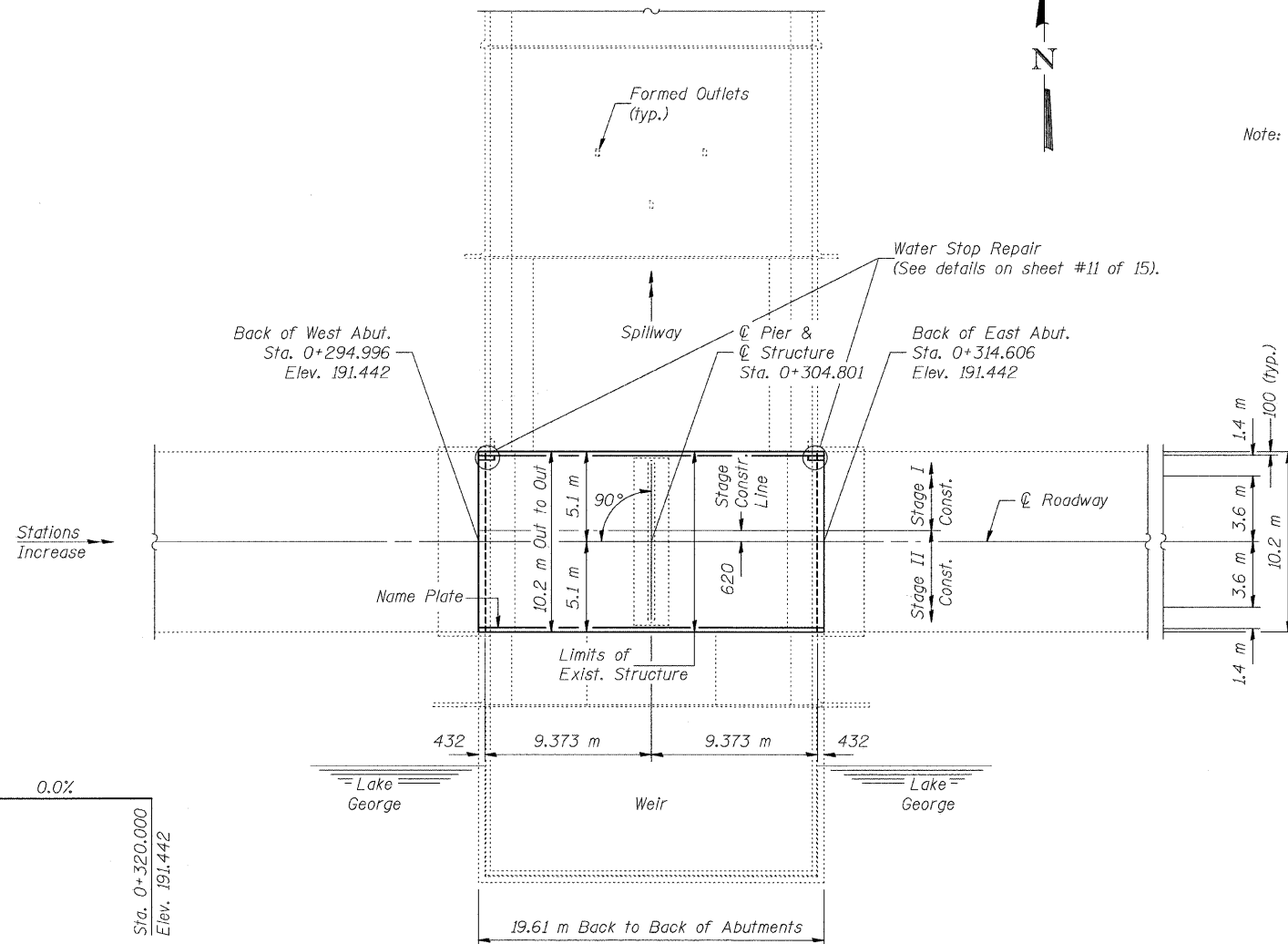
Reinforcement bars designated (E) shall be epoxy coated.

LAKE GEORGE SPILLWAY  
REBUILT 20 BY  
ROCK ISLAND COUNTY  
SEC. 92-00297-00-BR  
F.A.S. RT. 204 STA. 0+304.801  
F.A. PROJECT:  
STR. NO. 081-3021 LOADING MS18

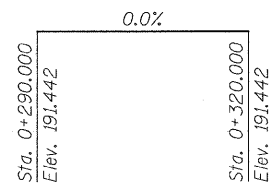
NAME PLATE

See Std. 515001

Note: Existing Name Plate to be cleaned and relocated next to new Name Plate. Cost included with Name Plates.



PLAN



PROFILE GRADE  
(along roadway)

DESIGNED	SPN
CHECKED	TWH
DRAWN	R. Doty
CHECKED	SPN/TWH

December 28, 2007  
EXAMINED: [Signature]  
PASSED: [Signature]



EXPIRES 11-30-2008

LOADING MS18  
Allow 1.2 kN/m<sup>2</sup> for future wearing surface.

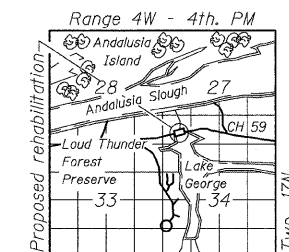
DESIGN SPECIFICATIONS  
1996 AASHTO

DESIGN STRESSES

FIELD UNITS  
NEW CONSTRUCTION  
f<sub>c</sub> = 24 MPa  
f<sub>y</sub> = 400 MPa (reinforcement)  
f<sub>y</sub> = 250 MPa (structural steel M 270M, Gr. 250)  
EXISTING CONSTRUCTION  
f<sub>c</sub> = 24 MPa  
f<sub>y</sub> = 276 MPa (reinforcement)  
f<sub>y</sub> = 250 MPa (structural steel)

SEISMIC DATA

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.028g  
Site Coefficient (S) = 1.2



LOCATION SKETCH

GENERAL PLAN  
CH 59 OVER  
LAKE GEORGE SPILLWAY  
F.A.S. RTE. 204-SEC. 92-00297-00-BR  
ROCK ISLAND COUNTY  
STATION 0+304.801  
STRUCTURE NO. 081-3021