

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi fy = 60,000 psi (Reinf.) fy = 30,000 psi (Existing Structural Steel) fy = 36,000 psi (Proposed Structural Steel)

Localing H3 20-44 Design Specifications: 2002 AASHTO & all applicable interims. 25#/Sq. Ft. included in dead load for future wearing surface.

Seismic Performance Category (SPC) = A Bedrock Acceleration Coefficient (A) = 0.045g Site Coefficient (S) = 1.0

WATERWAY INFORMATION

Drainage Area = 8.1 Sq. Mi. Low Grade Elev. 549.65 @ Sta. 12+00										
Flood	Freq.			Sq. Ft. Natural		Head - Ft.		Headwater El.		
7 7000	Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.	
Design	20	1,730	320	320	545.4	0.2	0.2	545.6	545.6	
Base	100	2,650	390	390	547.5	0.6	0.6	548.1	548.1	
Overtopping										
Max Calc	500	3 570	390	390	547 R	1.1	11	5489	548 9	

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges",

Steven W. Maggison ILLINOIS STRUCTURAL NO. 6064 6-10.05

QPI and QPZ painting contractes certification are not required for this project.

GENERAL NOTES

Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.

All proposed construction activity shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions. Plan dimensions and details relative to existing structure have been taken from filed purely and activities to exist the partial partials per the second proposed to the control of the purely and the permit of the partial partials partials per the control of the control of the permit of the pe

from field survey and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for

the work.

The Contractor shall excavate behind the abutments to the elevations

The excavation shall be a contractor of the excavation shall be a contractor. shown prior to the removal of the existing deck. The excavation shall be backfilled with Porous Granular Backfill after superstructure rehabilitation has been completed. The excavation required behind the abutments shall be

considered incidental to Porous Granular Backfill.

Removal of existing bridge rail will be included in the pay item Removal of Existing Concrete Deck.

Fasteners shall be high strength bolts. (AASHTO M164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type I or 2 in painted areas). Bolts ³/₄ '\(\phi \), open holes ¹⁵/₆ '\(\phi \), unless otherwise noted. Calculated weight of Structural Steel = 580 Lbs. This includes new anchor bolts

(at both abutments) and replacement bearing plates (at both abutments) where determined necessary by the Engineer after Concrete Removal.)

Field welding of construction accessories to beams will not be permitted. Reinforcement bars shall conform to the requirements of AASHTO M31 or

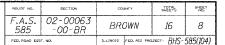
M322 Grade 60.

Bridge Deck Grooving shall be completed on the surface area of the bridge. Profective Coat shall be applied to the bridge surface and fascias.

All construction joints shall be bonded.

Painting of existing steel when entire structure will be blast cleaned:

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 steel shall be cleaned per Near White Blast Cleaning - SSPC-SP10. All existing steel shall be painted according to the requirements of Paint System 1 - 0Z/E/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 Gray, Munsell No 5B 7/1.

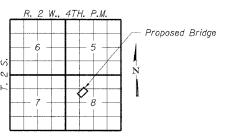


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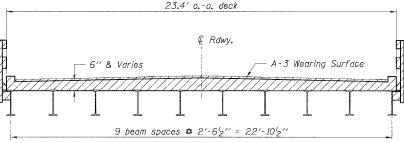
CONTRACT NO. 93399

CAMP CREEK REBUILT 200_ BY BROWN COUNTY SEC. 02-00063-00-BR C.H. 11 / F.A.S. 585 F.A. PROJ. BHS-585(104) STR. NO. 005-3020 / LOADING HS 20

> NAME PLATE See Std. 515001



LOCATION SKETCH



EXISTING BRIDGE SECTION



'ndicates limits of removal of existing concrete deck. See special provisions.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Concrete Deck	Each	1		1
Concrete Removal	Cu. Yd.		3.4	3.4
Concrete Superstructure	Cu. Yd.	30.9		30.9
Bridge Deck Grooving	Sg. Yd.	112		112
Protective Coat	Sq. Yd.	124		124
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	540		540
Cleaning and Painting Steel Bridge	L. Sum	1		1
Containment and Disposal of Lead Paint Cleaning Residues	L. Sum	1		1
Reinforcement Bars, Epoxy Coated	Pound	7,790	155	7,945
Steel Railing, Type S1	Foot	86		86
Name Plates	Each	1		1
Porous Granular Backfill	Ton			60
Riprap, Special	Ton			50



LONDIG

Expires 11-30-06

A Division of Hampton, Lenzini and Renwick, Inc. Civil & Structural Engineer

80IS. Durkin Drive Springfield, Illinois 62704 217-546-3400 P.O. Box 1036 DuQuoin, Illinois 62832 618-790-4637 12-16-0017-1 Ogte: 06/10/05 ESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.

Rice, Berry and Associates

GENERAL PLAN AND ELEVATION SECTION 02-00063-00-BR

C.H. 11 / F.A.S. 585

BROWN COUNTY

STRUCTURE NO. 005-3020 / STATION 10+00

