

**SUMMARY OF QUANTITIES**

Location	Item	Class III Excavation Cu. Yds.	Concrete	Reinforcing Steel, Gr. 60 (Repair)	Reinforcing Steel (Grade 60) (Epoxy Coated)	Structural Steel (AASHTO M270)	Multi-Layer Polymer Concrete Overlay	Bridge Curb Repair	Concrete Surface Repair	Handrail, Remove, Repair and Reset, Type I	Handrail, Remove, Repair and Reset, Type II	Concrete Masonry Coating Lump Sum	Sidewalk Approach Seat	Area Prepared for Patching	Area Prepared for Patching (Full Depth)	Structural Steel (Merchant Quality)
			Grade 4.0 (AE) Cu. Yds.	Lbs.	Lbs.	Lbs.	Sq. Yds.	Sq. Ft.	Sq. Ft.	L.F.	L.F.	Each	Sq. Yds.	Sq. Yds.	Lbs.	
Abutment No. 1 (West)		1,348				8,920							2			
Retaining Wall 'A' (West)			137.9		25,210											
Retaining Wall 'B' (East)			172.3		30,820											
Abutment No. 2 (East)		2,534				9,950							2			
Abutment Wingwall (East)			2.0		290											
Superstructure				10,214			2,831	195	3,004			1		1,301	59	2,380
<b>Total</b>		<b>3,882</b>	<b>312.2</b>	<b>10,214</b>	<b>△ 56,320</b>	<b>18,870</b>	<b>2,831</b>	<b>195</b>	<b>3,004</b>	<b>804</b>	<b>826</b>	<b>1</b>	<b>4</b>	<b>1,301</b>	<b>59</b>	<b>2,380</b>

△ Reinforcing steel does not include bridge sidewalk approach slab seat

**GENERAL NOTES**

**EXISTING DIMENSION VERIFICATION:** Dimensions of the existing structure are based on old plans. Verify, by field measurement, the as built dimensions of the existing structure and submit such verification in writing to the Engineer. The verification will include sketches, drawings, photographs and descriptions as needed to clearly define the as built dimensions that will be incorporated in the new construction.

**ENVIRONMENTAL PROTECTION:** Use protection as shown in the KDOT Specifications. The Environmental Protection Structure Classification is Class A or B.

These plans provide for the construction of all proposed bridge improvements without the necessity of entering or disturbing the Arkansas River. If the Contractor determines that entering the river will be desired or necessary, he will be responsible for obtaining all permits and adhering to all regulatory requirements. The Contractor shall prevent all construction materials and debris from coming in contact with the river.

**EXISTING REINFORCING STEEL:** Existing reinforcing steel to remain in place shall be thoroughly cleaned. Bars severely damaged or broken shall be straightened or replaced as directed by the Engineer. After removal of concrete, any bars which have lost more than one-half the original cross-sectional area due to corrosion, shall be replaced and paid for at the unit price bid for "Reinforcing Steel (Repair)".

**REINFORCING STEEL:** All reinforcing steel dimensions are to the centerline of bars unless otherwise noted. All reinforcing steel, except the spiral bars, shall conform to the requirements of ASTM A615, Grade 60.

**CONCRETE:** Superstructure concrete is bid as Concrete (Grade 4.0)(AE). Bevel all exposed edges of all concrete with a 3/4" triangular molding, except as otherwise noted on the plans.

**EXISTING CONCRETE:** Casting to existing concrete, the term "existing" means "any".

**TEMPERATURE:** The design temperature for all dimensions is 60° F.

**QUANTITIES:** Items not listed separately in the Summary of Quantities are subsidiary to other items in the proposal.

**DIMENSIONS:** All dimensions shown on the design plans are horizontal dimensions unless otherwise noted. Make necessary allowances for roadway grade and cross slope.

**EXISTING UTILITY CONDUIT:** The existing utility conduit for light poles on bridge supported below the bridge deck shall remain.

**STRUCTURAL STEEL:** Support beam, stiffener and end plates shall meet AASHTO M270 Grade 50W unless noted otherwise.

**WELDING:** Material and construction shall conform to KDOT Specifications. Welding requires approved procedures and welders.

**DECK PREPARATION:** Remove loose and unsound deck concrete and bituminous material as designated by the Engineer to whatever depth is necessary to reach sound concrete. See KDOT Specifications. Prepared areas are to be patched in accordance with these plans.

**MASONRY COATING:** Contractor to provide material documents for approval prior to application. The quantity shown is an estimate of the area to be coated as shown in these plans. No measurement of quantity will occur in the field and no change in payment will be made for this item based on actual quantity placed.

**CONSTRUCTION LOADS:** Only foot traffic is permitted on the new deck during the seven day curing period. Work to place reinforcing steel or forms for the bridge rail or barrier is allowed 3 days after the concrete is placed provided the curing is maintained on any exposed deck by keeping it wet during the 7-day curing period. Light truck traffic (gross vehicle weight less than 5 Tons) is allowed on the deck 15 days after the pour is completed. Legal loads are permitted 21 days after the concrete is placed. With Engineer approval, heavy stationary loads may be allowed on the bridge deck 28 days after the deck pour is completed. See KDOT Specifications.

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**DESIGN DATA**

**EXISTING DESIGN SPECIFICATIONS:**  
AASHTO Specifications, 1957 Edition.

**EXISTING DESIGN LOADING:**  
HS 20-44

**EXISTING UNIT STRESSES:**  
Reinforcing Steel:  $f_y = 40,000$  psi (1961 Plans)  
 $f_y = 60,000$  psi (1991 Plans)

**NEW UNIT STRESSES:**  
Concrete (Grade 4.0)(AE):  $f'_c = 4,000$  psi  
Reinforcing Steel (Grade 60):  $f_y = 60,000$  psi  
Structural Steel (AASHTO M270 Gr. 50W)

LRFR RATING FACTORS			
Design Load	Rating Level	Inventory	Operating
	HL-93 Loading		0.9
2008 Manual for Bridge Evaluation			

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**GENERAL NOTES & QUANTITIES**

PROJECT NO.	472-84922	
DATE	04/05/2016	
SCALE	NONE	
DESIGNED	DRAWN	CHECKED
HWL	DPG	KJS
NO.	REVISION	DATE

PLOTFILE: Tuesday, April 05, 2016 @ 11:56AM  
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