STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 N-0519-01	2012	75	212

GENERAL NOTES (CONT.)

FALSEWORK INSPECTION: This project has falsework plan requirements which are considered "Category 1" by KDOT specifications. The falsework designer of record will conduct an inspection of the as-built falsework. The bid item, "Falsework Inspection" is full compensation for all materials, labor and equipment. See KDOT specifications

FILLETS: Camber the steel girders for the total dead load deflection and the vertical curvature, if necessary. The ordinates shown for concrete dead load deflection represent the amount of camber that should be in the girders after they are erected and bolted but prior to placing the floor forms. After the structural steel is completely erected and the falsework bents are removed, measure the camber in the field by taking a profile of each girder. Correct any variation between the actual camber and the concrete dead load deflection shown in the plans by varying the depth of the concrete fillets over the girders so that the finished floor is constructed to the theoretical grade. The minimum depth of the slab over the girder shall be 9 1/2" inches.

The theoretical amount of concrete required for the fillets is 26.5 C.Y. This amount of concrete is included in the Summary of Quantities. Any additional concrete required to construct the fillets will be subsidiary.

FABRICATION OF WELDED SPLICES: See Figure 3.2.3-5 "Flange and Web Welded Splice Configurations" of the Bridge Design Manual. All flange splices shall be full penetration welds.

PAINTING TOP FLANGES: (Studs applied in the shop) Apply a 3 mil primer coat of an approved inorganic zinc primer to the tops of the top flanges and to the studs.

(Studs applied in the field) Shop Work - Blast clean the tops of the top flanges to SSPC-SP10 Specifications (latest Revision).

Field Work - Blast clean the tops of the top flanges to SSPC-SP6 Specifications (latest Revision) before the studs are applied. After the studs are applied, blast clean the tops of the top flanges and the studs to SSPC-SP6 Specifications and paint with an approved organic zinc primer to a minimum dry film thickness of 3 mils.

FABRICATION OF FIELD SPLICES: Prepare joints for the field splices in accordance with KDOT Specifications. Use Type "B" shop laydown.

STRUCTURAL STEEL: Girder flange plates and flange splice plates shall meet AASHTO M270 Grade 50W T3 requirements except as noted. Girder web plates and web splice plates shall meet ASTM A709 Grade 50W T3 requirements except as noted. All other structural steel shall meet ASTM A709 Grade 50W, unless noted otherwise. Shop and Field Splices shall be made only where shown on the Contract Plans as a "splice" or as an "optional splice." Elimination of any "splice" may be requested.

PAINTING: Blast clean all surfaces of all weathering steel, including all contact surfaces of bolted connections, to meet SSPC-SP6 Specifications (latest Revision). Blast clean to meet SSPC-SP10 Specifications and prime coat the embedded portion of the girders, including the abutment diaphragms; the top flanges, including the shear studs; and the top flange splice plates. Paint the areas of the girder near the expansion devices in accordance with KDOT Specifications.

PAINTING BEARINGS: Blast clean the bearings, in the shop, except for the ANSI 125 finished surfaces. Paint the bridge bearings with an Inorganic Zinc Primer except for the ANSI 125 finished surfaces. Paint the ANSI 125 finished surfaces with an approved dry film lubricant. After erection, apply the water-borne acrylic finish coat to all exposed surfaces.

BOLTS: All bolts, nuts and hardened flat washers shall conform to the heavy hex structural requirements of ASTM A325, Type 3, and KDOT Specifications unless otherwise noted. Direct Tension Indicators (DTIs) are to comply with the requirements of the latest edition of ASTM F959. No allowance will be made for high strength bolts used for permanent or temporary connections. This work is subsidiary to the bid item, "Structural Steel". The number of bolts is shown for the convenience of the Contractor.

BOLTED CONNECTIONS: Girder Connections: Use 7/8 inch diameter heavy hex structural bolts for the main member connections. Use 15/16 inch diameter bolt holes. Do not ream during field erection. Accurately align all connections by driving 15/16 inch diameter drift pins in all corners and in ¼ of the remaining holes in each plate. See KDOT Specifications.

Secondary Member Connections: Use 7/8 inch diameter heavy hex structural bolts for the secondary member connections. Use 15/16 inch diameter bolt holes. Oversized and/or slotted holes, as specified in the KDOT Specifications, may be used in only one of the two members connected and must be shown in the approved shop drawings. Oversized and/or slotted holes may require additional standard hardened washers or plate washers. Report to the Engineer prior to any required field reaming that will remove more than 1/4 inch of material from one ply of the connected parts.

Use Direct Tension Indicators (DTIs) on all high strength bolts. Place the DTI under the bolt head and turn the nut to tighten. This method is preferred whenever possible. Face the protrusions on the DTI to the underside of the bolt head. Place a hardened flat washer under the nut. See KDOT Specifications.

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

ERECTION: Bring each line of girders to the correct line, grade (or relative grade) and camber, and secure in place prior to connection of the girder field splices. Provide falsework bents as necessary to maintain the correct line and elevation. Leave the falsework bents in place until all girder splice connections are completed. Submit information which clearly shows the proposed layout and use of falsework bents. The Engineer shall approve such information prior to erection of structural steel.

CONSTRUCTION JOINTS: The construction joints shown are optional with the Contractor. If used, place the construction joints only at locations shown or at locations approved by the Engineer.

OPTIONAL PERMANENT STEEL DECK FORMS: At the Contractor's option, an approved permanent steel deck form may be used in place of conventional wood forms. Use Type 1 steel deck forms conforming to ASTM A446. Support hangers shall be a non welded system. Do not weld to any flange. The pay quantity of the concrete slab shall be computed from the nominal slab dimension with no allowance for corrugations. No direct payment will be made for deck forms or any additional concrete. Permanent steel deck forms shall be used inside the girders (non exposed area) only.

RADIOGRAPHIC INSPECTION OF GIRDERS: Radiograph all butt welds in the flanges and all but the middle one third of the web butt welds in each span.

WELDING: Material and construction shall conform to KDOT Specifications. On the shop drawings, show a code or symbol at the tail of the weld symbol, which refers to an approved pre-qualified weld procedure.

WELDED STUD SHEAR CONNECTORS : Weld Shear Stud Connectors with automatically timed stud welding equipment connected to a suitable power source. All stud welding shall conform to KDOT Specifications.

CONCRETE PLACING SEQUENCE: The Superstructure Deck Concrete shall be placed as shown in the construction sequence. If, due to an unforeseen emergency situation, the concrete placement is stopped, a transverse construction joint shall be installed 1/4 of the span length short of a pier as directed by the Engineer. The following information shall be provided to the Engineer: The proposed rate of concrete placement in cubic yards per hour, the plant capacity, a description of the equipment used in placing the concrete, proposed admixtures, and the quantity of concrete in each placing segment. Any additional cost for the Contractor's plan of placing concrete, including admixtures, shall be at the Contractor's expense and considered subsidiary to the bid item "Concrete (Grade 4.0)(AE)(SA)". Approval of the Contractor's sequence is required prior to placement of concrete for the Superstructure. The Contractor may submit an alternate placing sequence for review. All falsework supports shall be released and provide adequate deflection for dead load prior to casting the Deck. Depending on the Contractor's placing sequence, an uplift may occur at girder ends. The falsework plans may need to include hold-downs or anchor bolts at girder ends.

CONSTRUCTION LOADS: Only foot traffic is permitted on the new sub-deck, one-course deck or any concrete overlay during the seven day curing period, keep any exposed deck wet during the 7-day curing period. See KDOT Specifications Section 710 Table 710-2.

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.

REMOVAL OF EXISTING STRUCTURE: Removal of existing structure is included in the bid item, "Removal of Existing Structures", Lump Sum. All materials removed from the existing structure shall become the property of the Contractor and removed from the construction site.

DEMOLITION PLANS: This is a Category C Demolition. Submit detailed Demolition Plans to the State Bridge Office (or Bureau of Local Projects) at least 4 weeks before beginning the demolition process. Portions of the submitted details shall bear the seal of a Licensed Professional Engineer. Identify, on the plans, the Demolition Supervisor meeting the requirements of the KDOT Specifications. The Demolition Supervisor will attend the required pre-demolition meeting before these operations begin, as described in KDOT Specifications. No demolition work will begin without approved Demolition Plans.

BRIDGE DECK GROOVING: After the bridge deck has cured, transversely groove the deck in accordance with KDOT Specifications. For phased construction groove each completed phase before opening to traffic. Align the grooves from each adjacent phase across the bridge deck without jogs or discontinuities. For skewed bridges all grooving will be perpendicular to the centerline of the bridge.

RAILROAD PROTECTION: Execute the work in such a manner and take any precautions necessary to prohibit broken concrete and other debris from falling on and damaging the rails, ties, ballast or other railroad property. As much as possible, do the work so as not to interfere with the normal use of the tracks. The Union Pacific Railroad and the Engineer shall approve the methods of protection proposed by the Contractor before any work begins.

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JAY ANGLEMYER 13283 LICENSED PROFESSIONAL ENGINEER KANSAS

BROADWAY BRIDGE AT 34TH STREET SOUTH

GENERAL NOTES AND QUANTITIES
SHEET TITLE

472-84830
PROJECT NUMBER

JAG
DESIGN BY

DPG
DRAWN BY

KJS
CHECKED BY

ISSUED
October 9, 2012
REVISED

SHEET NO.
75 of 212

PLOTTED: Thursday, October 11, 2012 @ 10:46AM
J:\Civil\09081\dwg\BRIDGE\09081 GN2