

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-85066	2014	238	388

**TAPERED TUBE ALTERNATE**

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 2009 Edition with current interims.

SHOP DRAWINGS: Before any fabrication is begun under the Contract, the Contractor or Fabricator shall submit, a set of complete shop drawings to the Engineer for approval. The Contractor shall be responsible for the correctness of his drawings, for shop fit-ups and field connections, after the drawings have been approved by the Engineer.

DIMENSIONAL TOLERANCE: All material, in addition to conforming to the appropriate ASTM requirements listed, shall not vary from the plan dimensions by more than +/-2%.

TAPERED STEEL TUBE: Steel tubes for poles and arms shall conform to ASTM A595 Grade A and shall have a decreasing taper of 0.14 in. per ft. No tubes may be spliced.

STRUCTURAL STEEL: All shapes, bars, and plates shall conform to ASTM A709 Grade 36.

BOLTS: All high strength bolts, nuts, and washers shall conform to ASTM A325 and shall be hot-dip galvanized to meet the requirements of ASTM A153, Class C. One washer shall be used under the turned element. All miscellaneous fasteners necessary for sign mountings shall be regular hex bolts, nuts with lockwashers and shall conform to ASTM A307 grade A and to the "Standard Specifications for State Road and Bridge Construction" and shall be coated. Stainless steel bolts may be used in lieu of coated bolts. Bolts shall have single self-locking nuts or double nuts. Beveled washers shall be used where bearing faces have a slope of more than 1:20 with respect to a plane normal to the bolt axis. Beveled washers may be clipped.

WELDING: All welding shall conform to the "Standard Specifications for State Road and Bridge Construction" and the latest edition of American Welding Society Specification Structural Welding Code D1.1-Steel. Only electrode filler metal, Grade 70 shall be used.

GALVANIZING: All material shall be hot dip galvanized according to ASTM A123, after fabrication, unless otherwise noted. Any damage to the coating shall be repaired after erection.

**UNIFORM TUBE ALTERNATE**

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 2009 Edition with current interims.

SHOP DRAWINGS: Before any fabrication is begun under the Contract, the Contractor or Fabricator shall submit, a set of complete shop drawings to the Engineer for approval. The contractor shall be responsible for the correctness of his drawings, for shop fit-ups and field connections, after the drawings have been approved by the Engineer.

DIMENSIONAL TOLERANCE: All material, in addition to conforming to the appropriate ASTM requirements listed, shall not vary from the plan dimensions by more than +/-2%.

PIPE: Steel pipe for poles and arms shall conform to ASTM A53, Type E or S, Grade B. No pipe may be spliced.

STRUCTURAL STEEL: All shapes, bars and plates shall conform to ASTM A709 Grade 36.

BOLTS: All high strength bolts, nuts, and washers shall conform to ASTM A325 and shall be hot-dip galvanized to meet the requirements of ASTM A153, Class C. One washer shall be used under the turned element. All miscellaneous fasteners necessary for sign mountings shall be regular hex bolts, nuts with lockwashers and shall conform to ASTM A307 grade A and to the "Standard Specifications for State Road and Bridge Construction" and shall be coated. Stainless steel bolts may be used in lieu of coated bolts. Bolts shall have single self-locking nuts or double nuts. Beveled washers shall be used where bearing faces have a slope of more than 1:20 with respect to a plane normal to the bolt axis. Beveled washers may be clipped.

WELDING: All welding shall conform to the "Standard Specifications for State Road and Bridge Construction" and the latest edition of American Welding Society Specification D1.1 Structural Welding Code D1.1-Steel. Only electrode filler metal, Grade 70 shall be used.

GALVANIZING: All material shall be hot-dip galvanized according to ASTM A123, after fabrication, unless otherwise noted. Any damage to the coating shall be repaired after erection.

**SIGN MOUNTING**

**CANTILEVER TYPE**

STEEL TUBE: Tubes shall conform to ASTM A500.

**ERECTION AND DEMOLITION PLANS**

ERECTION PLANS: This is a Category A Structure. Submit detailed Erection Plans to the Field Engineer per KDOT Specifications. The seal of a Licensed Professional Engineer is not required.

DEMOLITION PLANS: This is a Category A Demolition. Submit detailed Demolition Plans to the Field Engineer per KDOT Specifications. No Demolition work will begin without approved Demolition Plans. The seal of a Licensed Professional Engineer is not required.

Std. Base File:  
 Plotted By: cp  
 File: I:\2009\09521\Overhead Signing - KDOT\EN35700\POS21.dgn  
 Plot Date: 30-DEC-2013 16:22

2	5/11/11	Updated notes and added notes	KMP	TLF
1	3-26-96	Changes to grating note	LES	KFH
NO.	DATE	REVISIONS	BY	APP'D
<b>KANSAS DEPARTMENT OF TRANSPORTATION</b>				
STANDARD STRUCTURAL SIGN SUPPORTS CANTILEVER AND BUTTERFLY TYPE OVERHEAD GENERAL NOTES AND SPECIFICATIONS SL152A-01				
FHWA APPROVAL		6-9-2011 APP'D		Terry L. Fleck
DESIGNED	BFM	DETAILED	DJE	QUANTITIES
DESIGN CK.	RDH	DETAIL CK.	LES	QUAN. CK.
			CADD	BY
			CADD	CK.