SECTION COUNTY TR 416 05-07128-00-BR FAYETTE 12 FED. ROAD DIST. NO. ILLINOIS PROJECT

Hollow structural steel tubing shall conform to the requirements of confract.

ASTM designation A500 Grade B Structural Steel Tubing and shall meet

No. 95481 the longitudinal CVN requirements of 15 ft.-lbs. at 0° F. All other steel shapes and plates shall conform to the requirements of

NOTES

AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270 Grade 50.

Bolts, cap screws, and nuts shall conform to the requirement of ASTM designation A307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.

All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M-111 and ASTM A 385. Galvanized rail shall not be painted.

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for STEEL RAILING, TYPE S-I.

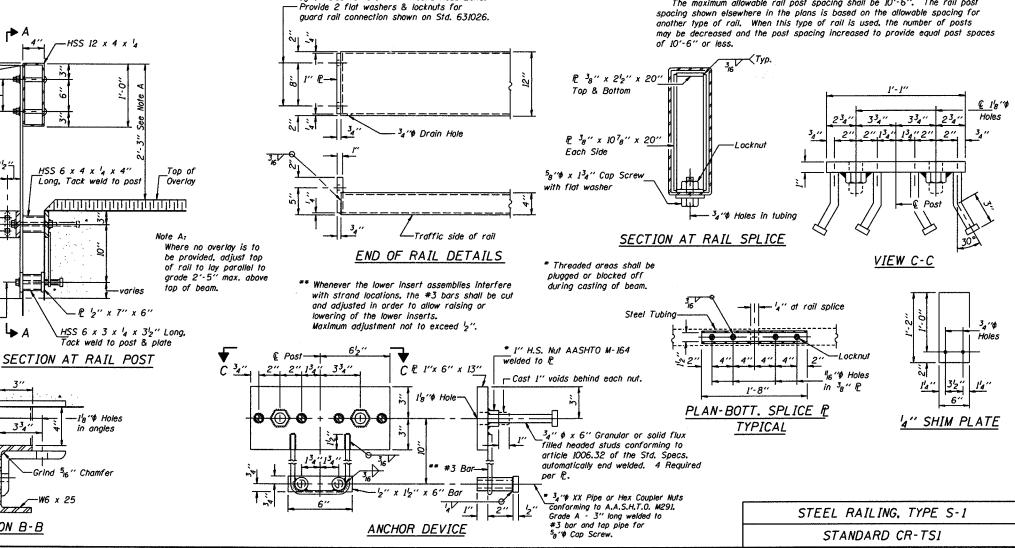
For multi-span bridges, sufficient  $\frac{1}{4}$ " x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with STEEL RAILING, TYPE S-1.

All field drilled holes shall be coated with an approved zinc rich paint before erection.

The '2" x 7" x 6" plates that come in contact with concrete shall either receive two coats of asphalt paint conforming to Section 1060.07 Type II. or '8" fabric bearing pads shall be placed between the plates and concrete.

The  $\frac{3}{4}$ "\$\phi\$ high strength bolts used to connect the 6 x 4 x  $\frac{3}{4}$  angles to the post shall be tightened according to Article 505.04 (f)(2) of the Standard Specifications. The 1'\$\psi\$ high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional ig turn. The 5g' cap screws in bottom of posts shall be tightened to a snug fit only.

The maximum allowable rail post spacing shall be 10'-6". The rail post spacing shown elsewhere in the plans is based on the allowable spacing for another type of rail. When this type of rail is used, the number of posts



I'8" Holes for 1" x 4" Round Head Bolts.

As Required

VIEW A-A ROUND HEAD BOLT

With Slot

-Parallel to arade

2-34" x 6" Round Head Bolts

(with slot or approved recess in

<sup>7</sup>8''� Holes in tubing may be drilled in the field.

in post

with flat washer

with flat washer

P 1" x 6" x 13"-

Edge of Beam ---

2-13<sub>16</sub> "# Holes in angles

1-136" x 512" Slotted

Hole in post.

HSS 6 x 4 x 4 x 4" Long.

L6 x 4 x 34 x 6" Long -

Tack weld to post

2-34"\$ x 314" H.S. Bolts with

hex, nut & flat washers

head) with locknut & flat washer.

1316 " x 512" Slotted Hole

<sup>13</sup>16 " Ø Holes in anales

2-1" x 734" H.S. Bolts

2-58"\$ x 534" Cap Screws

-Grind 5<sub>6</sub>'' Chamfer

SECTION B-B

Without Slot

78' # Holes

В

1<sup>l</sup>a''\$ Holes

in angles

1316 " x 3" Slotted Holes-

Illinois Department of Transportati

Engineer of Bridges and Structures

APPROVED APRIL 4. 2005

SECTION A-A

in post