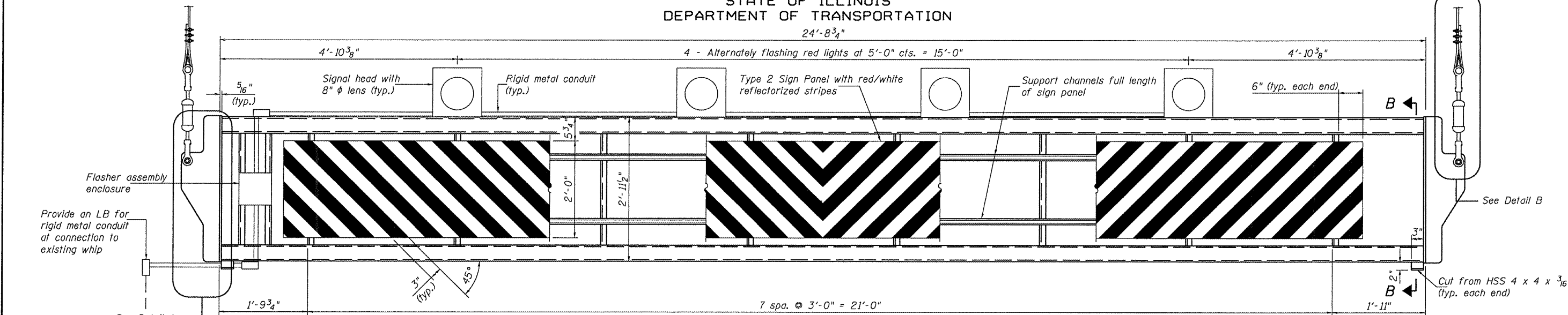


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

24'-8³/₄"



ELEVATION

Notes:

HSS members shall conform to the requirements of ASTM A500, Grade D. Steel plate material and angles shall conform to the requirements of AASHTO M 270, Grade 36.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel. The entire system shall be shop applied and damaged areas shall be touched up in the field. The color of the final finish coat shall be Interstate Green, Munsell No. 7.5G 4/8. See Special Provision for "Cleaning and Painting New Metal Structures".

Conduit layout shown is diagrammatic and is not intended to show exact location. It shall be the Contractor's responsibility to determine the proper size of the electrical cable and conduit, conduit placement, and to provide all necessary fittings, clamps, bushings, and appurtenant hardware as may be required to complete the installation of the conduit and light fixtures. It is permissible for the Contractor to use the inside of the HSS member as conduit. The Contractor shall furnish details for the conduit and electrical system, including the method of attachment to the gate and connection to the existing flexible electrical supply whip, to the Engineer for review and approval prior to ordering material.

Wire rope shall conform to the requirements of ASTM A 475 for extra high-strength grade. Wire rope shall be 7-wire strand construction with a Class C zinc coating. The estimated length of required wire rope at each end of the gate is 65 feet according to the existing plans. The Contractor shall field verify the length of required wire rope prior to ordering material.

The compression spring shall have closed ground ends and a free length of 4.5 inches. The minimum rate of compression shall be 1000 pounds per inch with a maximum solid compressed length of 3 inches.

The number and spacing of the wire rope clips shall be as specified by the wire rope clip manufacturer to develop the breaking strength of the wire rope. Installation of the wire rope clips shall be according to the manufacturer's directions.

No. 2¹/₂" clevis shall have minimum safe working load capacity of 7500 pounds based on 5:1 safety factor.

2" φ pipe and pipe end caps shall be hot dipped galvanized. Pipe end caps shall be of the same grade of material and the thickness shall be equal to or greater than the thickness of the pipe. Pipe end caps shall be tool tightened after assembly of the connection hardware to prevent loosening due to vibrations. All other components in Detail B except the wire ropes shall be galvanized in accordance with AASHTO M 111 or M 232.

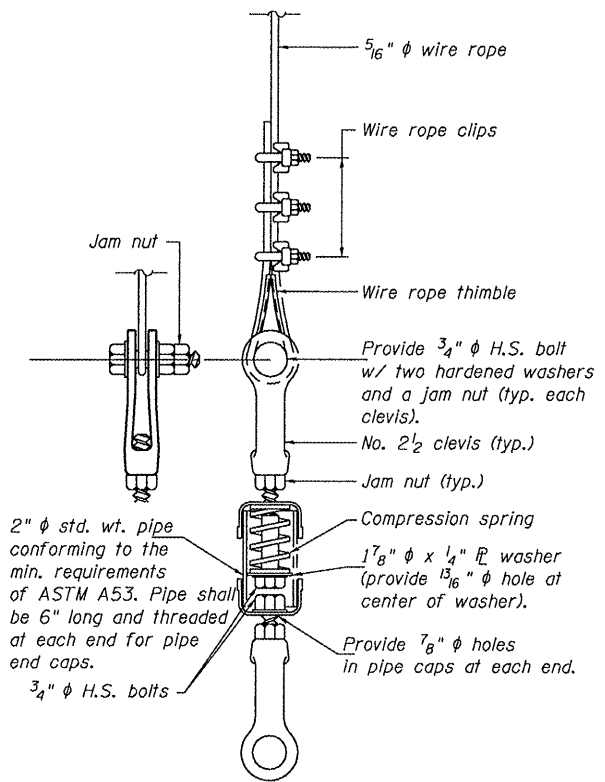
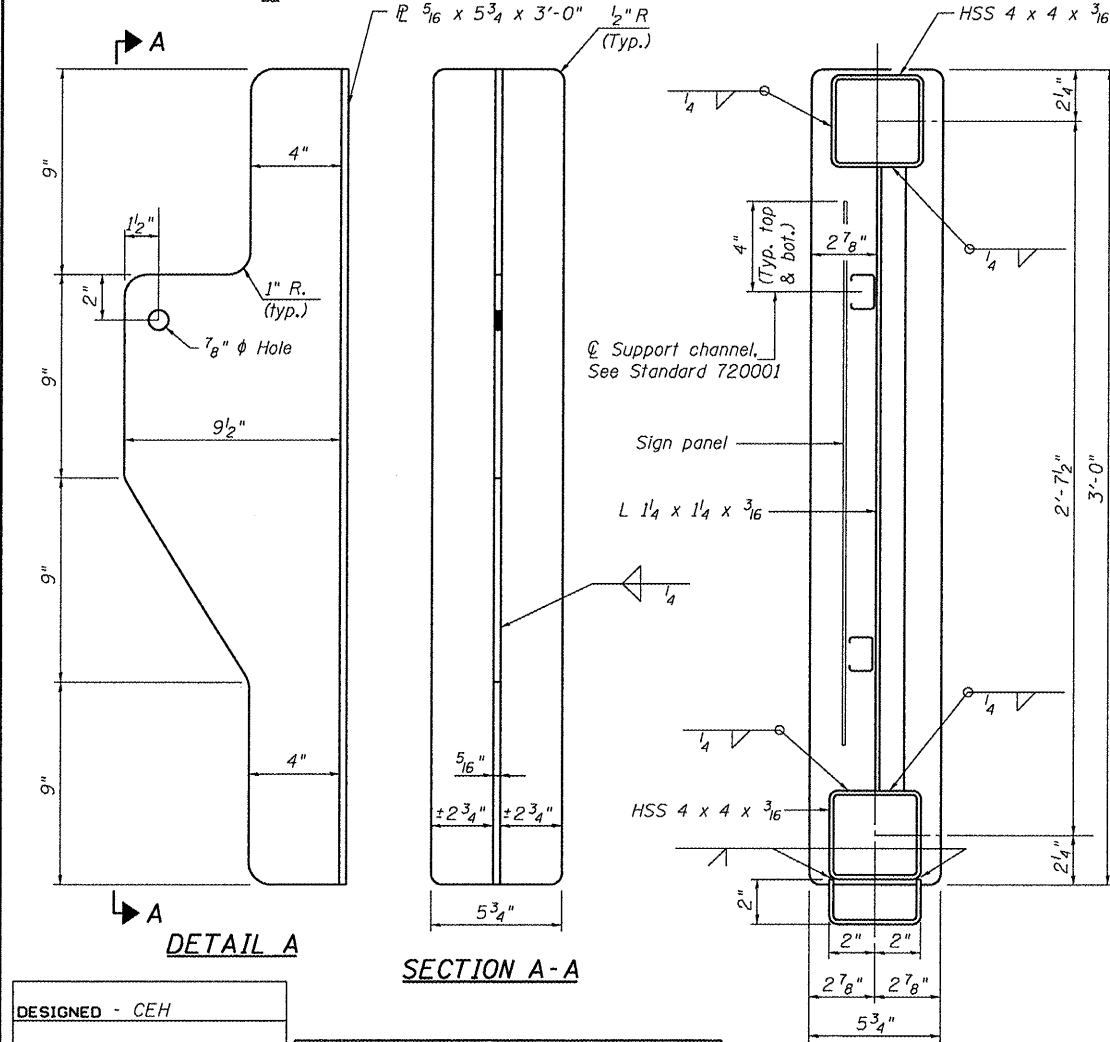
Furnishing, fabricating, and painting structural steel for the new traffic control gates as well as furnishing and installing the wire ropes and all connection hardware shall be included in the cost of Traffic Control Gate Replacement at the location specified.

Sign panel shall be furnished and installed in accordance with Section 720 of the Standard Specifications except as indicated in the plans. The cost of furnishing and installing the sign panel, support channels, and all hardware necessary shall be included in the cost of Traffic Control Gate Replacement at the location specified.

All electrical components shall be furnished and installed in accordance with the applicable portions of Division 800 of the Standard Specifications except as indicated in the plans. The cost of furnishing and installing the electrical components and all necessary hardware and connecting the existing electrical supply whip is included in the cost of Traffic Control Gate Replacement at the location specified.

Work this sheet with sheets 7 thru 9 of 25.

Existing flexible electrical supply whip (typ. at north end of each gate)



| |
|--------------------|
| DESIGNED - CEH |
| CHECKED - SDS |
| DRAWN - DLH |
| CHECKED - CEH, SDS |

WHKS & co.
ENGINEERING

7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

TRAFFIC CONTROL GATE DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

| | | | | | |
|---|--------------------|-------------------|----------------------|-----------------------|-----------------|
| SHEET NO. 10 OF 25 SHEETS | F.A.P. RTE. 757 | SECTION 20BR-2 | COUNTY SCOTT/PIKE | TOTAL SHEETS 30-15 | SHEET NO. 15 |
| | SN 086-0001 | | CONTRACT NO. 72C39 | | |
| FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT | | | | | |