

MICHIGAN  
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION  
FOR  
**SPLICE BOX**

SIG:EMS

1 of 2

APPR:HLO:NJB:04-29-20  
FHWA:APPR:05-05-20

**a. Description.** This work consists of either furnishing and installing, or removing, a splice box, on a steel or wood pole, including enclosure, hardware, fittings, connectors, wiring, grounding and all appurtenant items required for a complete installation or removal of the splice box. The installed splice box must accommodate the wiring from the traffic signals, the pedestrian signals, and pedestrian pushbuttons for two approaches to the intersection.

**b. Materials.** Provide material in accordance with sections 918 and 921 of the Standard Specifications for Construction and this special provision.

1. Where installation is specified on the plans, furnish a splice box meeting the following:
  - A. Fabricated as shown on Standard Plan SIG-408 Series;
  - B. Includes a drip shield to prevent moisture from entering the enclosure when the door is open;
  - C. 18 inches wide, 18 inches high, and 8 inches deep;
  - D. Four standoffs mounted on the inside for a back-panel mounting;
  - E. Opening at the bottom of the enclosure, near the ground bar, to accept a #6 ground wire;
  - F. Predrilled holes as shown on Standard Plan SIG-408 Series;
  - G. Furnished with two cabinet mounting brackets for mounting to wood or steel poles;
  - H. Fabricated so that it is not necessary to remove the back-panel to attach the cabinet mounting brackets;
  - I. Interior painted white;
  - J. Exterior coated with a durable, weather-resistant, protective coating having a total dry film thickness not less than 1.5 mils. Ensure the final coat is aluminum with no paint with a thickness not less than 0.75 mil;
  - K. Furnished with a lock and two keys (Corbin Type Blank 04266 or equivalent);
  - L. Enclosure door is fitted with a 3/16 inch by 5/8 inch neoprene sponge rubber gasket door seal;

M. Furnished with 9-inch by 12-inch ULINE S-2761BL, C-Line 901-46912Q or approved equal, plastic job holder equipped with metal reinforcing hole(s), hung on a hook welded to the inside of door;

N. Furnished with the following terminal blocks each rated for a minimum 30 amperes, 300 volts, with 3/16 to 1/4 inch hex head or screw head screws that do not compress directly on the wires;

(1) Three 16-position compression, to accommodate six #14 American Wire Gauge wires for signal wire termination, each permanently labeled adjacent to both sides of the terminal blocks to identify the terminal block connections;

(2) One 6-position compression terminal block, to accommodate pedestrian push button termination;

O. Furnished with one 13-position neutral buss bar and one 13-position chassis ground buss bar designed to accommodate a #6 ground wire; and

P. All components on the back-panel permanently labeled.

2. Prior to beginning installation, furnish detailed shop drawings, wiring diagrams, and material lists for each splice box for approval, and a sample splice box if requested. Furnish wiring diagrams on 32-pound, 96 brightness, Hammermill laser print paper, or approved equal. Ensure that the wiring diagrams identify the component layout and allow space to write in the field connections. Do not begin installation until approval of the shop drawings is received from the Engineer.

**c. Construction.** Where installation is specified, install, wire, and mount a splice box at location(s) shown on the plans. Complete this work in accordance with sections 819 and 820 of the Standard Specifications for Construction and this special provision.

Where removal is specified, remove the splice box enclosure, hardware, and all appurtenant items as required for a complete removal. Store or dispose of the removed material as directed by the Engineer or as indicated on the plans. Complete this work in accordance with section 204 of the Standard Specifications for Construction.

**d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay items:

Pay Item	Pay Unit
Splice Box .....	Each
Splice Box, Rem.....	Each

1. **Splice Box** includes furnishing and installing a new splice box at locations as shown on the plans.

2. **Splice Box, Rem** includes removing and disposing of an existing splice box at locations as shown on the plans.