

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
TRAFFIC SIGNAL BACKPLATE

SIG:EMS

1 of 2

APPR:HLO:NJB:05-01-20
FHWA:APPR:05-06-20

a. Description. This work consists of completing one or more of the following work types at location(s) shown on the plans:

1. Furnishing and installing a traffic signal backplate.
2. Removing and disposing of an existing traffic signal backplate.
3. Removing, storing and reinstalling an existing traffic signal backplate.

As applicable, this work includes removal or installation of hardware, connectors, fittings and all material necessary to complete the work.

b. Materials. Material must meet sections 819, 820, and 921 of the Standard Specifications for Construction.

1. Provide a one-piece backplate for three or four section traffic signal heads as indicated on the plans or as directed by the Engineer. Ensure that five section (doghouse) signal head combinations are provided with no more than three vacuum formed pieces.
2. Provide backplates that are designed to precisely fit the manufacturer's signal heads and supplied with necessary hardware to attach the backplate to the signal.
3. Provide backplates that are vacuum formed from 0.125 inch thick black acrylonitrile butadiene styrene (ABS) plastic with a hair cell finish on the front side (facing approaching traffic) to reduce glare.
4. Provide backplates that are constructed with a minimum 5/8 inch flange on all sides to provide structural rigidity. Ensure the backplates are provided with a three inch corner radius.
5. Ensure that all backplates extend approximately five inches around the perimeter of the traffic signal combinations after installation.
6. Provide backplates with an *ASTM Type IV* reflective yellow tape border. Ensure that a one inch border is used with yellow signal heads and visors, and a two inch border is used with black signal heads and visors.
7. **Warranty.** Provide materials with a manufacturer's warranty/guarantee, transferable to MDOT, that the supplied materials will be free from all defects in materials and workmanship for the stated time period from the date of shipment. Supply the Engineer with any warranty or guarantee documents from the manufacturer and a copy of the invoice showing date of

shipment.

c. Construction. Complete this work in accordance with sections 819 and 820 of the Standard Specification for Construction, as shown on the plans, and as directed by the Engineer. Remove, store, and dispose of material in accordance with section 204 of the Standard Specification 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
Backplate, TS.....	Each
Backplate, TS, Rem.....	Each
Backplate, TS, Salv	Each

1. **Backplate, TS** includes installing the backplate on existing or new signal head(s) at location(s) shown on the plans where installation is specified. Furnish and install a traffic signal backplate, as indicated on the plans or as directed by the Engineer.

2. **Backplate, TS, Rem** includes removing the existing backplate, hardware, and other appurtenances, required for a complete removal where removal is specified. Dispose of removed materials.

3. **Backplate, TS, Salv** includes removing the existing backplate, hardware, and other appurtenances required for a complete removal, storing salvaged materials in a clean environment, and reinstalling the materials where salvage is specified. Complete reinstallation in accordance with subsection c. of this special provision.