

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
**WARRANTY WORK REQUIREMENTS FOR PAVER PLACED SURFACE SEAL
(CAPITAL PREVENTIVE MAINTENANCE)**

CFS:DJW

1 of 3

APPR:KPK:RAG:09-25-20
FHWA:APPR:10-02-20

a. Description. This special provision must be used in conjunction with 20SP-500B to construct warranted paver placed surface seals. The work consists of the surface preparation and application of a paver placed surface seal.

b. Limits of Warranted Work. The warranted work includes all paver placed surface seal applications on driving lanes and shoulders within the project limits unless otherwise indicated in the proposal or excluded as specified in subsection h.1 of this special provision.

c. Warranty Period. The length of warranty will be 3 years from the Acceptance Date of Warranted Work.

d. Amount of Warranty Bond. Supply a warranty bond equal to 100 percent of the warranted work for paver placed surface seal.

e. Materials. Subsection 503.02 of the Standard Specifications for Construction remains in effect except as noted in this special provision.

f. Construction. Subsection 503.03 of the Standard Specification for Construction remains in effect except as noted in this special provision.

g. Measurement and Payment. Delete subsection 503.04 of the Standard Specifications for Construction in its entirety and replace it with the following:

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
Paver Placed Surface Seal, Type B, Warranty	Square Yard
Paver Placed Surface Seal, Type C, Warranty	Square Yard

Paver Placed Surface Seal, Type B, Warranty and Paver Placed Surface Seal, Type C, Warranty includes preparing the surface, placing the paver placed surface seal mixture and complying with all requirements including the warranty. The placement includes placement of a membrane and hot mix asphalt surface course of mixture for full width coverage as specified in the contract.

h. Warranty Requirements. If any of the following performance thresholds are exceeded, warranty work is required. Ensure the warranty work is performed prior to conclusion of the

warranty period or within such other time frame as agreed to by the Department and the Contractor, unless safety concerns dictate otherwise.

Maximum Deficient Segments per Warranty Lane

- 4 Segments - A combination of one or more surface deficiencies exceeding the allowable threshold limit for rutting, raveling, bleeding/flushing, and debonding.
- 1 Segment - Rutting exceeding the allowable threshold limit.
- 1 Segment - Any single surface deficiency for raveling, bleeding/flushing, and debonding, exceeding 10 percent of the segment length.

Threshold Limits and Corrective Action

1. Rutting. A single measure of rut depth must not exceed 1/4 inch for any 528 feet (0.1 mile) segment during the first 120 days after initial project acceptance. During the entire warranty period rut depths that average in excess of 3/8 inch are deficient. The average rut depth is defined by 5 measurements at approximately 100 foot intervals in the segment as determined by the Engineer. Pavement segments where the original pavement rut depth exceeds 1/2 inch are excluded from the warranty for rutting threshold level. The Contractor will define locations where rutting exceeds 1/2 inch and provide the information to the Engineer. Work must not begin until the Engineer has verified and accepted the Contractor's list of rutting exceptions. Any subsequent rutting caused from movement of the underlying pavement layers is excluded from the warranty.

Corrective action is required for any one segment deficiency. Correction of this parameter requires the Contractor to reapply a paver placed surface seal treatment on the deficient portion of the segment. The Engineer may accept alternative corrective measures, based on unique conditions.

The measurement will be done using a straight rigid device that is a minimum of 7 feet long and of sufficient stiffness that it will not deflect from its own weight, or a wire under sufficient tension to prevent sag when extended 7 feet. Measurements will be taken by placing this straightedge across the pavement surface perpendicular to the direction of travel. The straightedge must contact the surface on at least two bearing points with one located on either side of the rut. The straightedge is properly located when sliding the straightedge along its axis does not change the location of the contact points. Rut depth is then measured at the point of greatest perpendicular distance from the bottom of the straightedge to the pavement surface.

2. Raveling. The threshold limit for raveling is 8 percent of the segment length.

Corrective action for this parameter requires the Contractor to reapply paver placed surface seal (full-width) to the deficient portion of the segment, including shoulders if part of the paver placed surface seal work. The Engineer may accept alternative corrective measures, based on unique conditions. Ensure the corrective action is placed on the full lane width.

3. Bleeding/Flushing. The threshold limit for bleeding or flushing is 5 percent of the segment length.

Corrective action for this parameter requires the Contractor to either reapply paver placed surface seal (full-width), diamond grind, or remove and replace (full-width) the paver placed surface seal treatment on the deficient portion of the segment, including shoulders if part of the paver placed surface seal work. The Engineer may accept alternative corrective measures, based on unique conditions.

4. Debonding. The threshold limit for debonding is 5 percent of the segment length.

Corrective action for this parameter requires the Contractor to either reapply paver placed surface seal (full-width) or remove and replace the paver placed surface seal (full-width) on the deficient portion of the segment, including shoulders if part of the paver placed surface seal work. The Engineer may accept alternative corrective measures, based on unique conditions. Ensure the corrective action is placed on the full lane width.