MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**REPLACE PRESSURE RELIEF JOINT FILLER**

STM:JDC 1 of 2 APPR:TGH:CRB:03-17-25

**a. Description.** This work consists of replacing joint filler material and sealing at existing pressure relief joints. Perform this work in accordance with section 602 of the Standard Specifications for Construction, this special provision, and the details shown on the plans.

**b. Materials.** Select the open cell, self-expanding, silicone pre-coated joint filler material from the following list, or Engineer approved equal. Ensure furnished material is capable of plus-50 percent and minus-50 percent movement. Field measure the existing joint openings and properly select the size the width of the joint material to accommodate the existing openings.

Company Product Name

LymTal International, Inc. Iso-Flex SILFAST XL

Watson Bowman Acme Corp. Wabo®FS Bridge Seal

EMSEAL Joint Systems Ltd. BEJS System

FPT Infrastructure Mataspan OC2000 Series

Silicone Specialties, Inc Silspec SES

Furnish a general certification to the Engineer per *MQAP Manual* that the materials meet the requirements specified herein.

**c. Construction.** Replace pressure relief joint filler at the locations shown on the plans.

Remove and dispose of existing joint filler, debris and concrete/HMA for the full depth and width of the pavement. Use removal methods that do not cause damage to the new bonding surfaces. Dispose of materials in accordance with the standard specifications. Immediately prior to application of the adhesives or primers, clean joint faces by abrasive blasting to remove all materials that may interfere with the bonding or curing of the joint. Prepare joint faces in accordance with the *International Concrete Repair Institute Guideline No. 03732*, CSP 3. Use a vacuum or oil-free moisture-free air blast to remove all dust and other loose material. Remove any oil or other contamination after initial cleaning. Ensure there is no visible moisture present on the surface of the concrete or HMA at the time of application. Artificial heat to dry joints before sealing is prohibited.

Handle and mix adhesives or primers in a safe manner in accordance with the manufacturer’s recommendations or as directed by the Engineer. Do not place adhesive or primer materials when the concrete or HMA surface is less than 50 ºF or ambient air temperature is forecast to fall below 50 ºF within 8 hours of application. Do not place adhesive or primer materials if weather or surface conditions are such that the material cannot be properly handled, placed, and cured in accordance with the manufacturer’s requirements and the specified requirements for traffic control.

Install joint materials in accordance with the manufacturer’s installation procedures/guidelines. Install joint material so that seams are not in the vehicle wheel path. Apply epoxy adhesive to joint ends and apply firm pressure as sections are joined together. Recess the surface of the pressure relief joint material 1/2 inch below the concrete or HMA surface. Place a 1/4-inch bead of silicone adhesive along both sides of the installed joint material and over all seams and transitions. Do not install joints on new concrete surfaces that are less than the minimum age specified by the manufacturer’s recommendation. Obtain the Engineer’s approval of installation procedures/guidelines prior to installation.

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

**Pay Item Pay Unit**

Joint, Pressure Relief, Replace Filler Foot

**Joint, Pressure Relief, Replace Filler** will be measured along the centerline of the joint.