MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
WET REFLECTIVE WATERBORNE AND WET REFLECTIVE SPRAYABLE THERMOPLASTIC

PMK:MKB 1 of 2 APPR:GJD:KJK:03-17-25
FHWA:APPR:03-17-25

a. Description. This work consists of furnishing and installing wet reflective (WR) optics and liquid applied pavement marking materials.

b. Materials.

1. WR Optics. Select WR optics from the Qualified Products List (QPL) (920.03) or a Department approved alternative that meets the requirements in Table 1:

Table 1: WR Markings

Average Initial Retroreflectivity at 30 meter geometry in mcd/lux/m^2		
Test Method	Color	
	White	Yellow
Dry (*ASTM E1710*)	700	500
Wet Recovery (*ASTM E2177*)	300	225
Wet Continuous (*ASTM E2832*)	250	200

Ship the material to the job site in sturdy containers marked in accordance with subsection 920.01.A of the Standard Specifications for Construction.

Prior to the start of work, submit to the Engineer certification from the Manufacturer that when applied in accordance with their application recommendations the WR optics meet the requirements shown in Table 1 above.

2. Binder. Furnish a liquid pavement marking product of the binder type specified in the contract from section 811 of the QPL or as specified by special provision, or use an alternative binder as approved by the Engineer.

c. Construction. For WR waterborne, place the binder material at a thickness of 18 mils while driving at a maximum rate of 8 mph. When a double drop is used, drop WR optics from the forward-most bead applicator gun and drop standard glass beads from the rear bead applicator gun as directed by the Manufacturer to achieve the values in Table 1. If a single drop is used, the optic may be a blend of optics or a single optic. Drop the single optic from the forward-most bead applicator gun at a rate directed by the Manufacturer to achieve the values in Table 1.

For WR sprayable thermoplastic, place the binder material at a thickness of 60 mils while driving at a maximum rate of 10 mph. When a double drop is used, drop WR optics from the forward-most bead applicator gun and drop standard glass beads from the rear bead applicator gun as

directed by the Manufacturer to achieve the values in Table 1. If a single drop is used, the optic may be a blend of optics or a single optic. Drop the single optic from the forward-most bead applicator gun at a rate directed by the Manufacturer to achieve the values in Table 1. While placing the WR sprayable thermoplastic, another follow truck is needed in addition to what is shown on the Pavement Marking Convoy Typicals.

d. Measurement and Payment. The completed work, as described, will be measured and paid for per subsection 811.04 of the Standard Specifications for Construction.