Regional Engineers

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Special Provision for Preformed Plastic Pavement Marking

April 19, 2024

This special provision was developed by the Central Bureau of Materials (CBM) to correct a typographical error in the 2022 Standard Specifications for the minimum refractive index of glass beads in Type D preformed plastic pavement markings and to clarify that manufacturers are required to get pre-approval from CBM for all types of preformed plastic markings.

This special provision should be inserted into contracts with PREFORMED PLASTIC PAVEMENT MARKING.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the August 2, 2024 and subsequent lettings. The Project Coordination and Implementation Section will include a copy in the contract.

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# Preformed Plastic PAvement Marking (bde)

Effective: June 2, 2024

Revise Article 1095.03(h) of the Standard Specifications to read:

“ (h) Glass Beads. Glass beads shall be colorless and uniformly distributed throughout the yellow and white portions of the material only. A top coating of beads shall be bonded to or directly embedded into the surface of the markings such that the beads are not easily removed when the film is scratched firmly with a thumb nail.

The glass bead refractive index shall be tested using the liquid immersion method.

Type B material shall have an inner mix of glass beads with a minimum refractive index of 1.50 and a top coating of ceramic beads bonded to top urethane wear surface with a minimum refractive index of 1.70. Beads with a refractive index greater than 1.80 shall not be used.

Type C material shall have glass beads with a minimum refractive index of 1.50 and a layer of skid resistant ceramic particles bonded to the top urethane wear surface. The urethane wear surface shall have a nominal thickness of 5 mils (0.13 mm).”

Revise Article 1095.03(n) of the Standard Specifications to read:

“ (n) Sampling and Inspection.

(1) Sample. Prior to approval and use of preformed plastic pavement markings, the manufacturer shall submit a notarized certification from an independent laboratory, together with the results of all tests, stating that the material meets the requirements as set forth herein. The independent laboratory test report shall state the lot tested, the manufacturer’s name, and the date of manufacture.

After initial approval by the Department, samples and certification by the manufacturer shall be submitted for each subsequent batch used. The manufacturer shall submit a certification stating that the material meets the requirements as set forth herein and is essentially identical to the material sent for qualification. The certification shall state the lot tested, the manufacturer’s name, and the date of manufacture.

(2) Inspection. The Contractor shall provide a manufacturer’s certification to the Engineer stating the material meets all requirements of this specification. All material samples for acceptance tests will be taken or witnessed by a representative of the Bureau of Materials and will be submitted to the Engineer of Materials, 126 East Ash Street, Springfield, Illinois 62704-4766 at least 30 days in advance of the pavement marking operations.”

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