

808-T-233 PAVEMENT MARKINGS

(Adopted 10-20-22)

The Standard Specifications are revised as follows:

SECTION 101, AFTER LINE 464, DELETE AND INSERT AS FOLLOWS:

101.61 State Highway System

The highways and streets in Indiana for which responsibility is assigned to the Department.

101.612 Street

A general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way.

SECTION 808, BEGIN LINE 73, DELETE AND INSERT AS FOLLOWS:

(a) Center Lines

Center lines shall be used to separate lanes of traffic moving in opposite directions. All center line markings shall be yellow in color and ~~46~~ in. in width *on the state highway system, and 4 in. wide on all other roads*. They shall be placed such that the edge of the marking, nearest to the geometric centerline of the roadway, shall be offset ~~43~~ in. from the geometric centerline *on the state highway system and 3 in. on all other roads unless a different offset is approved by the Engineer.*

The center line of a multi-lane roadway shall be marked with a double solid line. The two lines forming the double solid line shall be spaced ~~86~~ in. apart *on the state highway system, 6 in. apart on all other roads*, and shall be equally offset on opposite sides of the geometric centerline *unless a different spacing is approved by the Engineer.*

The center line of a two-lane, two-way roadway, where passing is allowed in both directions, shall be marked with a broken line.

The center line of a two-lane, two-way roadway, where passing is allowed in one direction only, shall be marked with a double line, consisting of a broken line and a solid line. The broken line and the solid line shall be spaced ~~86~~ in. apart *on the state highway system, 6 in. apart on all other roads*, and shall be equally offset on opposite sides of the geometric centerline *unless a different spacing is approved by the Engineer.* The solid line shall be offset toward the lane where passing is prohibited. The broken line shall be offset toward the lane where passing is allowed.

The center line shall be placed within the milled corrugation when center line rumble stripes are specified. Placement of the center line marking in the milled corrugation does not alter the pavement marking performance requirements of 808.07.

(b) Lane Lines

Lane lines shall be used to separate lanes of traffic moving in the same direction. Normal width lane line markings shall be white in color and shall be ~~56~~ in. wide on ~~interstates and freeways~~ *the state highway system*, and 4 in. wide on all other roads. They shall be offset 4 in. to the right of longitudinal pavement joins or divisions between traffic lanes.

Wide lane lines for lane drops, route splits, or auxiliary lanes shall be white in color and shall be ~~8~~10 in. wide *on the state highway system, and 8 in. wide on all other roads*. White solid lines shall be used to mark lane lines only when specified or directed.

(c) Edge Lines

Edge lines shall be used to outline and separate the edge of pavement from the shoulder. Edge line markings shall be 46 in. in width *on the state highway system, and 4 in. wide on all other roads*. ~~and~~The edge lines shall be placed such that the edge of the marking nearest the edge of the pavement shall be offset 4 in. from the edge of the pavement except as otherwise directed. Right edge lines shall be marked with a white solid line and left edge lines shall be marked with a yellow solid line.

SECTION 808, BEGIN LINE 192, INSERT AS FOLLOWS:

3. *Dry Retro-reflectivity. Contracts with 50,000 ft or more of longitudinal paint line or 10,000 ft for each type of longitudinal durable marking line applied shall have retro-reflectivity measured, except black markings and markings placed on seal coat pavements placed in accordance with 404. Longitudinal lines shall meet required minimum initial and retained average retro-reflectivity measurements.*

SECTION 808, AFTER LINE 223, INSERT AS FOLLOWS:

4. *Wet retro-reflectivity. Contracts with longitudinal durable marking line applied shall meet the required longitudinal line minimum measurements for initial wet retro-reflectivity and will be measured by the Department in accordance with ASTM E2177 at the discretion of the Engineer. The testing period will be not less than 14 days to not more than 30 days after the durable longitudinal lines are applied. The initial wet recovery retro-reflectivity for white markings shall exceed 275 mcd/m²/lx and yellow shall exceed 175 mcd/m²/lx. Sampling zones that do not meet these wet retro-reflectivity levels for white or yellow markings shall be replaced or receive an additional layer of durable marking material and supplemental elements at no additional cost.*

SECTION 808, BEGIN LINE 323, DELETE AND INSERT AS FOLLOWS:

2. Thermoplastic

a. Application

Thermoplastic marking shall be applied in molten form by conventional extrusion, by ribbon type extrusion, or spray when the pavement and ambient air temperatures are 50°F and rising. Heat bonded preformed thermoplastic may be used for transverse or message markings. The average final thickness of each ~~36 in. length~~ of the thermoplastic marking shall be no less than 90 mils and no more than 125 mils. Immediately following the application of the thermoplastic markings, ~~additional~~ retro-reflectorization shall be provided by applying *pavement marking* beads to the surface of the molten material ~~at a uniform minimum rate of 8 lb/100 sq ft of marking~~. *A first drop of supplemental elements shall be applied in accordance with the manufacturer's recommendations and a second drop of standard, modified standard, or supplemental beads in accordance with the*

manufacturer's recommendations. Individual passes of markings shall not overlap or be separated by gaps greater than 1/4 in. longitudinally.

SECTION 808, BEGIN LINE 364, DELETE AND INSERT AS FOLLOWS:

3. Preformed Plastic

a. Application

The markings shall be applied *by technicians certified by the manufacturer. The markings shall be applied* when the air temperature is a minimum of 40°F and rising. A primer is required if the ambient air temperature is below 50°F. The pavement surface shall be primed with a binder material in accordance with the manufacturer's recommendations.

~~If there is a dispute regarding installation, the manufacturer shall provide a trained representative to ensure that the installation is properly performed.~~

SECTION 808, BEGIN LINE 382, DELETE AND INSERT AS FOLLOWS:

4. Multi-Component

a. Application

This material shall be applied only when the pavement and ambient air temperatures are 40°F and rising. The wet film thickness of the marking material shall be a minimum of 2025 mils. Immediately following the application of the markings, ~~additional~~ reflectorization shall be provided by applying *pavement marking beads* to the surface of the wet marking ~~at a uniform minimum rate of 20 lb/gal. of marking.~~ *A first drop of supplemental elements shall be applied in accordance with the manufacturer's recommendations and a second drop of standard, modified standard, or supplemental beads in accordance with the manufacturer's recommendations.*

SECTION 921, BEGIN LINE 124, DELETE AND INSERT AS FOLLOWS:

4. Supplemental Elements

~~These shall be for color, skid resistance, or wet weather retro-reflectivity and may~~ shall be used *for thermoplastic and multi-component longitudinal line markings provided they do not exhibit a characteristic of toxicity referenced in AASHTO M 247. The supplemental elements shall be selected from the QPL of Pavement Marking Beads.*

A type DC certification in accordance with 916 shall be ~~provided~~ *furnished* for the supplemental elements.
