

Section 647 Special Pavement Markings

647.1 Description

- (1) This section describes furnishing and applying, or removing, special pavement markings consisting of a combination of lines, arrows, symbols, and words.

647.2 Materials

- (1) Furnish pavement marking materials conforming to [646.2](#).

647.3 Construction

- (1) Apply pavement markings at the locations, and to the dimensions and tolerances the plans show, or as the engineer directs. Use the color the plans show. Conform to the applicable requirements of [646.3](#) modified as follows:
 1. Apply glass beads uniformly across the width of the line at or exceeding 18 pounds per gallon of paint or epoxy.
 2. Ensure that markings are straight or smoothly curved as the plans show.
 3. Protect arrow, symbol, and word markings with cones, barricades, or vehicles until dry or cured to a no-pickup condition.
 4. Each special pavement marking including stop lines, crosswalks, railroad crossings, arrows, symbols, and words constitutes a separate section subject to the engineer's evaluation at the end of the proving period.
- (2) Under the Pavement Marking Railroad Crossings bid items, apply the RXR symbol and 3 transverse stripes the plans show. On contracts that do not include pavement-marking work under [646](#), also apply edgelines, lane lines, centerline, and no-passing barrier lines adjacent to the railroad crossing as the plans show.
- (3) Under the Pavement Marking Curb bid items, apply marking material to the vertical face and top of the curb.
- (4) Under the Pavement Marking Aerial Enforcement Bars bid items, the department will locate the markings. Give the engineer at least one week to coordinate with the State Patrol to provide the exact locations.

647.4 Measurement

- (1) The department will measure the EACH bid items under this section as each individual unit acceptably completed. The department will measure the Pavement Marking Yield Line Symbols bid items as each individual triangle in the yield line.
- (2) The department will measure the linear foot bid items under this section by the linear foot of line acceptably completed.
- (3) The department will measure the Pavement Marking Concrete Corrugated Median bid items by the square foot acceptably completed.
- (4) The department will measure Removing Pavement Markings Arrows, Removing Pavement Markings Symbols, and Removing Pavement Markings Words as each individual arrow, symbol, or word acceptably removed. The department will count removing an RXR symbol as 3 individual symbol removals.

647.5 Payment

- (1) The department will pay for measured quantities at the contract unit price under the following bid items:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
647.0100 - 0129	Pavement Marking Railroad Crossings (material)	EACH
647.0130 - 0199	Pavement Marking Arrows (material) (type)	EACH
647.0200 - 0249	Pavement Marking Arrows Bike Lane (material)	EACH
647.0250 - 0299	Pavement Marking Symbols (material)	EACH
647.0300 - 0349	Pavement Marking Symbols Bike (type) (material)	EACH
647.0350 - 0399	Pavement Marking Words (material)	EACH
647.0400 - 0449	Pavement Marking Words Bike Lane (material)	EACH
647.0450 - 0499	Pavement Marking Curb (material)	LF
647.0500 - 0519	Pavement Marking Curb Ramp (material)	LF
647.0520 - 0549	Pavement Marking Yield Line Symbols (material) (height)	EACH
647.0550 - 0599	Pavement Marking Stop Line (material) (width)	LF
647.0600 - 0649	Pavement Marking Island Nose (material)	EACH
647.0650 - 0699	Pavement Marking Parking Stall (material)	LF
647.0700 - 0749	Pavement Marking Diagonal (material) (width)	LF
647.0750 - 0799	Pavement Marking Cross Walk (material) (width)	LF

647.0800 - 0849	Pavement Marking Aerial Enforcement Bars (material) (width)	LF
647.0850 - 0899	Pavement Marking Concrete Corrugated Median (material)	SF
647.0955	Removing Pavement Marking Arrows	EACH
647.0960	Removing Pavement Marking Symbols	EACH
647.0965	Removing Pavement Marking Words	EACH

- (2) Payment for the Pavement Marking bid items is full compensation for preparing the surface, including brush-off blasting of concrete; for providing marking, including reflectorization with glass beads; for protecting marking until dry or cured; and for replacing marking improperly constructed or that fails during the proving period. Payment for paint and epoxy items also includes remarking if initially applied at less than 90 percent of the specified rate.
- (3) The department will pay separately for applying edgeline, lane line, centerline, and no-passing barrier lines adjacent to railroad crossings under the appropriate Pavement Markings bid item as specified in [646.5](#). This work is incidental to the Pavement Marking Railroad Crossings bid items if the contract does not contain the appropriate Pavement Markings bid items.
- (4) For the various epoxy bid items, the department will pay separately for engineer-directed removals under Removing Pavement Markings if removal is required to prepare the surface for the initial marking application. Removals required to replace defective markings are incidental to the epoxy bid items.
- (5) Payment for the Removing Pavement Markings bid items is full compensation for removing arrows, symbols, and words; and for repairing associated damage, dust collection, and disposal of residue. The department will pay for removing other special pavement markings under the Removing Pavement Marking as specified in [646.5](#).