

July 2, 2009

**HIGH PRESSURE WATER METHOD
For
REMOVAL OF PAVEMENT MARKINGS**

1. Description. -

This item consists of removal of pavement markings from an asphalt or concrete pavement course by utilization of high pressure water. Eradicate and remove existing and temporary pavement markings, including waterborne fast dry paint, thermoplastic, and epoxy pavement markings, from the pavement surface by high pressure water where directed by the plans, the special provisions, the standard specifications, the MUTCD, and the Engineer.

2. Requirements. -

The Contractor shall conduct the removal operations of the pavement markings without damaging the surface or texture of the pavement course.

The Contractor shall remove no less than 95 percent of the total area of the pavement markings designated for removal to provide uniform exposure of the pavement surface. The presence of remnant pavement markings that indicate or may be perceived as a line shall require the Contractor to repeat the removal process.

The area of removal shall extend beyond all edges of the pavement marking designated for removal no less than ½ inch.

The Contractor shall remove all recoverable residue from the water blast cleaning method, including the water. When operating within 10 feet of a travel lane open to traffic or in an area that the residue may encroach onto the adjacent travel lane, the Contractor shall remove the residue immediately after contact between the water and the pavement surface. The removal process shall require a vacuum attachment operating concurrently with the blast operation or by an alternate method as approved by the Engineer. The Contractor is responsible for maintaining safety as required by the Department and all federal, state, and local laws.

In areas where pavement joints are present, the Contractor shall provide adequate protection of the pavement joints to prevent damage, disfigurement, compaction, or recession of the pavement joint material. The Contractor shall obtain approval of the proposed methods for providing protection of the joint material from the Engineer prior to beginning the work.

Removal of pavement markings by high pressure water is prohibited when the ambient air temperature is 40 degrees Fahrenheit or less or anticipated to decrease to 40 degrees Fahrenheit or less within 2 hours.

3. Method of Measurement. -

The Department will pay for removal of the pavement markings designated for removal by high pressure water at the contract unit price bid.

Measure the pavement markings designated for removal in square feet of the actual pavement markings to be removed. Determine the length of the pavement marking by measuring along the center of the line by the linear foot, excluding the spaces between broken lines, and multiplying by the width of the pavement marking in place. The measurement shall include the area of the marking only and shall exclude the area that extends ½" beyond the edges of each pavement marking designated for removal. The area ½" beyond the edges of each pavement marking shall be considered incidental.

SUPPLEMENTAL SPECIFICATIONS

Measure the removal of arrows, words, and railroad crossing symbols by the square footage of the full area occupied by the arrow, word, or railroad crossing symbol. To determine the square footage of arrows and words, measure the area as a complete square or rectangular area to encompass the complete arrow or word. The edges of the square or rectangular area designated for removal shall be parallel and perpendicular to the adjacent edge of pavement. A railroad crossing symbol consists of an "X" and two "R" 's. Determine the area of the railroad crossing symbol for removal, including only the area occupied by the "X" and two "R" 's, as a complete square or rectangle as designated above.

The Department will make no separate measurement for payment for traffic control during removal of pavement markings. Include all costs for traffic control in the contract lump sum price bid item for "Traffic Control". In the absence of a bid item for "Traffic Control", consider traffic control for application and removal of pavement markings incidental to the pavement marking bid items.

4. Basis of Payment.

The Department shall provide full compensation for providing all materials necessary to complete the job properly. Payment shall include the removal of the pavement markings, furnishing the materials, all labor, hardware, equipment, tools, incidentals, and any miscellaneous items necessary to complete the item of work.

Payment for each item includes all direct and indirect costs and expenses required to complete the work.

Payment will be made under:

ITEM NO.	PAY ITEM	PAY UNIT
6091405	REMOVAL OF PAVEMENT MARKINGS (HIGH PRESSURE WATER)	SF