

The pavement shall be protected and cured as required in Subsection 476.71 except that membrane compounds not compatible with bituminous materials shall not be used.

COMPENSATION

430.80 Method of Measurement.

Cement concrete base course will be measured in place by the square meter conforming to the length, width and depth required by the plans or as directed. The Contractor shall have no claim for extra payment if thickness of pavement exceeds that shown on the plans or as directed.

430.81 Basis of Payment.

Standard cement concrete base course will be paid for at the contract unit price per square meter under the item for Cement Concrete Base Course.

High early strength concrete base course will be paid for at the contract unit price per square meter under the item for High Early Strength Cement Concrete Base Course.

The price paid per square meter shall also include all sprinkling or treating the roadway to keep down dust.

430.82 Payment Items.

430.	Cement Concrete Base Course	Square Meter
431.	High Early Strength Cement Concrete Base Course	Square Meter

SECTION 440

ROADWAY DUST CONTROL

DESCRIPTION

440.20 General.

This work shall consist of furnishing and applying approved dust control material to the surface of the subgrade or elsewhere as directed in accordance with these specifications.

MATERIALS

440.40 Materials.

The material for this work shall be of the kind shown on the plans and shall meet the requirements of the following Subsections of Division III, Materials:

Sand	M1.04.0, Type a
Calcium Chloride	M9.01.0
Bituminous Material	
Cut-back Asphalt	M3.02.0
Asphalt Emulsion	M3.03.0

CONSTRUCTION METHODS

440.60 General.

The required material shall be properly applied where directed by the Engineer and distributed uniformly at the rate specified or ordered. The means of distribution shall depend upon the kind of material used, and the method and equipment used shall be satisfactory to the Engineer. The number and frequency of applications shall be as determined by the Engineer.

440.61 Treatment with Calcium Chloride.

Calcium chloride shall be uniformly applied at the rate of 800 grams/square meter or at any other rate as directed by means of a mechanical spreader, or other approved methods.

440.62 Treatment with Bitumen.

Bituminous material shall be applied by means of an approved pressure distributor of a type that will distribute the material uniformly under a pressure of not less than 210 kilopascals without streaks or spots. It shall be so designed as to enable its operator to "cut out" any portion of the roadway, to control the flow, and to avoid any surplus deposit of the material on the roadway or elsewhere. The bitumen shall be applied at the rate specified on the plans or as directed by the Engineer.

440.63 Sand Cover.

When and if directed by the Engineer, the bitumen shall be covered with a sufficient quantity of sand to absorb all surplus bitumen.

440.64 Treatment with Water.

Water shall be applied at locations at such times, and in the amount as directed by the Engineer. Quantities of water wasted or applied without authorization will not be paid for.

Watering equipment shall consist of pipelines, tanks, tank trucks, or other devices, approved by the Engineer, which are capable of applying a uniform spread of water over the surface. A suitable device for a positive shut-off and for regulating the flow of water shall be located so as to permit positive operator control.

COMPENSATION

440.80 Method of Measurement.

Calcium chloride will be measured by the kilogram.

Bituminous material will be measured by volume in liters in accordance with the provisions of Section 468.

Sand will be measured by the cubic meter by load measurement. The quantity shall be the volume of the load, as measured, divided by 1.15.

Water will be measured for payment by the number of 1000 liters. The water will be measured in tanks or tank trucks of predetermined capacity, or by means of satisfactorily installed meters. Any and all measuring devices shall be furnished by the Contractor.

440.81 Basis of Payment.

Calcium chloride will be paid for at the contract unit price per kilogram under the item for Calcium Chloride for Roadway Dust Control, complete in place.

Bituminous material will be paid for at the contract unit price per liter of Bitumen for Roadway Dust Control, complete in place.

Sand will be paid for at the contract unit price per cubic meter under the item for Sand Borrow (Cover), complete in place as specified.

Water will be paid for at the contract price per 1000 liters for Water for Roadway Dust Control which price shall

include all water, labor, tools and equipment required to furnish and measure the water applied to surfaces designated by the Engineer and at the times specified.

440.82 Payment Items.

440.	Calcium Chloride for Roadway Dust Control	Kilogram
441.	Bitumen for Roadway Dust Control	Liter
443.	Water for Roadway Dust Control	1000 Liters
154.1	Sand Borrow (Cover)	Cubic Meter

SECTION 445

SHOULDERS

DESCRIPTION

445.20 General.

Shoulders shall be constructed of approved materials in accordance with these specifications and in conformity with the lines, grades and typical cross sections shown on the plans.

Shoulders shall be composed of excavated material or borrow of the kind required or as shown on the plan.

Where shown on the plans, the top portions of shoulders shall be paved with surfacing material of the kind specified.

MATERIALS

445.40 General.

Materials shall meet the requirements specified in the following Subsections of Division III, Materials:

Ordinary Borrow	M1.01.0
Gravel Borrow	M1.03.0, Type c
Loam Borrow	M1.05.0
Sodding (Field)	M6.05.0
Seed	M6.03.0

445.41 Surfacing Materials.

The surfacing materials for paving the top portion of shoulders shall conform to the requirements of the particular sections of these specifications relating to the kind of pavement or surfacing required.

CONSTRUCTION METHODS

445.60 General.

The subgrade for shoulders, if required, shall be prepared as required in Section 170 (Subgrade).

Portions of the shoulders, of sufficient width to hold the pavement in its proper place, shall be built in conjunction with the pavement and shall be rolled to a width of at least 300 millimeters with each rolling of the roadway base course or surface course.

Whenever the plan shows that sodding, loaming, paving or other similar work affecting shoulder construction adjacent to the roadway pavement is required, the Contractor will be required to construct temporary shoulders of suitable