400 FLEXIBLE PAVEMENT

ITEM 407 - TACK COAT

407.01 Description. This work shall consist of preparing and treating a paved surface with bituminous material and cover aggregate or rubberized asphalt material in accordance with these specifications and in reasonably close conformity with the lines shown on the plans or established by the Engineer.

407.02 Materials. Bituminous material of the type specified shall meet applicable requirements of *702*.

The material for rubberized tack coat consists of 702.04 asphalt emulsion, SS-1 *or SS-1h,* blended with ODOT *702.13 and 702.14* Rubber Compound to produce a composition 95 plus or minus 0.3 percent residual asphalt to 5 plus or minus 0.3 percent rubber solids by weight. The Contractor shall furnish a certification to the City showing the percent of rubber solids by weight of asphalt in the emulsion. Cover aggregate shall be No. 8 or No. 9 crushed aggregate, *and meet the physical properties of 703.05.*

A sample of the tack material shall be supplied by the Contractor prior to the start of work for testing. Random sampling throughout the duration of the project will occur at the request of the Engineer.

407.03 Equipment. Equipment shall consist of 1 or more mechanical sweepers, flushers, hand brooms, scrapers, spreader boxes, and tack distributors.

Tack distributors shall be designed, equipped, maintained and operated so that tack material is applied at the specified rate per square yard (square meter) with uniform pressure over the required width of application. The distributor equipment shall include a tachometer, pressure gauges, accurate volume measuring devices or a calibrated tank. An accurate thermometer with a range covering the specified application temperature for tack material shall be mounted at approximately center height of the tank with the stem extending into the tack material. The distributor shall have a full circulating system with a spray bar, adjustable laterally and vertically. The spray bar shall be

maintained at a constant height above the pavement under variable load conditions. Each distributor shall have suitable charts showing truck and pump speeds and other pertinent application data necessary to obtain the required results.

Each distributor shall be checked and calibrated, if so directed by the Engineer. A certificate of the calibration shall be posted in the driver's compartment stating that the distributing system is in good working condition and when used with the charts and instructions furnished by the manufacturer will give the required results. The certificate shall bear the date of calibration and signature of the calibrating agency.

407.04 Preparation of Surface. The surface shall be thoroughly clean and dry when the tack material is applied. Material cleaned from the surface shall be removed and disposed of as directed by the Engineer.

407.05 Application of Tack Material. The tack material shall be uniformly applied with a tack distributor. For irregular areas such as driveways and intersections, the method of application shall be approved by the Engineer.

The tack coat shall not precede the work of placing the subsequent course to such an extent that the treated surface will be injured during the interim. The tack coat shall be applied in a manner that offers the least inconvenience to traffic and permits one-way traffic without pickup or tracking.

The tack material shall not be applied when the atmospheric temperature is below the minimum placement temperature for the pavement course as specified in 401.06.

The quantity, rate of application, temperature, and areas to be treated shall be approved prior to application. The tack coat application shall be limited to areas that will be covered by a pavement course during the same day.

The tack materials shall be applied at a rate of 0.15 gallons per square yard (0.5 L/m^2) for resurfacing and 0.10 gallons per square yard (0.4 L/m^2) for new construction, unless otherwise indicated in the plans.

407.06 Application of Cover Aggregate. Immediately following the application of the tack material in areas which will be exposed to traffic, sufficiently dry cover aggregate shall be applied uniformly to form a bonded layer which, after curing, will not be picked up by traffic. Excessive application resulting in an unbonded layer of cover aggregate will not be accepted.

407.07 Protection of Curb and Structures. When tack material is being applied, the exposed surfaces of the curb and gutter and all structures shall be protected from being marred or defaced.

407.08 Method of Measurement. The quantity of tack coat shall be either the actual number of square yards (square meters) of pavement area covered with tack material according to the final measurements of the Engineer, or by the gallon (liter) in accordance with 407.05. The quantity of cover aggregate will be the actual number of tons (metric tons) used.

407.09 Basis of Payment. Payment for accepted quantities complete in place will be made at the contract price for:

Item	Unit	Description
407	Gallons (Liters) or Square Yards (Square Meters)	Tack Coat, Bituminous
407	Gallons (Liters) or Square Yards (Square Meters)	Tack Coat, Rubber
407	Tons (Metric Tons)	Cover Aggregate