

CITY OF ODESSA  
STANDARD SPECIFICATIONS

ITEM 33  
THREE COURSE SURFACE TREATMENT

33.1 DESCRIPTION

This item shall consist of a wearing surface composed of three applications of asphaltic material, each covered with aggregate, constructed on the prepared base course or surface in accordance with these specifications.

Two course surface treatment shall not be applied when the air temperature is below 50E F. and is falling, but it may be applied when air temperature is above 40E F. and is rising. Air temperature shall be taken in the shade and away from artificial heat. Asphaltic material shall not be placed when general weather conditions, in the opinion of the Engineer, are not suitable.

33.2 MATERIALS

A. Asphaltic Materials:

The asphaltic materials used shall be one or more of the materials prescribed in Item 38, "Asphalts, Oils and Emulsions", whichever is called for on the plans.

B. Aggregate:

The aggregate used shall be the type and grade or types and grades selected from those prescribed in Item 38, "Aggregate and Surface Treatments". The particular type and grade or types and grades shall be as noted on the plans.

C. Aggregate (Stockpiled):

When plans include the item "Aggregate (Stockpiled)", aggregate of the grade and type specified for the second course of the surface treatment shall be stockpiled within the limits of the project at sites designated by the Engineer. Stockpile sites shall be leveled, if required, and prepared as specified below.

33.3 CONSTRUCTION METHODS

The area to be treated shall be cleaned of dirt, dust, or other deleterious matter by sweeping or other approved methods. If it is found necessary by the Engineer, the surface shall be lightly sprinkled just prior to the first application of asphaltic material.

Asphaltic material of the type and grade shown on the plans for the first course shall be applied on the clean surface by an approved type of self-propelled pressure distributor so operated as to distribute the material in the quantity specified, evenly and smoothly, under a pressure necessary for proper distribution. The Contractor shall provide all necessary facilities for determining the temperature of the asphaltic material in all of the heating equipment and in the distributor, for determining the rate at which it is applied, and for securing uniformity at the junction of two distributor loads. The distributor shall have been recently calibrated, and the Engineer shall be furnished an accurate and satisfactory record of such calibration. After beginning the work, should the yield on the asphaltic material appear to be in error the distributor shall be calibrated in a manner satisfactory to the Engineer before proceeding with the work.

Asphaltic material for each course shall be applied for the full width of the surface treatment in one application unless the width exceeds twenty-four (24) feet. No traffic or hauling will be permitted over the freshly applied asphaltic material. Asphaltic material shall not be applied until immediate covering is assured.

Aggregate, of the type and grade shown on the plans for the first course, shall be immediately and uniformly applied and spread by mechanical spreading devices, of approved design, at the approximate rates indicated on the plans and as directed by the Engineer. After the first course has been completed as specified above, there should be a slight excess of aggregate on the surface.

The entire first course shall then be broomed, bladed or raked as required by the Engineer and shall be thoroughly rolled with approved rollers. The entire course shall be covered twice by the roller before the next course is applied.

The Contractor shall be responsible for the maintenance of the surface of the first course and the distribution of the excess aggregate until the second course is applied.

The second course shall consist of asphaltic material and aggregate of the type and grade indicated on the plans for the second course. The asphaltic material and aggregate for this second course shall be applied and covered in the manner specified for the first application. The surface shall then be broomed, bladed, or raked as required by the Engineer and thoroughly rolled as specified for the first course. Asphaltic materials and aggregates for both courses shall be applied at the approximate rates indicated on the plans and as directed by the Engineer.

The Contractor shall be responsible for the maintenance of the surface and the distribution of the excess aggregate until the work is accepted by the Engineer.

The third course shall consist of asphaltic material and aggregate of the type and grade indicated on the plans for the third course. The asphaltic material for this third course shall be applied and covered with aggregate in the manner specified for the first application. The surface shall then be broomed, bladed, or raked as required by the Engineer and thoroughly rolled as specified for the first course. Asphaltic material and aggregate for the third course shall be applied at the approximate rate indicated on the plans and as directed by the Engineer.

The Contractor shall be responsible for the maintenance of the surface and distribution of the excess aggregate until the work is accepted by the Engineer.

Temporary stockpiling of aggregates on the roadway will be permitted provided the stockpiles are spaced not less than one thousand (1,000) feet apart and are so placed that they neither obstruct traffic nor interfere with roadway drainage. The Contractor shall be responsible for the proper preparation of stockpile areas before aggregates are placed thereon, including leveling and cleaning of debris necessary for protection of the aggregate to prevent any contamination thereof.

All storage tanks, piping, retorts, booster tanks, and distributors used in storing or handling asphaltic materials shall be kept clean and in good operating condition at all times, and they shall be operated in such manner that there will be no contamination of the asphaltic material with foreign material. It shall be the responsibility of the Contractor to provide and maintain in good working order a recording thermometer at the storage heating unit at all times.

Asphaltic material shall be applied at a temperature between the minimums and maximums recommended in the item "Asphalts, Oils and Emulsions".

The Engineer shall select the temperature of application for the type of asphaltic material to be used and the Contractor shall apply the asphaltic material at a temperature within fifteen (15) degrees of the temperature selected.

WARNING TO CONTRACTORS: Attention is called to the fact that asphaltic materials are very inflammable. The utmost care shall be taken to prevent open flames from coming in contact with asphaltic materials or the gases of same. The Contractor shall be responsible for any fires or accidents which may result from heating the asphaltic materials.

#### 33.4 MEASUREMENT

Work and accepted material as prescribed for this item will be measured by the square yard of "Three Course Surface Treatment" complete in place, and accepted.

Aggregate (Stockpiled), if required to be furnished, will be measured by the cubic yard of material in vehicles at the point of stockpiling.

#### 33.5 PAYMENT

The work performed and material furnished as prescribed by this item and measured as provided under "Measurement" will be paid for at the unit prices bid for "Three Course Surface Treatments" and "Aggregate (Stockpiled)", if required, of the type and grade specified, which prices shall each be full compensation for cleaning and sprinkling the base; for furnishing, freight involved, preparing, hauling, and placing all materials; for rolling, blading, and drag brooming, and for all manipulations, labor, tools, equipment, and incidentals necessary to complete the work.

ADDENDA FOR ASSESSMENT PAVING PROJECTS ONLY

MEASUREMENT

Work and accepted material as prescribed by this item shall not be measured separately. Work and accepted material as prescribed by this item shall be included in measurement for "Pavement".

PAYMENT

Payment for the work performed and the materials furnished as prescribed above by this item shall be included in the unit price bid for "Pavement" and not other payment will be made for "Three Course Surface Treatment".