

S300-10A CRACK & SEAT CONC PAV

Description. This work shall consist of cracking existing pavement, and seating cracked pavement as shown on the plans or as directed.

Material. There is no material required for this item.

Construction Requirements. The existing Portland cement concrete (PCC) pavement shall be cracked longitudinally and transversely such that the majority of the cracked pavement shall be generally of 12 in. to 18 in. size with a maximum dimension of 24 in. No more than 10% of the pavement material shall be less than 12 in. (maximum dimension).

Cracking shall be accomplished with an impact hammer. The hammer shall be capable of delivering such energy as necessary to crack the pavement full depth. The breaker shall be equipped with a plate-type shoe designed to prevent penetration, spalling, or shattering the existing surface. Hammer impact must be near the joint but not over the joint.

The cracks shall be continuous without extensive surface spalling along the crack and without excessive shattering of the pavement or base. Spalling over 0.10 ft in depth shall be considered as extensive surface spalling. Other methods and equipment may be used when approved by the Engineer.

The use of a headache or dropball shall not be permitted. The Contractor shall exercise care during cracking to protect and prevent damage to underground utilities and drainage facilities. The Contractor shall be required to repair all damage to underground utilities and drainage facilities, if damaged, by the cracking and seating operation. There shall be no additional payment for repair of damages. The Contractor's attention is directed to Section 107 - Legal Relations and Responsibility to Public, of the Standard Specifications.

Before cracking operations begin, the Contractor shall demonstrate, to the satisfaction of the Engineer, the ability of the selected equipment and procedure to produce cracking of acceptable quality. Such demonstration shall consist of cracking not less than 3 nor more than 5 existing slabs within the limits of the work.

When cracking the test sections, the Contractor shall furnish and apply water to dampen the pavement surface during cracking so that the extent of the cracking can be readily determined. To verify that the procedure is producing cracked pavement as specified in these special provisions, the Contractor shall take at least two core drilled pavement cores, 0.50 ft or more in diameter, in the cracked pavement test section. One core shall be centered on a crack at an impact location and one shall be centered on a free running crack not at an impact location. Adjustments shall be made to the energy or striking pattern when the Engineer deems it necessary, based on these check sections. If adjustments are made, additional cores will be required as directed by the Engineer and at no additional cost to the contract.

Core holes in the existing pavement shall be filled with either:

- a. Class 15 concrete.
- b. Type B, Class I grout conforming to Subsection 506.03 Part I. 2a.
Grout shall be mixed, placed and cured according to the manufacturer's recommendations.

Once the equipment and the procedure for cracking pavement have been approved, that equipment and procedure shall be utilized to crack the concrete pavement for the project. Cores of the cracked concrete pavement shall be taken by the Contractor at two cores per lane mile for each machine used to crack the lane. After four days of production, coring may be waived, if cracking has been satisfactory.

Whenever cracking is unsatisfactory, as determined by the Engineer or the equipment or procedures are changed, an additional test section shall be selected and marked by the Engineer. The Contractor shall crack the additional test sections until the equipment and procedure produce cracked pavement conforming to these special provisions. Coring during production shall then be carried out as described previously.

After the pavement has been cracked, the surface shall be cleaned by the use of power brooms, compressed air or other approved methods, of all loose and spalled concrete, dirt, and other foreign material.

Unless otherwise directed by the Engineer, cracked concrete shall be seated by making not less than 5 passes over the cracked concrete with either a pneumatic-tired roller conforming to the requirements of Section 306 - Rolling, of the Standard Specifications, weighing not less than 35 tons. The Contractor may, at the Engineer's discretion, use a scraper loaded to 35 tons with rock in place of the roller. A pass shall be one movement of a roller in either direction. Each pass of the scraper will be monitored to ensure complete tire coverage. Roller and/or scraper shall not exceed 5 miles per hour.

If this method of seating proves ineffective or unfeasible due to subgrade contamination or any other reasons, the Engineer shall have the authority to direct alternative methods.

Method of Measurement. Crack and seat concrete pavement will be measured by the square yard determined from the full width and length of the concrete pavement treated and shall include doing all work in cracking existing pavement, cracking test sections, coring cracked concrete, seating cracked pavement, cleaning the pavement as shown on the plans or as directed.

Basis of Payment. Payment for accepted work will be made as follows:

Pay Item	Pay Unit
Crack & Seat Conc Pav	SY

S600-35A RUMBLE STRIPS (OPTION "A" GRIND)

Description. This work shall consist of cutting rumble strips in existing bituminous shoulders to the dimensions, spacing, and applying an application of diluted emulsified asphalt at the locations shown on the plans or as directed.

Materials. Diluted Emulsified Asphalt shall meet the requirements of Section 408.

Equipment. The equipment shall consist of a rotary cutting head capable of making the cuts shown in the detailed drawings as to provide a smooth cut (approximately 0.08 in. between peaks and valleys). Cutting head shall be suspended independently from the power unit to permit self-alignment with the sloped shoulder and provide an equal cut depth.

Construction Requirements. The Contractor shall provide a positive means of controlling the alignment of the rumble strips. Edge line pavement marking may be utilized as a guide if the pavement marking is uniform and consistent in alignment throughout the project. Alignment of the edge of the pattern will be randomly verified and checked by the Engineer. Rumble strips shall be placed as shown in the plans or as directed. Rumble strips shall not vary more than (+/- 2 in.) over any 100' longitudinal installation. No payment will be made for misaligned rumble strips.

The Contractor shall demonstrate to the Engineer on an initial 500 ft. test section that the equipment and method will provide the desired milled rumble strip and surface inside each depression without tearing or