

ITEM 321 CRACKING AND SEATING EXISTING NON-REINFORCED CONCRETE PAVEMENT

321.01 Description

321.02 Equipment

321.03 Construction Details

321.04 Method of Measurement

321.05 Basis of Payment

321.01 Description. This work consists of cracking and seating existing non-reinforced concrete pavement or concrete base before placing an asphalt concrete pavement.

321.02 Equipment. Use devices for cracking the concrete capable of producing the desired crack pattern without extensive spalling or excessive shattering. Extensive spalling is spalling over 1-1/4 inches (30 mm) in depth. Do not use whippammers.

Use watering equipment capable of wetting the cracked surface uniformly to reveal the crack pattern.

Use a 50-ton (45 metric tons) pneumatic tire roller conforming to the requirements of Item 204 for seating the cracked concrete slabs. Use pneumatic tire towing equipment capable of moving the roller forward and backward along predetermined lines.

321.03 Construction Details. Demonstrate, to the Engineer's satisfaction, the ability of the selected equipment and procedures to produce cracking of acceptable quality by cracking at least three, but no more than five, existing concrete slabs. When cracking the test sections, furnish and apply water to dampen the cracked concrete to enhance visual determination of the cracking pattern. In addition to 107.07, provide positive provision to contain any flying debris during cracking operations.

Crack existing concrete into nominal 4 × 4-foot (1.2 × 1.2 m) segments. In the event existing panels are already cracked into segments, crack these segments further into nominally equal-sized square or rectangular pieces having longitudinal and transverse dimensions not more than 5 feet (1.5 m) and not less than 3 feet (0.9 m), wherever feasible. Do not allow the cracking equipment to impact the slabs within 1 foot (0.3 m) of another break line, joint, or the edge of the concrete.

Furnish and apply water to a check section at least once each day to verify that a satisfactory crack pattern is being maintained. Make adjustments to the energy or striking pattern when the Engineer deems it necessary, based on the check sections.

Roll the cracked concrete until the concrete pieces are firmly seated. Perform rolling with at least two coverages as specified in Item 204. The Engineer will determine the maximum number of coverages of the roller on the test sections to ensure seating without damage to the concrete.

Before placing the asphalt concrete, remove all loose pieces of broken concrete that are not firmly seated. Repair all voids, such as spalls, removed loose pieces, joints, or cracks that, in the Engineer's opinion, will make uniform compaction of the first asphalt concrete course difficult. Repair voids by applying 407 Tack Coat, filling with asphalt concrete, and compacting as directed by the Engineer.

321.04

Do not allow traffic on the cracked concrete before the initial asphalt concrete base and intermediate courses are in place.

321.04 Method of Measurement. The Engineer will measure the area of existing non-reinforced concrete pavement or concrete base satisfactorily cracked and seated in square yards (square meters). The Engineer will measure the actual width of the existing concrete, and will measure the length along the centerline of each roadway or ramp.

321.05 Basis of Payment. Payment is full compensation for furnishing all labor, equipment, materials, and incidentals necessary to complete this work; for all crack pattern test and check sections including water; and for repairing of joint, cracks, spalls, and voids.

The City will pay for the accepted quantities at the contract price as follows.

Item	Unit	Description
321	Square Yard (Square Meter)	Cracking and Seating Existing Non-Reinforced Concrete Pavement