CITY OF ALBANY

Standard Specifications Technical Provisions

Section 12

Asphalt Concrete Leveling Course & Crack Fill Repairs

12-1 Asphalt Concrete Leveling Course

<u>12-1.1</u> — Asphalt leveling course shall be placed in areas designated by the Engineer prior to placing any designated asphalt seal coat, interlayer or asphalt concrete overlay.

The area to be leveled shall be well cleaned, loose material removed and a tack coat applied.

- 12-1.2 Tack Coat Tack coat shall be asphalt grade RSW-1 in accordance with Section 94 of the State Standard Specifications. It shall be applied at the rate of 0.02 to 0.10 gallons per square yard; the exact rate of application shall be as approved by the Engineer and shall provide a thorough coating of the area to receive asphalt concrete leveling course.
- <u>12-1.3 Material for Leveling Course</u> The asphalt concrete leveling course shall be of such aggregate gradation to ensure a smooth conform with the existing pavement surface can be achieved. The maximum size aggregate shall be %-inch.
- <u>12-1.4 Placement</u> The asphalt leveling course shall be placed in areas as marked by the Engineer. The material shall be placed and compacted in such a manner as to ensure a uniform cross section is achieved with the adjacent existing surface.

In place density of the leveling course shall not be less than as specified by Section 9-6 of the Technical Provisions.

<u>12-1.5 Measurement</u> — The quantity of asphalt concrete leveling course will be measured on a square foot basis or tonnage basis as indicated in the bid proposal. Final qualities for payment purposes must be agreed upon by the Engineer prior to placing any subsequent seal coat, interlayer or asphalt paying.

<u>12-1.6 Payment</u> — The contract unit price paid for placing asphalt concrete leveling course shall be at unit price.

12-2 Crack Fill Repair

<u>12-2.1 General</u> — This work shall consist of placing asphalt concrete and/or asphalt rubber crack sealant in pavement cracks as directed by the Engineer.

<u>12-2.2 Preparation</u> — Cracks designated to be repaired shall be cleaned to a minimum depth of ³/₄-inch by blast cleaning or hand methods, followed by high pressure air jets, to remove all vegetation, residue, moisture and foreign matter. Cracks from which vegetation is removed shall receive an application of a nonpetroleum-based weed killer.

Cracks wider than one (1) inch and greater than three (3) inches in depth shall be filled to within one (1) inch of surface grade with sand and hand tamped. The sand shall be ±1 percent saturated surface dry at the time it is placed and compacted. Cleaned cracks shall receive a tack coat in accordance with Section 12-1.2.

Cracks designated to be repaired with an average clear opening of 1/2-inch or more in width and less than 1/2-inch in width shall be routed to provide a minimum sealant reservoir of 1 inch wide by 1/2-inch deep. Cracks having an average clear opening width of 1/2-inch or greater need not be routed, but shall be cleaned to a minimum depth of 1/2-inch. Cracks less than 1/2-inch clear opening width will not be sealed.

<u>12-2.3 Asphalt Repairs</u> — Cracks greater than one (1) inch in width and three (3) inches in depth shall receive a one (1) inch thick application of hand compacted asphalt concrete, after placing the sand backfill as specified in Section 12-2.2.

The maximum gradation of aggregate for the asphalt concrete for crack repairs shall be %-inch.

The asphalt concrete crack repair shall be placed and compacted in such a manner as to provide a finish surface flush with the surrounding pavement.

<u>12-2.4 Asphalt Rubber Crack Sealant</u> — The sealant shall consist of a mixture of paving grade asphalt and vulcanized granulated crumb rubber. The mixture shall contain not less than 25 percent granulated reclaimed rubber, by weight. Rubber gradation shall conform to the following requirements:

Sieve Size	Percent Passing
No. 8	100%
No. 10	98-100%
No. 30	-
No. 40	0–10%

The sealant shall conform to the following requirements:

Cone Penetration, 77 degrees F	40 Max
Softening Point, degrees F	175 Min
Resilience, 77 degrees F, %	30 Min

The sealant shall be capable of being melted and applied to cracks at temperatures below 400 degrees F. When heated, the material shall readily penetrate cracks ¼-inch in width or wider.

Modifiers may be used to facilitate blending.

Each lot of sealant shipped to the job site shall be accompanied by a Certificate of Compliance.

Exposed surfaces shall be dry at the time the sealant is applied.

Sealant materials shall be heated and placed in conformance with the manufacturer's written instructions. Joint sealant materials shall not be placed when the pavement surface temperature is below 50 degrees F.

Sufficient sealing material shall be placed in the cracks so that upon completion of the work the surface of the sealant in the crack shall be flush with the adjacent pavement surface, or at the elevation directed by the Engineer. The Contractor shall "spot up" or refill to the proper elevation, at the Contractor's expense, all unsatisfactory cracks.

All cracks shall be leveled and excess crack sealant removed immediately after placing. Sand shall be applied to sealed cracks, as necessary and at the direction of the Engineer, to absorb excess material.

The finished crack sealant shall be bonded to the faces of the crack. There shall be no separation or opening between the sealant and the faces, and there shall be no crack, separation, or other opening in the sealant.

<u>12-2.5 Measurement</u> — Crack filling shall be measured on a per foot basis for the type of repair.

<u>12-2.6 Payment</u> — The contract unit price paid for the type of crack repair shall be considered as including full compensation for all labor, tools, material, equipment, including but not limited to preparation and tack coat and no additional compensation shall be made therefor.

If there is no bid item in the "Bid Proposal" form, then compensation for crack repairs designated by the City shall be paid for as extra work.