

III. TECHNICAL SPECIFICATIONS

DIVISION 51

SURFACE RECYCLING OF ASPHALT PAVEMENT

51.01 SCOPE: The Contractor shall furnish all materials, equipment and labor necessary to recycle the existing asphaltic pavement in a simultaneous multi-step heated process of scarifying, remixing, reshaping, recompacting and applying rejuvenating agents to the existing asphaltic pavement.

51.02 MATERIALS: Plasticizing, rejuvenating agent shall consist of reclamite or approved equal.

51.03 EXECUTION: The entire surface to be recycled shall be thoroughly cleaned of all dust, dirt, and other foreign materials. Asphaltic recycling shall be performed only when the air temperature is above 45 degrees F.

Asphalt material (tack coat) will not be required.

Heater-scarifier shall consist of one or more machine-mounted, high-density heaters as specified by the Engineer. Scarifications shall be performed only by the final heater unit.

Heat shall be uniformly applied under a totally insulated and enclosed hood over the surface of the pavement at a speed that will allow the existing materials to soften enough to permit the scarifier teeth to plow through pavement materials without breaking aggregate particles. The temperature and movement of the heaters shall be so regulated as to prevent charring or burning of the pavement. Typical speeds range between 1.5 and 15 m/min. (5 and 50 ft./min.)

Heating operation shall comply with all air pollution control standards.

Scarifying unit shall be capable of loosening the existing surface to accomplish a scarification depth of between 13 and 19mm (0.5 and 0.75 inches), and a thorough remixing, redistribution and leveling of the scarified materials shall be required.

Immediately after scarification and prior to recompaction, a rejuvenation agent shall be applied at a nominal application rate of 0.05 to 0.10 gallon per square yard, or in accordance with the manufacturers recommendation, and have a viscosity which will assure complete coverage and penetrate the total depth of the recycled materials.

Recompaction of the hot scarified materials shall be performed immediately following the application of the rejuvenation agent. Compaction equipment shall be either pneumatic tire, steel wheel or both as specified by the Engineer with a minimum weight of 10 tons. Maximum distance between the heater-scarifier and paver shall be 750 feet.

Asphalt concrete resurfacing shall be done in accordance with Technical Specification, Division 49.

51.04 MEASUREMENT AND PAYMENT: Costs of all materials, labor, and equipment, as well as incidental expenses shall be included in the unit price for heated scarification rejuvenating agents and shall be measured for a follows:

- A. Heated scarification will be measured at the unit price per square yard of existing pavement heated-scarified, completed-in-place.
- B. Rejuvenating agents will be measured at the unit price per gallon, completed-in-place.