

**Part 1            General**

**1.1                RELATED REQUIREMENTS**

- .1        The list of work sections in this division is indicative and non-exhaustive. It does not exclude the works described in the other specification sections, shown in the drawings or necessary for the execution of the works in keeping with overall intent of the plans.
- .2        Section 01 33 00 - Submittal Procedures.
- .3        Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

**1.2                SECTION CONTENT**

- .1        Materials and application of asphalt tack coat to an existing asphalt or concrete surface prior to asphalt paving.

**1.3                REFERENCES**

- .1        American Society for Testing and Materials International, (ASTM)
  - .1        ASTM D140-[01], Standard Practice for Sampling Bituminous Materials.
- .2        Canadian General Standards Board (CGSB)
  - .1        CAN/CGSB-16.2-M89, Emulsified Asphalts, Anionic Type, for Road Purposes.

**1.4                SUBMITTALS**

- .1        Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
- .2        At least 2 weeks prior to commencement of work, submit two samples of proposed asphalt tack coat material to Departmental Representative in accordance with 01 33 00 - Submittal Procedures.
- .3        Sample asphalt tack coat material to: ASTM D140.
- .4        Provide access on tank truck for Departmental Representative to sample asphalt material to be incorporated into Work, in accordance with ASTM D140.

**1.5                QUALITY ASSURANCE**

- .1        Upon request by Departmental Representative, submit manufacturer's test data and certification that asphalt tack coat material meets requirements of this section.

**1.6                DELIVERY, STORAGE, AND HANDLING**

- .1        Deliver, store and handle materials in accordance with ASTM D140.

- .2 Provide, maintain and restore asphalt storage area.

## **1.7 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .2 Divert unused asphalt from landfill to facility authorized to recycle such materials.

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Anionic emulsified asphalt : to CAN/CGSB-16.2, grade: SS-1.
- .2 Water : clean, potable, free from foreign matter.

### **2.2 MATERIALS**

- .1 Pressure distributor to be : Designed, equipped, maintained and operated so that asphalt material can be :
  - .1 Maintained at constant temperature.
  - .2 Applied uniformly on variable widths of surface up to 5 m.
  - .3 Applied with uniform pressure at readily determined and controlled rate of 0.3, with a permissible deviation that shall in no instance exceed 0.003 L/m<sup>2</sup>.
  - .4 Distributed in uniform spray, without atomization, and at required temperature.
  - .5 Equipped with meter that registers metres of travel per minute, visibly located to enable truck driver to maintain constant speed required for application of asphalt tack coat at specified rate.
  - .6 Equipped with pump with a flow meter graduated in units of 5 L or less of asphalt tack coat material passing through nozzles per minute, and readily visible to operator. Pump power unit to be independent of truck power unit.
  - .7 Equipped with an easily read, accurate and sensitive device that registers temperature of liquid in reservoir.
  - .8 Equipped with accurate volume-measuring device or calibrated tank.
  - .9 Equipped with nozzles of same make and dimensions, adjustable for fan width and orientation.
  - .10 Equipped with nozzle spray bar, with operational height adjustment.
  - .11 Cleaned if previously used with incompatible asphalt material.

**Part 3 Execution**

**3.1 APPLICATION**

- .1 Obtain Departmental Representative's approval of surface before applying asphalt tack coat.
- .2 Apply asphalt tack coat only on clean and dry surface.
- .3 Dilute asphalt emulsion with water at 1:1 ratio for application.
  - .1 Mix thoroughly by pumping or other method approved by Departmental Representative.
- .4 Apply asphalt tack coat evenly to pavement surface at rate as directed by Departmental Representative.
- .5 Paint contact surfaces of curbs, gutters, headers, manholes and like structures with thin, uniform coat of asphalt tack coat material.
- .6 Tack coat binder shall also be applied to MG 20 granular base prior to paving base course.
- .7 Do not apply asphalt tack coat when air temperature is less than 10°C or when rain is forecast within 2 hours of application.
- .8 Evenly distribute localized excessive deposits of tack coat by sweeping as directed by Departmental Representative.
- .9 Where traffic is to be maintained, treat no more than one half of width of surface with asphalt tack coat in one application.
- .10 Keep traffic off tacked areas until asphalt tack coat has set.
- .11 Re-tack contaminated or disturbed areas as directed by Departmental Representative.
- .12 Permit asphalt tack coat to set before placing asphalt pavement.

**END OF SECTION**