

# CITY OF SWIFT CURRENT where life makes sense

# SECTION 04000 ASPHALT PAVEMENT CRACK ROUTING AND SEALING

DECEMBER 2015

#### **CONSTRUCTION SPECIFICATIONS**



# SECTION: 04000 ASPHALT PAVEMENT CRACK ROUTING AND SEALING

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# SECTION: 04000 ASPHALT PAVEMENT CRACK ROUTING AND SEALING

# 1 GENERAL

## 1.1 DESCRIPTION

**1.1.1** The work described in this section consists of routing, cleaning and drying cracks in pavement surfaces, supplying crack sealant material and sealing the routed cracks with the sealant.

#### 1.2 RELATED SECTIONS

- 12000 Flexible Guide Posts and Delineators
- 10000 Regulatory Roadway Signs
- 02010 Site Preparation and Grading
- 02015 Sub Grade Preparation
- 03001 Aggregates General
- 03005 Granular Base Course
- 03010 Granular Sub Base
- 03060 Geotextile and Rolled Erosion Control Devices
- 03070 Rip Rap
- 04001 Asphalt Pavement Crack Sealing
- 04015 Asphalt Concrete
- 04025 Prime, Tack and Fog Coats
- 04070 Asphalt Concrete Pavement Milling
- 06010 Concrete Side walk, Curb and Gutter Construction
- 07000 Pavement Markings

#### 1.3 INSPECTION AND TESTING

- **1.3.1** The Contractor shall supply material samples to the City for QA (Audit) testing purposes when requested.
- **1.3.2** Evaluation of the work will be based on a visual inspection by the City. To be acceptable, the work must conform with the following:
  - All routed cracks conform with the specified route profile
  - The route conforms to the path of the crack with no part of the crack outside or touching the edge of the rout cross section
  - All routed cracks have been sealed
  - At least 95% of the cracks treated have been filled with an adequate amount of crack sealant material.

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**1.3.3** Failure to comply with the acceptable criteria will result in the Contractor re-treating all failed cracks at his own expense.

# 2 PRODUCTS

- 2.1 MATERIAL
- 2.1.1 Hot poured rubberised asphalt products generally accepted for this work are Husky 1G11, CRAFCO 522, KOCH 9030 or Beram 195LM.
- 2.1.2 The use of other materials will be subject to the approval of the City. In situations where the Contractor obtains approval to use a material not included in the above list, he shall provide the City with the following information five (5) days prior to commencing the Work:
  - Name and mailing address of the crack sealant supplier and manufacturer
  - Name of crack sealant product to be supplied
  - Written confirmation from the manufacturer that the crack sealant to be supplied meets all specified requirements along with test results that demonstrate that the product meet all specified requirements.
- 2.1.3 The Contractor shall verify that the crack sealant delivered and used in the Work is the type and grade ordered.

# **3 EXECUTION**

#### 3.1 PROCEDURE

- 3.1.1 No Work shall be performed during rain or snow or when the pavement surface is wet.
- 3.1.2 The crack sealant shall not be applied when the pavement temperature is below 10 Celsius.
- 3.1.3 Unless otherwise directed by the City, all cracks between 2 mm and 25 mm in width shall be routed and sealed. All cracks shall be routed to a minimum width of 20 mm and to a depth of 20mm.
- 3.1.4 Prior to the application of crack sealant, the entire road surface shall be cleaned ensuring all loose material and moisture is removed from the routed cracks and surrounding areas.
- 3.1.5 Crack sealant shall be heated and applied in accordance with the manufacturer's recommendations. Routed cracks shall be filled with crack sealant such that upon cooling the sealant shall not be more than 3 mm below the pavement surface.
- 3.1.6 Excessive crack sealant shall be removed from the pavement surface immediately following application. Traffic shall be kept off sealed cracks until the crack sealant has cured. At locations such as intersections where this is not practical, the Contractor shall prevent tracking by applying a blotting agent to the crack sealant. When a blotting agent is used, it shall not be applied until the sealant has cooled sufficiently to prevent inclusion of the blotting agent into the sealant.

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- 3:1.7 When necessary, the Contractor shall supply one of the following blotting agents:
  - Screened sand with a maximum topsize of 2 mm
  - Cement
  - Fly ash
- 3.1.8 The use of other blotting agents shall be subject to the approval of the City.
- **3.1.9** Fuel, asphalt and any other spills shall be cleaned up to the satisfaction of the City at the Contractor's expense.

# 4 MEASUREMENT AND PAYMENT

#### 4.1 MEASUREMENT

4.1.1 Measurement shall be based on lineal meters (m) or square meters (m<sup>2</sup>) of actual work completed, as specified in the unit rate schedule of the contract.

#### 4.2 PAYMENT

4.2.1 Payment shall be based on the measured quantity multiplied by the unit rate specified in the unit rate schedule of the contract.

#### END OF SECTION