REQUEST FOR BID

Date: 04/05/12
Bid 12-0249

RETURN BY OPENING TIME TO:
Purchasing Division
RM 100 City Hall
411 West 1st Street
Duluth, MN 55802

Crack Sealer

 Buyer: Dennis Sears
 Phone: 218-730-5003
 Fax: 218-730-5922

BID OPENING, RM 100 AT 2:00 PM ON Thursday, April 19, 2011

Note: All bids must be written, signed, and transmitted in a sealed envelope, plainly marked with the bid number, subject matter, and opening date. The City of Duluth reserves the right to split award where there is substantial savings to the city, waive informalities and to reject any and all bids. Bidder should state in proposal if bid is based on acceptance of total order. Sales tax is not to be included in the unit price. Bidder to state freight charges if, proposal is F.O.B. shipping point, freight not allowed. Low bid will not be the only consideration for award of bid. All pages must be signed or initialed by authorized bidder’s representative as indicated at the bottom of the page(s) of the request for bid.

OFFICIAL SEALED BID

Designated F.O.B. Point

Tax: Federal Excise Tax Exemption
Account No. 41-74-0056 K

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<table>
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<th>Item No.</th>
<th>Qty</th>
<th>U/OM</th>
<th>Description</th>
<th>Unit Price</th>
<th>Total Price</th>
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<tr>
<td>01</td>
<td>100,000 lbs</td>
<td>Crack sealer according to MN Dot Specification #3723 attached</td>
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Vendor E-mail Address_________________________________________ Freight Charges N/A

Name_________________________________________________________
Addr__________________________________________________________
______________________________________________________________

By:__________________________________________ (print title) (signature) (tele#)

Total Bid Price ___________________________
(To include any additional pages)

Payment Terms ___________________________

F.O.B. Point N/A

Delivery Date N/A

An Equal Opportunity Employer
3723
Joint and Crack Sealer
(Hot-Poured Elastic Type)

3723.1 SCOPE
This specification covers joint and crack sealer of the hot-poured elastic type, for sealing joints and cracks in concrete and bituminous pavements, bridges, and other structures. On concrete structures requiring less than 23 kg (50 pounds) of material, the contractor may substitute an approved silicone or polyurethane sealer.

3723.2 REQUIREMENTS
A General Requirements
The sealant shall be composed of a combination of polymeric materials, fully reacted chemically to form a homogeneous compound. Only material from certified sources is allowed for use. A list of certified sources is on file at the Chemical Laboratory.

The sealant must be melted in a double boiler, oil jacketed melter-applicator equipped with a mechanical agitator, pump, gas pressure gauges, separate temperature thermometers for the oil bath and melted material with accessible control valves and gauges. Follow melting procedures recommended by supplier.

The sealant, when melted, shall be free of any dispersed or settling component and be of a uniform consistency suitable for filling joints and cracks without inclusion of large air holes or discontinuities.

B Physical Requirements
The sealant shall conform to ASTM D 3405 except for the following modifications:

1. Cone penetration at 25 °C (77 °F), 150 g, 5 s, .......................... 60 - 90
2. Bond at -29 °C (-20 °F), 3 cycles, 100% extension .......... Passes
3. Mandrel bend test at -34 °C (-29 °F), 25 mm (1 inch)

mandrel ........................................................................ No cracking
4. Resilience at 25 °C (77 °F), minimum, % ....................... 40

C Packaging and Marking
The sealant material shall be packaged and shipped in suitable commercial boxes, of no more than 23 kg (50 pound) weight, clearly marked with the name of the material, the name of the manufacturer, brand name, weight, batch number, and pouring temperature recommended by the manufacturer.
3723.3 SAMPLING AND TESTING

A Sampling

Inspection and sampling usually done at source. Contact Chemical Laboratory for list of approved lots. If lot has not been preapproved submit a 23 kg (50 pound) sample to the Chemical Laboratory for testing.

B Methods of Test

B1 Testing shall be according to ASTM D 3405 except the bond test will be run using sawed cement mortar blocks prepared by the Mn/DOT method.

B2 Mandrel bend test ..................... ASTM D 522 Method B

Test at -34 °C (-29 °F) using 25 mm (1 inch) mandrel, 180 degree bond over five seconds. Test specimen prepared according to ASTM D3405, Flow Test, and conditioned at -34 °C (-29 °F) for a minimum of 4 hours.

B3 Cement Mortar Blocks ( Mn/DOT Method).

Prepare mortar using one part high early Portland Cement conforming to AASHTO M 85 Type III and two parts by weight of clean, uniformly graded, concrete fine aggregate conforming to AASHTO M 6. Add sufficient water to produce a flow of 100 √ 5 when tested in accordance with the procedure for determination of consistency of cement described in section 9 of AASHTO T 106, Test for Compressive Strength of Hydraulic Cement Mortars (using 50 mm (2 inch) cube specimens). After curing one day in moist air and six days in water at 23 √ 1.7 EC, the blocks shall be cut into 25 x 50 x 75mm (1 x 2 x 3) inch test blocks using a diamond saw blade. Discard the one inch strips in contact with the vertical sides of the mold.

Immerse the mortar blocks in lime saturated water for not less than two hours prior to use. To prepare specimens, remove from lime saturated and soak the block face until the face is smooth. Brush off the mortar face. Any mortar that sticks to the face is removed with a wire brush or a wire brush. Assemble the block, 12.5V .25mm (0.50 √ 0.01 inch) apart enclosing a reservoir of 50 x 50 x 12.5mm (2 x 2 x 0.50 inch)