

Memorandum

City of Lawrence

Public Works

TO: Chuck Soules
FROM: Mark Thiel
CC: Tom Orzulak, Steve Lashley
Date: 3/21/2012
RE: **PW-1211 : 2012 Crack Sealing project (In-House)**

Please include the following item on the City Commission consent agenda for consideration at the March 27th, 2012 meeting:

Introduction

The City's annual pavement maintenance program was reviewed and approved by the City Commission on December 20, 2011. Of the various program projects, the 2012 Microsurfacing Program was awarded on February 28, 2012, the 2012 Crack Seal Program (to be performed by City internal crews), the 2012 Overlay Program Phases 1 and 2, the KLINK Overlay & Geometric Improvements work on 6th St from Iowa St to Monterey Way, and the 2012 CIP Reconstruction of Wakarusa Dr from Research Park Way to Oread West Dr are also planned for this construction season as presented at the December 20, 2011 City Commission Meeting.

Project Description

For the 2012 pavement maintenance program the Public Works Department had great success with performing the crack sealing operation in-house. This year we wish to continue utilizing a combination of in-house staff, contracted labor and rented equipment. The project would be supervised by the street division manager and senior maintenance staff. It would also receive the same level of inspection as in previous years. The project will be broken down as follows; contracted labor, materials and equipment rental and will involve the filling of narrow joints and wide cracks.

Labor

We solicited informal bids from three labor companies. Two provided pricing and one was unable to provide the type labor needed due to their insurance restrictions. We have quoted the lowest labor rate bid (\$15.71) in the total project cost. We have estimated that this project will take 3 months to complete with approximately 2400 contracted labor hours. Cost for 3 months labor is approximately \$37,704.00.

Equipment

Last year we rented the crack sealing equipment (machine) at a cost of \$15,000 for three months use. Because of the success of last year's in-house operation we will continue to perform this part of our maintenance program utilizing contract labor and in-house staff with one difference. We are recommending the purchase of the crack sealing machine. Based on rental cost, life of the equipment it is financially more practical for us to purchase a machine vs. renting each year. The cost to purchase is approximately \$50,000.00 and the cost for rental each year would be \$15,000.00. It would take a little over three years for the payback. It is expected this equipment would last 10 years. At the rental rate over a 10 year period we would

spend \$150,000.00. The other advantage of owning the machine is that it will be available to us for use beyond the three months of rental each year. Allowing us to perform additional crack sealing as needed.

Materials

We will utilize the same materials specified when this project is contracted. Two types of crack-sealing will be completed, narrow cracks and wide cracks. We have found that this process provides the most effective use of materials in meeting our specification on crack-sealing. The two types of crack-sealant would be provided by PMSI. They have a requirement that their products be used in their equipment. The PMSI products meet or exceed our specification requirements. The efficiency of the in-house operation has resulted in a better product while at the same time reducing the amount of materials used as when this project was contracted. We had enough materials left from last year's project to perform the work outlined in the 2012 program.

Project Cost

Labor	\$37,704.00
Equipment	\$50,000.00 (purchase)
Materials	<u>\$0.00</u>
Total	\$87,704.00

Traditionally, contracted costs have been:

2008	\$226,500.00
2009	\$244,000.00
2010	\$248,000.00

Funding Source

The labor cost requested is \$37,704.00 would be funded from motor fuels tax fund 214-3-3800-4508. and the equipment purchase would be \$50,000.00 from the equipment reserve fund 205-3-3000-6005.

Action Request

Approve the purchase of equipment in the amount of \$50,000.00 and approve the use of contract labor at an hourly rate of \$15.71 for a total of \$37,704.00.