AGENDA ITEM #: _____ DATE: September 9, 2019 CAR #: 2019-6732



CITY COUNCIL ACTION REPORT

SUBJECT: FY2020 Pavement Management Projects

STAFF PRESENTER(S): Luke Albert, City Traffic Engineer Brian Harvel, Pavement Management Coordinator

OTHER PRESENTER(S): None

Summary: Authorize expenditures up to \$3,946,100 for FY2020 pavement management projects and approve budget transfers to move savings to other pavement management projects. Budget transfers will be required to return savings from the CIP projects back to the overall pavement management program.

Recommendation: Approve expenditure authority up to \$ 3,946,100 to complete pavement management projects in various locations throughout the city and related budget transfers.

Fiscal Impact: The FY2020 pavement management budget includes \$3,946,100 in HURF and General Funds in the Engineering operating and capital budgets. Identified in Table 1 below are the FY2020 pavement management projects.

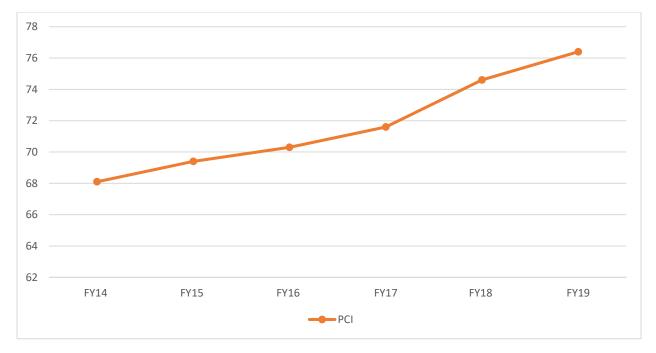
| Item | TOTAL |
|--|-------------|
| Roadway Preparation and ADA Ramps Repairs/Replacements | \$410,000 |
| Riggs Road and Bullard Avenue Pavement Rehabilitation (CIP) | 914,000 |
| Litchfield Road Pavement Preservation (CIP) | 550,000 |
| Other FY2020 Pavement Management Projects | 2,072,100 |
| Total | \$3,946,100 |

Table 1: FY2020 Pavement Management Projects

The Riggs Road and Bullard Avenue Pavement Rehabilitation project includes 50% participation from APS, up to the \$457,000 already received by the City. If the pavement rehabilitation costs are less than \$914,000, APS will receive a refund for the amount of their proportionate savings. In addition, HURF funds from the operating budget were programmed in the CIP for each project that exceeded \$100,000. Any savings in the CIP projects will be transferred back to the operating budget to be allocated to FY2020 pavement management projects.

Background and Previous Actions

On March 17, 2014 and August 25, 2014, the city's pavement management consultant, APT, presented an update on their pavement management project at which time treatment strategies and funding recommendations were discussed. During those presentations, the city's Pavement Condition Index (PCI) of 68.1 was presented to Council. Figure 1 below identifies the average network PCI of the roadway network during the past 6 fiscal years. The city's PCI has increased by over 8 points to 76.4 during this time as a result of increased commitment to the pavement management program which demonstrates a significant increase in the overall health of the city's roadway network.





Staff Analysis

Proposed FY2020 pavement management projects total 138.41 lane-miles of pavement treatment projects that included both preservation and rehabilitation projects (Exhibit 1).

A description of each preservation type is provided below, followed by a list of roadways or neighborhoods recommended for the designated pavement treatment:

- 1. **High Density Mineral Bond -** A surface seal exclusively for local roads. This treatment requires special equipment for application and per manufacturer's specifications should only be placed on roads in relatively good condition. Roadway coverage with the product is guaranteed for 5 years.
 - Estrella
 - Copper Ridge 1
 - Copper Ridge 2
 - Echo Ridge
 - o Oasis
 - o Spanish Bay
 - Desert Vista
 - o Eagle Ridge
 - La Entrada
 - o La Mirada
 - o Las Palmas
 - o Cordoba
 - Stone Gate
 - \circ Saronno
 - Las Brisas
 - Canyon Trails 4 West
- 2. **High Volume Fractured Aggregate Surface Treatment (FAST)** High volume FAST applications are typically performed on arterial, collector and rural roadways where cracking is moderate to severe and provides structural assistance to the pavement. FAST applications typically last 5 to 7 years.
 - 2a. **High Volume FAST with Scrub Seal** A FAST application preceded by an application of a scrub seal. A scrub seal is a thick rubber based product scrubbed into the complete surface area of a road to seal cracks that are too numerous to be sealed with standard crack fill. Scrub aids in achieving the standard life expectancy of the FAST.
 - Riggs Road from 187th Ave to Bullard Ave
 - Bullard Ave from North of Riggs Rd to End of Pavement
 - 2b. **High Volume Cape Seal** A FAST application followed by an application of a Microsurface. This is used on urban arterials and collectors. The FAST provides strength to the pavement and while the Micro-surface seals the FAST and provides a strong, smooth pavement surface.
 - 145th Ave from Encanto Ave to McDowell Rd
 - 144th Ave from Merrell St to Wigwam Blvd

- Lower Buckeye Road from 173rd Ave to Citrus Rd
- 3. **Micro-surfacing** An product that is commonly used on arterial and collector roads, and is effective at correcting or inhibiting raveling and oxidation of the pavement surface, improving surface friction, sealing the pavement surface, and filling minor surface irregularities and wheel ruts up to 1.25 inches deep. Micro-surfacing typically lasts 5 7 years.
 - Litchfield Rd from Wigwam Blvd to Yuma Rd / Western Ave
 - McDowell Rd from Litchfield Rd to Sarival Rd
 - Van Buren St from Litchfield Rd to Estrella Pkwy
 - Thomas Rd from 144th Ave to Litchfield Rd
 - Palm Valley Blvd from 144th Ave to Litchfield Rd
 - Portland from 167th Ave to Sarival Ave
 - Calistoga Dr from Estrella Pkwy to 182nd Dr

Existing City contracts with the following companies will be used for pavement treatments, crack sealing, and ADA ramp repairs and replacements:

VSS International, Inc. Viasun Corporation DBA Construction, Inc. Holbrook Asphalt Co. Vincon Engineering Construction, LLC Superior Supply Inc.

Attachments

Exhibit 1: FY2020 Pavement Management Program