



STAFF REPORT

To: Honorable Mayor and Members of Town Council

From: Frank Castillo, Project Manager

Title: Award of Contracts for the 2023 Pavement Maintenance Program, and Capital Improvement Projects

Notification and Outreach Efforts

Staff has developed specific public coordination outreach to ensure that residences and businesses will understand construction impacts and how this may affect access to individual businesses and residences. Public outreach will occur in numerous forms such as; 1) Public Outreach Open Houses, 2) Town newsletters, 3) HOA mediums such as newsletters, 4) Town social media, 5) Door notification, 6) Press releases, 7) Town's website and others. Residents and businesses will be notified of actual dates that work is to be completed adjacent to their properties, and traffic control plans will be developed and managed to ensure worker and public safety.

Town staff will host a Public Outreach Open House March 23. This Public Outreach Open House will consist of detailed maps of the 2023 maintenance work to let concerned residents know which streets will receive treatments and how it may affect them. This year's Open House will be held at The Ridge House – Founder's Village, 4501 Enderud Blvd. Staff plans to coordinate with neighborhood Home Owners Association's (HOA). Furthermore, press releases will be published before the start of PMP construction season to notify the public of work locations and dates.

History of Past Town Council, Boards & Commissions, or Other Discussions

The Public Works Commission at their October 3, 2011 meeting voted unanimously to recommend to Town Council to adopt the proposed Five Year Pavement Maintenance Program, and the Overall Condition Index (OCI) goal to be set at 75 for primary streets and 70 for residential streets. The OCI is an average rating of each street's condition. This was done in an effort to minimize impacts of roadway maintenance to residents, and to reduce costs of work by concentrating in one area of Town. Town Council approved the Town's rotating five-year PMP regionalized area plan for residential streets at the November 1, 2011 Town Council meeting. The Town's five-year regional plan divides the town into five regionalized areas. Primary streets can be included in any year of the five-year program. The PMP program will then annually rotate around these five areas excluding primary streets and downtown Castle Rock such that every

fifth year repairs to an area's residential street system will occur. In addition to the regionalized Five Year Pavement Maintenance Program, the Public Works Department has developed the Strategic Asset Management Plan (SAMP) to maximize value from each asset for our stakeholders. Staff has begun making adjustments to the regionalized plan to better align with SAMP policies of working to obtain the lowest total lifecycle cost.

Staff will be taking the 2023 PMP to the Public Works Commission Monday, March 6, 2023.

Discussion

The Town's goal for the PMP is to preserve and extend the life of the Town's streets by making the most cost effective annual improvements to selected street segments. These goals are met when proper street maintenance is administered to these segments.

Staff determines which streets require maintenance by evaluating the street's condition rating in addition to a physical inspection. A pavement management program, Cartegraph's Pavement Asset Module, establishes these condition ratings. This program establishes a condition rating based on staff's field observation for the streets, and rates them from poor to excellent condition. Different types of street maintenance treatments, such as crack seal, slurry seal, mill & overlay, full depth reclamation, and reconstruction are identified based on the condition of the roadway.

The most commonly used and cost effective pavement maintenance activity is crack sealing. Crack seal material is placed into pavement cracks, generally 1/8 of an inch and larger to seal and fill to prevent the intrusion of water and incompressible material into the crack, and to reinforce the adjacent pavement. This year under the PMP, the Town will apply crack seal as part of the 2023 Slurry Seal Project

Slurry seal is a form of maintenance to keep a newer street in good condition. This type of seal is thin in nature and meant to keep water out of minor cracks, and improve skid resistance. This year the Town will complete approximately 27 lane-miles of slurry seal, which is 3% of the Town's streets. A lane-mile is a single lane width by a mile long.

Another category of street maintenance is asphalt mill and overlay. This maintenance treatment removes and replaces a layer of asphalt without compromising the original pavement section. This work is more costly than a slurry seal and normally will be done to a street that has more than one distress. The distresses include minor alligator or fatigue cracking, joint reflection cracking, longitudinal / transverse cracking, thermal cracking, potholes, raveling and rutting. This year the Town will complete approximately 41 lane-miles of mill & overlay, which is approximately 6% of the Town's streets.

A street that has reached the end of its usable service life, or has surpassed it, requires reconstruction, via removal and replacement or full depth reclamation. Remove and replace reconstruction, and full depth reclamation, involves removing the pavement section in its entirety, moisture conditioning the subgrade and installing a new pavement section. Reconstruction essentially begins a new service life for the pavement. This year

the Town will perform approximately 14 lane-miles of reconstruction, which is approximately 2% of the Town's streets.

Staff also evaluates the condition of the Town's concrete curb, gutter, and public sidewalks within the projects' limits and town wide. These contracts will remove and replace damaged concrete infrastructure that is a hazard to pedestrians or to the traveling public.

The invitation to bid for construction of the various projects within the PMP was advertised in December 2022. Bids were opened for the projects on January 19, 2023.

A list showing the various PMP & Capital reconstruction projects and the bid results is attached (**Attachment A**). All bids were checked for accuracy, references were checked, and all documents were reviewed for contract compliance. Staff believes that each of the recommended bidders is qualified to perform the work associated with the respective maintenance contract. A summary of the individual contracts with bid amount plus contingency and the contractors are shown on the following table:

2023 PMP & CAPITAL RECOMMENDED AWARD

PROJECT	BID AMOUNT PLUS CONTINGENCY	CONTRACTOR
2023 Asphalt Overlay Project	\$7,255,348 + \$725,535 (10%) Contingency Total: \$7,980,883	Schmidt Construction Co. Castle Rock, CO
2023 Curb, Gutter and Sidewalk Replacement Project	\$1,143,835 + \$114,384 (10%) Contingency Total: \$1,258,219	Chato's Concrete, LLC Denver CO
2023 Full Depth Reclamation Project	\$6,893,561 + \$689,356 (10%) Contingency Total: \$7,582,917	Schmidt Construction Co. Castle Rock, CO
2023 Slurry Seal Project	\$1,291,384 + \$129,139 (10%) Contingency Total: \$1,420,522	Vance Brothers Inc., Denver, CO
2023 Miscellaneous Concrete Replacement Project	\$234,000 +\$23,400 (10%) Contingency Total: \$257,400	TBD (Will be bid and awarded in Summer)
GRAND TOTAL:	\$18,499,942	

It is anticipated that concrete repairs, and the reconstructions will begin in early-April. The asphalt overlay and sealing portions will occur in the summer months. All PMP, and associated Capital projects, are expected to be completed in the fall.

Budget Impact

All costs are within the allocated budget. The budget for the 2023 PMP is \$10,900,000 and the budget for 2023 reconstruction projects is \$7,600,000 for a total 2023 Budget of \$18,500,000. The total of the low bid results for identified work is \$16,584,128. Staff recommends adding contingencies for the various PMP projects and reconstructions for unforeseen conditions that total \$1,658,414, or 10% of the contract amounts, for a total authorization of \$18,242,542. This year, competitive bids came in with better than expected results. Therefore, we are including a 10% contingency to each PMP project. This will give more flexibility within each contract to expand the scope to allow more work to be done as needed. The remaining budget of \$257,400 will be allocated for the annual miscellaneous concrete project that typically bids in the Fall, and any other needs that historically occur during the program year.

Attachments

Attachment A: PMP & Capital reconstruction projects bid results