



MEMORANDUM

To: Mayor and City Council

From: Kent Collins, P.E., Director of Public Works

Date: August 11, 2020

Reference: Update on Belt Line Reconstruction

General Information:

- Belt Line Road between IH-635 and Southwestern was originally constructed in 1985.
- Scope includes full pavement replacement, utility replacement and rehabilitation, landscaping, sidewalk construction, signal work, and significant traffic control and temporary paving to maintain mobility during construction.
- Halff Associates is currently designing the project and is at 70% completion
- Current construction estimate is between \$23 million and \$24 million
- Planned start of construction early 2022
- Estimated completion late 2023

Introduction:

This agenda item is being presented as a status update for the Belt Line Road (IH-635 to Southwestern) Reconstruction project. This is an update on the design elements being considered for inclusion and how those elements will impact construction and cost.

Analysis:

Belt Line between Southwestern and IH-635 was originally constructed in 1985 and has outlasted the original design life. The roadway has been maintained over the years to extend the life, and one additional overlay project was implemented in partnership with Dallas County to span the time to the start of the reconstruction project. Design of the project is currently in process with Halff Associates. The construction plans are currently at 70% completion.

The basic scope of the Belt Line reconstruction project includes the following elements:

- Replacement of all existing pavement with an updated pavement section
- Intersection enhancements to improve mobility and safety
- Sidewalks, street lights and landscaping
- Replacement of the water and wastewater infrastructure to renew the lines to match the expected life of the new pavement

- Strategic replacement/rehabilitation of the existing storm sewer system
- Signal work as needed to accommodate intersection changes and/or traffic control

When design work commenced on Belt Line the traffic volume on South Belt Line ranged between 40,000 and 50,000 vehicles per day. As a result, the design includes removing the center median and using that space to add two temporary lanes to handle traffic during construction. Currently, those traffic volumes range between 20,000 and 25,000 vehicles per day. If the lower traffic volumes persist, an opportunity to change the construction phasing and traffic control exists to simplify and accelerate the construction.

The original scope included significant replacement of the water, sewer and drainage utilities under Belt Line. Based on investigation of the existing lines, much of the existing utility infrastructure can remain in place with continued proper maintenance.

The scope also included a paving section that was designed to attract contractors that typically bid on TxDOT projects and is like the section that was originally designed for Freeport Parkway. A value engineering effort has led to a change in pavement design that eliminated significant effort and paving quantities (primarily the 4" of asphalt base).

Given the current traffic conditions and value engineering efforts that have taken place to date, staff will present an update on the design efforts related to Belt Line, present construction timing options, and present new cost information for discussion and feedback.

Legal Review:

No legal review was required.

Fiscal Impact:

There is no fiscal impact associated with this item.

Recommendation:

This is a work session item and no recommendation is provided.