12/14/2023

Recommendation for Action

File #: 23-3600, Agenda Item #: 79.

Posting Language

Conduct a public hearing and approve the recommended alternative in the Preliminary Engineering Report to replace the Barton Springs Road Bridge over Barton Creek.

Lead Department

Capital Delivery Services.

Fiscal Note

This item has no fiscal impact.

For More Information:

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Council Committee, Boards and Commission Action:

November 10, 2022 - Update on the Barton Springs Road Bridge over Barton Creek project to the Mobility Committee. Update only, no action taken.

May 11, 2023 - Briefing on the Barton Springs Road Bridge project and mobility elements of the Zilker Park Vision Plan to the Mobility Committee. Briefing only, no action taken.

October 27, 2023 - Briefing on the Barton Springs Road Bridge project to the Mobility Committee.

Additional Backup Information:

The Barton Springs Road Bridge over Barton Creek is located near the intersection of Azie Morton Road and Barton Springs Road. The location of the bridge, at the entrance to Zilker Park, is a focal point of key community events such as Austin City Limits Musical Festival, South-By-Southwest (SXSW) Conference and Music Festival, Barton Springs, Trail of Lights, and Blues on the Green. Barton Springs Road and the associated bridge is also a key connection for vehicular, bicycle, and pedestrian access linking Mopac to downtown and the South Lamar/Congress Avenue corridors, as well as providing the primary northern entrance to the Zilker and Barton Hills neighborhoods via Azie Morton Road, located immediately east of the bridge.

The full bridge replacement option provides the most cost-effective and the longest useful life The Barton Springs Road Bridge over Barton Creek requires rehabilitation or replacement. It was originally built in 1925 and was expanded on one side in 1946. Structurally it is in fair condition, however, the existing bridge dimensions, sidewalks, and bike lanes do not meet with current design standards. The roadway west of Azie Morton Road is not aligned with the roadway east of Azie Morton Road. The project will reduce congestion and provide benefits to the local neighborhoods, commuters (all travel modes), and local businesses, as well as Zilker Park users and event attendees. Based on the recent condition assessment, the Transportation Public Works Department posted signs on the bridge to require large loads to use only the right lane as a pre-emptive measure to extend the life of the bridge. If left as-is, we would eventually have to restrict large loads (trucks, busses, etc.) from using this bridge.

The Council and community acknowledged the need to improve the bridge and approved funding for design in the 2020 bond program. Construction funding has not been identified.

The engineering team evaluated five options ranging from preservation of the existing structure to total replacement. Due to the condition of the existing structure, the preservation/rehabilitation options would result in less than half of the original structure intact. The remaining structure would require refacing with new material surfaces, the view of the historical structure would be mostly blocked by the new structure, these options provide less useful life than replacement, and due to the complexity of the preserve/rehab projects, the costs of these options are more than the recommended replacement option. The construction impacts to the public are effectively the same across all rehabilitation or replacement options.

The full bridge replacement option provides the most cost-effective and the longest useful life. The recommended alternative is a three-span bridge with "Y-shaped" piers oriented in the direction of the creek, one of five alternatives studied. This option provides the most visual openness underneath the bridge, allowing pedestrians and paddlers under the bridge a more open view. It also provides additional space for both the Zilker Eagle and the Ann and Roy Butler hike and bike trail. Bridge Replacement Option 3 as detailed in the Preliminary Engineering Report is the most cost-effective option and provides less construction risk than the other options studied.

Public impact will be determined further during the project design, at a minimum the bridge will remain open to all modes of transportation during construction.

Delay in approving this recommendation will extend the completion of the preliminary phase, delaying the design and eventual construction of the bridge.

This project is located within zip code 78704 (District 9).