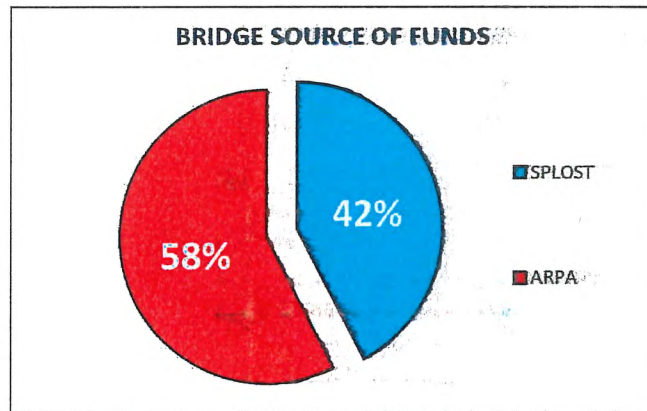


DATE: October 3, 2024  
TO: Mayor and City Council  
FROM: Assistant City Manager  
SUBJECT: Highway 20 Pedestrian Bridge  
Construction Contract Award



## BUDGET IMPACT

The project is currently programmed in the 2024 Capital Improvement Budget for the initial stages of construction for the first \$1,805,000, comprised of both SPLOST 2017 and 2023 funds as sources<sup>1</sup>. Since the project will span budget years, the balance of the project is budgeted for the remainder of the project in 2025 at an amount of \$4,250,000, comprised of both SPLOST and ARPA funding (now part of General Fund Balance). Breakdown below for both years.



## BACKGROUND

On the basis of staff recommendation and planning documents like our Comprehensive & Downtown Master Plans, City Council approved and adopted the capital improvement budget for 2024 in order to accomplish the action items and work programs associated with the planning efforts. These documents along with the recommendations in them include transportation improvement projects like the pedestrian bridge over Highway 20 to connect segments of the greenway trail system on the north and south sides of the wide section of highway. We use these planning exercises to strategically plan for future conditions.

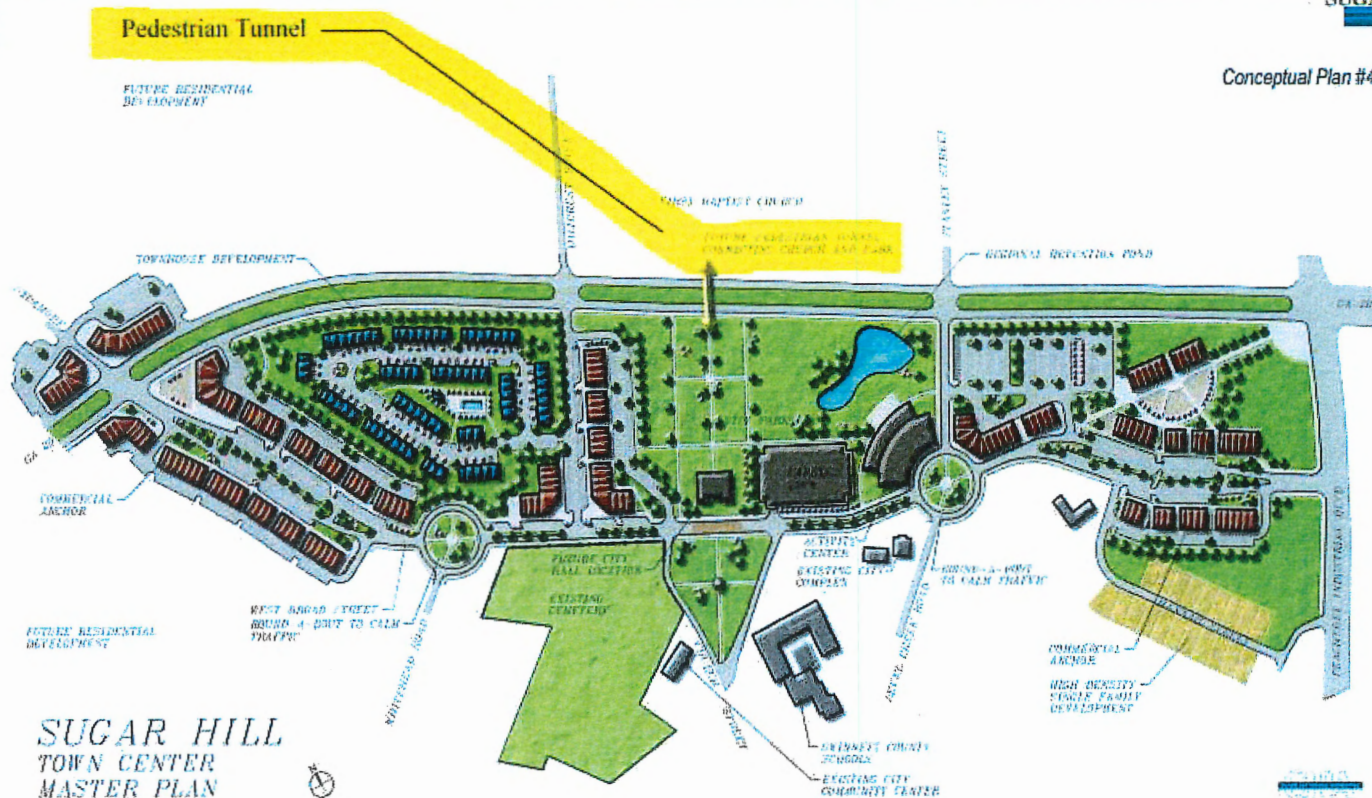
During the budget presentation, we also considered the 2005 Town Center Master Plan (*see next page*) and its reference to a grade-separated pedestrian crossing of Highway 20 (tunnel). It has taken some twenty (20) years to get to this point where the bridge is needed, but credit is due to the vision of those before us who anticipated the future conditions of a four-lane divided highway, commercial core downtown, or a pedestrian pathway to other parts of the city. A bridge is much needed for conflict avoidance with vehicles (37,800 vpd) as well as for efficient operation of the adjacent intersection. A critical segment for safe pedestrian passage across the road for the 2,700 beneficiaries north of Highway 20 and about 3,000 south of the road or nearly 20% of the city's population of 28,000.

<sup>1</sup> 2024-2028 CIP, p. 2 *Source of Funds for 2024*



### Conceptual Plans

Conceptual Plan #4



- mixed use/retail/office: 275,000 s.f. overall
- high density residential: 90 units as well as 30,000-60,000 s.f. available in upper floors of mixed use buildings
- total parking: approx 850 spaces (dependant on size of parking deck)

2005 Sugar Hill Town Center Master Plan

The primary project objective is to provide a grade-separated pedestrian crossing over the 110-foot wide roadway for safety reasons (conflict avoidance), but also for shortening the signal cycle. Considering a no-build scenario, at the 3.5 fps walking rate for healthy individuals, that would result in a pedestrian phase of the signal at 31 seconds (or 2.5 for older or mobility impaired at 44 seconds), meaning traffic delay. Anticipated greenway use, measured near Gold Mine park is around 130 users a day and it is reasonable to expect a similar, if not higher count at the intersection. This could add upwards of 30-60 minutes of extra cycle length per day along with its associated ripples East and West on 20 as well as onto PIB. Based on the pedestrian phase effects at the intersection, the grade-separated solution is a reasonable, efficient and safer alternative.

**DESIGN PHASE:**

Location and Alignment: The bridge layout, including ramps were designed to take advantage of both the termini of the greenway connections (both northside and southside) as well as the topography in the location currently proposed. At the time the location was selected, the south side of SR20 was purchased by the city from JW Trucks and the north side was the subject of development interest after the highway widening impacted the northwest corner of Stanley and 20. The ramps were chosen to makeup grade due to the drop in elevation from the E-Center running north and then turning west across 20 to shorten the ramp while meeting ADA slope standards that have been applied to the greenway design. The ramp alignment on the north side also seeks to honor the original Town Center Master Plan destination of the church parking (used for concert parking currently)

Material Selection: The prestressed concrete design was selected during the scoping phase of the project in 2022 as a cost-effective material that does not need as much maintenance as powder coated steel truss, notably over the highway. Lead time, life-cycle cost, appearance and ease of construction are all improved with concrete components. Using pre-stressed concrete instead of steel construction allows many of the downsides of metal to be avoided.

Architectural finishes and aesthetic considerations were then contemplated to provide a form noteworthy of its location of arriving in Sugar Hill. Balancing form and function, the design intent of the bridge seeks to functionally convey pedestrians across the expanse of Highway 20, it also communicates the sense of arrival to a unique place with message of genetic strands that gives Sugar Hill its own DNA. The ribbons also hint at our walkable, vibrant greenway as well as the hills that are often claimed to be “the Hill where the Sugar Spilled.” The steel tube that make up the ribbons are designed by Henry Steel, whose forms give many of the overpass structures on interstates in metro Atlanta a decorative enhancement. A lighter color for the bents and abutments made the foundations less imposing and the lighting components are more modern in shape and form.

The project has been fully designed and permitted through the Georgia Department of Transportation.



**BID RESULT:**

<b>OhmShiv</b>	<b>\$7,222,626.50</b>
<b>E R Snell</b>	<b>\$7,319,044.35</b>
<b>Reeves Young</b>	<b>\$7,854,698.70</b>

Bids were received from three (3) GDOT prequalified contractors who participated in the pre-bid conference and met the criteria for this type of work. The costs for the project were estimated earlier this year by the city's engineering consultant to be \$5.5M and the budget set right at \$6M.

All bids are overbudget and staff is seeking to negotiate with the low bidder for a project cost that was closer to the budget while remaining true to the project goals and objectives, otherwise described as value engineering. Updates will be presented at the Council meeting next week and will include funding recommendations from other SPLOST-funded projects for any reductions not achieving the original budget number.

*Attachments*

- Encroachment Permit – GDOT (9/26/2024)*
- Plan Excerpts*
- Rendering*



