REPORT TO THE BOARD OF MAYOR & ALDERMEN

DATE: October 27, 2025

FROM: Tim Gwaltney, Deputy Town Engineer

SUBJECT: Contract Change Order #1 for Shelby Drive from Sycamore Road to

Highway 72 Project

INTRODUCTION:

The purpose of this agenda item is to consider approval of Change Order 1 for the Shelby Drive from Sycamore Road to Highway 72 project.

BACKGROUND:

The Town entered into a Local Programs Contract with the Tennessee Department of Transportation (TDOT) for the Shelby Drive from Sycamore Road to Hwy 72 project in April of 2017. Please see Exhibit 1 for project location. This project involves widening the existing rural, 2-lane segment of Shelby Drive from just east of Sycamore Road to Hwy 72 to a 4-lane, median divided urban cross section matching the roadway cross section along the Collierville High School frontage. The project includes replacement of two bridges and a major drainage culvert, installation of utilities (water, sewer and irrigation), street lighting, bike lanes, curb & gutter, sidewalk and replacement of the existing span wire traffic signal at the Shelby Drive/Hwy 72 intersection with mast arms.

The Town entered into a Professional Services Agreement with Fisher Arnold, Inc. in April 2018 for environmental, design and Right-of-Way services. Those services were completed in October of 2024 and the Town subsequently received a Notice to Proceed (NTP) to Construction from TDOT in December of 2024. The Town advertised for construction in January of 2025 and received bids on February 5, 2025

Madden-Phillips was the low bidder in the amount of \$14,208,767.86. The Town entered into a construction contract with Madden-Phillips for this amount on March 24, 2025, with a completion date of May 18, 2027. Construction began on May 18, 2025 and is continuing.

DISCUSSION:

Change Order 1 (Exhibit 2) consists of the following:

Item #	Description	Decrease in Contract Amount	Increase in Contract Amount	
N/A	TDOT CO1 (attached) – Bid Form Discrepancies	(\$1.75)		
Multiple Items	TDOT CO2 (attached) – Sanitary Sewer Field Changes	(\$129,691.20)	\$101,367.06	
Multiple Items	TDOT CO3 (attached) – Subgrade Issues	(\$826,200.00)	\$1,855,825.00	

TOTAL CONTRACT INCREASE

\$1,001,299.11

There were multiple minor math errors in the original bid form resulting in a \$1.75 reduction of the original awarded amount. Please see Exhibit 3, TDOT CO1 which was approved 06/16/25.

Field changes related to the sanitary sewer installation resulted in a \$28,324.14 reduction in the contract amount. Please see Exhibit 4, TDOT CO2 which was approved 08/25/25.

A strong, solid subbase is imperative to a long-lasting roadway. The subbase must be dry and able to reach 95% compaction. There were known subsurface issues during the design phase of this project. The original plan was to undercut the bad areas and truck in suitable fill. The total bid amount for the planned subsurface remedy was \$826,200.00. Soon after the major dirt work on the project began it became apparent the planned subsurface remedy was not adequate. Areas were undercut and select material was brought in for fill. The contractor was not able to reach the required compaction limit. Soft, yielding soils persisted. Frequent heavy rains during the spring and early summer construction period caused worse than expected conditions.

Several alternatives to undercutting were considered. Please see Exhibit 5, TDOT CO3 which was approved on 9/11/25. One alternative was a tri-axial geogrid material with a 12-inch layer of graded gravel. A test section of this alternative failed. After the failure the geogrid representative suggested a double layer of geogrid due to the poor site conditions, but this option was considered too costly. A preliminary cost estimate for the double layer geogrid alternative was approximately \$3.4 million after deducts.

Another option considered was the placement of a 3-foot-thick layer of rip-rap with 6 inches of graded gravel on top. A preliminary cost estimate for this alternative was approximately \$5.1 million after deducts which also was deemed too costly.

The option considered the best solution and most cost effective was lime treatment of the soil. Lime treatment has been used successfully on similar projects in the area. The cost for lime treatment is \$1,029,625.00, 80% reimbursable. TDOT approved CO3 in early September. The lime treatment operations began soon after approval. The lime treatment has been working beautifully. There have been no issues with reaching the 95% compaction requirement on the lime treated soil. The segment of the roadway from Quinn Road to the bridge near Collierville High School has been brought to grade and curb and gutter has been installed.

Approval of Town of Collierville Change Order 1 will increase the contract amount to \$15,210,066.97. Several weeks of dirt work activities were lost during the summer months while the subsurface issues were being addressed. However, there is no time extension associated with this change order.

STAFF RECOMMENDATIONS: Staff recommends approval of Change Order 1.

BUDGET IMPACT:

Fund	Dept.	Obj. Code	Description	Approved Line Item Budget	Previous Expenses	Proposed Expense	Balance	Budget Impact
131	43120	931- 201701	Shelby Dr Widening Sycamore/Hwy 72	\$16,219,123.04	\$14,791,947.92	\$1,001,299.11	\$425,876.01	N/A

ATTACHMENTS:

Exhibit 1 - Vicinity Map.pdf

Exhibit 2 - Town of Collierville Change Order #1.pdf

Exhibit 3 - TDOT Change Order O1.pdf

Exhibit 4 - TDOT Change Order O2.pdf

Exhibit 5 - TDOT Change Order O3.pdf

PROPOSED MOTION:

To approve Change Order 1 related to the Shelby Drive from Sycamore Road to Highway 72 project.

Board Action: Motion By_____ Seconded By_____

Vote Total Hall	Jordan	Robbins	Marshall	Stamps	Fraser
Yes					
No					
Abstain					