



Huntsville, Alabama

305 Fountain Circle
Huntsville, AL 35801

Cover Memo

Meeting Type: City Council Regular Meeting **Meeting Date:** 4/24/2025

File ID: TMP-5229

Department: Engineering

Subject:

Type of Action: Approval/Action

Resolution authorizing the Mayor to execute Modification No. 1 to the Agreement between the City of Huntsville, Alabama and Garver, L.L.C., for Pinhook Creek Channel Improvements, Project No. 71-24-BR02.

Resolution No.

Finance Information:

Account Number: 3080-71-00000-528006-00000000-

City Cost Amount: \$109,147.50

Total Cost: \$1,109,125.50

Special Circumstances:

Grant Funded: N/A

Grant Title - CFDA or granting Agency: N/A

Resolution #: N/A

Location: (list below)

Address: N/A

District: District 1 ☐ District 2 ☐ District 3 ☐ District 4 ☐ District 5 ☐

Additional Comments:

Modification No. 1 to contract with Garver for an additional nine (9) subsurface geotechnical borings to finalize retaining wall and bridge design associated with the Pedestrian Access and Redevelopment corridor project.

RESOLUTION NO. 25-

BE IT RESOLVED by the City Council of the City of Huntsville, Alabama, that the Mayor be, and is hereby authorized, to execute Modification No. 1 to the Agreement between the City of Huntsville, Alabama and Garver, L.L.C., adopted and approved on the 8th day of August, 2024, by the City Council of the City of Huntsville, Alabama by Resolution No. 24-572, as attached hereto.

BE IT FURTHER RESOLVED that the total contract amount be and is hereby modified from NINE HUNDRED NINETY-NINE THOUSAND NINE HUNDRED SEVENTY-EIGHT AND NO/100 DOLLARS (\$999,978.00) to ONE MILLION ONE HUNDRED NINE THOUSAND ONE HUNDRED TWENTY-FIVE AND .50/100 DOLLARS (\$1,109,125.50), including this Modification No. 1, an increase of ONE HUNDRED NINE THOUSAND ONE HUNDRED FORTY-SEVEN AND .50/100 DOLLARS (\$109,147.50). End date: December 31, 2025. Agreement is substantially in words and figures similar to that document attached hereto and identified as "Modification No. 1 to the Agreement between the City of Huntsville, Alabama and Garver, L.L.C., for Pinhook Creek Channel Improvements, Project No. 71-24-BR02," consisting of a total of three (3) pages plus eight (8) additional pages consisting of Attachment "A", and the date of April 24, 2025 appearing on the margin of the first page, together with the signature of the President or President Pro Tem of the City Council, and an executed copy of said document being permanently kept on file in the Office of the City Clerk of the City of Huntsville, Alabama.

ADOPTED this the 24th day of April, 2025.

President of the City Council of the City of
Huntsville, Alabama

APPROVED this the 24th day of April, 2025.

Mayor of the City of Huntsville,
Alabama

STATE OF ALABAMA)

COUNTY OF MADISON)

Modification No. 1 to the Agreement between
the City of Huntsville, Alabama and Garver, L.L.C.,
for Pinhook Creek Channel Improvements, Project
No. 71-24-BR02.

THIS IS MODIFICATION NO. 1 TO AN AGREEMENT entered in on the 8th day of August, 2024, in the amount of NINE HUNDRED NINETY-NINE THOUSAND NINE HUNDRED SEVENTY-EIGHT AND NO/100 DOLLARS (\$999,978.00). The original Agreement is hereby amended by Modification No. 1 dated April 24, 2025, in the amount of ONE HUNDRED NINE THOUSAND ONE HUNDRED FORTY-SEVEN AND .50/100 DOLLARS (\$109,147.50) for a revised contract amount of ONE MILLION ONE HUNDRED NINE THOUSAND ONE HUNDRED TWENTY-FIVE AND .50/100 DOLLARS (\$1,109,125.50), by and between the City of Huntsville, Alabama, a municipal corporation in the State of Alabama (Owner) and GARVER, L.L.C., (ENGINEER).

WITNESSETH

WHEREAS, the firm identified as the ENGINEER to the Agreement dated August 8, 2024, has proposed a change, identified as Attachment "A" to the original Agreement. This modification delineates a change for nine (9) additional subsurface rock borings for the design of the PARC project.

WHEREAS, the Owner desires that the contract documents be altered to be consistent with Attachment "A" hereto.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, the Owner and the ENGINEER agree to the following modifications to the agreement:

1. Garver, L.L.C., will provide for nine (9) additional subsurface rock borings at a time and materials cost Not-to-Exceed ONE HUNDRED NINE THOUSAND ONE HUNDRED FORTY-SEVEN AND .50/100 DOLLARS (\$109,147.50). End date: August 9, 2025.
2. Item #1 shall be performed in accordance with the original Agreement dated August 8, 2024, and approved by the City Council by Resolution No. 24-572, and as described in the letter from Andrew Dinges to Kathy Martin, dated April 8, 2025, shown as Attachment "A".
3. The terms of this contract modification and the execution thereof is not in any way to be viewed as a waiver on the part of the Owner of any of its rights pursuant to the Contract.

President of the City Council of the City
of Huntsville, AL
Date: April 24, 2025

4. All other terms and conditions remain unchanged.

IN WITNESS WHEREOF, the parties have entered their hands and seals and attest to the same with the signature of the Mayor being the official act of the said municipality in accordance with his duly constituted authority.

THE CITY OF HUNTSVILLE, ALABAMA,
a municipal corporation

By: _____
Tommy Battle
Its Mayor

ATTEST:

Shaundrika Edwards
City Clerk

STATE OF ALABAMA)
COUNTY OF MADISON)

I, the undersigned, a notary public in and for said County, in said State, hereby certify that Tommy Battle and Shaundrika Edwards, whose names as Mayor and City Clerk of the City of Huntsville, a municipal corporation, are signed to the foregoing instrument, and who are known to me, acknowledged before me on this day that, being informed of the contents of the instrument, they, in their capacity as such officers, executed the same with full authority for and as the act of said corporation on the day the same bears day.

GIVEN under my hand and official seal this the ____ day of _____ 2025.

Notary Public _____
My Commission Expires: _____

ENGINEER: GARVER, L.L.C.

By: _____

ATTEST:

STATE OF ALABAMA)
COUNTY OF MADISON)

I, the undersigned, a notary public in and for said County, in said State, hereby certify that Ryan Patton, Senior Project Manager, is signed to the foregoing instrument, and who is known to me, acknowledged before me on this day that, being informed of the contents of the instrument, he, in his capacity as such officer, executed the same with full authority for and as the act of said Corporation on the day the same bears day.

GIVEN under my hand and official seal this the ____ day of _____ 2025.

Notary Public _____
My Commission Expires: _____

ATTACHMENT "A"



5125A Research Drive NW
Huntsville, AL 35805

TEL 256.534.5512
FAX 256.534.5544

www.GarverUSA.com

April 8, 2025

Mrs. Kathy Martin, PE
Director of Engineering
City of Huntsville
305 Fountain Circle
Huntsville, Alabama 35801

**Re: Additional Services Request – Pedestrian Access
And Redevelopment Corridor – Pinhook Creek Channel
Improvements - Subsurface Exploration – Additional Borings
COH Project No. 71-24-BR02**

Dear Mrs. Martin:

We appreciate the opportunity to submit this proposal for additional geotechnical services related to the above-referenced project. As per our recent discussions, these additional borings are necessary for the completion of the subsurface exploration for this project. Included herewith is an additional services proposal from GTEC, LLC, Garver's geotechnical subconsultant for this project, which details their scope and fees for this additional work.

The Total Estimated Lump Sum Additional Services Fee that we propose for performing these services is \$109,147.50, which includes a 5% fee for managing this subconsultant work. This work can begin immediately once we receive your authorization and will be completed in approximately seven (7) weeks.

Please review at your convenience and let me know if you have any questions or need any further information regarding this project or the items submitted. If this proposal meets your approval, we will begin work within five (5) days following approval and execution of our contract with the City, or sooner if authorized to do so. We look forward to continuing to work with you and the City of Huntsville on this very important project.

Sincerely,

GARVER

A handwritten signature in blue ink, appearing to read 'Andrew E. Dinges', is written over the printed name.

Andrew E. Dinges, PE, PLS
Senior Project Manager

Attachments: Exhibit A – Subconsultant Proposal – GTEC



February 13, 2025

Garver
5125 Research Drive
Huntsville, Alabama 35805

ATTN: Mr. Andrew E. Dinges, PE, PLS

SUBJECT: Change Order for an Additional Geotechnical Engineering Study
Pinhook Creek Channel Improvements
Huntsville, Alabama
GTEC Proposal No. 00290-P CO-1 Rev 1

Ladies and Gentlemen,

GTEC, LLC is pleased to provide this Change Order for an Additional Geotechnical Engineering Study for the above-referenced project in Huntsville, Alabama. Project information was provided by Mr. Andrew Dinges and Mr. Zachary Turner with Garver via email and during a meeting on December 11, 2024 with Ms. Kathy Martin and Mr. Alan Clements with the City of Huntsville and Miguel Rosales with Rosales + Partners. Additional design information was provided by Miguel Rosales on January 31, 2025. This change order describes the additional design needs of the project and presents a planned scope of services, fee, and anticipated schedule.

PROJECT INFORMATION

GTEC, LLC is performing a geotechnical engineering study for improvements for the multimodal corridor located between Holmes Avenue and Lowe Mill District adjacent to Pinhook Creek and Huntsville Spring Branch in Huntsville, Alabama. Phase I includes adding three (3) pedestrian bridges across existing channels and channel improvements. Project plans also include removing and replacing one (1) railroad bridge with a precast, prestressed concrete box girder railroad bridge; however, studies and designs for this structure have already been completed.

Project plans include the construction of a cable-suspended bridge crossing US-431/231 and Governors Drive. We understand the northern abutment of the cable-suspended bridge will be located from the north side of US-431/231 on the west of Huntsville Spring Branch, and the southern abutment of the bridge will be located on the south side of Governors Drive, west of Huntsville Spring Branch, and east of Broglan Branch. Additional plans also include an elevated ramp beginning near Binford Drive which will connect to the cable-suspended bridge between Abutment 5 and Abutment 6. The approach ramps for the three abutments will include 12 to 14 feet of fill.



Based on the provided 30% Progress Print, we understand the suspension bridge and ramp will likely be supported on drilled shafts or micropiles. The cable-suspended bridge will have eight spans with lengths ranging from 80 feet to 266.5 feet as summarized below.

Span	Approximate Span Length (ft)	Estimated Drilled Shaft Length Range (ft)	Estimated Micropile Length Range (ft)
1	80	40 to 45	45 to 50
2	80	35 to 40	40 to 45
3	266.5	35 to 55	40 to 60
4	266.5	55 to 65	60 to 70
5	266.5	65 to 70	70 to 75
6	266.5	65 to 100	75 to 105
7	80	100	105
8	80	100	105

The ramp will have six spans with lengths ranging from 57.5 feet to 85 feet as summarized below.

Span	Approximate Span Length (ft)	Estimated Drilled Shaft Length Range (ft)	Estimated Micropile Length Range (ft)
1	57.5	45 to 75	50 to 80
2	85	65 to 75	70 to 80
3	85	65 to 100	70 to 105
4	85	80 to 100	85 to 105
5	85	75 to 80	80 to 85
6	57.5	65 to 75	70 to 80

We understand Federal Highway Administration (FHWA) funding is anticipated for this project. We understand that funding for the proposed construction will not require GTEC to submit our geotechnical reports for review by the Alabama Department of Transportation (ALDOT); however, we understand ALDOT will perform a cursory review of the geotechnical report. This scope does not meet ALDOT's State of Alabama Geotechnical Manual (Geotechnical Manual) released September 7, 2021. Deviations from ALDOT's Geotechnical Manual include backfilling test borings with soil cuttings instead of grouting. Proposed rock coring depths are based on the depth to competent rock in previous studies at the site. The proposed rock coring depths deviate from ALDOT's requirements for bridge borings.

Geotechnical studies have been previously performed by AMEC for the City of Huntsville for an earlier design of the bridge. The results of the field testing for borings B-111, B-114, B-119, B-120,



B-121, and B-122 from those studies will be used as supplemental data for the reports for this project.

SCOPE OF SERVICES

The purpose of our study is to explore the subsurface conditions and groundwater levels in order to provide recommendations for construction planning. To accomplish this objective, we have developed the following scope of services.

Utility Clearance and Property Access

We will contact Alabama One Call prior to the performance of our field services. The utility location services will only mark registered public utility lines; therefore, we will need assistance in locating private lines or underground structures.

Boring locations will be marked using a hand-held GPS unit. Boring elevations can be estimated by interpolating between contour lines of Garver-provided topography. If more accurate location and elevation are needed, we recommend our boring locations be surveyed.

GTEC understands Garver will be responsible for coordinating with the City of Huntsville for property access during our field activities.

Geotechnical Drilling

GTEC proposes to explore the subsurface conditions with nine (9) additional soil test borings during this study. The location and depth of our proposed borings are summarized on the attached Sampling and Testing Plan. The attached Proposed Boring Location Plan provides the location and depth of each proposed boring.

Each boring will be advanced to auger refusal using soil augers. Standard penetration tests (SPT) in accordance with ASTM D1586 will be conducted in conjunction with the soil test borings. The SPT tests will be performed at 2-½ foot intervals in the upper 10 feet and at 5-foot intervals thereafter to boring termination or auger or SPT refusal. Pocket penetrometer readings may be taken on each sample and recorded on the Boring Log. Below auger refusal, each boring will be advanced to continuous rock (i.e. greater than 90 percent recovery) using NQ rock coring techniques. Rock core samples will similarly be logged along with measurements of the sample recovery and Rock Quality Designation (RQD). Based on previously performed borings, we anticipate the depth of auger refusal to range from 30 to 60 feet and the depth to competent limestone bedrock to range from 45 to 115 feet. If the depth to continuous rock exceeds the proposed total boring depth, we will invoice rock coring drilling at the unit rate provided.

Upon completion, subsurface water will be measured and recorded in each borehole, and the borehole will be backfilled with soil auger cuttings.



Shear Wave Velocity Testing

GTEC will perform seismic shear wave velocity testing at the Skybridge Ramp site. The testing will be performed in accordance with ASTM D5777-18 "Standard Guide for Using Refraction Method for Subsurface Investigation". The seismic measurements are interpreted to determine the depths to refracting layers along with the velocity associated with each layer. The average velocity of the upper 100-ft is then calculated in accordance with Section 3.10.3.1 of AASHTO LRFD Bridge Design Specifications to determine the seismic soil class.

Laboratory Testing

A member of our staff will supervise the drilling activities and visually classify the soil samples in general accordance with ASTM D2488, the Standard Practice for Description and Identification (Visual-Manual Procedure). Based on the anticipated conditions, we plan to perform the following laboratory tests on select samples:

- Natural Moisture Content (Soil), ASTM D2216
- Atterberg Limits, ASTM D4318
- Sieve Analysis with Wash No. 200, ASTM D1140
- Unconfined Compressive Strength of Soil, ASTM D2166
- One-Dimensional Consolidation, ASTM D2435
- pH Testing (Soil), ASTM G51
- Electrical Resistivity (Soil), ASTM G57
- Chloride Content (Soil), EPA Test Method 9056A
- Sulfate Content (Soil), EPA Test Method 9056A
- Rock Core Compressive Strength, ASTM D7012

Engineering Evaluation and Report

We will issue a foundation study report describing the exploration and outlining our recommendations. The report will include the following:

- Our understanding of the planned project,
- A summary of existing site conditions, site geology, and topography,
- Records of field tests outlining the materials encountered at the test locations,
- Results of laboratory tests performed to provide information regarding the engineering characteristics of the subsurface materials,
- Boring location plans,
- Boring profiles at bridge locations,
- Recommendations for bridge foundations including estimated bearing depths,
- Recommendations for L-Pile parameters for bridge foundation lateral capacity analysis by others,



- Recommendations for approach ramp retaining walls, including shallow foundation recommendations and estimated settlement,
- Recommendation for seismic soil site class utilizing shear wave velocity data, and
- Groundwater concerns, if encountered.

FEE AND SCHEDULE

At this time, we propose our services described for an additional lump sum fee of \$103,950.00.

If continuous rock is not encountered by the proposed rock core termination depths, we will invoice the additional rock coring at a unit rate of \$70.00 per foot. Services not included in the scope can be added at our prevailing unit rates.

SCHEDULE

We will schedule field activities upon receipt of this contract authorized by signature below and provide the planned dates of services. This proposal is valid if accepted within 60 days of issuance. Following authorization, we plan the following schedule for field activities.

- Week One: Lay Out and Survey Borings and Call in Utilities,
- Week One: Perform Shear Wave Velocity Testing,
- Week Two: Mobilize Drilling and Begin Lab Testing,
- Week Five: Complete Drilling,
- Week Six: Complete Lab Testing,
- Week Seven: Issue Skybridge Bridge Foundation Geotechnical Report.

AUTHORIZATION

Should this change order meet your objectives, please sign, date, and return. Signed authorization will constitute acceptance of the fee and schedule. This change order will be performed under the terms and conditions of the Professional Services Agreement for Subconsultant Professional Services dated August 15, 2024 between Garver, LLC and GTEC, LLC. Any modification to this proposal, the fee, schedule, or the terms and conditions stated in the Professional Services Agreement must be accepted by both parties.

To Authorize this Change Order, please sign below:

Printed Name/Title

Signature and Date



CLOSING REMARKS

We appreciate this opportunity to be of service and look forward to working with you on this project. If you have any questions regarding this proposal or would like to discuss the proposed scope and budget, please do not hesitate to contact GTEC.

Respectfully,
GTEC

A handwritten signature in blue ink that reads "Lori E. McCafferty".

Lori E. McCafferty, E.I.
Staff Engineer

A handwritten signature in blue ink that reads "Rachel T. Finch".

Rachel T. Finch, P.E.
Senior Engineer

Attachments: Testing and Sampling Plan

Cable-Suspended Bridge and Ramp: Sampling and Testing Plan													
Boring Type	Boring No.	Boring Location	Estimated Soil Depth (ft)	Estimated Rock Core (ft)	Intact Tube Samples	Natural Moisture	Atterberg Limit Tests	Particle Size w/ Wash No. 200	Unconfined Compression of Soil	Unconfined Compression of Rock	One-Dimensional Consolidation	Piezometer	Corrosion Suite
Bridge	G-301	Bent 1	45	15	3	12	1	1	1	1	2		1
Bridge	G-302	Bent 2	30	15		9				1			
Bridge	G-303	Bent 4	30	35	1	9	1	1	1	1			
Bridge	G-304	Bent 5	40	35		11				1		1	
Bridge	G-305	Bent 7	30	80		9				1			
Bridge	G-306	Bent 8	30	80	1	9	1	1	1	1			1
Bridge	G-307	Bent 9	45	65	2	12				1	2		
Ramp	G-308	Bent R0	40	40	2	11				1	2		
Ramp	G-309	Bent R1	55	60	1	14	1	1	1	1			
Total:			345	425	10	96	4	4	4	9	6	1	2