CITY OF FRANKLIN, TENNESSEE PROFESSIONAL SERVICES AGREEMENT COF Contract No. 2020-0009

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is by and between the City of Franklin, Tennessee, hereinafter referenced as City, and <u>ALFRED BENESCH & COMPANY</u> hereinafter referenced as Consultant, who mutually agree as follows:

DECLARATIONS. City desires to retain Consultant to provide engineering, related technical, and other services in connection with City's project hereinafter referenced as Project. The Project is described as follows:

DESIGN OF LEWISBURG PIKE SIDEWALK/MULTI-USE TRAIL

- 1. SCOPE OF SERVICES. Consultant shall provide survey, engineering, and related technical services for the Project in accordance with the Scope of Services ("Services") as found in Attachment A which shall be considered as an integral part hereof.
- 2. Consultant shall submit as a part of Attachment A an individual Fee Schedule and a Completion Schedule for the Project based on the detailed Scope of Services.
- 3. In event of a conflict between this Agreement and the attached document(s), this Agreement shall supersede conflicting terms and conditions.
- 4. Consultant shall be paid on a monthly basis for work performed based on the Fee Schedule as contained in Attachment A in the amount not-to-exceed Three Hundred Sixty-Four Thousand One Hundred Eighty-Two and No/100 Dollars (\$364,182.00).
- 5. Payment of reimbursable items, at direct cost and as listed in the Scope of Services, shall be allowed to exceed the above listed non-to-exceed contract ceiling.

The Board of Mayor and Aldermen Approved this Agreement on the	Day of
2020.	

TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

ARTICLE 1. SERVICES. Consultant will:

- 1.1 Act for City in a professional manner, using that degree of care and skill ordinarily exercised by and consistent with standards of competent consultants using the standards in the industry:
- 1.2 Consider all reports to be confidential and distribute copies of the same only to those persons specifically designated by the City.
- 1.3 Perform all services under the general direction of a senior professional employee, licensed and/or registered in the State of Tennessee, when appropriate.
- 1.4 Designate, in writing, the sole Project representative to coordinate with City the Services to be provided, including all contact information.
- 1.5 Unless provided for in the Project Scope of Services (Attachment A), Consultant shall perform all Services with his own forces (employees). Should sub-consultants be proposed to be used in the Project, a listing of said sub-consultants with Services to be performed shall be provided. After approval of this Agreement, no substitute for sub-consultants shall be allowed unless approved by City.
- 1.6 Retain pertinent records relating to the services performed for a period of seven (7) years following the completion of the work; during this period the records shall be available for review by City at all reasonable times.

ARTICLE 2. CITY'S RESPONSIBILITIES. City, or its authorized representative, will:

- 2.1 Provide Consultant with all information regarding the Project, which is available to, or reasonably obtainable by, the City.
- 2.2 Furnish right-of-entry onto the Project site for Consultant's necessary field studies and surveys. Consultant will endeavor to restore the site to its original condition and shall remain solely liable for all damages, costs and expenses, including reasonable attorneys' fees, for failure to make such restoration.
- 2.3 Designate, in writing, the sole Project representative to coordinate with and direct the Consultant, including all contact information.
- Guarantee to Consultant that it has the legal capacity to enter into this contract and that sufficient monies are available to fund Consultant's compensation.

ARTICLE 3. GENERAL CONDITIONS.

- 3.1 Consultant, by the performance of services covered hereunder, does not in any way assume, abridge or abrogate any of those duties, responsibilities or authorities customarily vested in other professionals or agencies participating in the Project.
- 3.2 Consultant shall be responsible for the acts or omissions of any party involved in concurrent or subsequent phases of the Project acting upon written instruction issued by the Consultant.
- 3.3 Neither City nor Consultant may assign or transfer its duties or interest in this Agreement without written consent of the other party.
- 3.4 ALLOCATION OF RISK AND LIABILITY; GENERAL. Considering the potential liabilities that may exist during the performance of the services of this Agreement, the relative benefits and risks of the Project, and the Consultant's fee for the services rendered, and in consideration of the promises contained in this Agreement, the City and the Consultant agree to allocate and limit such liabilities in accordance with this Article.

- 3.5 INDEMNIFICATION. Consultant agrees to indemnify and hold City harmless from and against legal liability for all claims, judgments, losses, damages, and expenses to the extent such claims, judgments, losses, damages, or expenses are caused by Consultant's negligent act, error or omission in the performance of the services of this Agreement. In the event judgments, losses, damages, or expenses are caused by the joint or concurrent negligence of Consultant and City, they shall be borne by each party in proportion to its own negligence.
 - 3.5.1 SURVIVAL. The terms and conditions of this paragraph shall survive completion of this services agreement.
- 3.6 LIMITATIONS OF RESPONSIBILITY. Consultant shall not be responsible for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project unless specifically undertaken in Attachment A, Scope of Services; (b) the failure of any contractor, subcontractor, Consultant, or other Project participant, not under contract to Consultant, to fulfill contractual responsibilities to City or to comply with federal, state, or local laws, regulations, and codes; or (c) procuring permits, certificates, and licenses required for any construction unless such procurement responsibilities are specifically assigned to Consultant in Attachment A, Scope of Services.

ARTICLE 4. TERMINATION BY THE CITY. The City may terminate this Agreement in accordance with the following terms and conditions:

- 4.1 Termination for Convenience. The City may, when in the interests of the City, terminate performance under this Agreement with the Consultant, in whole or in part, for the convenience of the City. The City shall give written notice of such termination to the Consultant specifying when termination becomes effective. The Consultant shall incur no further obligations in connection with the work so terminated, other than warranties and guarantees for completed work and installed equipment, and the Consultant shall stop work when such termination becomes effective. The Consultant shall also terminate outstanding orders and subcontracts for the affected work. The Consultant shall settle the liabilities and claims arising out of the termination of subcontracts and orders. The City may direct the Consultant to assign the Consultant's right, title and interest under termination orders or subcontracts to the City or its designee. The Consultant shall transfer title and deliver to the City such completed or partially completed work and materials, equipment, parts, fixtures, information and Contract rights as the Consultant has in its possession or control. When terminated for convenience, the Consultant shall be compensated as follows:
 - (1) The Consultant shall submit a termination claim to the City specifying the amounts due because of the termination for convenience together with costs, pricing or other data required by the City. If the Consultant fails to file a termination claim within one (1) year from the effective date of termination, the City shall pay the Consultant the amount the City deems the Consultant is due.
 - (2) The City and the Consultant may agree to the compensation, if any, due to the Consultant hereunder.
 - (3) Absent agreement to the amount due to the Consultant, the City shall pay the Consultant the following amounts:
 - (a) Contract costs for labor, materials, equipment and other services accepted under this Agreement;

(b) Reasonable costs incurred in preparing to perform and in performing the terminated portion of the work, and in terminating the Consultant's performance, plus a fair and reasonable allowance for direct job site overhead and earned profit thereon (such profit shall not include anticipated profit or consequential damages); provided however, that if it reasonably appears that the Consultant would have not profited or would have sustained a loss if the entire Agreement would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss, if any;

The total sum to be paid the Consultant under this Section shall not exceed the total Agreement Price, as properly adjusted, reduced by the amount of payments otherwise made, and shall in no event include duplication of payment.

4.2 Termination for Cause. If the Consultant does not perform the work, or any part thereof, in a timely manner, supply adequate labor, supervisory personnel or proper equipment or materials, or if it fails to timely discharge its obligations for labor, equipment and materials, or proceeds to disobey applicable law, or otherwise commits a violation of a material provision of this Agreement, then the City, in addition to any other rights it may have against the Consultant or others, may terminate the performance of the Consultant, in whole or in part at the City's sole option, and assume possession of the Project Plans and materials and may complete the work.

In such case, the Consultant shall not be paid further until the work is complete. After Completion has been achieved, if any portion of the Contract Price, as it may be modified hereunder, remains after the cost to the City of completing the work, including all costs and expenses of every nature incurred, has been deducted by the City, such remainder shall belong to the Consultant. Otherwise, the Consultant shall pay and make whole the City for such cost. This obligation for payment shall survive the termination of the Agreement.

In the event the employment of the Consultant is terminated by the City for cause pursuant to this Section and it is subsequently determined by a Court of competent jurisdiction that such termination was without cause, such termination shall thereupon be deemed a Termination for Convenience under this Section and the provisions of Section 4.1 shall apply.

- 4.3 Termination for Non-Appropriation. The City may also terminate this Agreement, in whole or in part, for non-appropriation of sufficient funds to complete or partially complete the Project, regardless of the source of such funds, and such termination shall be on the terms of Section 4.1.
- 4.4 The City's rights under this Section shall be in addition to those contained elsewhere herein or provided by law.

ARTICLE 5. SCOPE OF SERVICES. Consultant shall provide the Services as described in Attachment A, Scope of Services.

- 5.1 By mutual agreement, this Agreement and scope can be amended by the parties. The scope and fee for any additional tasks or services under such amendment shall be mutually negotiated and agreed to in writing prior to beginning such additional tasks or services.
- 5.2 ENVIRONMENTAL RESPONSIBILITY.

Where drilling/sampling services are involved, the samples obtained from the Project site are the property of the City. Should any of these samples be recognized by the Consultant to be contaminated, the City shall remove them from the Consultant's custody and transport them to a disposal site, all in accordance with applicable government statutes, ordinances, and regulations. For all other samples, the Consultant shall retain them for a sixty (60)-day period following the submission of the drilling/sampling report unless the City directs otherwise; thereafter, the Consultant shall discard the samples in accordance with all federal, state and local laws.

ARTICLE 6. SCHEDULE.

- 6.1 TIME OF THE ESSENCE. The parties agree that time is of the essence with respect to the parties' performance of all provisions of the Agreement.
- Before executing this Agreement, the Consultant shall have prepared and submitted for approval to the City a Completion Schedule for the Project with milestones for the various stages (tasks) of the Services as outlined in the Scope of Services. The Consultant shall submit and obtain the City's approval for any proposed changes to the logic, durations, sequences, or timing of tasks as approved in the Completion Schedule.
- 6.3 FORCE MAJEURE. Neither party will be liable to the other for any delay or failure to perform any of the services or obligations set forth in this Agreement due to causes beyond its reasonable control, and performance times will be considered extended for a period of time equivalent to the time lost because of such delay plus a reasonable period of time to allow the parties to recommence performance of their respective obligations hereunder. Should a circumstance of force majeure last more than ninety (90) days, either party may by written notice to the other terminate this Agreement. The term "force majeure" as used herein shall mean the following: acts of God; strikes, lockouts or other industrial disturbances; acts of public enemies; orders or restraints of any kind of the government of the United States or of the State or any of their departments, agencies or officials, or any civil or military authority; insurrections, riots, landslides, earthquakes, fires, storms, tornadoes, droughts, floods, explosions, breakage or accident to machinery, transmission pipes or canals; or any other cause or event not reasonably within the control of either party.
- 6.4 Should City request changes in the scope, extent, or character of the Project, the fee and the time of performance of Consultant's Services as indicated in Attachment A shall be adjusted equitably.

ARTICLE 7. USE OF DOCUMENTS, DATA.

- 7.1 All Documents, including, but not limited to, reports, drawings, specifications, and computer software prepared by Consultant pursuant to this Agreement are instruments of service in respect to the Project. The City shall retain an ownership and property interest therein whether or not the Project is completed.
 - 7.1.1 USE OF DATA SYSTEMS: The City maintains all rights to data systems and data ((including derivative or hidden data such as metadata) created and used by Consultant through information supplied to the Consultant by the City..

- 7.1.2 DISCLOSURE OF DOCUMENTS/DATA. City may be required to disclose documents or data under state or federal law. City shall notify Consultant if a request for data or documents has been made and shall give Consultant a reasonable opportunity under the circumstances to respond to the request by redacting proprietary or other confidential information. Consultant waives any right to confidentiality of any document, e-mail or file it fails to clearly mark on each page as confidential or proprietary. In exchange, Consultant agrees to indemnify, defend, and hold harmless City for any claims by third parties relating thereto or arising out of (i) the City's failure to disclose such documents or information required to be disclosed by law, or (ii) the City's release of documents as a result of City's reliance upon Consultant representation that materials supplied by Consultant (in full or redacted form) do not contain trade secrets or proprietary information, provided that the City impleads Consultant and Consultant assumes control over that claim.
- 7.2 By execution of this Agreement, Consultant and his sub-consultant(s) grant the City a royalty-free, perpetual, irrevocable, and assignable license to use any and all intellectual property interest Consultant or his sub-consultant(s) possess to any drawings, details, specifications, documents, and other information created before each of their first involvement with the Project and subsequently incorporated into the Project's documents. City-furnished data that may be relied upon by Consultant is limited to the printed copies that are delivered to the Consultant pursuant to Article 2 of this Agreement. Any copyrighted electronic files furnished by City shall be used by Consultant only for the Project as described herein. City's posting or publication of such documents created by Consultant for City shall constitute fair use and shall not constitute an infringement of Consultant's copyright, if any.
- 7.3 Documents that may be relied upon by City are limited to the printed copies (also known as hard copies) that are signed or sealed by the Consultant. Files in electronic media format of text, data, graphics, or of other types that are furnished by Consultant to City are only for convenience of City, unless the delivery of the Project in electronic media format has been dictated in Attachment A, Scope of Services. Any conclusion or information obtained or derived from electronic files provided for convenience will be at the user's sole risk.
- 7.4 Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within sixty (60) days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. Unless stated otherwise herein, Consultant shall not be responsible to maintain documents stored in electronic media format after acceptance by City.
- 7.5 When transferring documents in electronic media format, Consultant makes no representations as to long term compatibility, usability, or readability, of documents resulting from the use of software application packages, operating systems, or computer hardware differing from that as required of, and used by, Consultant at the beginning of this Project.
- 7.6 City may make and retain copies of Documents for information and reference in connection with use on the Project by the City, or his authorized representative. Such Documents are not intended or represented to be suitable for reuse by City or others on

- extensions of the Project or on any other project. Any such reuse or modifications without written verification or adaptation by Consultant, as appropriate for the specific purpose intended, will be at City's sole risk and without liability or legal exposure to the Consultant or to Consultant's sub-consultants.
- 7.7 If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- 7.8 Any verification or adaptation of the Documents for extensions of the Project or for any other project will entitle Consultant to further compensation at rates to be agreed upon by City and Consultant.

ARTICLE 8. INSURANCE.

- 8.1 During the performance of the Services under this Agreement, Consultant shall maintain the following minimum insurance:
 - a) General Liability Insurance with a combined single limit of \$1,000,000 per occurrence and \$2,000,000 annual aggregate.
 - b) Automobile Liability Insurance with a combined single limit of \$1,000,000 for each person and \$1,000,000 for each accident.
 - c) Workers' Compensation Insurance Coverage A in accordance with statutory requirements and Coverage B, Employer's Liability Insurance, with a limit of \$500,000 for each occurrence.
 - d) Professional Liability Insurance with a limit of \$1,000,000 annual aggregate.
- 8.2 Consultant shall add the City an additional insured on all policies unless otherwise prohibited.
- 8.3 Consultant shall, upon execution of this Agreement, furnish City certificates of insurance, which shall include a provision that such insurance shall not be canceled without at least thirty (30) days' written notice to City.
- 8.4 No insurance, of whatever kind or type is to be considered as in any way limiting other parties' responsibility for damages resulting from their activities in the execution of the Project. City agrees to include, or cause to be included, in the Project's construction contract, such requirements for insurance coverage and performance bonds by the Project's construction contractor as City deems adequate to indemnify City, Consultant, and other concerned parties against claims for damages and to insure compliance of work performance and materials with Project requirements.

ARTICLE 9. PAYMENT.

- 9.1 City will pay Consultant for services and expenses in accordance with the Fee Schedule proposal submitted for the Project as part of the Scope of Services. Consultant's invoices will be presented at the completion of the work or monthly and will be payable upon receipt. Payment is due upon presentation of invoice and is past due thirty (30) days from invoice date. City shall give prompt written notice of any disputed amount and shall pay the remaining amount.
- 9.2 Consultant shall be paid in full for all services under this Agreement, including City authorized overruns of the Project budget or unforeseen need for Consultant's services exceeding the original Scope of Services.
- 9.3 TRAVEL; EXPENSES
 - City shall reimburse reasonable expenses, including travel and meals, when specified in the Scope of Services, but only in accordance with the City's Travel and Expense Policy and Procedures Manual. The maximum amount will be applied as of the date of travel

and as listed in the per diem reimbursement rates on the "CONUS" website developed by the United States General Services Administration, located at www.gsa.gov [click on 'per diem rates' under the 'etools' category].

ARTICLE 10. MISCELLANEOUS PROVISIONS

- 10.1 EQUAL EMPLOYMENT OPPORTUNITY. In connection with this Agreement and the Project, City and Consultant shall not discriminate against any employee or applicant for employment because of race, color, sex, national origin, disability or marital status. City and Consultant will take affirmative action to ensure that the contractor used for the Project does not discriminate against any employee and employees are treated during employment without regard to their race, age, religion, color, gender, national origin, disability or marital status. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship.
 - 10.1.1 Consultant shall insert the foregoing provision in all contracts relating to this Project.
- 10.2 TITLE VI CIVIL RIGHTS ACT OF 1964. City and Consultant shall comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), 49 C.F.R., Part 21, and related statutes and regulations.
 - 10.2.1 Consultant shall insert the foregoing provision in all contracts relating to this Project.
- 10.3 NO THIRD PARTY RIGHTS CREATED. City and Consultant each binds itself and its successors, executors, administrators, permitted assigns, legal representatives and, in the case of a partnership, its partners, to the other party to this Agreement and to their successors, executors, administrators, permitted assigns, legal representatives and partners of such other party in respect to all provisions of this Agreement. The Services provided for in this Agreement are for the sole use and benefit of City and Consultant. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than City and Consultant.
- 10.4 WARRANTIES/LIMITATION OF LIABILITY/WAIVER. City reserves all rights afforded to local governments under law for all general and implied warranties. City does not waive any rights it may have to all remedies provided by law and therefore any attempt by Consultant to limit its liability shall be void and unenforceable.

ARTICLE 11. EXTENT OF AGREEMENT:

- 11.1 APPLICABLE LAW/CHOICE OF FORUM AND VENUE. This Agreement is made under and will be construed in accordance with the laws of the State of Tennessee without giving effect to that state's choice of law rules. The parties' choice of forum and venue shall be exclusively in the courts of Williamson County, Tennessee. Any provision of this Agreement held to violate a law or regulation shall be deemed void, and all remaining provisions shall continue in force.
- 11.2 ENTIRE AGREEMENT. This Agreement, including these terms and conditions, represent the entire Agreement between City and Consultant for this Project and supersedes all prior negotiations, representations or agreements, written or oral. This Agreement may be amended only by written instrument signed by City and Consultant.

ARTICLE 12. DISPUTE RESOLUTION, BREACH.

- 12.1 If a dispute should arise relating to the performance of or payment for the Services under this Agreement, the aggrieved party shall notify the other party of the dispute within a reasonable time after such dispute arises. During the pendency of any dispute, the parties shall continue diligently to fulfill their respective obligations hereunder. No arbitration or mediation shall be required as a condition precedent to filing any legal claim arising out of or relating to this Agreement. No arbitration or mediation shall be binding.
- 12.2 BREACH. Upon deliberate breach of the Agreement by either party, the non-breaching party shall be entitled to terminate the Agreement with notice, with all of the remedies it would have in the event of termination, and may also have such other remedies as it may be entitled to in law or in equity.

ARTICLE 13. SURVIVAL.

The provisions contained in this Professional Services Agreement shall survive the completion of or any termination of the Agreement, contract or other document to which it may accompany or incorporate by reference or which subsequently may be modified, unless expressly excepted from this Article upon consent of both parties.

(Signature)		CITY OF FRANKLIN, TENNESSEE:				
			(Signature)			
Name:		Name:	Dr. Ken Moore			
Title:		Title:	Mayor			
Date:		Date:				
	Approved as to Form:					
Mari	cruz R Fincher Staff Attorney	-				



Alfred Benesch & Company 8 Cadillac Drive, Suite 250 Brentwood, Tennessee 37027 www.benesch.com P 615-370-6079 F 615-627-4066

Lewisburg Pike Multi-Use Path- City of Franklin

Proposed Scope and Estimate

Multi-Use Path over the Harpeth River

Benesch will develop plans for a multi-use path along the south side of Lewisburg Pike from approximately Stewart Street headed southeast 0.95 miles to a point of termination near the entrance to Eastern Flank Circle. The path will follow along the edge of Lewisburg Pike except for locations of City property where the path may diverge to lessen the impact on existing utility facilities. North of Stewart Street on the west side the project proposes the installation of a curb and gutter section with a 6-ft wide grassed area available for a future sidewalk. The project will also include a proposed sidewalk on the north side of Lewisburg Pike from approximately 510-ft south of the intersection with E. Fowlkes Street and Adams Street continuing southeast approximately 0.20 miles to the intersection with Thompson Alley all in the City of Franklin, Tennessee.

This work will include the design of a 12' wide concrete multi-use path with varying widths of separation between the path and existing roadway. From the northern termini of the project to approximately Thompson Alley, the separation between the path and roadway will be provided by 2.5' wide curb and gutter. The width will be dependent on the existing features and right-of-way widths along the corridor. Within this portion of the project, Lewisburg Pike will be improved to include a new curb and gutter and an enclosed storm water drainage system. To the south of Thompson Alley, the path's roadway separation will vary in width based on available ROW. The work will also include the design of a 6' wide concrete sidewalk on the north side of the existing roadway. The sidewalk will have no separation between, but Lewisburg Pike will be improved to include a new curb and gutter and an enclosed storm water drainage system. Design of water quality units or other water quality items are not included for the proposed drainage design. While portions of the project lie within the floodplain of the Harpeth River, noted as FEMA Zone AE in FIRM 47187C0211G with an effective date of 12/22/2016, we do not anticipate the need for a CLOMR, LOMR, or LOMA submittal.

Benesch will perform the office survey work to produce a MicroStation file for use on the project. CEC will provide an ASCII file of the survey points and this will be used to produce the CADD file.

A standard Preliminary 30% set of plans will be developed to set the horizontal and vertical alignments of the proposed path and sidewalk and will be used for initial coordination. Following this, the development of a 60% Right-of-Way/Utility set will occur. It is anticipated that Right of Way acquisition by the City will be required as part of the project. However, Benesch will prepare the deeds and exhibits as part of the project. The 60% set will also be sent to utility companies and CSXT Corp. to facilitate their involvement in the project. The 100% construction documents will be produced for bidding. Probable construction costs will be estimated at the Right-of-Way and Construction stages of plans production. The plans will be developed for the project based upon the approved alignment. The multi-use path design parameters for the project will be based upon current versions of the following design guides; "Guide for the Development of Bicycle Facilities", American Association of State Highway and Transportation Officials; "TDOT Standards Specifications for Road and Bridge Construction"; City of Franklin Street Standards. These technical guidelines and specifications shall be followed unless superseded by the standard for the City of Franklin.

The potential for retaining walls are anticipated on the north side of Lewisburg between CSX and Thompson Alley. A second location is likely along the road frontage of the property currently occupied by Mid-South Mulch and

Lewisburg Pike Multi-Use Path – City of Franklin Page | 2



Outdoor Services. These locations are anticipated to require MSE walls therefore the scope and estimate will include layout and concept development for these walls.

The scope includes plans to attend a Public Meeting should this be deemed necessary to inform the public about the project. The scope also includes three coordination meetings with the City to ensure that all elements are appropriately included. Benesch will assist city staff through-out the bidding phase of the project. This will include supplying all required documents in Portable Document Format (PDF) suitable for printing. Benesch will assist the city in producing the bid book. Benesch can organize and lead the pre-bid meeting and assist the city as necessary with answering contractor questions and then opening and evaluating the bids once received.

The multi-use path design scope includes production of erosion control plans, pedestrian safety and signing during construction, permit applications and a SWPPP for the NPDES Permit.

Any permit fees or third-party review fees shall be billed to the City as a reimbursable item.

Utility Coordination and Corridor Creation

Benesch will provide utility coordination services for the project. Below is a general example of items to be completed:

- 1. Notify in writing all utility companies
- 2. Issue Preliminary Plans and solicit comments
- 3. Issue ROW plans and timeline for relocation plans submittals (2 potential utility meetings)
- 4. Review and approve relocation plans
- 5. Coordinate any contracts between the City and Utility

Benesch will also provide coordination services to develop a proposed utility corridor to adequately accommodate the City's utility stakeholders. Specifically, the planned corridor will be established along the proposed alignment of Lewisburg Pike. The corridor will be developed at a functional-level (horizontal alignment only). Benesch will develop a Memorandum of Understanding to be reviewed and agreed upon by the City and all utilities regarding the future use of said corridor. The final deliverable will be an overall plan layout which will depict the proposed location of each existing utility, their respective easements, and also identify areas where future utilities could be accommodated. Below is an outline of the anticipated items to be completed:

- 1. Preparation for and attendance of an Initial Stakeholder Meeting
- 2. Creation of Initial Functional-Level Layout, and Memorandum of Understanding for Corridor
- 3. Preparation for and attendance of a Second Stakeholder Meeting
- 4. Finalize the Layout and Memorandum of Understanding

The final design of the facilities for each utility will not be completed as part of this task, but shall be designated as an additional service. If required, Benesch can provide an amendment to this proposal or execute a separate agreement for these services.

Railroad Coordination

Benesch will coordinate with the CSXT railroad regarding the expansion and/or replacement of the crossing surface, signage and warning systems at DOT Crossing #350617V. All work will be in accordance with the MUTCD and the CSXT "Public Project Information Manual". Benesch will also coordinate with CSXT regarding the existing and proposed utility facilities within the corridor and with regards to the potential storm sewer trunk line

12/09/2019

Lewisburg Pike Multi-Use Path – City of Franklin Page | 3



installation under the existing crossing. All utility crossings will be governed by the most current "Design and Construction Standard Specifications of Pipeline Occupancies" issued by CSXT.

Topographic Survey and Environmental Services (See the attached Scope from CEC, Inc.)

- 1. CEC, Inc. will provide topographic survey, and property line information for the project limits. This survey will be performed to TDOT standards and be tied to TDOT State Plane Coordinates.
- 2. The CEC, Inc. scope includes the development of the necessary documents for the completion of the Jurisdictional Waters Determination for the project.

Geotechnical Services

1. See attached scope and fee from CIA as needed to provide the geotechnical exploration, global stability analysis, and report for the construction of potential retaining walls along the corridor.

Additional Services - Multi-Use Trail Extension to Mack Hatcher

At the discretion of the Board of Mayor and Alderman, Benesch will develop plans for a continuation of the multiuse path along the south side of Lewisburg Pike from approximately Eastern Flank Circle proceeding southeast approximately 0.90 miles to a point of termination near Mack Hatcher Memorial Parkway. The path will follow along the edge of Lewisburg Pike except for locations of City property where the path may diverge to lessen the impact on existing utility facilities. This work will include the design of a 12' wide concrete multi-use path with varying widths of separation between the path and existing roadway. The services detailed in the primary scope of work will also be included for the alternate section.

1. If the above additional services are required, CEC, Inc. will provide topographic survey, and property line information for the added project limits. This survey will be performed to TDOT standards and be tied to TDOT State Plane Coordinates.

Items not included in the Benesch Scope

- 1. Stormwater quality design
- 2. Traffic or Pedestrian signal design or traffic counts and studies
- 3. Landscape or Irrigation design
- 4. Three-dimensional and/or perspective view concept renderings
- 5. Final design of utility facilities
- 6. Detailed retaining wall design
- 7. Design of pedestrian bridges should they be required for stream crossings
- 8. Right-of-Way Appraisal Services
- 9. Right-of-Way Acquisition Services
- 10. Lighting design
- 11. Mitigation design for impacted environmental features.
- 12. Construction phase services or full TDOT level Construction Engineering and Inspection (CEI)
- 13. Printing of full-size review or bid plans for contractors

12/09/2019

Lewisburg Pike Multi-Use Path – City of Franklin Page | 4



Attachments:

- 1. Scope by CEC, Inc.
- 2. Scope by Civil Infrastructure Associates (CIA)

Compensation:

Design Phase Services					
Multi-Use Path/Sidewalk Design and Survey Office Work		Lump Sum	\$	156,400.00	
Utility Coordination and Corridor Creation		Lump Sum	\$	14,500.00	
Bid Documents and Assistance		Lump Sum	\$	4,500.00	
Geotechnical Services (By CIA)		Cost Plus	\$	13,857.00	
Survey Field Work (By CEC, Inc.)		Cost Plus	\$	30,525.00	
Jurisdictional Waters Determination (By CEC, Inc.)		Cost Plus	\$	4,200.00	
Final Contract Not-To-Exceed				223,982.00	

Additional Design Services				
Multi-Use Path Design and Survey Office Work	Lump Sum	\$	104,200.00	
Utility Coordination and Corridor Creation	Lump Sum	\$	9,500.00	
Survey Field Work (By CEC, Inc.)	Cost Plus	\$	25,000.00	
Jurisdictional Waters Determination (By CEC, Inc.)	Cost Plus	\$	1,500.00	
	Additional Contract Not-To-Exceed	\$	140,200.00	

The following is the compensation to be paid to Benesch for the scope items noted above. The fees for the additional design services have been developed with the understanding that they will be performed concurrently with the original design phase services. The only reimbursables that will be included on this project are permit fees, and third-part review fees which will be paid by Benesch and reimbursed at cost by the City. All other incidental costs (i.e. printing, travel, etc.) shall be included in the lump sum totals.



November 19, 2019

Sammie McCoy Principal Engineer Alfred Benesch & Company 8 Cadillac Drive, STE 250 Brentwood, TN 37027

Dear Mr. McCoy:

Subject: Revised Proposal for Professional Services

Lewisburg Pike Sidewalk & Multi-use Trail Project

Franklin, Tennessee CEC Project 195-344

Civil & Environmental Consultants, Inc. (CEC) is pleased to present Alfred Benesch & Company (CLIENT) this **REVISED** proposal for professional surveying and Jurisdictional Waters Determination services to aid in the design of the sidewalk and multi-use trail along Lewisburg Pike in Franklin, TN as shown on Figure 1 and Figure 2 provided by CLIENT. CEC completed a survey along a portion of Lewisburg Pike in 2016 and this scope will update the area of previous survey and acquire additional survey. The proposed scope of services, fee, and schedule presented below, is based on email correspondence and phone calls between CLIENT and CEC.

1.0 SCOPE OF SERVICES

1.1 Task 0001 - Survey

CEC will conduct a field-run topographic survey within the new survey areas as shown on Figure 3. The limits of survey will generally extend on the west side of Lewisburg Pike from Stewarts Street in a northerly direction for approximately 460 feet with a 25 foot width of survey. The new area limits will also extend along Lewisburg Avenue from the east side of the existing railroad track crossing along both sides of the road southeasterly for approximately 500 feet, and then continuing along the southerly side of Lewisburg Pike, but extending to the northerly edge of pavement for an additional 3,600 feet covering the area shown on Figure 3. The survey limits also include the Collins Farm property owned by the City of Franklin. CEC will survey sanitary sewer manhole rims and inverts as shown in Figure 2. Where the existing sidewalk is located on the old golf course the survey limits will extend 15 feet to the southerly side of the sidewalk.

Within the survey limits, CEC will locate the visible and\or marked utilities, adjacent roadway, building locations, existing site improvements, and edge of tree drip lines. Invert elevations, pipe size and pipe material of the storm and sanitary sewer structures will be obtained if visible. Individual specimen trees with a diameter of twenty-four (24) inches or greater and aesthetic

COF Contract No. 2020-0009 - Attachment A

Mr. McCoy – Alfred Benesch & Company CEC Project 195-344 Page 2 November 19, 2019

understory trees with a diameter of eight (8) inch or more measured at four-and-one-half feet above grade will be located. Contours will be generated at one-foot intervals.

Utilities will be shown according to surface observations combined with plans and markings provided by calling the TN811. It is CEC's experience TN811 may not respond to a request for markings unless excavation activities are involved. TN811 does not mark utility lines or services on private property. The surveyor makes no guarantee that the utilities located comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the utilities located are in the exact location indicated. For utility lines or service locations on private property, CEC can retain the services of a private underground utility location service for an additional fee upon request.

CEC will locate existing property and right-of-way (ROW) monumentation along with field evidence of occupation within the limits of survey. CEC will establish the approximate ROW and property sidelines for approximately 14 parcels along Lewisburg Pike that the new survey areas adjoin from deed calculations in combination with field evidence located. CEC assumes there will be sufficient monumentation and evidence found during the performance of the field portion of the survey to adequately define the ROW and sidelines. Property owner information will be provided based on current tax records. A General Property Survey as defined by the Standards of Practice for Land Surveyors in TN is not included as part of this proposal.

Within the 2016 surveyed area as shown on Figure 3, CEC will complete an updated survey of Lewisburg Pike to show the new paved surface elevations and lane stripping. In addition to the road surface, CEC will verify no other features have changed that would affect the design of the sidewalk and multiuse trail. CEC will check current tax records to verify current property owners are shown for approximately 9 parcels within the 2016 survey area.

CEC will utilize survey field technicians equipped with GPS, Robotics, and Conventional Total Station surveying instruments. The survey will be referenced to the Tennessee State Plane Coordinate System (NAD83) and the North American Vertical Datum of 1988 (NAVD88, Geoid 12B) in U.S. Feet. CEC will process the survey data in Civil3D to verify survey information before providing the CLIENT an ASCII points file utilizing the TDOT survey code list for their use.

It is understood that the CLIENT hereby grants CEC or represents and warrants (if the site is not owned by the CLIENT) that permission has been duly granted for a Right-of-Entry by our firm, agents, staff, consultants and subcontractors for the purpose of obtaining field information pertinent to the subject project.

1.2 Task 0002 - Jurisdictional Waters Determination

The scope of this task is to provide a Waters of the U.S. Determination (i.e., streams and wetlands) within the project area described above. In performing the jurisdictional determinations, the 1987 *Corps of Engineers Wetlands Delineation Manual* and the 2012 *Regional Supplement: Eastern*

Mr. McCoy – Alfred Benesch & Company CEC Project 195-344 Page 3 November 19, 2019

Mountains and Piedmont Region, Version 2.0, will be closely followed to establish a description of the soils, plants and hydrologic conditions of the site. CEC will perform the following tasks:

- 1. Using the 1987 Corps of Engineers Wetland Delineation Manual and the 2012 Regional Supplement: Eastern Mountains and Piedmont Region, Version 2.0, delineate potential wetlands located along the proposed alignment.
- 2. Complete the Corps of Engineers Wetland Data Forms for each wetland/upland sampling site.
- 3. Using a Trimble[®] GeoXT GPS Unit, map the wetland boundaries (if present) to determine area, and log lat/long of each soil pit along with hue, value and chroma of the soil using a standard Munsell[®] Color Chart.
- 4. Complete the *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers* forms, which the Corps currently uses to determine mitigation ratios.
- 5. Prepare a summary report describing the findings that includes the routine wetland determination data forms, a photo summary, and delineation map.
- 6. Submit wet weather conveyance and stream determinations to TDEC as a Qualified Hydrologic Professional.
- 7. Coordinate with TDEC and the Nashville Corps of Engineers office to schedule a concurrence site visit at the direction of Alfred Benesch & Company.

2.0 SCHEDULE

CEC can begin work on this project within 10 business days of your notification to proceed and can deliver the survey information and Jurisdictional Determination within 45 business days following the commencement of the survey fieldwork, weather permitting.

3.0 AGREEMENT & FEE

CEC's estimated fee is based on the scope above and will be billed on a Time and Materials basis. The estimated cost to perform the scope of services outlined above is provided below:

Task	Estimated Fee
0001 - Survey	\$30,525.00
0002 - Jurisdictional Waters Determination	\$ 4,200.00
Total	\$34,725.00

COF Contract No. 2020-0009 - Attachment A

Mr. McCoy – Alfred Benesch & Company CEC Project 195-344 Page 4 November 19, 2019

Any additional services requested by the client and performed by CEC will be invoiced as per our 2019 City of Franklin Services Fee Schedule (attached). CEC will obtain the client's approval prior to performing any additional work. Our Schedule of Terms and Conditions which apply to the proposed work is also attached. Your verbal or written (including email) authorization to proceed will form a binding contract and indicates your acceptance of our Terms and Conditions. Any changes to our Terms and Conditions must be agreed to in writing by both parties prior to your authorization to proceed.

4.0 CLOSING

CEC appreciates the opportunity to provide this proposal to Alfred Benesch & Company for the professional surveying services. Should you have any questions or comments regarding this proposal or the project, please do not hesitate to call us at (615) 333-7797.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

James R. Cooley, P.L.S.

Project Manager

Eric Gardner, P.E.

Senior Project Manager

Jeff Duke

Senior Principal

Enclosures: Figure 1 - Proposed Sidewalk and Multi-use Trail Location Map

Figure 2 - Collins Farm Property Figure 3 - Survey Limits Map Survey Terms & Conditions

2019 City of Franklin Services Fee Schedule

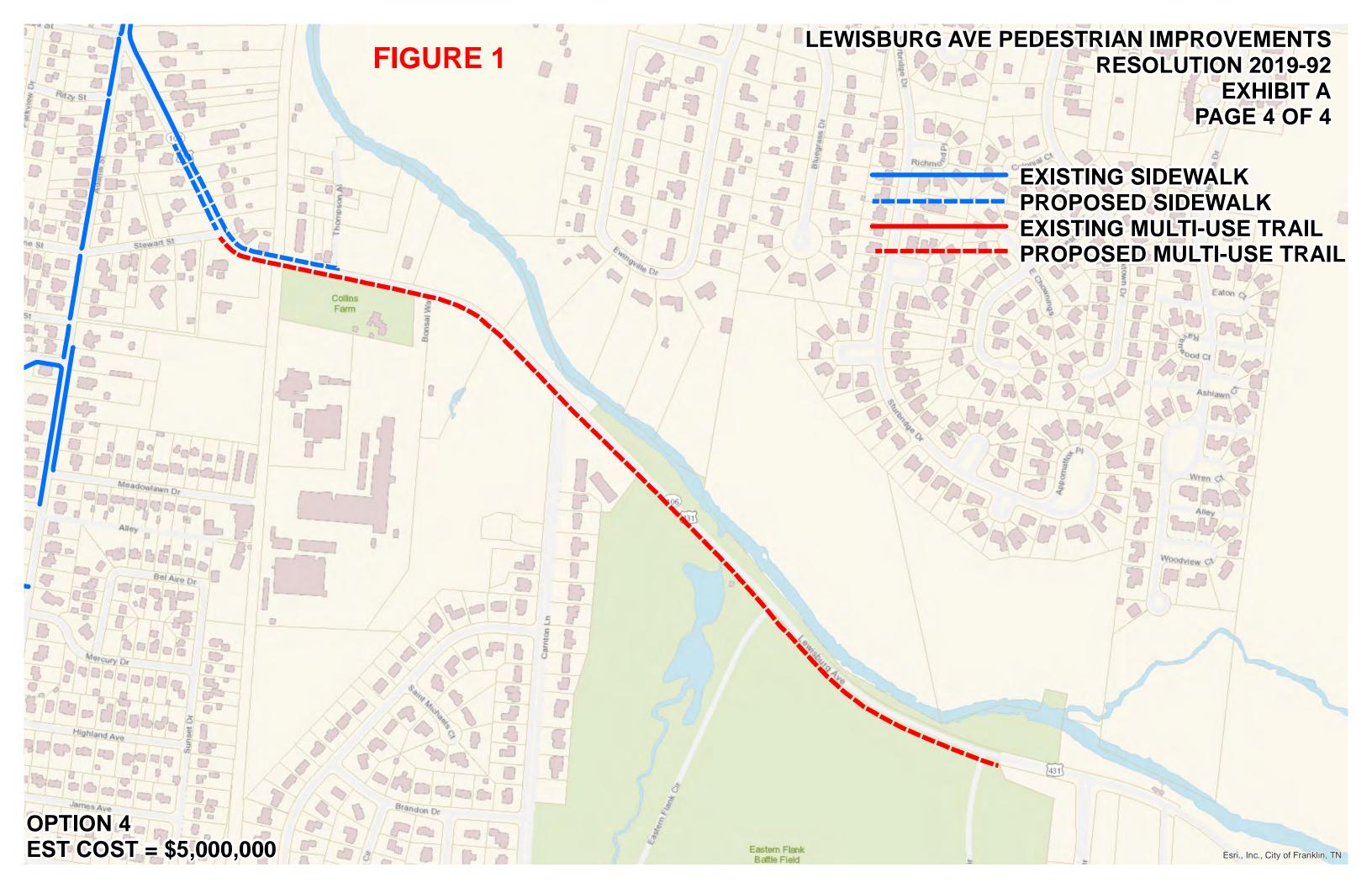
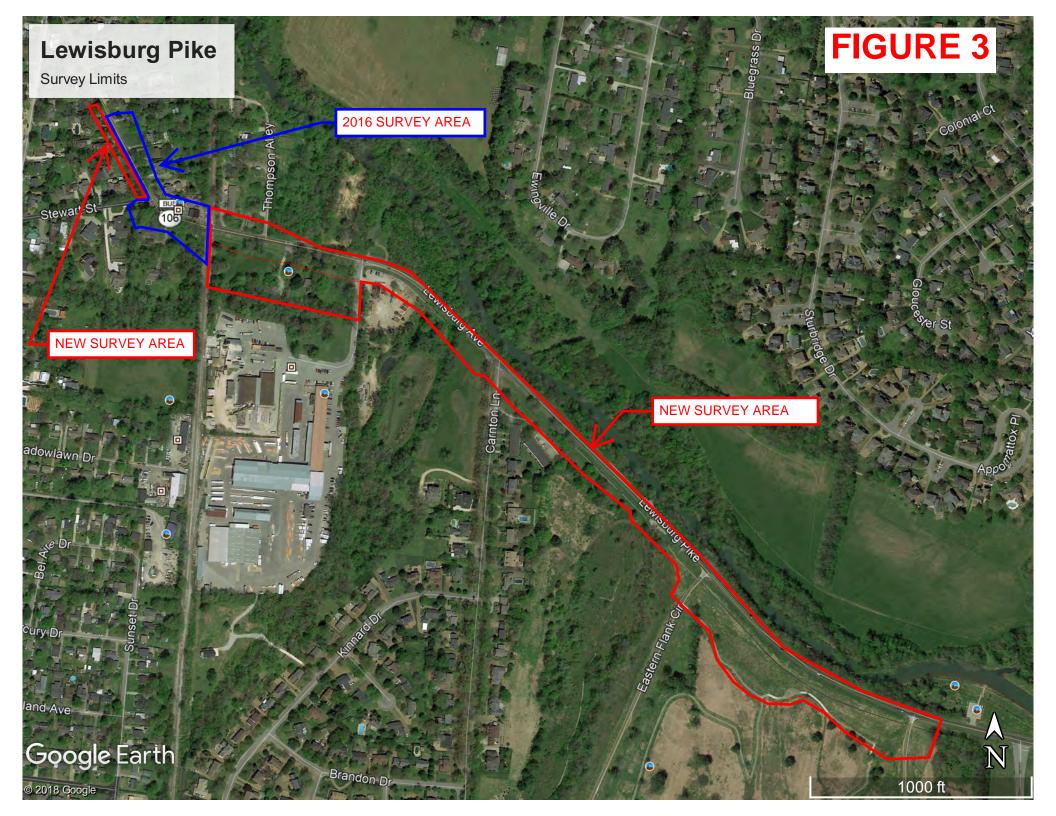


FIGURE 2





CIVIL & ENVIRONMENTAL CONSULTANTS, INC. 117 SEABOARD LANE • SUITE E-100 FRANKLIN, TENNESSEE 37067

PHONE: 615-333-7797 • FAX: 615-333-7751

E-MAIL: nashville@cecinc.com

City of Franklin Services Fee Schedule

January 1, 2019 through December 31, 2019

PROFESSIONAL SERVICES

Classification	Rate/Hou
Senior Principal	\$222
Principal	\$202
Senior Project Manager	
Project Manager III	\$166
Project Manager II	
Project Manager I	
Assistant Project Manager	\$113
Project Consultant / Geologist / Ecologist / Environmental Scientist	
Staff Consultant / Geologist / Ecologist / Environmental Scientist	\$99
Designer	
Draftsperson / CADD Operator	\$68
Senior Field Technician	\$84
Environmental Technician./ Intern	\$52
Senior Land Surveyor	\$141
Assistant Project Surveyor	\$102
Survey Technician IV	
Survey Technician III	\$86
Survey Technician II	\$76
Survey Technician I	\$66
Administrative Assistant	\$66
Administrative Manager	\$76

DIRECT EXPENSES

Printing and Reproduction *
Miscellaneous Reimbursables *

SUBCONTRACT SERVICES

Services @ Cost Plus 10%

^{*} As directed by the City Engineer on a project-by-project basis



November 13, 2019

Mr. Sammie McCoy Principal Engineer Alfred Benesch & Company 8 Cadillac Drive, STE 250 Brentwood, TN 37027

Dear Mr. McCoy:

Subject: Proposal for Professional Services

Lewisburg Pike Sidewalk & Multi-use Trail Project – From the Eastern

Flank Battlefield Park to Mack Hatcher

Franklin, Tennessee CEC Project 195-344

Civil & Environmental Consultants, Inc. (CEC) is pleased to present Alfred Benesch & Company (CLIENT) this proposal for additional professional services related to the proposed extension of sidewalk and multi-use trail on Lewisburg Pike. CEC had previously submitted a proposal to aid in the design of the sidewalk and multi-use trail along Lewisburg Pike from Stewart Street to the eastern entrance to the Eastern Flank Battlefield Park (EFBP). This proposal is to provide surveying and Jurisdictional Waters Determination services from the eastern entrance of the EFBP to Mack Hatcher as shown on Exhibit 1. The proposed scope of services, fee, and schedule presented below, is based on email correspondence and phone calls between CLIENT and CEC.

1.0 SCOPE OF SERVICES

1.1 Task 0003 - Survey

CEC will conduct a field-run topographic survey within the new survey area as shown on Exhibit 1. The survey will generally extend along Lewisburg Pike from the eastern entrance to the EFBP to the intersection of Lewisburg Pike and Mack Hatcher. The limits of the survey will be the edge of pavement on the north/westbound traffic lane to 75' south and west of the east/southbound traffic lane. The limits will also include the radius return of Lewisburg Pike at the intersection with Mack Hatcher on the northwest corner of the intersection.

Within the survey limits, CEC will locate the visible and\or marked utilities, adjacent roadway, building locations, existing site improvements, and edge of tree drip lines. Invert elevations, pipe size and pipe material of the storm and sanitary sewer structures will be obtained if visible. Individual specimen trees with a diameter of twenty-four (24) inches or greater and aesthetic understory trees with a diameter of eight (8) inch or more measured at four-and-one-half feet above grade will be located. Contours will be generated at one-foot intervals.

COF Contract No. 2020-0009 - Attachment A

Mr. McCoy – Alfred Benesch & Company CEC Project 195-344 Page 2 November 13, 2019

Utilities will be shown according to surface observations combined with plans and markings provided by calling the TN811. It is CEC's experience TN811 may not respond to a request for markings unless excavation activities are involved. TN811 does not mark utility lines or services on private property. The surveyor makes no guarantee that the utilities located comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the utilities located are in the exact location indicated. For utility lines or service locations on private property, CEC can retain the services of a private underground utility location service for an additional fee upon request.

CEC will locate existing property and right-of-way (ROW) monumentation along with field evidence of occupation within the limits of survey. CEC will establish the approximate ROW and property sidelines for approximately 20 parcels along Lewisburg Pike that the new survey area adjoin from deed calculations in combination with field evidence located. CEC assumes there will be sufficient monumentation and evidence found during the performance of the field portion of the survey to adequately define the ROW and sidelines. Property owner information will be provided based on current tax records. A General Property Survey as defined by the Standards of Practice for Land Surveyors in TN is not included as part of this proposal.

CEC will utilize survey field technicians equipped with GPS, Robotics, and Conventional Total Station surveying instruments. The survey will be referenced to the Tennessee State Plane Coordinate System (NAD83) and the North American Vertical Datum of 1988 (NAVD88, Geoid 12B) in U.S. Feet. CEC will process the survey data in Civil3D to verify survey information before providing the CLIENT an ASCII points file utilizing the TDOT survey code list for their use.

It is understood that the CLIENT hereby grants CEC or represents and warrants (if the site is not owned by the CLIENT) that permission has been duly granted for a Right-of-Entry by our firm, agents, staff, consultants and subcontractors for the purpose of obtaining field information pertinent to the subject project.

1.2 Task 0004 - Jurisdictional Waters Determination

The scope of this task is to provide a Waters of the U.S. Determination (i.e., streams and wetlands) within the project area described above. In performing the jurisdictional determinations, the 1987 *Corps of Engineers Wetlands Delineation Manual* and the 2012 *Regional Supplement: Eastern Mountains and Piedmont Region*, Version 2.0, will be closely followed to establish a description of the soils, plants and hydrologic conditions of the site. CEC will perform the following tasks:

- 1. Using the 1987 *Corps of Engineers Wetland Delineation Manual* and the 2012 *Regional Supplement: Eastern Mountains and Piedmont Region*, Version 2.0, delineate potential wetlands located along the proposed alignment.
- 2. Complete the Corps of Engineers Wetland Data Forms for each wetland/upland sampling site.

Mr. McCoy – Alfred Benesch & Company CEC Project 195-344 Page 3 November 13, 2019

- 3. Using a Trimble[®] GeoXT GPS Unit, map the wetland boundaries (if present) to determine area, and log lat/long of each soil pit along with hue, value and chroma of the soil using a standard Munsell[®] Color Chart.
- 4. Complete the *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers* forms, which the Corps currently uses to determine mitigation ratios.
- 5. Prepare a summary report describing the findings that includes the routine wetland determination data forms, a photo summary, and delineation map.
- 6. Submit wet weather conveyance and stream determinations to TDEC as a Qualified Hydrologic Professional.
- 7. Coordinate with TDEC and the Nashville Corps of Engineers office to schedule a concurrence site visit at the direction of Alfred Benesch & Company.

2.0 SCHEDULE

CEC can begin work on this project within 10 business days of your notification to proceed and can deliver the survey information and Jurisdictional Determination within 45 business days following the commencement of the survey fieldwork, weather permitting.

3.0 AGREEMENT & FEE

CEC's estimated fee is based on the scope above and will be billed on a Time and Materials basis. The estimated cost to perform the scope of services outlined above is provided below:

Task	Estimated Fee
0003 - Survey	\$25,000.00
0004 - Jurisdictional Waters Determination	\$ 1,500.00
Total	\$26,500.00

Any additional services requested by the client and performed by CEC will be invoiced as per our 2019 City of Franklin Services Fee Schedule (attached). CEC will obtain the client's approval prior to performing any additional work. Our Schedule of Terms and Conditions which apply to the proposed work is also attached. Your verbal or written (including email) authorization to proceed will form a binding contract and indicates your acceptance of our Terms and Conditions. Any changes to our Terms and Conditions must be agreed to in writing by both parties prior to your authorization to proceed.

COF Contract No. 2020-0009 - Attachment A

Mr. McCoy – Alfred Benesch & Company CEC Project 195-344 Page 4 November 13, 2019

4.0 <u>CLOSING</u>

CEC appreciates the opportunity to provide this proposal to Alfred Benesch & Company for the professional surveying services. Should you have any questions or comments regarding this proposal or the project, please do not hesitate to call us at (615) 333-7797.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

James R. Cooley, P.L.S.

Project Manager

Eric Gardner, P.E.

Senior Project Manager

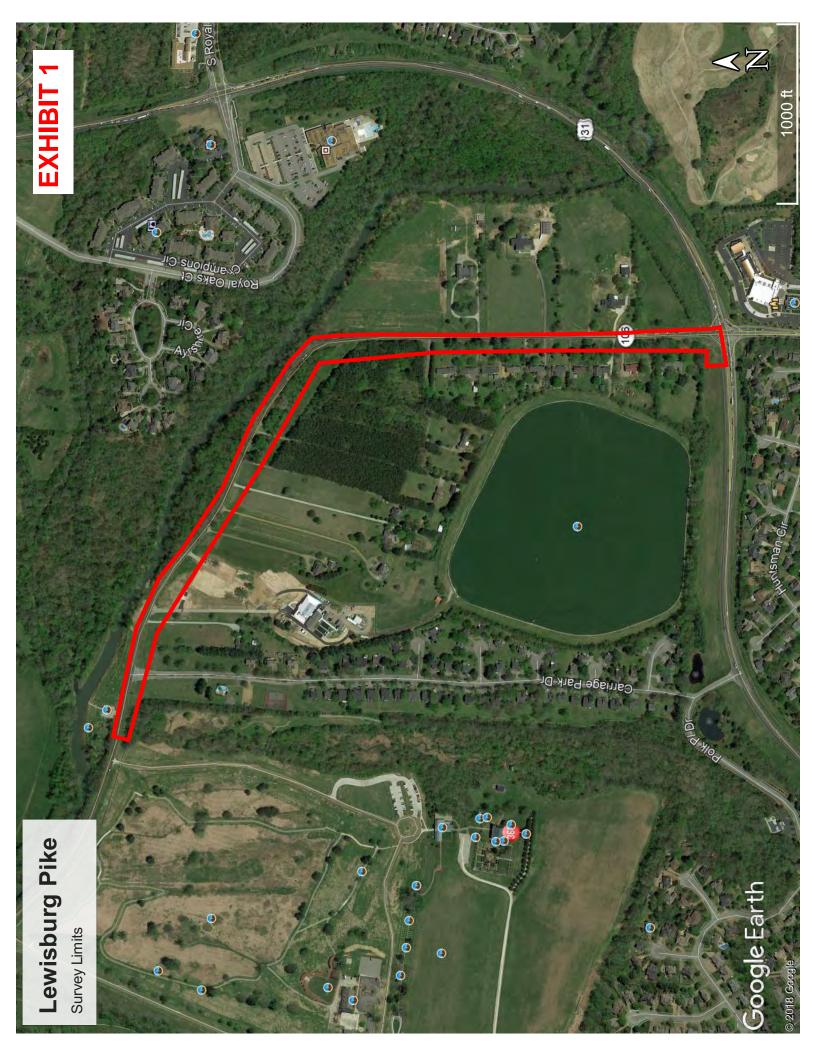
Jeff Duke

Senior Principal

Enclosures: Exhibit 1 - Proposed Multi-use Trail Location Map

Survey Terms & Conditions

2019 City of Franklin Services Fee Schedule



COF Contract No. 2020-0009 - Attachment A



307 Hickerson Drive Murfreesboro, TN 37129 tel 615.663.7678 www.cia-engineers.com

October 15, 2019

Mr. Brian Ralstin, PE
Project Engineer
Alfred Benesch & Company, Inc.
8 Cadillac Drive, Suite 250
Brentwood. Tennessee 37027

Re: Proposal for Geotechnical Exploration Services Harlinsdale Pedestrian Bridge Franklin, Williamson County, Tennessee CIA Proposal No. 2019320

Dear Mr. Ralstin:

CIA, LLC is pleased to submit this proposal to provide geotechnical exploration services for the referenced project. This proposal is based on project information provided to us and presents our scope of services, fee, and schedule information.

PROJECT AND BACKGROUND INFORMATION

Initial project information was provided to us by Benesch by email transmission on October 8, 2019. At that time, we were provided an aerial drawing showing the project limits and the location of a potential retaining with a maximum height approaching 10 feet vertically. We were instructed to provide a geotechnical scope that would be adequate to develop geotechnical parameters for design of an MSE wall and to provide global stability of the proposed wall.

Based on the provided drawing, we understand that the project will be located along Lewisburg Pike in Franklin, Tennessee. The project consists of adding a multi-use path and sidewalks to the existing roadway.

SCOPE OF SERVICES

The goals of this exploration are to generally characterize site geologic conditions, determine lithology, evaluate soil and rock foundation conditions at the retaining wall location, and develop recommendations for the proposed construction. The assessment of environmental concerns is beyond the scope of the geotechnical exploration.

After review of the plan provided by Benesch, CIA plans to advance up to 6 borings at the proposed retaining wall location. All borings will be extended to auger refusal. The overburden at each drilled location will be drive-sampled in general accordance with ASTM D 1586 "Penetration Test and Split-Barrel Sampling of Soils." At select locations, we may attempt to obtain relatively undisturbed samples with thin-walled (Shelby) tubes. We do not plan to borings into the underlying rock. Upon completion of boring advancement, each boring will be checked for the presence of groundwater and will then be subsequently backfilled with auger cuttings.

Lewisburg Pike Retaining Wall October 15, 2019 Page 2 of 6

The estimated drilling quantities are presented in the attached cost estimate summary. CIA will monitor the exploration and adjust the exploration program to address any specific needs dictated by the subsurface conditions encountered. We will communicate the observed subsurface conditions to the design team and coordinate any adjustments to the exploration program and associated impacts to the budget and schedule for completion of the geotechnical exploration. No additional work that will require an increase in the budget for the geotechnical exploration will be initiated without prior approval.

Following completion of the field exploration, laboratory testing will be assigned to selected samples to assess the engineering characteristics of the overburden. Laboratory index testing will be conducted to determine the natural moisture content, Atterberg limits, and grain size distribution of select soil samples recovered from the drilling operations. Additionally, select soil specimens may be subjected to unconfined compressive strength testing to provide shear strength data to support design efforts. Other tests may be required depending upon the subsurface conditions encountered.

No drilling activities will take place without proper coordination with current property owners. CIA will contact the Tennessee One Call System (811), the state-wide utility clearance coordinator for the State of Tennessee, to have the underground utilities marked prior to mobilization of the drilling equipment. The boring locations may be offset from the proposed locations to facilitate access and avoid marked utilities. CIA is not responsible for repair of utilities that are not properly identified by others at the time of our exploration.

A geotechnical report will be issued for the geotechnical exploration, outlining the scope of work performed as well as the results of the exploration and lab testing program. The report will address geotechnical aspects of retaining wall design and construction. The geotechnical reports will present our findings and will address, at a minimum, the following:

- General information regarding the site and subsurface conditions, including soil stratigraphy and bedrock occurrences, as well as groundwater measurements.
- Results of laboratory tests performed on selected samples.
- General comments regarding geology and geologic hazards, such as karst conditions.
- Recommendations for site preparation, including criteria for stripping, excavation, reuse of onsite materials as structural fill, undercutting of suitable materials and subgrade remedial treatments, and criteria for compacted fill where applicable.
- Recommendations for retaining wall design and construction.
- Recommendations for embankment and walkway design and construction (if applicable).
- Recommendations for temporary and permanent groundwater control, if needed.

Additional comments/conditions upon which this proposal is based are as follows:

- We anticipate that the proposed exploration will be conducted within public right of way of the City
 of Franklin property. If access to private property is required, we will make reasonable efforts to
 gain voluntary permissions for entry from private property owners, where appropriate. Benesch will
 be notified, as necessary, of any properties where such entry might be denied.
- We will measure from existing landmarks to establish the boring locations during field exploration.
 Determination of the exact boring locations and ground surface elevations is beyond this scope of



Lewisburg Pike Retaining Wall October 15, 2019 Page 3 of 6

services. This proposal does not include provisions for surveying efforts to establish the boring locations.

- If traffic conditions or related concern for the safety of personnel working adjacent to and within
 existing roadways, CIA will coordinate activities with Benesch, The City of Franklin, or county
 personnel as applicable. A CIA professional will be dedicated to the field work on a full-time basis
 to coordinate safety procedures and drilling efforts. We do not anticipate that subcontracted traffic
 control will be required.
- The subsurface exploration will be planned and conducted in accordance with the Tennessee Department of Environment and Conservation General Permit for Surveying and Geotechnical Exploration. As such, installation and monitoring of erosion protection/siltation control measures by both subcontracted and CIA personnel may be required as part of the drilling program.
- The unit prices submitted in this proposal were derived based on the anticipated scope of work assuming the subsurface exploration program would be performed within one year from this proposal date.
- We will retain the soil samples for 30 calendar days following the submittal of the geotechnical engineering report. After this time, the soil samples may be discarded unless directed otherwise.

FEE SCHEDULE AND AUTHORIZATION

It is our understanding that the geotechnical work will be contracted under a unit price contract. Based on our understanding of the project, our estimated fees are outlined below. A detailed cost estimate is attached.

1.00 Drilling Services	\$4,980.00
2.00 Laboratory Services	\$1,412.00
3.00 Engineering Services	\$7,465.00
Total Not-to-Exceed Costs	\$13,857.00

We will discuss with you any expected modifications in scope of services and fee if necessary.

Closing

We appreciate the opportunity to support this design-build pursuit exploration and design efforts for this project and look forward to working with you in the future. If you have any questions, please feel free to contact our office.

Sincerely,

CIA, CIVIL INFRASTRUCTURE ASSOCIATES, LLC

Matt Bullard, PE Vice President

Director of Geotechnical Services

Attachment: Cost Estimate



Geotechnical Exploration and Engineering Professional Services Lewisburg Pike Retaining Wall Franklin, Williamson County, Tennessee Alfred Benesch & Company



COST ESTIMATE 10/15/2019

	ASSOCIATES				
1.0	DRILLING SERVICES				
		Qty.		Rate	Cost
1.1	Equipment Mobilization	ĺ	\$ 800.00	each	\$ 800.00
1.2	On-site Project Professional	20	\$ 95.00	per hour	\$ 1,900.00
1.3	Soil Auger Drilling	150	\$ 14.00	per vertical foot	\$ 2,100.00
1.4	Rock Core Set-up	0	\$ 100.00	each	\$ -
1.5	Rock Coring	0	\$ 42.00	per vertical foot	\$ -
1.6	Water Hauling	0	\$ 250.00	per day	\$ -
1.7	Shelby Tubes	3	\$ 60.00	each	\$ 180.00
				SUBTOTAL	\$ 4,980.00
2.0	LABORATORY TESTING SERVICES				
		Qty.		Rate	Cost
2.1	Natural Moisture Content	8	\$ 9.00	each	\$ 72.00
2.2	Sieve Particle Size Analysis (ASTM D 422)	2	\$ 80.00	each	\$ 160.00
2.3	Atterberg Limits (ASTM D 4318)	4	\$ 65.00	each	\$ 260.00
2.4	Unconfined Compression Test (Rock)	0	\$ 125.00	each	\$ -
2.5	Unconfined Compression Test (Soil)	4	\$ 100.00	each	\$ 400.00
2.6	Triaxial Compression Test (CU)	2	\$ 260.00	each	\$ 520.00
				SUBTOTAL	\$ 1,412.00
3.0	ENGINEERING SERVICES				
		Qty.		Rate	Cost
3.1	Project Initiation, Coordination, and Utility Locates	αιγ.			0001
3.1.1	Project Professional	2	\$ 95.00	per hour	\$ 190.00
3.1.2	Senior Project Manager	1	\$ 185.00	per hour	\$ 185.00
3.2	Engineering Evaluations and Report Development,	Bridge			
3.2.1	Project Professional	42	\$ 95.00	per hour	\$ 3,990.00
3.2.2	Senior Project Manager	12	\$ 185.00	per hour	\$ 2,220.00
3.2.3.		4	\$ 220.00	per hour	\$ 880.00
	<u> </u>			SUBTOTAL	\$ 7,465.00

ESTIMATED TOTAL COST \$ 13,857.00



Schedule of Hourly Rates

CIVIL, GEOTECHNICAL, AND SURVEY

Senior Principal	\$220
Principal	\$210
Senior Project Manager	\$200
Senior Engineer	\$190
Project Manager	\$185
Project Engineer III	\$175
Project Engineer II	\$165
Project Engineer I	\$155
Technical Professional III	\$140
Technical Professional II	\$130
Technical Professional I	\$120
Senior Designer	\$120
Designer	\$110
Senior Field Technician	\$120
Field Technician II	\$100
Field Technician I	\$80
Administrative Professional	\$80
Survey Crew – 3 Man Party	\$220
Survey Crew – 2 Man Party Two Man Survey Crew	
Survey Crew - One Man Robotic or RTK (GPS) Survey Crew	
Senior Survey CADD/GIS Technician	
Survey CADD/GIS Technician	
Senior Land Surveyor/Manager (PE/RLS)	•
Land Surveyor/Manager (PE/RLS)	
Party Chief	\$100

Effective November 2019