## CITY OF FRANKLIN, TENNESSEE PROFESSIONAL SERVICES AGREEMENT COF Contract No. 2019-0136

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is by and between the City of Franklin, Tennessee, hereinafter referenced as City, and <u>COLLIER ENGINEERING CO, INC</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:

## CITY OF FRANKLIN FIRE STATION 7 CONSTRUCTION MATERIALS TESTING SERVICES FRANKLIN TENNESSEE 37064

- 1. SCOPE OF SERVICES. Consultant shall provide documentation of geotechnical aspects of the site development on a full-time basis, and these matters principally include subgrade preparation and placement/compaction of engineered fill in building and pavement areas, and installation of compacted aggregate piers. The Consultant's scope of services will include effort to perform field and laboratory inspection and testing for structural concrete, masonry and steel framing 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. Consultant's services will be provided on an On Call basis as requested by the Owner's or Contractor's representative.
- 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 of Twenty-Eight Thousand Sixty-Seven and 84/100 Dollars (\$ 28,067.84).

The Board of Mayor	and Aldermen	Approved thi	s Agreement o	on the
Day of	201			

## 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.
- 2.4 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 judgments, losses, damages, and expenses to the extent such 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.
- 6.2 The Consultant's services will be provided on an On-Call basis and in response to regular requests as made by the Owner's or Contractor's representative. At least 24 hour notice will be provided in order that Consultant may schedule their resources. Consultant will attempt to accommodate requests on shorter notice, as applicable. Consultant will not be responsible for scheduling of their testing services and resources and will not be responsible for tests that are not conducted, or for the competency of materials that are not tested, due to a failure by others to appropriately schedule the Consultant's services for the project.
- 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. Consultant shall retain an ownership and property interest therein (including the right of reuse at the discretion of the Consultant) whether or not the Project is completed.
  - 7.1.1 USE OF DATA SYSTEMS: Ownership, property interests and proprietary rights in data systems used by Consultant do not extend to the data created by or supplied to Consultant by the City; all rights to that data (including derivative or hidden data such as metadata) shall vest solely in City at the moment of creation.
  - 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 subconsultants.
- 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.

BY: Mully Mucce Consultant's Signature TITLE: Geofect Mgr Date: 30 May 2019	BY: Dr. Ken Moore Mayor Date:	_
Approved as to Form:		
Tiffani M. Pope, Staff Attorney		



March 27, 2019

City of Franklin, TN (the City) 109 3rd Avenue South, Ste. 103 Franklin, TN 37064

Attn: Mr. Brad Wilson, Facilities & Project Manager

Re: Proposal for Construction Materials Testing Services

Proposed Fire Hall 7

Franklin, TN

Collier Proposal No. 3073-19-01

Dear Mr. Wilson:

Pursuant to your Request for Proposal (RFP) received via email, Collier Engineering Company, Inc., (Collier) is pleased to submit this proposal for the requested services. Our duties will be performed to support the construction of an approximately 16,000 square foot emergency services (fire station) building. The building is presumed will incorporate masonry and steel framing with concrete slabs on grade and separate building sectors including high bay equipment areas and staff/office quarters. Current planned improvements include drive and parking areas.

We have not been provided anticipated project schedules and our stipulated visits are predicated upon recollection from similar projects. Our anticipated field services include documentation of geotechnical aspects of the site development on a full-time basis, and these matters principally include subgrade preparation and placement/compaction of engineered fill in building and pavement areas, and installation of compacted aggregate piers. Our scope of services will include effort to perform field and laboratory inspection and testing for structural concrete, masonry, and steel framing.

The base amount is approximately \$28,067.84 and is attached for your consideration. Effort will accrue and be billed on a Time and Materials basis per the attached Fee Schedule, which includes inclusive, burdened labor rates. Should additional services be required that are outside the scope of services assumed herein they will be performed at the unit rates shown on the Fee Schedule. Unless directed otherwise, we will issue monthly invoices for our effort.

The value stated above should be established as an initial placeholder budget for our services. We will agree to amend (increase) the budget should the amount be consumed during project duration and additional funding be necessary. The testing services cost estimate is based upon the stipulated unit rates, and the assumed number of visits for the itemized inspections shown on the attached estimate breakdown and the following assumptions:

COF CONTRACT No. 2019-0136 EXHIBIT A

Proposal for Materials Testing Services Proposed Franklin Fire Hall 7 April 16, 2019



We will be copied in a timely manner on all specification addenda/revisions, drawing addenda/revisions, RFIs and responses, approved submittals relating to our work, field directives from A/E, meeting minutes and any other documentation that modifies the contract documents. Our services will be scheduled with our office a minimum of one (1) working day in advance. The scope of services as described or assumed in this proposal or as specifically required by the project will be relayed to the person(s) who will be responsible for scheduling our services so that they are aware of the services that are required and of their responsibility for correction and re-inspection of all deficiencies noted.

Our services will specifically exclude job site safety responsibility and our services do not relieve any contractor/subcontractor from complying with project specifications.

The cost estimate does not include, but such items will be billed, effort associated with overtime, re-testing due to non-compliances, weather delays, contractor delays, and cancelling of previously-scheduled technicians that arrive at the project site as requested.

We will not be responsible for scheduling our services and will not be responsible for tests that are not performed due to a failure to schedule our services on the project.

In accordance with the City's and the project's demands, we have commenced responding to requests for consultation and field assistance with the initial grading efforts for the project. Your acceptance of this proposal may be confirmed by signing and returning the attached Contract for Materials Engineering and Testing Services, or issuance of an Purchase Order. We will conduct our services in accordance with the attached terms.

We appreciate the opportunity to provide this proposal and look forward to working with you. Please give us a call if you have any questions or comments regarding this proposal.

Sincerely,

Collier Engineering Company, Inc.

J. Samuel Vance, P.E.

**Geotechnical Services Manager** 

Attachments: Estimate

Contract for Construction Materials Engineering and Testing Services

Materials Testing Fee Schedule





5560 Franklin Pike Circle, Brentwood, TN 37027

J. Samuel Vance, P.E. 615-418-0220

**Quote for Materials Testing Services** Proposed Fire Hall 7, Franklin, TN Proposal No. 3073-19-01

April 16, 2019

Our scope of services is predicated upon assumptions and issues as stated below and in the proposal body, and the number of trips/shifts to observe work operations as assumed per the following:

- 1. Two (2) weeks (six (6) days per week) for grading operations within and near the building including in paved areas.
- 2. One (1) week for installation of compacted aggregate piers in the building.
- 3. Concrete pours: four (4) for agg pier caps/footings; four (4) for grade beams, stairs, etc.; four (4) for building slabs; four (4) for pavements.

- 4. Eight (8) trips to inspect masonry (CMU) work for structural load bearing walls.
- 5. Five (5) trips by a Certified Welding Inspector (CWI) to inspect/test structural framing connections.
- 6. Four(4) visits to test crushed mineral aggregate placement in paved areas.
- 7. Two (2) days to observe asphalt paving operations.
- 8. Each trip to cover grading and agg piers assumed to include an 8-hour day; no overtime effort (over 8 hours and no Saturday or Sunday) is included in our current estimate.
- 9. Each visit to cover concrete pours, masonry work, and steel inspection is assumed to require 4 hours. Assumptions regarding hours/visit to cover other items are noted.
- 9. Items, work categories, or other testing requirements not specifically stated in the accompanying proposal or in these worksheets and that are requested by you, the Owner, or the contractor will be billed at stipulated rates.

Observe fill construction/field testing	Trips	Hours/Trip	Total	Units	Rate		ts Rate Extension		Extension
Senior Technician (grading and aggregate piers)	16	8	128	hours	\$	87.00	\$	11,136.00	
Proctors			2	each	\$	150.00	\$	300.00	
			Fie	ld observation	/test	ing subtotal	\$	11,436.00	
ConcreteTesting	Trips	Hours/Trip	Total	Units		Rate		Extension	
C 1			4.5		4	74.00	4		

ConcreteTesting	irips	Hours/Trip	rotar	Units		кате	Extension
Concrete Technician - pier caps	4	4	16	hours	\$	74.00	\$ 1,184.00
Concrete Technician - grade beams, misc.	4	4	16	hours	\$	74.00	\$ 1,184.00
Concrete Technician - interior slabs	4	4	16	hours	\$	74.00	\$ 1,184.00
Concrete Technician - exterior pavements	4	4	16	hours	\$	74.00	\$ 1,184.00
Technician - Specimen Pick up (on site time)	3	0.5	2	hours	\$	74.00	\$ 111.00
Cylinders (2 sets of 5 per bldg. slab pour & 1 set of 5 for	or remain	ing)	100	each	\$	15.00	\$ 1,500.00
				Concret	e testi	ing subtotal	\$ 6,347.00



5560 Franklin Pike Circle, Brentwood, TN 37027 J. Samuel Vance, P.E. 615-418-0220 Page 2 - Quote for Materials Testing Services Proposed Fire Hall 7, Franklin, TN Proposal No. 3073-19-01

April 16, 2019

Masonry Testing	Trips	Hours/Trip	Total	Units	Rate	Extension
Technician: part-time inspections during grouting	8	4	32	hours	\$ 80.00	\$ 2,560.00
Technician - Specimen Pick up (on site time)	4	0.5	2	hours	\$ 80.00	\$ 160.00
CMU Block (3 sets of 18)			18	each	\$ 65.00	\$ 1,170.00
Grout Prisms (4 sets of 4)			16	each	\$ 15.00	\$ 240.00
Mortar Cylinders (4 sets of 6)			24	each	\$ 15.00	\$ 360.00
				Masonry	testing subtotal	\$ 4,490.00
Structural Steel Testing	Trips	Hours/Trip	Total	Units	Rate	Extension
CWI Technician for part-time inspections	4	4	16	hours	\$ 95.00	\$ 1,520.00
				Structural Stee	l testing subtotal	\$ 1,520.00
Stone Base field testing	Trips	Hours/Trip	Total	Units	Rate	Extension
Technician	4	3	12	hours	\$ 80.00	\$ 960.00
Stone Proctor			1	each	\$ 260.00	\$ 260.00
				Stone Base	testing subtotal	\$ 1,220.00
						_
Observe asphalt paveing	Trips	Hours/Trip	Total	Units	Rate	Extension
Technician	2	3	6	hours	\$ 74.00	\$ 444.00
				Observe asphal	t paving subtotal	\$ 444.00
Project Management						
Admin, reporting, PM - budgeted at 12% of field subt	otal				PM Subtotal	\$ 3,054.84
				TOTAL	. FEE ESTIMATE	\$ 28,067.84

Collier Fee Schedule

Fire Hall 7

March 2019 Collier Engineering Fees - Fire Hall 7 (subject to change 90 days from proposal date)

The first proposal area								
Item	Unit	Rate						
Professional/Techn	ical Staff							
Principal	hour	\$	250.00					
Senior Project Manager	hour	\$	175.00					
Senior Project Engineer	hour	\$	165.00					
Project Manager	hour	\$	145.00					
Project Engineer	hour	\$	135.00					
Staff Engineer	hour	\$	120.00					
Field Engineer	hour	\$	110.00					
Administrative assistant	hour	\$	56.00					
Lead CADD	hour	\$	100.00					
Draft Person/Cad Operator	hour	\$	75.00					
Tech IV *	hour	\$	87.00					
Tech III *	hour	\$	80.00					
Tech II *	hour	\$	74.00					
*Note: 3 hour minimum, and overtime at 1.5 times the regular hourly rate applies for excess of 8 hours								

<sup>\*</sup>Note: 3 hour minimum, and overtime at 1.5 times the regular hourly rate applies for excess of 8 hours

## Miscellaneous

Generatorday\$85.00Coring machineday\$95.00Coring crew (2 personnel)hour\$150.00Floor flatnessday\$125.00Slab moisture kitseach\$20.00Crack monitor (labor to install and check device not included)each\$50.00Soil Laboratory Testing RatesAtterberg Limits Determination (LL, PL)each\$85.00Combined Analysis (Hydrometer and Sieve)each\$140.00Density Determination (Shelby tube sample)each\$25.00Density Determination (Irregular sample)each\$50.00Organic Content (by heating)each\$50.00Sieve Analysis (Unwashed)each\$50.00Sieve Analysis (Washed over #200 sieve)each\$120.00Specific Gravity Determinationeach\$70.00Moisture Content Determinationeach\$10.00
Coring crew (2 personnel)  Floor flatness  Slab moisture kits  Crack monitor (labor to install and check device not included)  Soil Laboratory Testing Rates  Atterberg Limits Determination (LL, PL)  Combined Analysis (Hydrometer and Sieve)  Density Determination (Shelby tube sample)  Density Determination (Irregular sample)  Organic Content (by heating)  Sieve Analysis (Unwashed)  Sieve Analysis (Washed over #200 sieve)  Specific Gravity Determination  hour  \$ 150.00  \$ 20.00
Floor flatness  Slab moisture kits  Crack monitor (labor to install and check device not included)  Soil Laboratory Testing Rates  Atterberg Limits Determination (LL, PL)  Combined Analysis (Hydrometer and Sieve)  Density Determination (Shelby tube sample)  Density Determination (Irregular sample)  Organic Content (by heating)  Sieve Analysis (Unwashed)  Specific Gravity Determination  day  \$ 125.00  \$ 20.00  \$ 85.00  \$ 45.00  \$ 25.00  \$ 45.00  \$ 6ach  \$ 50.00  \$ 50.
Slab moisture kits Crack monitor (labor to install and check device not included)  Soil Laboratory Testing Rates  Atterberg Limits Determination (LL, PL) Combined Analysis (Hydrometer and Sieve) Density Determination (Shelby tube sample) Density Determination (Irregular sample) Corganic Content (by heating) Sieve Analysis (Unwashed) Specific Gravity Determination  \$ 20.00 \$ 50.00 \$ 20.00
Crack monitor (labor to install and check device not included) each \$ 50.00  Soil Laboratory Testing Rates  Atterberg Limits Determination (LL, PL) each \$ 85.00  Combined Analysis (Hydrometer and Sieve) each \$ 140.00  Density Determination (Shelby tube sample) each \$ 25.00  Density Determination (Irregular sample) each \$ 45.00  Organic Content (by heating) each \$ 50.00  Sieve Analysis (Unwashed) each \$ 85.00  Sieve Analysis (Washed over #200 sieve) each \$ 120.00  Specific Gravity Determination
Soil Laboratory Testing Rates  Atterberg Limits Determination (LL, PL) each \$85.00 Combined Analysis (Hydrometer and Sieve) each \$140.00 Density Determination (Shelby tube sample) each \$25.00 Density Determination (Irregular sample) each \$45.00 Organic Content (by heating) each \$50.00 Sieve Analysis (Unwashed) each \$85.00 Sieve Analysis (Washed over #200 sieve) each \$120.00 Specific Gravity Determination each \$70.00
Atterberg Limits Determination (LL, PL)  Combined Analysis (Hydrometer and Sieve)  Density Determination (Shelby tube sample)  Density Determination (Irregular sample)  Organic Content (by heating)  Sieve Analysis (Unwashed)  Sieve Analysis (Washed over #200 sieve)  Specific Gravity Determination  each  \$ 85.00  \$ 25.00  \$ 45.00  \$ 6ach  \$ 50.00  \$ 85.00  \$ 50.00  \$ 50.00  \$ 50.00  \$ 6ach  \$ 70.00
Combined Analysis (Hydrometer and Sieve)each\$ 140.00Density Determination (Shelby tube sample)each\$ 25.00Density Determination (Irregular sample)each\$ 45.00Organic Content (by heating)each\$ 50.00Sieve Analysis (Unwashed)each\$ 85.00Sieve Analysis (Washed over #200 sieve)each\$ 120.00Specific Gravity Determinationeach\$ 70.00
Density Determination (Shelby tube sample)each\$25.00Density Determination (Irregular sample)each\$45.00Organic Content (by heating)each\$50.00Sieve Analysis (Unwashed)each\$85.00Sieve Analysis (Washed over #200 sieve)each\$120.00Specific Gravity Determinationeach\$70.00
Density Determination (Irregular sample)each\$45.00Organic Content (by heating)each\$50.00Sieve Analysis (Unwashed)each\$85.00Sieve Analysis (Washed over #200 sieve)each\$120.00Specific Gravity Determinationeach\$70.00
Organic Content (by heating) each \$ 50.00 Sieve Analysis (Unwashed) each \$ 85.00 Sieve Analysis (Washed over #200 sieve) each \$ 120.00 Specific Gravity Determination each \$ 70.00
Sieve Analysis (Unwashed)each\$85.00Sieve Analysis (Washed over #200 sieve)each\$120.00Specific Gravity Determinationeach\$70.00
Sieve Analysis (Washed over #200 sieve)each\$120.00Specific Gravity Determinationeach\$70.00
Specific Gravity Determination each \$ 70.00
Moisture Content Determination each \$ 10.00
Swell Test single pressure each \$ 120.00
Swell Test (two pressures) each \$ 200.00
Swell Test (ASTM STP 479) each \$ 250.00
California Bearing Ratio (CBR) each \$ 575.00
Compaction and Density Standard Proctor (ASTM D 698) each \$ 150.00

Fees for other soil testing quoted upon request



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Structural Steel and Metals Test	ing		Collier Fee S	chedule re Hall 7
AWS Certified Welding Inspector	hour	\$	95.00	div
	noui	Į.	33.00	
Aggregates Testing Rates	aaab	ć	85.00	
Sieve Analysis (ASTM C 136)	each each	\$	85.00 55.00	
Analysis of Material finer than #200 Sieve (ASTM C 117) Soundness (ASTM C 88) (5 cycles)	each	\$ \$	350.00	
Abrasion (ASTM C 331)	each	\$	250.00	
Abrasion (ASTM C 131) Abrasion (ASTM C 131)-Large Size Aggregate	each	\$	300.00	
Specific Gravity (ASTM C 127 or 128)	each	\$	65.00	
Absorption Analysis (ASTM C 127 or 128)	each	\$	65.00	
Unit Weight (ASTM C 29)	each	\$	55.00	
Fees for other aggregrate testing quoted up		•	33.00	
Asphalt Testing Rates				
Extraction (ASTM D 2172) (includes gradation)		\$	155.00	
Extraction only		\$	105.00	
Asphalt Cement by ignition (including gradation)		\$	145.00	
Marshall Density Specimens - Set of 3 samples	set	\$	150.00	
Marshall Stability Flow and Density Specimens (ASTM D 1559)	301	•	130.00	
(already mixed)	each	\$	45.00	
Marshall Stability Flow and Density Specimens (3 samples)	set	\$	125.00	
Core Density (field cut)	each	\$	50.00	
Asphalt Design Mix Review (Marshall Method)	each	\$	1,200.00	
Three Point Marshall Curve (including laboratory mixed asphalt with	h			
9 stability, flow and density tests)	set	\$	900.00	
Three Point Marshall Curve (additional point)	each	\$	200.00	
Penetration and Specific Gravity (ASTM D 5)	each	\$	85.00	
Fees for other asphalt testing quoted upo	n request			
Concrete and Masonry Testing Ra	ates			
Concrete or Mortar Mix Verification	each	\$	350.00	
Laboratory Concrete Trial Batch (with cylinders)	each	\$	500.00	
Laboratory Concrete Trial Batch (with beams)	each	\$	750.00	
Compressive Strength of cured cylinder (ASTM C 39)	each	\$	15.00	
Cylinder molds	each	\$	2.50	
Flexural Strength of Concrete Beam	each	\$	55.00	
Diamond bit wear per inch depth (1" steel = 12" concrete; rate				
dependent upon core diameter)	inch		00 - \$7.00	
Concrete core, measurement and strength	each	\$	50.00	
Trimming/ Per Cut		\$	20.00	
Compressive Strength and Dimensions of Masonry Block Units (min				
of 3; unit rate dependent on size and quantity)	each	\$35.	00 - \$75.00	
Net Area, Absorption, Specific Gravity and Moisture - Content of		•		
Masonry Block (ASTM C 140) / Per Block	1	\$	65.00	
Compressive Strength of Masonry Block Prism (Hollow)	each	\$	130.00	
Compressive Strength of Ave inch Grout Prism (grouted)		ote on red		
Compressive Strength of 3 inch Mortar Cube or 3 inch cul	each	\$	30.00	
Compressive Strength of 2 inch Mortar Cube or 3 inch cyl.  Laboratory Mortar, Trial Batch (excludes testing cubes)	each	\$ \$	15.00	
raporatory mortal, mai patch (excludes testing cubes)	each	>	275.00	

Fees for other concrete testing quoted upon request

