

**RESOLUTION 21-174**

**A RESOLUTION TO AUTHORIZE THE MAYOR TO SIGN A CONTRACT WITH THOMAS & HUTTON TO PROVIDE ENGINEERING SERVICES FOR THE WATER TREATMENT PLANT EXPANSION**

**WHEREAS**, the City of Spring Hill's Raw Water Intake and Water Treatment Plant is at peak design capacity production of 4 MGD; and

**WHEREAS**, the City of Spring Hill has a maximum daily withdrawal permit of 6 MGD; and

**WHEREAS**, currently the City is eligible to utilize WIFIA Loan funding to contract with Thomas & Hutton in coordination of said project; and

**WHEREAS**, Thomas & Hutton engineering services for the raw water intake and plant expansion upgrades meets the WIFIA loan funding criteria; and

**WHEREAS**, Thomas & Hutton submitted a proposal for contractual engineering services for a lump sum cost of \$615,000.00; and

**WHEREAS**, the engineering services will be funded from the Water and Sewer fund and are budgeted in the FY 2021-2022 budget totaling \$800,000.00; and

**WHEREAS**, City staff recommends approving the engineering services contract to Thomas & Hutton for the design and development of construction bid documents (plans and specifications), consisting of upgrading the WTP capacity to 6.0 MGD.

**NOW, THEREFORE BE IT RESOLVED**, the City of Spring Hill Board of Mayor and Aldermen:

1. Approve the engineering services contract for the Raw Water Intake and Water Treatment Plant Expansion proposal from Thomas & Hutton.
2. Authorize the Mayor to sign the contract, attached herein.

**Passed and Adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 4<sup>th</sup> day of October, 2021.**

  
Jim Hagan, Mayor

ATTEST:

  
April Goad, City Recorder

LEGAL FORM APPROVED:

  
Patrick Carter, City Attorney



**REQUEST:**            **Approval of Resolution 21-174**

**SUBMITTED BY:**   **Jeremy Vanderford, Water Treatment Plant Superintendent,**

**DATE:**                **October 4, 2021**

**RE:**                    **To authorize the mayor to sign a contract with Thomas & Hutton for engineering services**

**ATTACHMENTS:**   **Contract**

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**PURPOSE:**

The purpose of this resolution is to approve the professional services contract with Thomas & Hutton for engineering services and to authorize the Mayor to execute the contract.

**BACKGROUND:**

The City of Spring Hill Water Treatment Plant is currently designed for a capacity of 4 MGD. The City has a withdrawal permit of 6 MGD from the Duck River. The City is in need of increasing the treatment capacity to 6 MGD to provide additional water for the citizens. This expansion will allow the City to utilize the full capacity of its current withdrawal permit.

**FINANCIAL IMPACT:**

The proposed lump sum cost of \$615,000.00 was budgeted in line 410-52110-944, funded through the Water and Sewer Fund with a total budget of \$800,000.00 utilizing WIFIA funding.

**STAFF RECOMMENDATION:**

Staff recommends approval of Resolution 21-174 to approve the contract with Thomas & Hutton and to authorize the Mayor to sign the contract for the professional engineering services of Thomas & Hutton.

ESTD 1946



THOMAS & HUTTON

502 HAZELWOOD DRIVE  
SMYRNA, TN 37167 | 615.220.5800  
THOMASANDHUTTON.COM

September 22, 2021

Ms. Pam Caskie, City Administrator  
City of Spring Hill  
199 Town Center Parkway  
Spring Hill, TN 37174

Re: Raw Water and  
Water Treatment Plant Expansion  
4.0 MGD to 6.0 MGD  
Engineering Services Proposal

Dear Ms. Caskie:

As requested, Thomas & Hutton (T&H), is pleased to submit a proposal to provide engineering services for the Water Treatment Plant (WTP) Expansion. Our proposal is based on providing engineering services for design and development of construction bid documents (plans and specifications), consisting of upgrading the pumping capacity of the existing Raw Water Intake (RWI) to 6.0 MGD and upgrading the WTP capacity to 6.0 MGD by replacing the existing treatment process with ultrafiltration Membrane Gravity Filter (MGF) ultrafiltration membranes. The existing RWI and WTP both were designed for a 4.0 MGD design capacity and were brought online in August 2003.

The city currently has a withdrawal permit approved by TDEC, when the original RWI and WTP were designed and constructed, for 6.0 MGD from the Duck River. The RWI is located upstream of Carpenter Bridge Road and provides the primary water source for Spring Hill. This expansion will allow the City to utilize the full capacity of this water source. As part of the WIFIA Loan program, T&H has been coordinating this project as well as the Main Street Booster Station to meet the requirements of environmental reviews, budgetary developments, and Facilities Plan report.

As part of T&H's engineering design efforts, the following tasks and engineering disciplines will be provided:

**TASKS**

1. Field Measurements
2. Civil Engineering Design
3. Structural Engineering Design
4. Electrical Engineering Design
5. Design Development Report with Hydraulic Analysis
6. Plans and Specifications Development
7. Submittal to TDEC
8. Opinion of Probable Construction Cost
9. Planning for Acquisition of Membranes
10. Bidding Assistance

### **SCOPE OF WORK**

1. Field Measurement will be taken for critical components to confirm as-built drawings and field located valving.
2. Services provided within the civil engineering task shall consist of developing the pump and piping plans, hydraulic calculations, membrane equipment review and recommendations, SCVADA integration, and integration of proposed equipment into existing facility.
3. Structural engineering shall perform sizing of membrane hoist system within the existing WTP structure, provide analysis of the existing filter basin area to ensure the proposed membrane filters do not exceed structural capacity. Structural shall also develop a concrete design mix, testing parameters, and concrete placement specifications for the miscellaneous equipment concrete and pads.
4. Electrical engineering shall consist of designing and specifying electrical components/power supply requirements for the new RWI pumps and WTP membrane equipment. The electrical work will evaluate existing electrical components and integrate the proposed required components accordingly for items such as VFD's, generator capacity and sizing, SCADA integration, and associated items.
5. The Design Development Report (DDR) shall be written and submitted to the Tennessee Department of Environment and Conservation (TDEC). The DDR shall compile the design basis, parameters, calculations, and recommendations for the plant design. The DDR will contain the hydraulic analysis.
6. Plans and Specifications shall be developed as to allow the City to publish an advertisement for bidding solicitations purposes. Plans and specifications will be a complete set of construction drawings as well as front end bid documents and technical specifications. The front-end documents will include all WIFIA loan program requirements as well as Spring Hill's standard requirements of advertising and bidding.
7. Plans, Specifications, and DDR, with hydraulic calculations, will be submitted to TDEC for review and approval for construction.
8. Opinion of Probable Construction Cost will be developed to allow the City to review and perform budgetary planning and shall be submitted to the WIFIA loan program.
9. Planning for Acquisition of Membranes will be provided to best determine the method of acquiring the MGF system, whether by purchase through RFP or Bid-Build within the selected contractor contract. This will be discussed with the city to determine the most economical approach.
10. Bidding Assistance will be provided to answer all contractor questions and develop addendums as necessary. T&H will attend the bid opening to record bids and will conduct a thorough review of submitted bids and front-end documents. T&H will provide an award recommendation letter to the City upon completion of the reviews and reference confirmations.

### **OPINION OF PROBABLE CONSTRUCTION COST**

The estimated construction costs to expand the RWI and WTP from 4.0 MGD to 6.0 MGD has previously been provided as part of the WIFIA loan application for an amount of \$8,181,000.

A revised opinion of probable construction cost will be developed based on the final construction plans for the project. Since T&H has no control over the cost of labor, materials, or equipment, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, our opinion of probable construction costs provided for herein are to be made based on our experience and qualifications. These opinions represent the best judgment as a design professional familiar with the construction industry. However, T&H cannot and does not guarantee that proposals, bids, or the construction cost will not vary from opinions of probable construction costs as prepared as part of this project.

### **FEES**

Engineering Design Fee: T&H proposes to perform the above-described engineering services, as part of our current contract with the City of Spring Hill, for a lump sum cost of \$615,000.00 which represents a fee rate of approximately 7.5% of estimated construction cost. Please note the attached T&H Terms and Conditions are an integral part of this contract proposal. T&H's monthly billing will be based on the percent completion of the above referenced services.

Construction Engineering and Inspection Fee: CEI Services is estimated to be \$368,000.00 which is approximately 4.5% of estimated construction cost. These services will be provided for a period of 15 months. Should the construction contract time be extended then T&H would request additional compensation to provide the CEI services for the additional construction contract time. CEI Services shall include onsite inspection during construction activities, shop drawing reviews, monthly progress meetings, pay request reviews and recommendations, contractor and City staff correspondence concerning project questions and issues, change order development if required, record drawings development, final project field observations, and deficiencies list, follow-up final walk-through observation, project closeout documents, and recommendation of acceptance project.

TDEC submittal fees will be the responsibility of the City of Spring Hill and are estimated to be \$1,000.

### **PROPOSED SCHEDULE**

1. October 2021: Approval of T&H Contract and Authorization-To-Proceed
2. November 2021: Field Measurements
3. December 2022: Design Kickoff Meeting
4. April 2022: RWI Design
5. May 2022: Membrane Purchase Order
6. July 2022: WTP Upgrades Design
7. August 2022: Design Development Report and Hydraulic Analysis
8. September 2022: Final Plans and Specifications
9. October 2022: TDEC Submittal
10. November 2022: Advertise for Bid
11. December 2022: Accept Bids
12. February 2023: Award Project to Contractor and Issue Notice-To-Proceed
13. April 2024: Project Completion (15 months)

Ms. Pam Caskie, City Administrator  
City of Spring Hill  
Engineering Services Proposal  
September 22, 2021  
Page 4

Please refer to attached Project Description for design considerations and previously performed pilot study. If the City of Spring Hill agrees with this proposal, we ask that a copy be signed by an authorized representative. Please retain one copy and return one copy to T&H as authorization to proceed. Please note the attached Terms and Conditions are an integral part of this proposal.

This proposal between City of Spring Hill ("Owner"), and Thomas & Hutton Engineering Co. ("Consultant" or "Thomas & Hutton"), consisting of the Scope of Services, General Provisions, Consulting Services on a lump sum basis, and this letter with authorized signatures, represents the entire understanding between City of Spring Hill and Thomas & Hutton with respect to the Project. This agreement may only be modified in writing if signed by both parties. Thomas & Hutton will begin work on this project upon receipt of an executed contract.

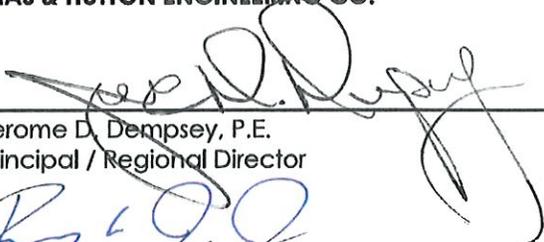
This proposal will be open for acceptance until October 31, 2021, unless changed by T&H in writing. We appreciate the opportunity to prepare this proposal and look forward to working with the City of Spring Hill on this project.

Should you have any questions or comments please give me a call.

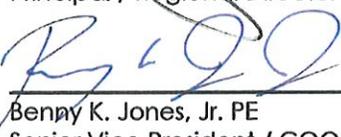
Sincerely,

**THOMAS & HUTTON ENGINEERING CO.**

By

  
\_\_\_\_\_  
Jerome D. Dempsey, P.E.  
Principal / Regional Director

By

  
\_\_\_\_\_  
Benny K. Jones, Jr. PE  
Senior Vice President / COO

**CITY OF SPRING HILL, TENNESSEE**

Accepted By: Jim Hagaman  
(Print Name)

  
\_\_\_\_\_  
(Signature)

Date: October 4, 2021

### **PROJECT DESCRIPTION**

The project scope will consist of providing professional engineering services for upgrades to the existing RWI and WTP. The scope will provide upgraded raw water pumping capacity and expanded treatment capacity, from the current design capacity of 4.0 MGD, to 6.0 MGD. The design will include replacing the existing treatment process of traditional sand media filters with Membrane Gravity Filters (MGF) which consist of advanced ultrafiltration membranes in accordance with the previously developed Facilities Plan. The MGF membrane operation is also similar to the existing Greenleaf filter operation, while providing resilient and reliable treatment. The MGF system utilizes ZeeWeed 1000 ultrafiltration membranes, which will replace the existing traditional granular filter media, and does not require coagulants or filter-aids to aid in filtration. This in-turn will lower the per 1000-gallon treatment cost which provides a significant savings compared to the existing process. The MGF system will also reduce chemical and electrical costs compared to the traditional vacuum hollow-fiber membrane systems which were analyzed during the development of the Facilities Plan report. The MGF only requires backwashing a few times per day with a 10-ppm chlorine and treated water solution, along with air scouring to create turbulence along the membrane surface for cleaning the filters.

#### Raw Water Pumps

The proposed improvements include replacing two (2) of the three existing 4-stage pumps with two (2) proposed 600-HP vertical turbine pumps, controlled by Variable Frequency Drives (VFD's) with upgraded SCADA controls. The two (2) proposed 6.0 MGD pumps would allow for redundant operation, of the system, in the event a pump is taken out of service for maintenance. The proposed new raw water pumps would be rated at approximately 4,167 gpm (6.0 MGD). The existing 4.0 MGD pump could be taken out of service or rotated in and out of operation during low flow periods. With recent pumping rates reaching 100% utilization of the two (2) existing pumps, the flowrates and pressures observed in the field will be utilized to confirm the head conditions for the proposed pumps.

#### Proposed MGF System

The recommended MGF system configuration being considered, based on a previous pilot study performed, is the Suez ZeeWeed 1000. This system contains 48-module NGC cassettes installed in all four (4) filter basins. Each filter basin equals one (1) membrane train. Each membrane train includes eight (8) 48-module NGC cassettes, arranged in two (2) chains of four (4) cassettes. Each module contains 550 ft<sup>2</sup> of membrane fiber surface area. A total of 1,440 modules provides a total fiber surface area of 792,000 ft<sup>2</sup>. The microscopic membrane pore size provides greater than 3-log removal of pathogens such as Giardia cysts and Cryptosporidium cysts. The membranes operate under gravity which draws clean water to the inside of the fiber, while keeping impurities out. The gravity system produces permeate, and due to the low pressure and high surface area, solids do not get driven into the membrane pores. This allows for a simple cleaning process, similar to the Greenleaf filters utilizing air scour, which does not require the complex chemical systems of a traditional membrane system. The gravity system also uses less power as compared to a vacuum or pressured system which requires constant pumping to push the water through the filters.

A six (6) week pilot study was performed at the WTP, on both the MGF and traditional membrane systems, utilizing pretreated water from the clarifiers. The test membrane produced quality filtered water exceeding water quality requirements and standards. The study concluded the following from operating in MGF mode: Stable performance of the pilot system was observed in MGF mode; the transmembrane pressure (TMP) trend during permeation indicated the membranes could be operated consistently at the full-scale MGF design flux of 8.2 gfd; the membrane integrity test (MIT) results indicated consistent fiber integrity and no fiber breaks; the calculated Log Removal Value (LRV) based on these results were greater than 4.0 log removal; the permeate turbidity

demonstrated the membrane system would exceed producing water with a turbidity of less than 0.01 Nephelometric Turbidity Units (NTU) 95% of the time, with an average turbidity of 0.02 NTU.

The MGF system minimizes the piping and retrofit of the existing facilities, reusing much of the existing structures and processes. The MGF system will utilize the existing feed siphon to feed the individual membrane trains. To utilize the existing wall penetrations through the forebay and filter areas, the membrane cassettes will be installed so that the top of the existing backwash troughs become the bottom of the membrane tank. Once the existing media and underdrains are removed the basins will be filled with lightweight concrete up to the top of the existing backwash troughs. The backwash troughs will stay in place to act as sumps at the bottom of the membrane trains. This retrofitting work can be performed one filter basin at a time to maintain operation of the plant, at a reduced capacity, during construction. A portable filtration skid could also be utilized as to offset any loss in treatment capacity while retrofitting operations take place.

#### Disinfection

As part of the project, the existing chlorine gas disinfecting system will be replaced with a liquid chlorine solution storage and pumping system. The existing chlorine gas tanks storage room will be utilized for the proposed liquid chlorine solution tanks storage. A temporary feed system for the liquid chlorine solution will have to be utilized to allow continued application of disinfectant while the chlorine gas system is replaced with the proposed chlorine liquid solution system.

#### ADDITIONAL SERVICES OF THE CONSULTANT:

Extra Services: From time to time the Owner may direct the Consultant to perform tasks related to the Project which are not included in any of the previously identified services. If the Consultant is of the opinion that any direction from the Owner is not covered by any of the previously services, the Consultant shall notify the Owner in writing before performing the services in question. The Owner shall determine if the services are covered or are Extra Services and instruct the Consultant in writing. All Extra Services will be directed in writing by the Owner and will be paid based on an agreed cost.

If the Owner wishes the Consultant to perform any of the following Additional Services, Owner shall so instruct Consultant in writing, and Consultant shall perform or obtain from others such services and will be paid therefore as provided in an executed Amendment:

Preparation of applications and supporting documents for governmental financial support of the Project; preparation or review of environmental studies and related services; and assistance in obtaining environmental approvals in addition to those required under Basic Services.

Services resulting from significant changes in the general scope, extent, or character of the Project or major changes in documentation previously accepted by Owner where changes are due to causes beyond Consultant's control.

Major revisions to final drawings and/or specifications previously approved, and preparation of Contract Documents for alternate proposals not previously identified.

Provide renderings or models.

Preparing to serve or serving as a consultant or witness in any litigation, arbitration or other legal or administrative proceeding except where required as part of Basic Services.

THE OWNER AGREES to provide the Consultant with the following:

Access to the Work: The Owner shall guarantee access to enable the Consultant to enter upon public and private lands as required for the Consultant to perform such work as surveys and inspections in the development of the Project.

Consideration of the Consultant's Work: The Owner shall give thorough consideration of all reports, sketches, estimates, drawing, specifications, proposals, and other documents presented by the Consultant, and shall inform the Consultant of all decisions within a reasonable time so as not to delay the work of the Consultant.

Legal Requirements: The Owner shall hold promptly and attend all required special meetings, serve all required public and private notices, receive, and act upon all protests and fulfill requirements necessary in the development of the Project, and pay costs incidental thereto.

Proposals: The Owner shall advertise for Proposals from Bidders, open the Proposals at the appointed time and place, and pay costs incidental thereto.

Protection of Control Points: The Owner shall protect to the best of his ability all horizontal and vertical control points set by the Consultant prior to the assumption of such responsibility by the Contractor. Replacement of these points which have been damaged, moved or removed shall be paid for by the Owner as extra services of the Consultant.

Standards: The Owner shall furnish the Consultant with a copy of current City standard specifications, City construction detail standards as available and as appropriate for the project, Drafting and CAD Standards and Design Review Checklist. The Consultant shall follow these documents in the preparation of Contract Documents for the Project. For technical specifications not available from City standards the Consultant shall use standard specifications. The final edited specifications shall be submitted by the Consultant to the Owner in hard copy and PDF document form. Drawings and Record Drawings shall be submitted in PDF document form.

**GENERAL PROVISIONS TO LETTER AGREEMENT FOR SERVICES BETWEEN  
THOMAS & HUTTON ENGINEERING CO. (CONSULTANT) AND CITY OF SPRING HILL, TENNESSEE (OWNER)  
RAW WATER INTAKE AND WATER TREATMENT PLANT EXPANSION**

**SEPTEMBER 22, 2021**

**PAYMENT FOR SERVICES**

For services rendered, OWNER shall pay CONSULTANT as outlined in the Letter Agreement for Services.

Payment for services on the basis of "Time & Expense" shall be paid in accordance with the schedule of charges attached hereto.

Project related costs for printing, reproductions, materials, and travel will be billed as reimbursable expenses.

Projects will be billed monthly or at the completion of the work, whichever comes sooner, with payment due upon receipt. Payment shall be considered overdue after forty-five (45) days from date of invoice, with interest charged at a monthly rate of 1.5 percent (18 percent annual rate).

CONSULTANT reserves the right to suspend work hereunder or any other work to be performed by CONSULTANT for OWNER or any of its affiliates under a separate agreement or agreements with CONSULTANT in the event of delinquent payment by OWNER to CONSULTANT hereunder or in the event of delinquent payment by OWNER or its affiliates to CONSULTANT under a separate agreement or agreements. For all purposes hereof, affiliate shall mean (i) in the case of an individual, any relative of any person listed among the following, (ii) any officer, director, trustee, partner, manager, employee or holder of 5 percent or more of any class of the voting securities of or equity interest in the OWNER; (iii) any corporation, partnership, limited liability company, trust or other entity controlling, controlled by or under common control with the OWNER; or (iv) any officer, director, trustee, partner, manager, employee or holder of 5 percent or more of the outstanding voting securities of any corporation, partnership, limited liability company, trust or other entity controlling, controlled by, or under common control with the OWNER.

In the event legal action is necessary to enforce the payment terms of this Agreement, the CONSULTANT shall be entitled to collect from the OWNER any judgment or settlement sums due, plus reasonable attorneys' fees, court costs and other expenses incurred by the CONSULTANT for such collection action and, in addition, the reasonable value of the CONSULTANT's time and expenses spent for such collection action, computed according to the CONSULTANT's prevailing fee schedule and expense policies.

**ASSIGNMENT**

Neither party to this Agreement shall transfer, sublet or assign any rights or duties under or interest in this Agreement, including but not limited to monies that are due or monies that may be due, without the prior written consent of the other party. Subcontracting to subconsultants, normally contemplated by the CONSULTANT as a generally accepted business practice, shall not be considered an assignment for purposes of this Agreement.

**OWNER'S RESPONSIBILITIES**

**A. Access**

OWNER shall make provisions for the CONSULTANT to enter upon public and private lands as required to perform such work as surveys and inspections in development of the Project.

**B. OWNER's Representative**

The OWNER shall designate in writing one person to act as OWNER's Representative with respect to the work to be performed under this Agreement. This Representative shall have complete authority to transmit instructions, receive information, interpret, and define OWNER's policy and decisions, with respect to the product, materials, equipment, elements, and systems pertinent to the work covered by this Agreement.

**C. Fees**

The OWNER is responsible for payment of fees associated with the

project. Such fees include permit review and application fees, impact fees, and capacity fees. The CONSULTANT will notify the OWNER regarding the amount of fees and timing of payment.

**CONSULTANT'S RESPONSIBILITIES**

In providing services under this Agreement, the CONSULTANT shall perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same time and in the same or similar locality. No other representation expressed or implied, and no warranty or guarantee is included or intended in the Agreement, or in any report, opinion, document, or otherwise.

**OWNERSHIP OF INSTRUMENTS OF SERVICE**

All reports, drawings, specifications, computer files, electronic files, BIM models, field data, notes and other documents and instruments prepared by CONSULTANT as instruments of service shall remain the property of the CONSULTANT. The CONSULTANT shall retain all common law, statutory, and other reserved rights, including, without limitation, the copyrights thereto. The CONSULTANT shall retain these records for a period of two (2) years following their completion during which period paper copies will be made available to the Project OWNER at reasonable times.

**ELECTRONIC FILES**

In accepting and utilizing any drawings, reports and data on any form of electronic media generated and furnished by the CONSULTANT, the OWNER agrees that all such electronic files are instruments of service of the CONSULTANT, who shall be deemed the author, and shall retain all common law, statutory law and other rights, without limitation, including copyrights.

The OWNER agrees not to reuse these electronic files, in whole or in part, for any purpose other than for the Project. The OWNER agrees not to transfer these electronic files to others without the prior written consent of the CONSULTANT. The OWNER further agrees to waive all claims against the CONSULTANT resulting in any way from any unauthorized changes to or reuse of the electronic files for any other project by anyone other than the CONSULTANT.

The OWNER is aware that differences may exist between the electronic files delivered and the printed hard-copy construction documents. In the event of a conflict between the signed construction documents prepared by the CONSULTANT and electronic files, the signed or sealed hard-copy construction documents shall govern.

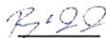
In addition, the OWNER agrees, to the fullest extent permitted by law, to indemnify and hold harmless the CONSULTANT, its officers, directors, employees and subconsultants (collectively, CONSULTANT) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising from any changes made by anyone other than the CONSULTANT or from any reuse of the electronic files without the prior written consent of the CONSULTANT.

Under no circumstances shall delivery of electronic files for use by the OWNER be deemed a sale by the CONSULTANT, and the CONSULTANT makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no event shall the CONSULTANT be liable for indirect or consequential damages as a result of the OWNER's use or reuse of the electronic files.

**CERTIFICATIONS, GUARANTEES, AND WARRANTIES**

The CONSULTANT shall not be required to sign any documents, no matter by whom requested, that would result in the CONSULTANT's having to certify, guarantee or warrant the existence of conditions whose existence the CONSULTANT cannot ascertain or any way might, in the sole judgment of the CONSULTANT, increase the CONSULTANT's contractual or legal obligations or risks, or adversely affect the availability or cost of its professional or general liability insurance. The OWNER also agrees not to make resolution of any dispute with the CONSULTANT or payment of any

\_\_\_\_\_  
Owner's Initials

 Consultant's Initials

**GENERAL PROVISIONS TO LETTER AGREEMENT FOR SERVICES BETWEEN  
THOMAS & HUTTON ENGINEERING CO. (CONSULTANT) AND CITY OF SPRING HILL, TENNESSEE (OWNER)  
RAW WATER INTAKE AND WATER TREATMENT PLANT EXPANSION**

**SEPTEMBER 22, 2021**

amount due to the CONSULTANT in any way contingent upon the CONSULTANT's signing any such certification.

**ACCESSIBILITY**

The OWNER acknowledges that the requirements of the Americans with Disabilities Act (ADA), Fair Housing Act (FHA) and other federal, state and local accessibility laws, rules, codes, ordinances and regulations will be subject to various and possibly contradictory interpretations. The CONSULTANT, therefore, will use its reasonable professional efforts and judgment to interpret applicable accessibility requirements in effect as of the date of [the execution of this Agreement, submission to building authorities, or other appropriate date] and as they apply to the Project. The CONSULTANT, however, cannot and does not warrant or guarantee that the OWNER's Project will comply with all interpretations of the accessibility requirements and/or the requirements of other federal, state, and local laws, rules, codes, ordinances, and regulations as they apply to the Project. Any changes in the applicable law or contrary interpretations of existing law subsequent to the issues of permits which requires CONSULTANT to perform redesign will be considered an additional service.

**SUBSTITUTIONS**

Upon the written request or direction of OWNER, CONSULTANT shall evaluate and advise OWNER with respect to proposed or requested changes in materials, products, or equipment. CONSULTANT shall be entitled to rely on the accuracy and completeness of the information provided in conjunction with the requested substitution. CONSULTANT shall not be responsible for errors, omissions, or inconsistencies in information by others or in any way resulting from incorporating such substitution into the Project. OWNER shall be invoiced for this service on a Time & Expense basis unless both parties mutually agree on a lump sum fee.

**OPINIONS OF PROBABLE COSTS**

Since the CONSULTANT has no control over the cost of labor, materials, or equipment, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, his opinions of probable construction costs provided for herein are to be made on the basis of his experience and qualifications. These opinions represent his best judgment as a design professional familiar with the construction industry.

However, the CONSULTANT cannot and does not guarantee that proposals, bids, or the construction cost will not vary from opinions of probable construction costs prepared by him.

**BETTERMENT**

If, due to the CONSULTANT's negligence, a required item or component of the Project is omitted from the CONSULTANT's construction documents, the CONSULTANT shall not be responsible for paying the cost required to add such item or component to the extent that such item or component would have been required and included in the original construction documents. In no event will the CONSULTANT be responsible for any cost or expense that provides betterment, upgrades, or enhances the value of the Project.

**CHANGED CONDITIONS**

If, during the term of this Agreement, circumstances or conditions that were not originally contemplated by or known to the CONSULTANT are revealed, to the extent that they affect the scope of services, compensation, schedule, allocation of risks or other material terms of this Agreement, the CONSULTANT may call for renegotiation of appropriate portions of this Agreement. The CONSULTANT shall notify the OWNER of the changed conditions necessitating renegotiation, and the CONSULTANT and the OWNER shall promptly and in good faith enter into renegotiation of this Agreement to address the changed conditions. If terms cannot be agreed to, the parties agree that either party has the absolute right to terminate this Agreement in accordance with the Termination provision hereof.

**CODE COMPLIANCE**

The CONSULTANT shall exercise usual and customary professional care in its efforts to comply with applicable laws, codes and regulations in effect as of the date of this agreement was written. Design changes made necessary by newly enacted laws, codes and regulations after this date shall entitle the CONSULTANT to a reasonable adjustment in the schedule and additional compensation in accordance with the Additional Services provisions of this Agreement.

In the event of a conflict between laws, codes and regulations of various governmental entities having jurisdiction over this Project, the CONSULTANT shall notify the OWNER of the nature and impact of such conflict. The OWNER agrees to cooperate and work with the CONSULTANT in an effort to resolve this conflict.

**VALUE ENGINEERING**

(If) OWNER has elected to engage in value engineering of the Project, OWNER has established cost as a primary project objective over other programming, performance, and aesthetic objectives and recognizes that in doing so, it has limited the available design and product options. These limitations may impact the overall project cost, schedule, and performance. OWNER has accepted these risks and impacts in recognition of the importance it has placed on project cost.

**DELEGATED DESIGN**

Where any design services are provided by persons or entities not under CONSULTANT's direct control, CONSULTANT's role shall be limited to its evaluation of the general conformance with the design intent and the interface with CONSULTANT's design and portion of the project. Except to the extent, it is actually aware of a deficiency, error, or omission in such design by others, CONSULTANT shall have no responsibility for such design and may rely upon its adequacy, accuracy, and completeness in all respects.

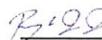
**LIMITS OF LIABILITY**

Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the OWNER or the CONSULTANT. The CONSULTANT's services under this Agreement are being performed solely for the OWNER's benefit, and no other party or entity shall have any claim against the CONSULTANT because of this Agreement or the performance or nonperformance of services hereunder. The OWNER and CONSULTANT agree to require a similar provision in all contracts with contractors, subcontractors, subconsultants, vendors, and other entities involved in this Project to carry out the intent of this provision.

To the fullest extent permitted by law, and not withstanding any other provision of this Agreement, the total liability, in the aggregate, of the CONSULTANT and the CONSULTANT's officers, directors, partners, employees and sub-consultants, and any of them, to the OWNER and anyone claiming by or through the OWNER (including, but not limited to construction contractors & subcontractors), for any and all claims, losses, costs or damages, including attorneys' fees and costs and expert-witness fees and costs of any nature whatsoever or claims expenses resulting from or in any way related to the Project or the Agreement from any cause or causes shall not exceed **the CONSULTANT's fee for services rendered under this contract. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law. This liability cap may be increased by mutual consent of both parties and in exchange for additional compensation.**

If the OWNER has elected to exclude Construction Observation and Monitoring from this contract. Based on this understanding, the OWNER assumes all responsibility for interpretation of the documents and for construction observation and supervision activities and waives any claims against the CONSULTANT that may in any way connected thereto. In addition, the OWNER agrees, to the fullest extent permitted by law, to indemnify and hold the CONSULTANT harmless from any loss, claim, or cost

\_\_\_\_ Owner's Initials

 Consultant's Initials

**GENERAL PROVISIONS TO LETTER AGREEMENT FOR SERVICES BETWEEN  
THOMAS & HUTTON ENGINEERING CO. (CONSULTANT) AND CITY OF SPRING HILL, TENNESSEE (OWNER)  
RAW WATER INTAKE AND WATER TREATMENT PLANT EXPANSION**

**SEPTEMBER 22, 2021**

including reasonable attorneys' fees resulting from the performance of such services by other persons or entities and all claims arising from clarifications, interpretations, or changes made to the contract documents or work specified therein to reflect field or other changes made except for sole negligence or willful misconduct of the CONSULTANT. Any requests for specific construction observation services and agreed to by the CONSULTANT will be paid as Additional Services by the OWNER.

**TIME BAR TO LEGAL ACTION**

All legal actions by either party against the other arising out of or in any way connected with this Agreement or the services to be performed hereunder shall be barred and under no circumstances shall any such legal action be initiated by either party after five (5) years from the date of Substantial Completion, unless this Agreement shall be terminated earlier, in which case the date of termination of this Agreement shall be the date on which such period shall commence. Nothing in this Agreement is construed to waive any protections granted under existing laws of the state in which the work is performed.

**ACTS OF OTHERS**

The CONSULTANT shall not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by Contractor(s) or the safety precautions and programs incident to the work of Contractor(s). CONSULTANT shall not be responsible for the failure of Contractor(s) to perform the work in accordance with the Contract Documents.

The CONSULTANT shall not be responsible for the acts or omissions of any Contractor, or sub-contractor, or any of the Contractor(s)', or sub-contractors' agents, or employees or any other persons (except CONSULTANT's own employees and agents) at the site or otherwise performing any of the Contractor(s)' work. However, nothing contained herein shall be construed to release CONSULTANT from liability for failure to perform properly the duties undertaken by CONSULTANT in the Contract Documents.

The CONSULTANT shall not be responsible for the acts, omissions, means, methods, or specifications of other design professionals not directly retained by CONSULTANT. **Unless specifically stated otherwise, the CONSULTANT's work and responsibility under this Contract terminates at the building pad or within five (5) feet of the building, whichever is greater, for any proposed building shown on the plans. The OWNER/Architect/Contractor is responsible for compliance with codes, regulations, manufacturer specifications, and construction methods related to the building structure. In no circumstance is the CONSULTANT responsible for any portion of the building, especially as it relates to moisture or mold.**

**INDEMNIFICATION**

The CONSULTANT agrees, to the fullest extent permitted by law, to indemnify and hold harmless the OWNER, its officers, directors and employees (collectively, OWNER) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the CONSULTANT's negligent performance of professional services under this Agreement and that of its subconsultants or anyone for whom the CONSULTANT is legally liable.

The OWNER agrees, to the fullest extent permitted by law, to indemnify and hold harmless the CONSULTANT, its officers, directors, employees and subconsultants (collectively, CONSULTANT) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the OWNER's negligent acts in connection with the Project and the acts of its contractors, subcontractors or consultants or anyone for whom the OWNER is legally liable.

Neither the OWNER nor the CONSULTANT shall be obligated to indemnify the other party in any manner whatsoever for the other party's own negligence or for the negligence of others.

**CONSEQUENTIAL DAMAGES**

Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the OWNER nor the CONSULTANT, their respective officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the Project or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation and any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty. Both the OWNER and the CONSULTANT shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this project.

**DISPUTE RESOLUTION**

Any dispute or claim arising out of or relating to this Agreement shall be determined as follows: CONSULTANT and OWNER will negotiate in good faith to reach agreement. If negotiations are unsuccessful, CONSULTANT and OWNER agree the dispute shall be settled by mediation. In the event the dispute or any issues remain unresolved after the above steps, the disagreement shall be decided by such remedies of law as they are available to the parties. The appointment of a mediator and location will be subject to agreement between CONSULTANT and OWNER with each party being responsible for their portion of those costs.

**JOBSITE SAFETY**

Neither the professional activities of the CONSULTANT, nor the presence of the CONSULTANT or its employees and subconsultants at a construction/project site, shall impose any duty on the CONSULTANT, nor relieve the General Contractor of its obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending and coordinating the Work in accordance with the Contract Documents and any health or safety precautions required by any regulatory agencies. The CONSULTANT and its personnel have no authority to exercise any control over any construction contractor or its employees in connection with their work or any health or safety programs or procedures. The OWNER agrees that the General Contractor shall be solely responsible for jobsite and worker safety and warrants that this intent shall be carried out in the OWNER's contract with the General Contractor. The OWNER also agrees that the General Contractor shall defend and indemnify the OWNER, the CONSULTANT and the CONSULTANT's subconsultants. The OWNER also agrees that the OWNER, the CONSULTANT and the CONSULTANT's subconsultants shall be made additional insureds under the General Contractor's policies of general liability insurance.

**Delays**

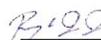
The OWNER agrees that the CONSULTANT is not responsible for damages arising directly or indirectly from any delays for causes beyond the CONSULTANT's control. For purposes of this Agreement, such causes include, but are not limited to, strikes or other labor disputes; severe weather disruptions or other natural disasters or acts of God; fires, riots, war or other emergencies; failure of any government agency to act in timely manner; failure of performance by the OWNER or the OWNER'S contractors or consultants; or discovery of any hazardous substances or differing site conditions.

In addition, if the delays resulting from any such causes increase the cost or time required by the CONSULTANT to perform its services in an orderly and efficient manner, the CONSULTANT shall be entitled to a reasonable adjustment in schedule and compensation.

**HAZARDOUS MATERIAL**

Both parties acknowledge that the CONSULTANT's scope of services does not include any services related to the presence of any hazardous or toxic

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Owner's Initials

 Consultant's Initials

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**SEPTEMBER 22, 2021**

materials and/or mold. In the event the CONSULTANT or any other person or entity involved in the project encounters any hazardous or toxic materials and/or mold, or should it become known to the CONSULTANT that such materials may be present on or about the jobsite or any adjacent areas that may affect the performance of the CONSULTANT's services, the CONSULTANT may, at its sole option and without liability for consequential or any other damages, suspend performance of its services under this Agreement until the OWNER retains appropriate qualified consultants and/or contractors to identify and abate or remove the hazardous or toxic materials and warrants that the jobsite is in full compliance with all applicable laws and regulations.

**CLIMATE CHANGE**

In no event shall the CONSULTANT be responsible or liable for any failure or delay in the performance of its obligations or impact to the project in any way hereunder arising out of or caused by, directly or indirectly, climate change, including but not limited to sea level rise.

**APPLICATIONS FOR PERMITS AND CERTIFICATES REQUESTED ON BEHALF OF OWNER**

The OWNER shall indemnify and hold the CONSULTANT harmless from and against any and all judgments, losses, damages, and expenses (including attorney fees and defense costs) arising from or related to claims by third parties to challenge the issuance of permits or certificates for the Project by agencies with jurisdiction in the premises. Defense costs shall include the time and expenses of the CONSULTANT's personnel to assist in the defense of the issuance of the permit or certificate.

**TERMINATION**

In the event of termination of this Agreement by either party, the OWNER shall within fifteen (15) calendar days of termination pay the CONSULTANT for all services rendered and all reimbursable costs incurred by the CONSULTANT up to the date of termination, in accordance with the payment provisions of this Agreement.

Either party may terminate this Agreement for the convenience and without cause upon giving the other party not less than fifteen (15) calendar days' written notice.

Either party may terminate this Agreement for cause upon giving the other party not less than seven (7) calendar day's written notice for any of the following reasons:

- Substantial failure by the other party to perform in accordance with the terms of this Agreement and through no fault of the terminating party;
- Assignment of this Agreement or transfer of the Project by either party to any other entity without the prior written consent of the other party;
- Suspension of the Project or the CONSULTANT's services by the OWNER for more than ninety (90) calendar days, consecutive or in the aggregate;
- Material changes in the conditions under which this Agreement was entered into, the Scope of Services or the nature of the Project, and the failure of the parties to reach agreement on the compensation and schedule adjustments necessitated by such changes.

In the event of any termination that is not the fault of the CONSULTANT, the OWNER shall pay the CONSULTANT, in addition to payment for services rendered and reimbursable costs incurred, for all expenses reasonably incurred by the CONSULTANT in connection with the orderly termination of this Agreement, including but not limited to demobilization, reassignment of personnel, associated overhead costs and all other expenses directly resulting from the termination.

**SIGNAGE**

OWNER agrees to allow CONSULTANT to place a sign on the job site during

construction. The sign will include general information relative to the CONSULTANT. CONSULTANT shall be responsible for the sign installation and removal.

**AMENDMENT**

This Agreement for Services can be amended by addenda if agreed to in writing and signed by both parties.

\_\_\_\_\_ Owner's Initials

 Consultant's Initials



**Consulting Services on a Time and Expense Basis**

January 1, 2021

Thomas & Hutton provides services on a time and expense basis as follows:

1. This basis includes allowance for direct salary expenses and for direct non-salary expenses. It also provides for services we may subcontract to others.
2. Direct salary expenses are generally based upon our payroll costs. The payroll costs include the cost of salaries and wages (including sick leave, vacation, and holiday pay) for time directly chargeable to the project; plus, unemployment, excise, payroll taxes, and contributions for social security, employment compensation insurance, retirement benefits, and medical and insurance benefits.

The current hourly rate charges for each skill position for 2021 are as follows:

| Hourly Rate | Engineer                                    | Survey   | Landscape   | GIS                | Quality Control               | Business/ Administrative  |
|-------------|---|--|---|--------------------|-------------------------------|---|
| \$ 250.00   | Consultant                                  | Consultant   | Consultant  | Consultant         | Consultant                    |   |
| \$ 225.00   | Senior Manager                              | Senior Manager   | Senior Manager                                    | Senior Manager     | Senior Manager                | Senior Manager  |
| \$ 205.00   | Project Manager V<br>Project Engineer V     | Survey Manager V<br>Project Surveyor V<br>Survey Party (3-Men) | Landscape Architect V<br>LA Project Manager V     | GIS Manager V      |                               |   |
| \$ 190.00   | Project Manager IV<br>Project Engineer IV   | Survey Manager IV<br>Project Surveyor IV                       | Landscape Architect IV<br>LA Project Manager IV   | GIS Manager IV     |                               | Senior Application Developer IV,<br>Software/Computer Consultant IV                       |
| \$ 175.00   | Project Manager III<br>Project Engineer III | Survey Manager III<br>Project Surveyor III                     | Landscape Architect III<br>LA Project Manager III | GIS Manager III    |                               | Senior Application Developer III,<br>Software/Computer Consultant III                     |
| \$ 165.00   | Project Manager II<br>Project Engineer II   | Survey Manager II<br>Project Surveyor II                       | Landscape Architect II<br>LA Project Manager II   | GIS Manager II     | Construction Administrator II | Senior Application Developer II,<br>Software/Computer Consultant II                       |
| \$ 150.00   | Project Manager I<br>Project Engineer I     | Survey Manager I<br>Project Surveyor I<br>Survey Party (2-Men) | Landscape Architect I<br>LA Project Manager I     | GIS Manager I      | Construction Administrator I  | Grant Administrator, Senior<br>Application Developer I,<br>Software/Computer Consultant I |
| \$ 140.00   | Designer IV<br>Engineering Technician IV    | Staff Surveyor V<br>Survey Field Supervisor                    | Landscape Designer IV                             | GIS Analyst IV     | Field Representative V        | Application Developer IV  |
| \$ 130.00   | Designer III<br>Engineering Technician III  | Staff Surveyor IV  | Landscape Designer III                            | GIS Analyst III    | Field Representative IV       | Application Developer III   |
| \$ 120.00   | Designer II<br>Engineering Technician II    | Staff Surveyor III   | Landscape Designer II                             | GIS Analyst II     |                               | Application Developer II  |
| \$ 110.00   | Designer I<br>Engineering Technician I      | Survey Party (1-Man)<br>Staff Surveyor II                      | Landscape Designer I                              | GIS Analyst I      | Field Representative III      | Application Developer I,<br>Permit Coordinator II, Admin IV                               |
| \$ 100.00   | CADD Technician III                         | Survey Technician III<br>Staff Surveyor I                      | Landscape Technician III                          | GIS Technician III | Field Representative II       | Permit Coordinator I  |
| \$ 90.00    | CADD Technician II                          | Survey Technician II   | Landscape Technician II                           | GIS Technician II  |                               |   |
| \$ 85.00    | CADD Technician I                           | Survey Technician I  | Landscape Technician I                            | GIS Technician I   | Field Representative I        | Admin III   |
| \$ 80.00    |   |  |   |                    |                               | Admin II  |
| \$ 75.00    |   |  |   |                    |                               | Admin I   |
| \$ 400.00   | Expert Witness                              |  |   |                    |                               |   |

3. When warranted, overtime will be charged for any non-salary employees. Overtime hours will be billed at 1-1/2 times the individuals charge rate.
4. Direct non-salary (reimbursable) expenses, including printing, reproduction, air travel, lodging, and meals are billed at cost. Travel in company or private vehicles will be billed at the IRS Standard Mileage Rate of \$0.56 per mile and may be revised based on fuel pricing. Outside consultant fees will be billed at 1.15 times the cost.
5. All rates and charges are effective through January 1, 2022, including printing, reproductions, materials, and travel and are subject to change at that time. New rates and costs will become immediately effective to contracts in effect at the time of rate changes.