#### CITY OF FRANKLIN, TENNESSEE PROFESSIONAL SERVICES AGREEMENT COF Contract No. 2016-0306

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

#### SCADA CONSTRUCTION ENGINEERING AND INSPECTION SERVICES

- 1. SCOPE OF SERVICES. Consultant shall provide construction engineering and inspection services for the Project in accordance with the Scope of Services (Services) as found in Attachment A which shall be considered as an integral part hereof.
- 2. Consultant shall submit as a part of Attachment A an individual Fee Schedule and a Completion Schedule for the Project based on the detailed Scope of Services.
- 3. In event of a conflict between this Agreement and the attached document(s), this Agreement shall supersede conflicting terms and conditions.
- 4. Consultant shall be paid on a monthly basis for work performed based on the Fee Schedule as contained in Attachment A in the Amount of <u>FOUR HUNDRED THIRTY-TWO THOUSAND SIX</u> <u>HUNDRED FORTY-ONE AND No/100 DOLLARS</u> (\$432,641.00).

The Board of Mayor and Aldermen Approved this Agreement 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:

- 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 Before executing this Agreement, the Consultant shall have prepared and submitted for approval to the City a Completion Schedule for the Project with milestones for the various stages (tasks) of the Services as outlined in the Scope of Services. The Consultant shall submit and obtain the City's approval for any proposed changes to the logic, durations, sequences, or timing of tasks as approved in the Completion Schedule.
- 6.3 FORCE MAJEURE. Neither party will be liable to the other for any delay or failure to perform any of the services or obligations set forth in this Agreement due to causes beyond its reasonable control, and performance times will be considered extended for a period of time equivalent to the time lost because of such delay plus a reasonable period of time to allow the parties to recommence performance of their respective obligations hereunder. Should a circumstance of force majeure last more than ninety (90) days, either party may by written notice to the other terminate this Agreement. The term "force majeure" as used herein shall mean the following: acts of God; strikes, lockouts or other industrial disturbances; acts of public enemies; orders or restraints of any kind of the government of the United States or of the State or any of their departments, agencies or officials, or any civil or military authority; insurrections, riots, landslides, earthquakes, fires, storms, tornadoes, droughts, floods, explosions, breakage or accident to

machinery, transmission pipes or canals; or any other cause or event not reasonably within the control of either party.

6.4 Should City request changes in the scope, extent, or character of the Project, the fee and the time of performance of Consultant's Services as indicated in Attachment A shall be adjusted equitably.

#### ARTICLE 7. USE OF DOCUMENTS, DATA.

- 7.1 All Documents, including, but not limited to, reports, drawings, specifications, and computer software prepared by Consultant pursuant to this Agreement are instruments of service in respect to the Project. 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 <u>www.gsa.gov</u> [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: <u>Consultant's Signature</u> TITLE: \_\_\_\_\_\_ Date: \_\_\_\_\_

BY: \_\_\_\_\_ Dr. Ken Moore Mayor Date:

Approved as to Form:

Shauna R. Billingsley, City Attorney

# Attachment A to Exhibit A City of Franklin, Tennessee Proposal for SCADA System Construction Management Services

# 1.0 Project Background

An important piece of the future growth and management of the City of Franklin's water and wastewater systems is the replacement of the antiquated Supervisory Control and Data Acquisition (SCADA) system that is currently utilized by the City to manage and control the existing water distribution, wastewater collection system, water treatment, and wastewater treatment systems. This proposal is for the construction services associated with the implementation of the designed upgrades to the SCADA system.

# 2.0 Scope

## Task G, General Services During Construction (SRF Basic Engineering)

For this project, we have assumed that General Services or Office Services will include: G1) Preparation of conformed drawings and specifications, G2) Project management, G3) Project meetings, G4) Engineering reviews, clarifications, and interpretations, G5) Site visits by engineering and management staff and G6) Witnessing of Factory Testing.

#### Task G1, Preparation of Conformed Drawings and Specifications

CDM Smith will incorporate addendum material into the bid drawings and specifications to prepare conformed drawings and specifications. We have assumed that the drawing set will consist of 32 drawings and that six sets of printed conformed documents (drawings and specifications) will be prepared.

#### Task G2, Project Management

This task includes management of the project team, establishing and monitoring consulting schedules and budgets, invoicing, reporting, and general coordination of the project. The following subtasks further define the work under this task. Each of these subtasks was budgeted assuming a total project timeframe of 52 weeks (50 weeks of construction duration plus 2 weeks of preparation and close out time.)

#### Task G2A – CDM Smith Project Kickoff Meeting

CDM Smith will hold an internal project kickoff meeting for initial planning and coordination with the team. This meeting will establish roles, responsibilities, expectations, communication protocol, processes and procedures, scope, schedule, budgets, etc. We assume that five staff members will participate in the kickoff meeting.

#### Task G2B – General Administration of the Construction Contract

This task will include coordinating project technical staff, monitoring the progress and cost of each task, budget control, preparing monthly progress reports for submission to the City of Franklin (COF), and preparing monthly invoices for submission to COF.

#### Task G2C – Final Documentation Filing and File Review

At the end of the project the CDM Smith team will complete final documentation, review the files, and complete final file maintenance and turn over a complete final set of documents to the City of Franklin.

#### Task G3, Project Meetings

We anticipate that five types of meetings requiring CDM Smith participation will occur during construction: G3A) Preconstruction meeting, G3B) Monthly progress meetings, G3C) Special meetings, G3D) Periodic CDM Smith project team meetings, and G3E) Bi-weekly conference calls between the CDM Smith project manager and the COF project manager. The anticipated scope and budget for the special meetings are based on those special meetings identified in the specifications, plus an allowance for unplanned special meetings.

#### Task G3A - Preconstruction Meeting

CDM Smith will prepare a pre-construction meeting agenda and conduct a preconstruction meeting in Franklin, Tennessee with the Contractor, and others as appropriate, to explain construction administration procedures and to delineate project requirements and constraints. CDM Smith will prepare and distribute minutes of the meeting within one week. We assume that this meeting will be no more than 3 hours long and will be attended in person by the CDM Smith project manager, the CDM Smith instrumentation and control engineer, and a local CDM Smith construction specialist and the CDM Smith Client Service Leader. We assume that the CDM Smith electrical engineer will attend by phone.

#### Task G3B - Monthly Progress Meetings

CDM Smith will conduct monthly progress meetings with the Contractor, COF representatives, and others as necessary to review submittal status, completed and ongoing activities, planned work schedules, and to discuss issues. CDM Smith will prepare an agenda for each meeting and will prepare meeting minutes subsequent to each meeting. Meeting minutes will be distributed to all parties within five business days following the meeting. CDM Smith has budgeted for a total of 11 monthly progress meetings. These will be attended in person by the CDM Smith Construction Specialist and will be attended by phone by the CDM Smith electrical engineer and the instrumentation and control engineer. We assume that the CDM Smith project manager will attend two of the meetings in person and 9 of the meetings by phone.

#### Task G3C - Special Meetings

The specifications identify several special meetings (see the list below), and in some cases additional special meetings will be required in between the monthly progress meetings to resolve time sensitive problems. Our assumptions are outlined in the list below.

- Maintenance of System Operations Special Meeting (1 meeting) This meeting will be attended by the CDM Smith construction specialist, project manager, electrical engineer, and instrumentation and control engineer. The electrical engineer will attend by phone. CDM Smith will also request that City personnel with responsibility for the wastewater collection system, the water distribution system, and SCADA for the water and wastewater treatment plants attend.
- 2. I&C Submittal Review Coordination, Standards and Conventions, and Historical Data Management and Reports Meeting (1 meeting)
- 3. I&C Draft Graphics Review Meeting (1 meeting)
- 4. I&C Second Graphics Review and Factory Testing Pre-Coordination Meeting (1 meeting)
- 5. I&C Field Testing Pre Coordination Meeting (1 meeting)
- 6. Other unplanned special meetings (1 meeting)

#### Task G3D - Periodic CDM Smith Team Coordination Meetings

We have budgeted for 24, half hour conference calls to coordinate with the team and identify and clear up any 'roadblocks' to progress. These will occur as the need arises.

#### Task G3E - Bi-Weekly Coordination Call with COF

The CDM Smith project manager and senior construction specialist will hold 26 half hour bi-weekly coordination calls with COF. The CDM Smith Client Service Leader will also attend half of these calls.

#### Task G4, Engineering Reviews, Clarifications and Interpretations

This task includes G4A) Review of shop drawings and other submittals, G4B) Review of payment applications, G4C) Review of schedule submittals, G4D) Response to RFIs, and G4E) Review of final/closeout submittals. CDM Smith will set up an e-room or an equivalent platform for management of submittals and other documents. This will be accessible to the contractor for uploading submittals and viewing files. The City will also have access.

#### Task G4A - Review Shop Drawings and Other Submittals

CDM Smith will process and track the Contractor's shop drawing and product data submittals on equipment and methods. Each submittal will be reviewed to determine conformance with the design concept and compliance with the contract documents.

A comprehensive list of submittals and deliverables required from the Contractor will be prepared, based on the provisions of the Contract Documents. The list will include shop drawings, product data, samples, operation and maintenance manuals, start-up and testing reports, record documents, and other submittals as required, with related specification references. The submittal schedule will be distributed at the Preconstruction Meeting and maintained similar to a checklist throughout the construction period. The budget for this task assumes review of up to 75 total submittals and resubmittals. The budget also assumes that any third submittals will be considered additional services that will be paid for by the Contractor.

City of Franklin, Tennessee

#### Task G4B - Review of Schedule of Values and Applications for Payment

CDM Smith will review and assist COF with negotiation of the schedule of values. In addition, CDM Smith will review 12 monthly applications for payment from the Contractor for compliance with the established procedure for their submission, noting particularly the relationship of the payment requested to the schedule of values, work completed, and materials and equipment delivered at the site but not incorporated in the Work. The reviewed and approved payment application will be forwarded to the COF with recommendation for action. Accurate project cost records will be maintained, including monthly payments and proposed, pending, or approved changes in the work.

#### Task G4C - Schedule Reviews

CDM Smith will review the Contractor's initial construction schedule to ensure that the activities are comprehensive, the workflow is logical, the relationships between tasks is logical, and that the schedule appropriately considers maintenance of system operation constraints. CDM Smith will monitor the Contractor's actual progress and compare it to the approved schedule. CDM Smith will interface with the COF staff on issues involving scheduled shut-downs, tie-ins, start-ups, commissioning, etc., to ensure adequate lead time is provided for proper coordination and preparation for these activities. We have budgeted for review of the initial schedule submittal plus a total of 11 subsequent schedule submittals.

#### Task G4D - Response to RFIs

CDM Smith will respond to Requests for Information and interpretation or clarification of the drawings and specifications. When required, sketches or other documentation will be prepared to accompany responses. CDM Smith will maintain a log of Requests for Information, indicating subject of request, date of request, originator of request, person responsible for response and date of response. The budget for this task assumes that responses will be prepared for a total of 20 RFIs.

#### Task G5, Site Visits by Office Staff

No onsite services are proposed. Instead we propose to provide regular visits by a local CDM Smith construction specialist supplemented by visits from the CDM Smith electrical and instrumentation and control engineers. The local construction specialist will provide general construction observation while the electrical and instrumentation and control engineers will provide specialized technical observation.

Disruption of the operation of any part of the water and wastewater systems can have far reaching consequences. As a result, one of the challenges that the contractor will face is staging of his work in a way that will allow him to meet the "Maintenance of System Operations" requirements that are established in the contract documents to prevent compromising the integrity of the City's operations. Different contractors will have different solutions to this problem and the particular solution used by the selected contractor will impact the number of trips and the level of effort required for CDM Smith construction observation staff. Thus, the assumptions we outline below for Tasks G5A and G5B are our best guess at the level of effort and number of trips.

Four categories of site visits are outlined below. They include: Construction specialist site visits, technical discipline member site visits, a substantial completion inspection, and a final completion inspection.

#### Task G5A – Construction Specialist Site Visits

We have assumed that the local construction specialist will need 4 hour per week for the first 12 weeks, 12 hours per week for the next 25 weeks, and 4 hours per week for the last 13 weeks, or a total of 400 hours. The three periods of time correspond to 1) the initial period of time where submittals and procurement will be taking place and site work will be limited, 2) the middle period of time when most construction will take place, and 3) the time between substantial completion and final completion. In addition to general observation, the local construction specialist will provide on-the-ground support for the technical staff when issues arise. We have also budgeted for 3000 automobile miles during this time period.

#### Task G5B - Technical Discipline Site Visits for Interim Inspections

Periodic site visits will be made by the CDM Smith instrumentation and control engineer during construction. The visits will be timed to coincide with the functional demonstration test (FDT) activities defined in the specifications, thus no hours are included for this task and instead those hours are accounted for under Task S2, Functional Demonstration Testing Observation.

#### Task G5C - Substantial Completion

Following notice from the Contractor that all of the Work is ready for its intended use, CDM Smith and COF, accompanied by the Contractor, will conduct an inspection to determine if the Work is Substantially Complete. If COF and CDM Smith consider the work Substantially Complete, CDM Smith will deliver a Certificate of Substantial Completion to the Contractor along with a checklist of items that must be complete for the work to be considered finally complete. The substantial completion inspection will be attended by the CDM Smith construction specialist, electrical engineer, and instrumentation and control engineer. We assume that the substantial completion inspection will take two days. Upon completion of the inspection the CDM construction specialist and engineers will prepare a certificate of substantial completion and a checklist.

#### Task G5D - Final Completion

CDM Smith will conduct a final inspection to determine if the Contractor's work is acceptable so that CDM Smith may recommend final payment to the Contractor. Accompanying the recommendation for final payment, CDM Smith will indicate that the Work is acceptable to the best of CDM Smith's knowledge, information and belief and based on the extent of the services performed and furnished by CDM Smith under this Agreement. We have assumed that the inspection will be performed by the CDM Smith construction specialist, electrical engineer, and instrumentation and control engineer. We assume that the final completion inspection will take two days and that only one final completion inspection will be required. Upon completion of the inspection the CDM construction specialist and engineers will prepare a certificate of final completion for the City's consideration and execution.

#### Task G6, Witnessing of Factory Testing

As with the Functional Demonstration Test (FDT), we have assumed that the Witnessed Factory Test (WFT) will be done in stages. The instrumentation engineer will require up to three trips of 20 hours each, which includes preparation time, travel and visit time, and memorandum preparation time, as well as travel costs.

## **Task S, Special Services**

Special services are services that are not part of the normal services provided under General and Resident Services. We have assumed that Special Services will include: S1) Change order claim review and negotiation assistance, S2) Witnessing of functional testing and startup, and S3) Preparation of record drawings. These are defined in detail below.

## Task S1, Change Management (SRF Basic Engineering)

This task includes review of contractor claims and proposals, preparation of requests for proposal, assistance of COF in negotiating change order scope, schedule and cost, and preparation of change orders, including the final reconciliation change order. RPR staff effort associated with change management are covered under the resident services task costs. Office support cost associated with change management is included under this task. As the level of effort for this item cannot be predicted, we propose to establish an allowance of \$20,000 for this item.

# Task S2, Functional Demonstration Testing (FDT) Observation (SRF Other Engineering)

This task involves engineer observation of functional demonstration testing by the Contractor. We have assumed that the instrumentation and control engineer will have to make up to three trips of two days each. As previously mentioned, the Maintenance of System Operations solution developed by the contractor will dictate the actual number of FDT trips required, so the number of visits and level of effort identified above are our best estimate of what will be required. Since the electrical improvements for this project are minor in nature, we have assumed that no electrical engineering hours will be required for functional demonstration testing observation.

### Task S3, Preparation of Record Drawings (SRF Other Engineering)

CDM Smith will review the final as-built information submitted by the Contractor, and will revise the construction drawings to reflect the record conditions based on the Contractor's Record Drawing information, supplemented with any additional information gathered during inspection activities. Final Record Drawings will be provided to COF in the following format: electronic drawing files on CDs (AutoCAD and PDF), and two sets each of full-size and half-size prints.

## Task SRF, SRF Related Services (SRF Administrative and Legal)

These services are services that are required under the SRF rules and include contract labor compliance, disbursement preparation guidance and review, closeout document preparation, and miscellaneous meetings and tasks. Contract labor compliance is monitoring that is required to verify that Davis-Bacon Act labor practices requirements are being followed.

## Task SRF1, Contract Labor Compliance

This task includes providing labor compliance services for administering, monitoring and enforcing labor standards as required under the Davis-Bacon Act which is required by the State Revolving Fund Loan Program. In general, the rules require:

- Comprehensive field interviews within two weeks of the start of the project,
- Comprehensive field interviews within two weeks of the end of the project, City of Franklin, Tennessee

- Weekly interviews with a randomly selected employee of the general contractor or a subcontractor,
- Monthly review of the pay requests for labor compliance, especially with respect to interview information

Specifically, the work includes but may not be limited to the following:

- Determine the specific labor standards parameters applicable for the construction project.
- Participate in the pre-construction meeting and inform contractors of wage and reporting obligations.
- Create and maintain a project Labor Standards Administration File.
- Conduct on-site field employee interviews on Form HUD-4720.
- Reconcile employee interviews with Certified Payrolls.
- Verify and document posting of federal notices on jobsite.
- Perform ongoing and timely monitoring reviews of the weekly Certified Payroll Reports and related submissions for compliance.
- Notify the prime contractor in writing of any labor discrepancies or suspected violations and define the corrective actions to be taken including restitution payments.
- Identify violations and investigate complaints of underpayment to workers.
- Prepare the Notice of Labor Standards Violation Report and HUD 5.7 Enforcement Report for the underpayments to workers, if necessary.
- Prepare various reports for contract and labor compliance including but not limited to the Contract and Subcontract Activity Report, and Semi-Annual Labor Standards Enforcement Report.
- Review the final project file and participate in the final review meeting.
- Records: Interview forms and certified payrolls will be kept with the rest of the project records for three years after the contract is completed.

The actual level of effort required for this task is dependent on the number of contractors/subcontractors that must monitored, the number of employees each contractor/subcontractor has, and the number and magnitude of problems that arise during a project. We propose establishing an allowance of 640 hours for this task and monitoring the expenditures on a monthly basis.

City of Franklin, Tennessee

#### Task SRF2, Disbursement Preparation Guidance and Review

This task includes reviewing of the Contractors pay applications to confirm compliance with the SRF requirements and providing guidance on disbursement request preparation as necessary. This task also includes filling out SRF checklists and forms, performing budget adjustment assistance, coordinating with SRF after disbursement requests have been sent in and assisting with revisions if necessary. We assume that a total of twelve disbursement requests will occur.

#### Task SRF3, Closeout Documents Preparation

This task includes compilation and review of documents associated with closing out the SRF loan.

#### Task SRF4, Miscellaneous Meetings/Tasks

This task includes assistance with numerous miscellaneous tasks and meetings. Examples include:

- Assistance with assembly of authority to award,
- Attendance at pre-construction meeting,
- Assistance with response to state audits, EPA audits, internal audits,
- Files review during the project (files will be reviewed during SRF periodic inspections,
- Fiscal sustainability plan composing and compilation,
- Change order review and assistance with submittal to SRF,
- Plans and specifications addendum review and assistance with submittal to SRF, and
- Other liaison services with SRF.

Since it isn't possible to accurately define the level of effort and complete scope of miscellaneous items, we propose establishing an allowance of \$25,000 for this task and monitoring the expenditures on a monthly basis.

# 3.0 Time of Completion/Schedule

The proposed schedule for the proposed task is as follows:

- Conforming of drawings and specifications This will be completed within one week of receipt of executed contract from the contractor.
- Preparation of record drawings This be completed within 15 days of receipt of record drawing information from the contractor.
- All other tasks will be completed as dictated by the construction progress and construction contract documents.

# 4.0 Compensation and Payment

The work under this contract will be performed for a not to exceed budget of \$432,641. A breakdown of the cost for this amendment is provided in Table 1. The work will be performed on a billing rates basis in accordance with the rates established in Table 2.

# Table 1

# Summary of Budget by Task Franklin SCADA Construction Services Proposal

|                                   | Task No. | G1               | G2         | G3       | G4                                | G5           | G6         | S1               | S2         | S3                       | SRF        |           |
|-----------------------------------|----------|------------------|------------|----------|-----------------------------------|--------------|------------|------------------|------------|--------------------------|------------|-----------|
|                                   |          | General Services |            |          |                                   |              |            | Special Services |            |                          |            |           |
|                                   |          | Conforming       | Project    | Project  | Reviews,<br>Clarifications<br>and | Office Staff | Witnessing |                  | Functional | Preparation of<br>Record | SRF        |           |
| LABOR                             | Rate     | Drawings         | Management | Meetings | Interpretations                   | Visits       |            | Change Mgmt      |            | Drawings                 | Assistance | Totals    |
| Officer                           | \$230    | 0                | 0          | 0        | 0                                 | 0            | 0          | 0                | 0          | 0                        | 0          | 101115    |
| Project Manager                   | \$190    | 3                | 75         | 84       | 61                                | 0            | 0          | 32               | 0          | 4                        | 0          | 259       |
| Senior Technical Specialist       | \$205    | 2                | 23         | 9        | 0                                 | 0            | 0          | 0                | 0          | 0                        | 0          | 34        |
| Technical Specialist              | \$185    | 2                | 2          | 25       | 113                               | 0            | 0          | 36               | 0          | 0                        | 0          | 178       |
| Senior Engineer/Scientist         | \$160    | 2                | 2          | 177      | 109                               | 80           | 60         | 40               | 60         | 0                        | 0          | 530       |
| Engineer/Scientist                | \$130    | 6                | 77         | 50       | 123                               | 0            | 0          | 0                | 0          | 12                       | 0          | 268       |
| Junior Engineer/Scientist         | \$110    | 0                | 0          | 0        | 113                               | 0            | 0          | 0                | 0          | 0                        | 0          | 11.       |
| Senior Designer                   | \$125    | 12               | 0          | 0        | 0                                 | 0            | 0          | 0                | 0          | 38                       | 0          | 50        |
| Designer/Drafter/Technician       | \$105    | 12               | 0          | 0        | 10                                | 0            | 0          | 0                | 0          | 38                       | 0          | 60        |
| Administrative Staff              | \$85     | 7                | 35         | 9        | 0                                 | 0            | 0          | 8                | 0          | 8                        | 0          | 67        |
| TOTAL HOURS                       |          | 46               | 214        | 354      | 528                               | 80           | 60         | 116              | 60         | 100                      | 0          | 1558      |
| TOTAL DOLLARS                     |          | \$5,805          | \$32,681   | \$58,015 | \$79,285                          | \$12,800     | 9600       | \$19,820         | \$9,600    | \$11,740                 | \$0        | \$239,340 |
| OTHER DIRECT COSTS<br>Car Mileage | \$0.58   | \$0              | \$0        | \$1,368  | \$0                               | \$1,920      | \$90       | \$0              | \$90       | \$0                      | \$0        | \$3,468   |
| Rental Car                        | \$70     | \$0              | \$0        | \$675    | \$0                               | \$300        | \$450      | \$0              | \$450      | \$0                      | \$0        | \$1,875   |
| Air Fare                          | \$700    | \$0              | \$0        | \$5,600  | \$0                               | \$2,800      | \$2,100    | \$0              | \$2,100    | \$0                      | \$0        | \$12,600  |
| Meals                             | \$44     | \$0              | \$0        | \$900    | \$0                               | \$360        | \$270      | \$0              | \$270      | \$0                      | \$0        | \$1,80    |
| Hotel                             | \$127    | \$0              | \$0        | \$1,430  | \$0                               | \$1,040      | \$780      | \$0              | \$390      | \$0                      | \$0        | \$3,64    |
| Apartment Rental                  | \$1,300  | \$0              | \$0        | \$0      | \$0                               | \$0          | \$0        | \$0              | \$0        | \$0                      | \$0        | \$        |
| Telephone                         |          | \$0              | \$0        | \$0      | \$0                               | \$0          | \$0        | \$0              | \$0        | \$0                      | \$0        | \$        |
| Document Reproduction             |          | \$800            | \$970      | \$560    | \$1,440                           | \$540        | \$100      | \$180            | \$200      | \$800                    | \$0        | \$5,59    |
| Shipping                          |          | \$150            | \$460      | \$0      | \$840                             | \$64         | \$0        | \$0              | \$10       | \$350                    | \$0        | \$1,874   |
| Miscellaneous Equipment/Supplies  |          | \$0              | \$0        | \$0      | \$0                               | \$0          | \$0        | \$0              | \$0        | \$0                      | \$0        | \$        |
| TOTAL ODCs Plus 0% Markup         |          | \$950            | \$1,430    | \$10,533 | \$2,280                           | \$7,024      | \$3,790    | \$180            | \$3,510    | \$1,150                  | \$0        | \$30,84   |
| OUTSIDE PROFESSIONALS             |          |                  |            |          |                                   |              |            |                  |            |                          |            |           |
| Structural - Special Inspection   | 15%      | \$0              | \$0        | \$0      | \$0                               | \$0          | \$0        | \$0              | \$0        | \$0                      | \$0        | \$        |
| Civil Infrastructure Associates   |          | \$0              | \$0        | \$0      | \$0                               | \$0          | \$0        | \$0              | \$0        | \$0                      | \$45,000   | \$45,00   |
| Scheduling Subconsultant          |          | \$0              | \$0        | \$0      | \$0                               | \$0          | \$0        | \$0              | \$0        | \$0                      | \$0        | \$        |
| Geotechnical - Materials Testing  |          | \$0              | \$0        | \$0      | \$0                               | \$0          | \$0        | \$0              | \$0        | \$0                      | \$0        | \$        |
| Site Observation Sub              |          | \$0              | \$480      | \$7,040  | \$4,200                           | \$36,560     | \$0        | \$0              | \$0        | \$0                      | \$54,400   | \$102,68  |
| Subtotal OPs                      |          | \$0              | \$480      | \$7,040  | \$4,200                           | \$36,560     | \$0        | \$0              | \$0        | \$0                      | \$99,400   | \$147,680 |
| Subtotals with Ten Percent Markup | 10%      | \$0              | \$528      | \$7,744  | \$4,620                           | \$40,216     | \$0        | \$0              | \$0        | \$0                      | \$109,340  | \$162,448 |
| TOTALS                            |          | \$6,755          | \$34,639   | \$76,292 | \$86,185                          | \$60,040     | \$13,390   | \$20,000         | \$13,110   | \$12,890                 | \$109,340  | \$432,641 |

#### Table 2

#### **Billing Rates**

| Labor Category   | Rate  |  |  |  |  |  |
|--|-------|--|--|--|--|--|
| Officer  | \$230 |  |  |  |  |  |
| Project Manager  | \$190 |  |  |  |  |  |
| Senior Technical Specialist  | \$205 |  |  |  |  |  |
| Technical Specialist   | \$185 |  |  |  |  |  |
| Senior Engineer/Scientist  | \$160 |  |  |  |  |  |
| Engineer/Scientist   | \$130 |  |  |  |  |  |
| Junior Engineer/Scientist  | \$110 |  |  |  |  |  |
| Senior Designer  | \$125 |  |  |  |  |  |
| Designer/Drafter/Technician  | \$105 |  |  |  |  |  |
| Administrative Staff   | \$85  |  |  |  |  |  |
|  |       |  |  |  |  |  |
| Notes:   |       |  |  |  |  |  |
| 1. The onsite construction specialist will invoice to CDM Smith at \$85 per hour |       |  |  |  |  |  |
| 2. Outside professionals will be marked up by ten percent                        |       |  |  |  |  |  |
| 3. Other direct costs will be invoiced at actual cost                            |       |  |  |  |  |  |