DESIGN PROFESSIONAL SERVICES AGREEMENT PROJECT NO. 81000819 / CONTRACT NO. 1443 WASTEWATER SCADA WATER SERVICES DEPARTMENT

This design professional services agreement is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation ("City"), and Black & Veatch Corporation ("Design Professional"). City and Design Professional agree as follows:

PART I

SPECIAL TERMS AND CONDITIONS

Sec. 1. Project description.

A. The services to be provided under this Agreement are for the following project (Project) and purpose: Develop an approach that adapts and separates water and wastewater Supervisory Control and Data Acquisition (SCADA) systems while expanding the existing capability to improve operations. It is also the basis for additional automation schemes. The Design Professional will develop the Conceptual Design Report, preliminary and final construction bidding documents, Construction Phase and Resident Phase Services, and follow-up auditing. The project consists of the central platform and communications backbone for up to 5 sites. The Engineer may be requested to provide additional design and construction phases related to further expansion.

Sec. 2. Services to be performed by Design Professional. Design Professional shall perform the following Scope of Services:

- A. Design Professional shall perform Scope of Services listed on Attachment A.
- B. Submit all documents, including plans, design drawings, specifications, reports, maps, models and renderings in the form requested by City. A list with the specific requirements is included in **Attachment B**.
- C. City shall have the right to inspect and review the work being done and to consult with Design Professional at any reasonable time. Conferences will be held at the request of City or Design Professional.
- D. If it is determined to be in the best interest of the work, Design Professional shall replace the project manager or any other employee of the Design Professional, Subcontractors, Suppliers or other persons or organizations performing or furnishing any of the work on the project upon written request by the City.
- Sec. 3. Term. Unless sooner terminated as provided herein, and unless specific dates for providing services are identified in this Agreement, this Agreement shall remain in force for a period which may reasonably be required for the completion of the services to be provided by Design Professional under the Scope of Services. Work under this agreement shall begin upon written Notice to Proceed.

Sec. 4. Compensation and Reimbursables.

- A. The maximum amount that City shall pay Design Professional under this Agreement is \$1,370,672.00, as follows:
 - 1. \$842,258.00 for the services performed by Design Professional under this Agreement.
 - 2. For Design Professional services described in the Scope of Services, City shall pay Design Professional compensation amounting to actual salary of personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and schedule of position classifications and the salary range for each position is included as a part of Attachment C.
 - 3. Actual reasonable expenses incurred by Design Professional directly related to Design Professional's performance under this Agreement, to include only the following, in an amount not to exceed \$293,414.00. The following are the reimbursable expenses that City has approved: Subcontractor direct costs paid by Design Professional, outside reproduction of final deliverables, local transportation in the project area, and non-local travel expenses for the cyber security specialist. Subcontractors office personnel labor costs shall be included in the unit prices for field investigation work.
 - 4. Design Professionals' maximum amount shown in Sec. 4, Compensation and Reimbursables, includes a total allowance amount of Two Hundred Thirty-Five Thousand Dollars (\$235,000.00) for Optional Services not yet authorized by the City that may be required throughout the course of work. This allowance amount will not be utilized by Design Professional unless specifically authorized in writing by the City to perform Optional Services. Optional Services will not be performed, nor is the Design Professional approved to utilize any allowance monies unless the City provides written authorization to Design Professional that includes the scope of work for each optional task to be performed and a maximum billing limit for compensation that has been mutually agreed upon.
 - 5. Compensation for all Optional Services will be based on the actual salary of office personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and schedule of position classifications and the salary range for each position is included as a part of Attachment C. The amount billed for each Optional Service shall not exceed the amount established for it without further written authorization. Additional amounts for Optional Services may be authorized, if deemed by CITY to be necessary, as the work progresses.
 - 6. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.

B. Method of Payment.

Design Professional shall invoice City monthly setting forth the total effort expended on an hourly basis and all actual reasonable expenses incurred and allowed under this Agreement. Each invoice shall provide the subtotal of the hours and costs invoiced by the Design Professional for each Task Series identified in Attachment A and a sum total of hours and costs for each invoice period. Design Professional shall submit a copy of invoices received

from its subcontractors with labor hours per person, salary rate per person, effective salary multiplier, and direct expenses for each Task Series. Design Professional shall also submit monthly project status report with each monthly invoice containing the information defined in Attachment A. City, upon approving the invoice, shall remit payment.

C. Condition Precedent to Payment.

- 1. It shall be a condition precedent to payment of any invoice from Design Professional that Design Professional is in compliance with, and not in breach or default of, all terms, covenants and conditions of this Agreement. If damages are sustained by City as a result of breach or default by Design Professional, City may withhold payment(s) to Design Professional for the purpose of offset until such time as the exact amount of damages due City from Design Professional may be determined.
- 2. No request for payment will be processed unless the request is in proper form, correctly computed, accompanied by a monthly status report, and is approved as payable under Agreement. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.
- 3. No request for payment will be processed unless it is accompanied by a copy of the most recent 00485.01 M/WBE Monthly Utilization Report submitted to the City's Human Relations Department.

Sec. 5. Notices. All notices required by this Agreement shall be in writing and sent to the following:

City:

Water Services Department

Terry Leeds, Director 4800 E. 63rd Street Kansas City, MO 64130 Phone: (816) 513-0528 Facsimile: (816) 513-0288

E-mail address: terry.leeds@kcmo.org

Design Professional:

Black & Veatch Corporation

Contact: Patrick O'Neill, Client Director

Address: 8400 Ward Parkway, Kansas City, MO 64114

Phone: (913) 458-4308

E-mail address: oneillpa@bv.com

All notices are effective (a) when delivered in person, (b) upon confirmation of receipt when transmitted by facsimile transmission or by electronic mail, (c) upon receipt after dispatch by registered or certified mail, postage prepaid, (d) on the next business day if transmitted by overnight courier (with confirmation of delivery), or (e) three (3) business days after the date of mailing, whichever is earlier.

Sec. 6. Merger. This Agreement consists of Part I, Special Terms and Conditions and any Attachments and any documents incorporated by reference; and Part II, Standard Terms and Conditions. This Agreement, including any Attachments and incorporated documents, constitutes the entire agreement between City and Design Professional with respect to this subject matter.

Design Prof. Service Agreement Part I 102014

Sec. 7. Conflict Between Agreement Parts. In the event of any conflict or ambiguity between the Special Terms and Conditions of Part I and the Standard Terms and Conditions of Part II of this Agreement, Part I will be controlling.

Sec. 8. Responsibilities of City. City shall:

- A. Make available to Design Professional all existing records, maps, plans, and other data possessed by City when such are necessary, advisable, or helpful to Design Professional in the completion of the work under this Agreement.
- B. Designate in writing a person to act as City representative with respect to the work to be performed under this Agreement; with such person having complete authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to the materials, equipment elements and systems pertinent to the work covered by this Agreement, and the responsibility to be available to inspect and review the work and to consult with Design Professional at any reasonable time.
- C. Provide standard City forms as required.
- D. Provide City Licensed Geographical Information System Data set forth in Attachment D, incorporated into this Agreement.

Sec. 9. Attachments to Part I. The following documents are attachments to Part I of this Agreement and are attached hereto and incorporated herein by this reference:

Attachment A - Scope of Services

Attachment B – Electronic Format Requirements

Attachment C - Engineering Fee Summary and Schedule of Position Classifications

Attachment D - Licensed Geographical Information System Data

Attachment E - HRD Documents

- 1. 00450 HRD Form 08: Contractor Utilization Plan/Request for Waiver
- 2. 00450.01: Letter of Intent to Subcontract
- 3. 00460 HRD Form 10: Timetable for MBE/WBE Utilization
- 4. 00470 HRD Form 11: Request for Modification or Substitution
- 5. 01290.14: Contractor Affidavit for Final Payment
- 6. 01290.15: Subcontractor Affidavit for Final Payment

Attachment F - Employee Eligibility Verification Affidavit

Attachment G – Non-Construction Subcontractors Listing

Sec. 10. Subcontracting. Design Professional agrees that it will only subcontract with the subcontractor(s) it has listed on the "Subcontractor List Non-Construction", contained in Attachment G.

Sec. 11. Minority and Women's Business Enterprises. City is committed to ensuring that minority and women's business enterprises (M/WBE) participate to the maximum extent possible in the performance of City contracts. If M/WBE participation goals have been set for this Agreement, Design Professional agrees to comply with all requirements of City's M/WBE Program as enacted in City's Code Sections 3-421 through 3-469 and as hereinafter amended. Design Professional shall make its Design Prof. Service Agreement Part I 102014

good faith efforts in carrying out this policy by implementing its contractor utilization plan, which is attached as Attachment E. If Design Professional fails to achieve the M/WBE goals stated in its contractor utilization plan, as amended, the City will sustain damages, the exact extent of which would be difficult or impossible to ascertain or estimate at the time of execution of this contract. Therefore, in order to liquidate those damages, the monetary difference between the amount of the M/WBE goals set forth in this contractor utilization plan, as amended, and the amount actually paid to qualified MBEs and WBEs for performing a commercially useful function will be deducted from the Design Professional's payments as liquidated damages. In determining the amount actually paid to qualified MBEs and WBEs, no credit will be given for the portion of participation that was not approved by the Director of City's Human Relations Division, unless the Director determines that the Design Professional acted in good faith. No deduction for liquidated damages will be made when, for reasons beyond the control of the Design Professional, the M/WBE participation stated in the Contractor Utilization Plan, as amended and approved by the Director, is not met.

Sec. 12. Professional services certification. Code Section 2-83, prohibiting Agreements with certain attorneys, architects, engineers and other professionals thereunder, shall apply to this Agreement. Design Professional certifies that it is not an architect, engineer, or other professional, exclusive of medical doctors or appraisers, who at the time of the issuance of the Agreement, serves as an expert witness for any litigation against City, and that it will not serve as an expert witness for any litigation against City during the term of this Agreement.

Sec. 13. Effectiveness; Date. This Agreement will become effective when the City's Director of Finance has signed it. The date this Agreement is signed by the City's Director of Finance will be deemed the date of this Agreement.

Each party is signing this Agreement on the date stated opposite that party's signature.

THIS AGREEMENT CONTAINS INDEMNIFICATION PROVISIONS

DESIGN PROFESSIONAL

	I hereby certify that I have authority to execute
	this document on behalf of Design Professional
Date: 6/7/2018	By: Date Of bey
	Name: Patrick O'Neill
	Title: Associate Vice President
0//12	KANSAS CITY, MISSOURI
Date: 6/78/18	By:
	Name: Terry Leeds
	Title: Director of Water Services
Approved as to form:	
$\mathcal{U}_{\mathcal{A}}$	
Assistant City Attorney	
** *	4 4 4 4 40 40 4 1 1 1 1

I hereby certify that there is a balance, otherwise unencumbered, to the credit of the appropriation to which the foregoing expenditure is to be charged, and a cash balance, otherwise unencumbered, in the Treasury, to the credit of the fund from which payment is to be made, each sufficient to meet the obligation hereby incurred.

For Director of Finance Date

PART II

STANDARD TERMS AND CONDITIONS

Sec. 1. General Indemnification.

- A. For purposes of this Section 1 only, the following terms shall have the meanings listed:
- 1. Claims means all claims, damages, liability, losses, costs and expenses, court costs and reasonable attorneys' fees, including attorneys' fees incurred by the City in the enforcement of this indemnity obligation.
- 2. **Design Professional's Agents** means Design Professional's officers, employees, subcontractors, subconsultants, successors, assigns, invitees, and other agents.
- 3. Clty means City, its Program Manager/Construction Advisor and any of their agents, officials, officers and employees.
- B. Design Professional's obligations under this Section with respect to indemnification for acts or omissions, including negligence, of City shall be limited to the coverage and limits of General (not Professional) Liability insurance that Design Professional is required to procure and maintain under this Agreement. Design Professional affirms that it has had the opportunity to recover the costs of the liability insurance required in this Agreement in its contract price.
- C. Design Professional shall defend, indemnify and hold harmless City from and against all Claims arising out of or resulting from all acts or omissions in connection with this Agreement caused in whole or in part by Design Professional or Design Professional's Agents, regardless of whether or not caused in part by an act or omission, including negligence, of City. Design Professional is not obligated under this Section to indemnify City for the sole negligence of City.

- D. Nothing in this section shall apply to indemnification for professional negligence which is specified in a separate provision of this Agreement.
- E. In no event shall the language in this section constitute or be construed as a waiver or limitation of the City's rights or defenses with regard to sovereign immunity, governmental immunity, or other official immunities and protections as provided by the federal and state constitutions or by law.

Sec. 2. Indemnification for Professional Negligence.

Design Professional shall indemnify, and hold harmless City and any of its agencies. officials, officers, or employees from and against all claims, damages, liability, losses, costs, and expenses, including court costs and reasonable attorneys' fees, to the extent caused by any negligent acts, errors, or omissions of the Design Professional, its officers, employees, subconsultants, subcontractors, successors, assigns, invitees and other agents, in the performance of professional services under this Agreement. Design Professional is not obligated under this Section to indemnify City for the negligent acts of City or any of its agencies. officials, officers, or employees.

Sec 3. Insurance.

A. Design Professional shall procure and maintain in effect throughout the duration of this Agreement, and for a period of two (2) years thereafter, insurance coverage not less than the types and amounts specified below. In the event that additional insurance, not specified herein, is required during the term of this Agreement, Design Professional shall supply such insurance at City's cost. Policies containing a Self-Insured Retention are unacceptable to City unless City approves in writing the Design Professional Self-Insured Retention.

- 1. Commercial General Liability Insurance: with limits of \$1,000,000 per occurrence and \$2,000,000 aggregate, written on an "occurrence" basis. The policy shall be written or endorsed to include the following provisions:
- a. Severability of Interests Coverage applying to Additional Insureds
- b. Per Project Aggregate Liability Limit or, where not available, the aggregate limit shall be \$2,000,000
- c. No Contractual Liability Limitation Endorsement
- d. Additional Insured Endorsement, ISO form CG20 10, or its equivalent
- 2. Worker's Compensation Insurance: as required by statute, Including Employers Liability with limits of:

Workers Compensation Statutory Employers Liability

\$100,000 accident with limits of: \$500,000 disease-policy limit \$100,000 disease-each employee

- 3. Commercial Automobile Liability Insurance: with a limit of \$1,000,000 written on an "occurrence" basis, covering owned, hired, and non-owned automobiles. If the Design Professional owns vehicles, coverage shall be provided on an "any auto" basis. If the Design Professional does not own any vehicles, coverage shall be provided on a "hired autos" and "nonowned autos" basis. The insurance will be written on a Commercial Business Auto form, or an acceptable equivalent. and will protect against claims arising out of the operation of motor vehicles, as to acts done in connection with the Agreement, by Design Professional.
- 4. Professional Liability Insurance with limits Per Claim/Annual Aggregate of \$1,000,000.

- B. The Commercial General Liability Insurance specified above shall provide that City and its agencies, officials, officers, and employees, while acting within the scope of their authority, will be named as additional insureds for the services performed under this Agreement. Design Professional shall provide to City at execution of this Agreement a certificate of insurance showing all required endorsements and additional insureds. The certificates of insurance will contain a provision stating that should any of the policies described in the certificate be cancelled before the expiration date thereof. notice will be delivered in accordance with the policy provisions.
- C. The Commercial General Liability and Commercial Automobile Liability insurance specified above shall contain a cross-liability or severability of interest clause or endorsement and shall contain a provision or endorsement that the costs of providing the insureds a defense and appeal, including attorneys' fees, as insureds, shall be supplementary and shall not be included as part of the policy limits but shall remain the insurer's responsibility. Insurance covering the specified additional insureds shall be primary insurance, and all other insurance carried by the additional insureds shall be excess insurance. With respect to Commercial Automobile Liability, Commercial General Liability, and any Umbrella Liability Insurance, Design Professional shall require its insurance carrier(s) to waive all rights of subrogation against City and its agencies. officials, officers, and employees.
- D. All insurance coverage must be written by companies that have an A.M. Best's rating of "A-V" or better, and are licensed or approved by the State of Missouri to do business in Missouri.
- E. Design Professional's failure to maintain the required insurance coverage will not relieve Contractor of its contractual obligation to indemnify the City pursuant to Sections 1 and 2. If the coverage afforded is cancelled

or changed or its renewal is refused, Design Professional shall give at least 30 days prior written notice to City. In the event of Design Professional's failure to maintain the required insurance in effect, City may order Design Professional to immediately stop work, and upon ten (10) days notice and an opportunity to cure, may pursue its remedies for breach of this Agreement as provided for herein and by law.

F. In no event shall the language in this Section constitute or be construed as a waiver or limitation of the City's rights or defenses with regard to sovereign immunity, governmental immunity, or other official immunities and protections as provided by the federal and state constitutions or by law.

Sec. 4. Design Standards and Endorsement.

A. Except as otherwise directed in writing by City, in the performance of services under this Agreement, Design Professional shall comply with all design standards required by federal, state, local laws or codes including but not limited to all applicable provisions of:

- Title II of the 2010 ADA Standards for Accessible Design as amended from time to time;
- the Clean Air Act(42 U.S.C. 7401 et seq. and the Clean Water Act (33 U.S.C. 1251 et seq.
- the Missouri Clean Water Law (Chapter 644 RSMo) together with any accompanying regulation(s) contained in the Missouri Code of State Regulations (CSR Title 10), as well as any implementing permits; and
- 4. Kansas City Code Sec. 3-71. LEED gold standard.

Design Professional shall notify and explain to City any applicable exceptions under these acts.

B. Design Professional shall use all design standards recognized and used in the industry in the performance of services

under this agreement. Design Professional shall endorse all plans and specifications, or estimates, and engineering data furnished under this Agreement if prepared by Design Professional. All subcontractors as appropriate shall endorse their respective plans and specifications, or estimates, and engineering data furnished for the Plan or Project.

C. Design Professional shall monitor quality assurance for their design services and shall revise the design and plans at their own expense in case of error or oversight in design by Design Professional or any subcontractor to Design Professional.

Sec. 5. Copyright and Ownership of Documents.

A. Design Professional shall on its behalf and on behalf of its employees and agents, promptly communicate and disclose to City all computer programs, documentation, software and other copyrightable works and all discoveries, improvements and inventions conceived, reduced to practice or made by Design Professionals or its agents, whether solely or jointly with others, during the term of this Agreement resulting from or related to any work Design Professional or its agents may do on behalf of City or at its request. All inventions and copyrightable works that Design Professional is obligated to disclose shall be and remain entirely the property of City. It is agreed that all inventions and copyrightable works are works made for hire and shall be the exclusive property of City. Design Professional hereby assigns to City any rights it may have in such copyrightable works. Design Professional shall cooperate with City in obtaining any copyrights or patents.

B. Original documents, including plans, specifications, reports, maps, models and renderings, including electronic media, prepared or obtained under the terms of this Agreement shall be delivered to and become the property of City and basic survey notes, diarles, sketches, charts, computations and

other data shall be made available upon request by City without restriction or limitation of their use. There shall be no legal limitations upon City in the subsequent use of the documents or ideas developed in the documents. In the event that any of the documents are reused by City, the nameplates or other identification to the Design Professional will be removed and the Design Professional will be released of subsequent liabilities. In the event that any of the design drawings are reused or modified by City, the name plates or other identification to the Design Professional will be removed.

Sec. 6. Governing Law.

This Contract shall be construed and governed in accordance with the laws of the State of Missouri without giving effect to Missouri's choice of law provisions. The City and Design Professional: (1) submit to the jurisdiction of the state and federal courts located in Jackson County, Missouri; (2) waive any and all objections to jurisdiction and venue; and (3) will not raise forum non conveniens as an objection to the location of any litigation.

Sec. 7. Compliance with Laws.

Design Professional shall comply with all federal, state and local laws, ordinances and regulations applicable to the work and this Agreement.

Sec. 8. Termination for Convenience.

A. City may, at any time upon ten (10) days notice to Design Professional specifying the effective date of termination, terminate this Agreement, in whole or in part. If this Agreement is terminated by City, City shall be liable only for payment for services rendered before the effective date of termination. Design Professional shall prepare an accounting of the services performed and money spent by Design Professional up to the effective date of termination and shall return to City any

remaining sums within thirty (30) days of such date.

- B. If this Agreement is terminated prior to Design Professional's completion of services, all work or materials prepared or obtained by Design Professional pursuant to this Agreement shall become City's property.
- C. If this Agreement is terminated prior to Design Professional's completion of the services to be performed hereunder, Design Professional shall return to City and sums pald in advance by City for services that would otherwise have had to be rendered between the effective date of termination and the original ending date of the Agreement. Design Professional shall prepare an accounting of the services performed and money spent by Design Professional up to the effective date of termination and shall return to City any remaining sums within thirty (30) days of such date.

Sec. 9. Default and Remedies.

If Design Professional shall be in default or breach of any provision of this Agreement, City may terminate this Agreement, suspend City's performance, withhold payment or invoke any other legal or equitable remedy after giving Design Professional notice and opportunity to correct such default or breach.

Sec. 10. Walver.

Waiver by City of any term, covenant, or condition hereof shall not operate as a waiver of any subsequent breach of the same or of any term, covenant or condition. No term, covenant, or condition of this Agreement can be waived except by written consent of City, and forbearance or indulgence by City in any regard whatsoever shall not constitute a waiver of same to be performed by Design Professional to which the same may apply and, until complete performance by Design Professional of the term, covenant or condition, City shall be entitled to Invoke any remedy available to it under this Agreement

or by law despite any such forbearance or indulgence.

Sec. 11. Acceptance.

No payment made under this Agreement shall be proof of satisfactory performance of the Agreement, either wholly or in part, and no payment shall be construed as acceptance of deficient or unsatisfactory work.

Sec. 12. Modification.

Unless stated otherwise in this Agreement, no provision of this Agreement may be waived, modified or amended except in writing signed by City.

Sec. 13. Headings; Construction of Agreement.

The headings of each section of this Agreement are for reference only. Unless the context of this Agreement clearly requires otherwise, all terms and words used herein, regardless of the number and gender in which used, shall be construed to include any other number, singular or plural, or any other gender, masculine, feminine or neuter, the same as if such words had been fully and properly written in that number or gender.

Sec. 14. Severability of Provisions.

Except as specifically provided in this Agreement, all of the provisions of this Agreement shall be severable. In the event that any provision of this Agreement is found by a court of competent jurisdiction to be unconstitutional or unlawful, the remaining provisions of this Agreement shall be valid unless the court finds that the valid provisions of this Agreement are so essentially and inseparably connected with and so dependent upon the invalid provisions(s) that it cannot be presumed that the parties to this Agreement could have included the valid provisions without the invalid provision(s); or unless the court finds that the valid provisions, standing alone, are incapable of

being performed in accordance with the intentions of the parties.

Sec. 15. Records.

A. For purposes of this section:

- 1. "City" shall mean the City Auditor, the City's Internal Auditor, the City's Director of Human Relations, the City Manager, the City department administering this Contract and their delegates and agents.
- 2. "Record" shall mean any document, book, paper, photograph, map, sound recordings or other material, regardless of physical form or characteristics, made or received in connection with this Contract and all Contract amendments and renewals.
- B. Design Professional shall maintain and retain all Record for a term of five (5) years that shall begin after the expiration or termination of this Contract and all Contract amendments. City shall have a right to examine or audit all Records and Design Professional shall provide access to City of all Records upon ten (10) days written notice from the City.
- C. The books, documents and records of Design Professional in connection with this Agreement shall be made available to the City Auditor, the City's Internal Auditor, the City's Director of Human Relations and the City department administering this Agreement within ten (10) days after the written request is made.

Sec. 16. Affirmative Action.

If this Contract exceeds \$300,000.00 and Design Professional employs fifty (50) or more people, Design Professional shall comply with City's Affirmative Action requirements in accordance with the provisions of Chapter 3 of City's Code, the rules and regulations relating to those sections, and any additions or amendments thereto; in executing any Contract subject to

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said provisions. Design Professional warrants that it has an affirmative action program in place and will maintain the affirmation action program in place for the duration of the Design Professional shall not Contract. discriminate against any employee or applicant for employment because of race, color, sex, religion, national origin or disability. ancestry. sexual orientation. gender identity or age in a manner prohibited by Chapter 3 of City's Code. Professional shall:

- Submit, in print or electronic format, a copy of Design Professional's current certificate of compliance to the City's Human Relations Department (HRD) prior to receiving the first payment under the Contract, unless a copy has already been submitted to HRD at any point within the previous two calendar years. If, and only if, Professional does Design not possess a current certification of compliance, Design Professional shall submit, in print or electronic format, a copy of its affirmative action program to HRD prior to receiving the first payment under the Contract, unless a copy has already been submitted to HRD at any point within the previous two calendar years.
- 2. Require any Subcontractor awarded a subcontract exceeding \$300,000.00 to affirm that Subcontractor has an affirmative action program in place and will maintain the affirmative action program in place for the duration of the subcontract.
- 3. Obtain from any Subcontractor awarded a subcontract exceeding \$300,000.00 a copy of the Subcontractor's current certificate of compliance and tender a copy of the same, in print or electronic format, to HRD within thirty (30) days from the date the subcontract is executed. If, and only if, Subcontractor does not possess a current certificate of compliance, Design Professional shall obtain a copy of the Subcontractor's affirmative action program and tender

a copy of the same, in print or electronic format, to HRD within thirty (30) days from the date the subcontract is executed.

City has the right to take action as directed by City's Human Relations Department to enforce this provision. If Design Professional falls, refuses or neglects to comply with the provisions of Chapter 3 of City's Code, then such failure shall be deemed a total breach of this Contract and this Contract may be terminated, canceled or suspended, in whole or in part, and Design Professional may be declared ineligible for any further contracts funded by City for a period of one (1) year. This is a material term of this Contract.

Sec. 17. Tax Compliance.

Design Professional shall provide proof of compliance with the City's tax ordinances administered by the City's commissioner of revenue as a precondition to the City making the first payment under this Agreement or any Agreement renewal when the total Agreement amount exceeds \$150,000.00. If Design Professional performs work on an Agreement that is for a term longer than one year, the Design Professional also shall submit to the city proof of compliance with the City's tax ordinances administered by the City's commissioner of revenue as a condition precedent to the city making final payment under the Agreement.

Sec. 18. Assignability and Subcontracting.

(a) Assignability. Design Professional shall not assign or transfer any part or all of Design Professional's obligation or interest in this Contract without prior written approval of City. If Design Professional shall assign or transfer any of its obligations or interests under this Contract without the City's prior written approval, it shall constitute a material breach of this Contract. This provision shall not prohibit Design Professional from

subcontracting as otherwise provided for herein.

(b) Subcontracting. Design Professional shall not subcontract any part or all of Design Professional's obligations or interests in this Contract unless the subcontractor has been identified in a format required by City. If Design Professional shall subcontract any part of Design Professional's obligations or interests under this Contract without having identified the subcontractor, it shall constitute a material breach of this Contract. The utilization of subcontractors shall not relieve Design Professional of any of its responsibilities under the Contract, and Design Professional shall remain responsible to City for the negligent acts, errors. omissions or neglect of any subcontractor and of such subcontractor's officers, agents and employees. City shall have the right to reject, at any point during the term of this Contract, any subcontractor identified by Design Professional, and to require that any subcontractor cease working under this Contract. City's right shall be exercisable in its sole and subjective discretion. City shall not be obligated to pay or be liable for payment of any monies which may be due to any subcontractor. Design Professional shall include in any subcontract a requirement that the subcontractor comply with all requirements of this Contract in performing Design Professional's services hereunder.

Sec. 19. Conflicts of Interest.

Design Professional certifies that no officer or employee of City has, or will have, a direct or indirect financial or personal interest in this Agreement, and that no officer or employee of City, or member of such officer's or employee's immediate family, either has negotiated, or has or will have an arrangement, concerning employment to perform services on behalf of Design Professional in this Agreement.

Sec. 20. Conflict of Interest - Certification.

Design Professional certifies that Design Professional is not an expert witness for any party in litigation against the City at the time of the issuance of this Contract.

Sec. 21. Buy American Preference.

It is the policy of the city that any manufactured goods or commodities used or supplied in the performance of any city Agreement or any subcontract hereto shall be manufactured or produced in the United States whenever possible.

Sec. 22. Independent Contractor.

Design Professional is an Independent contractor and is not City's agent. Design Professional has no authority to take any action or execute any documents on behalf of City.

Section 23. Employee Eligibility Verification.

If this Contract exceeds five thousand dollars(\$5.000.00), Design Professional shall execute and submit an affidavit, in a form prescribed by City, affirming that Design Professional does not knowlngly employ any person in connection with the contracted services who does not have the legal right or authorization under federal law to work in the United States as defined in 8 U.S. C. § 1324a(h)(3). Design Professional shall attach to the affidavit documentation sufficient to establish Design Professional's enrollment and participation in an electronic verification of work program operated by the United States Department of Homeland Security (E-Verify) or an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, under the Immigration Reform and Control Act of 1986. Design Professional may obtain additional information about E-Verify and enroll at http://www.uscis.gov/e-verify . For those Design Professionals enrolled in E-Verify, the first and last pages of the E-Verify Memorandum of Understanding that Design

Professional will obtain upon successfully enrolling in the program shall constitute sufficient documentation for purposes of complying with this Section. Design Professional shall submit affidavit and attachments to City prior to execution of the contract, or at any point during the term of the Contract if requested by City.

ATTACHMENT A SCOPE OF SERVICES

Owner:

City of Kansas City, Missouri, Water Services Department

Design Professional:

Black & Veatch

WSD Contract No:

1443

WSD Project No:

81000819

A. SCOPE OF SERVICES. The services to be performed by the ENGINEER under this AGREEMENT consist of the Five (5) phases, as stated below. Further, it is understood and agreed that the date of commencement, rate of progress and the time of completion of the work to be done hereunder are essential provisions of this AGREEMENT; and it is further understood and agreed that the work which is the subject of this AGREEMENT shall commence upon execution of this AGREEMENT and receipt of a Notice to Proceed.

Basic services to be provided by ENGINEER under this AGREEMENT for the Project are as follows:

- Phase 0 Conceptual Design and Planning Services
- Phase 1 Preliminary Design
- Phase 2 Final Design, Equipment Procurement, and Bid Phase
- A.1 Conduct Project Administration Services. Design Professional will provide the management functions required to successfully complete all phases of the work, including all project correspondence with the City; Status Reports, consultation with the City's staff; supervision and coordination of services; implementation of a project specific work plan, procedures, and a quality control/quality assurance plan; scheduling and assignment of personnel resources, administration and coordination of subconsultants, continuous monitoring of work progress; and invoicing for the work performed. The Scope of Services and the subtasks discussed below explicitly set forth what ENGINEER will perform and does not implicitly put additional responsibilities or duties upon ENGINEER.

A.2 Project Schedule.

Phase 0 - Concep

- Conceptual Design – 180 calendar days

Phases 1 and 2 - Preliminary Design, Final Design, and Bidding - 360 calendar days

A.3 Cost Estimating. All opinions of probable equipment, implementation, and lifecycle cost developed for the conceptual study, equipment procurement costs, preliminary design construction costs, final design construction costs, and engineer's bid estimates will follow the recommendations of the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinion level of accuracy presented by ENGINEER will be a Class 4 study or feasibility cost opinion in accordance with accepted industry guidelines and as defined by AACE. Since ENGINEER has no control over the cost of labor, material or equipment furnished by others not under contract to ENGINEER, ENGINEER's opinion of probable cost for construction of the work will be made on the basis of experience and qualifications as an ENGINEER. ENGINEER

- does not guarantee or warranty that proposals, bids or actual PROJECT costs will not vary from ENGINEER's opinions of probable cost.
- A.4 <u>Progress Reporting</u>. ENGINEER will prepare monthly invoices, monthly status reports and general correspondence during all phases of the project. Status reports will include an updated schedule, a summary of status of each major task and a summary of the PROJECT financial status. With each invoice, include a table or excel file divided by task for each task member hours and their position.
- A.5 <u>Follow-On Phases.</u> At the discretion of the CITY and after completion of the Project, the DESIGN PROFESSIONAL may be requested to provide additional services related to the Wastewater SCADA.
- B.0 PHASE 0 CONCEPTUAL DESIGN AND STANDARDS. The conceptual design and master planning services of Phase 0 will form the basis for a standardized approach to instrumentation and control and supervisory control and data acquisition (SCADA) system improvements for Kansas City Water Services Department (WSD) Wastewater Facilities including treatment plants, wastewater pump stations, flood pump stations, in-line storage facilities, local monitoring devices, central platform, and communications backbone. This Conceptual Design task will be completed by ENGINEER within one hundred eighty (180) calendar days of a written Notice to Proceed. Concepts will be developed and design decisions will be made for:
 - Centralized SCADA System Platform, Components, and Support
 - Central SCADA System Equipment and Related Component Physical Locations
 - Backbone Connectivity, Implementation, and Long-term Support
 - End Users Definitions and system use requirements
 - Transition of Currently Active Platforms
 - B.0.1 Review System Documentation. ENGINEER will perform a general assessment of available SCADA system documentation, including the existing Wastewater SCADA Master Plans, OCP/Smart Sewer implementation plans, system block diagrams, network block diagrams, communication system block diagrams, SCADA technology overview at up to 60 remote sites (refer to Table 1). ENGINEER will assist WSD in identification of the specific documents to be reviewed. Where existing documents are incomplete or missing, they shall be identified. WSD shall be responsible for assembling all available required data for review by ENGINEER. If the WSD chooses to expand or update the existing SCADA system documentation this work will be completed as supplemental or optional services.
 - **B.0.2** Project Initiation Meeting. Conduct a Project Initiation Meeting with WSD to confirm PROJECT goals and objectives; to review PROJECT schedule and budget commitments; to review facilities; obtain existing system documentation; review advantages and disadvantages of system platform options (Wonderware and Rockwell) and identify criteria for the existing system condition assessment. Criteria will include visual inspection, consideration of component age and remaining useful life, expected duration of vendor support and availability of spare parts, ease of maintenance, expansion capacity and conformance to industry standards/best practices.

As part of the Project Initiation Meeting, discuss Mission Communications remote terminal units (RTUs) as an option for installation at remote sites. Provide discussion regarding advantages and disadvantages of using Mission RTUs versus using Allen Bradley PLCs as the field interface devices.

- ENGINEER will conduct a condition assessment of each facility listed in Table 1 at the end of this scope document and a series of structured interviews with individuals or groups identified at the Project Initiation Meeting and utilize an on-line survey to selected staff. ENGINEER will provide the target audience with a structured questionnaire outlining system functions and features to be considered. Two separate 2-hour interviews will be conducted. Anticipated functional groups include operations, technical support staff, information technology staff, and engineering. ENGINEER will conduct informal interviews with WSD staff to document current security practices, features of the existing system that work well and should be retained or shortcomings that should be addressed while performing the condition assessments. ENGINEER will observe how operators currently interact with existing SCADA system components to identify potential improvements to enhance functionality and ease of use. Findings from the site visits will be documented in technical memorandum (TM) 1.
- **B.0.4** SCADA System Assessment. A TM will be developed for each of the major elements presented below; a total of four (4) TM will be prepared one for each of the elements described.
- **B.0.4.1** TM1 SCADA System Readiness and Vision. This TM will assess the condition of the existing SCADA system and identify functional needs and requirements for the future. Development of the report will be based on on-site field investigations and meetings with staff. Complete the following tasks:
 - A. Using the criteria developed at the Project Initiation Meeting, document the condition and locations of existing SCADA system components including HMI operator workstations, HMI networks, SCADA runtime servers, SCADA historical data collection systems, control networks, PLCs, and RTUs.
 - B. Develop an understanding of the existing radio backbone methodology including the physical locations and issues.
 - C. Study existing process control strategies and adequacy of the existing monitoring and control functions. Consider ways to improve or optimize the level of monitoring and control. Consider existing features that should be retained and shortcomings that should be addressed. Review options for tie between O&M support systems and SCADA.
 - D. Consider current security practices, with respect to National Institute of Standards and Technology (NIST) and Department of Homeland Security (DHS) guidelines. Define data access requirements for other users and systems. Discuss remote and mobile operation requirements.

- E. Discuss existing and possible future physical locations for SCADA equipment, servers, workstations, routers, and switches. Discuss equipment placement as it relates to reliability, operational efficiency, operational functionality, physical security, H2S environmental effects, expandability, network connection options, back-up electrical power sources, server failover and recovery options.
- F. Review functional requirements identified during formal and informal interviews with WSD staff and observations of their interaction with the existing systems. Discuss potential operational, maintenance, IT, business, and strategic needs.
- G. Conduct SCADA Trends Workshop to inform WSD attendees of the latest trends in the industry. Using the information obtained in the workshop and information obtained through staff interviews and meetings, develop SCADA Vision statements for application to all future SCADA planning, design, and construction activities.
- H. After the SCADA Trends Workshop, a Wastewater SCADA Chartering Workshop will be held to further detail SCADA system vision, functionality, and capabilities.
- I. ENGINEER will document the findings of the site visits, inventories, interviews, workshops, and documentation review of this task in TM1. A draft copy will be transmitted to the WSD in pdf format for review and comment. ENGINEER will revise the draft memorandum incorporating ENGINEER's responses to WSD's comments. The final memorandum will be provided to the WSD electronically in pdf format and will be incorporated into the Conceptual Design Report at the end of this phase.

B.0.4.2 TM2 – Wastewater SCADA System Investigation Results and Recommendations. Complete the following:

- A. Rockwell Automation PlantPax SCADA software platform is being utilized on current in-plant systems already installed at the Blue River Treatment Complex and Fishing River Treatment Plant by other projects. ENGINEER will present comparison between PlantPax and Schneider Electric Wonderware System Platform during the Project Initiation meeting. WSD will make a choice for one package moving forward on the project. ENGINEER will coordinate with WSD/City procurement staff to document and justify SCADA software for sole-source procurement or inclusion in a construction contract. Evaluate project delivery alternatives to reduce cost and increase value and quality of delivered systems. Consider negotiating long-term pricing for SCADA software, SCADA hardware, and communications backbone equipment. Advise methods to develop and use qualification-based selection for programming and system integration services
- B. Evaluate and make recommendations for regarding staffing and/or required support agreements. Discuss staff development needs and provide recommendations. Develop guideline for the preparation of Standard Operating Procedures (SOP's) and require that SOP's be provided as part of the construction phase including server failure, communication failures, history retrieval, and other standard tasks to support WSD staff's use and maintenance.

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- C. Identify and document operational, maintenance, IT, business, and strategic goals. The following bullet list has already been emphasized by Operations. Expand on Operations and the other five areas.
 - o Information should be readily available and be easily understood. Data decimal point rounding conventions should be developed.
 - o It should be reasonably easy to make changes to enhance day-to-day operations.
 - o Alarms should be meaningful to avoid alarm fatigue. Should be able to sort and print alarm reports.
 - The system should not have limitations on handshaking ability with other devices which may have meaningful information needed by Operations.
 - The system should securely support remote access.
 - Only meaningful information should be conveyed back from the field, not all information.
 - The HMI control screens should be functional and intuitive to Operators. It should not be necessary to go through several nested screens to get to the needed information or control.
 - o Process control formulas should be visible and understandable.
 - o Evaluate which functions will be local and remote control and develop security hierarchy.
- D. Develop server implementation including failover, recovery, historian, backup methodologies, remote access, network management, security, information management, and interfaces with asset management and other enterprise systems. Analysis will consider ease of generating automatic and ad hoc reports and access to historical operational data to support optimized plant operations.
- E. Consider existing locations or make recommendations for new locations for equipment and staff. Justify recommendations based on operational reliability, efficiency, operational functionality, physical security, H2S environmental effects, expandability, network connection options, and back-up electrical power sources. A new central control room and new server location(s) are anticipated and may be further developed by optional services for construction if suitable existing locations are not identified by the Engineer and City.
- F. Evaluate alternatives to support remote and mobile operations. Analysis will consider and address cyber security issues related to means and methods to isolate the SCADA system from the internet or other business networks.
- G. Consider, evaluate, and discuss communication system alternatives for connectivity between the in-line storage and real time control systems as a uniquely different requirement verses the monitoring only of an automated process such as a small lift station.
- H. Coordinate SCADA planning considerations with Smart Sewer to ensure Smart Sewer recommendations can be implemented in SCADA system and that data can be shared between SCADA and the Smart Sewer program.

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- I. Assess backbone communications needs and recommend improvements including migration from serial radios and phone line telemetry to Ethernet, utilization of cell phone technology, fiber technology, and/or radios. The use of a combination of technologies should be considered and justified if necessary. Develop a decision tree that may be used in the future for determining how to connect new locations.
- J. Develop systematic approach to separate existing Dynac/Kapsch and Microtel Autodialer sites while minimizing impact on operations and coordinating with on-going capital improvement projects. The plan will define site groupings based on 1) existing systems utilized 2) types of control needs and priorities 3) physical location challenges and types. Identify, quantify, and report on the gap between existing control systems at sites and connecting to the new platform. Provide an itemized CIP cost estimate. Phase 1-3 of this project will connect and configure five locations: Fishing River WWTP; Blue River WWTP; Santa Fe Pump Station; 87th Street Pump Station; and Turkey Creek Pump Station. It is anticipated these initial sites will have some PLC configuration modifications to implement either PlantPax or Wonderware interface requirements. These five sites are included for initial development of the backbone. Additional sites may be added by optional services, follow-on phases, and separate projects. Additionally, investigation of provisions required for auxiliary control rooms at Fishing River WWTP and Birmingham WWTP are included.
- K. Provide and define equipment and life cycle cost in recommendations.
- L. ENGINEER will document the evaluations along with the findings and recommendations of this task in TM2. A draft copy will be transmitted to WSD in pdf format for review and comment. ENGINEER will revise the draft memorandum incorporating ENGINEER's responses to WSD's comments. The final memorandum will be provided to the WSD electronically in pdf format and will be incorporated into the Conceptual Design Report at the end of the phase.
- B.0.4.3 TM3 Wastewater Communications Network Backbone and Platform Support.

 Utilizing information technology (IT) professionals coordinating with operational technology (OT) professionals to complete the following tasks:
 - A. Coordinate all recommendations with B.0.4.1; TM1-SCADA System Readiness Assessment and B.0.4.2; TM2-Wastewater SCADA System Investigation Results and Recommendations.
 - B. Specify the general architecture requirements of the communications backbone in written and diagrammatic form. The architecture shall be incompliance with Control System Industry Standards, IEC 6243, NIST 800-82, and US Department of Homeland Security/Idaho National Laboratory Report INL/EXT-06-11478 providing the highest level of availability, integrity, and confidentiality. The initial project shall have the goal of developing a "network security overlay" that will be the basis of quickly and safely interfacing future sites to the SCADA system platform. The design shall include defense-in-depth strategies.

- C. Recommend IT staffing or support agreement needs. Provide industry standard salary ranges and estimated support agreement scope and costs.
- D. Provide and define equipment and life cycle cost. Tabulate in tables or other format to convey information.
- E. Develop a network ip addressing scheme which will be the basis to connect all future systems. Consider existing addressing modifications on the five sites which will be connected initially.
- F. Provide recommendations for storage and retrieve process data history. Provide long term costs considerations. Include the concepts in the architecture discussion (TM3-B).
- G. The five initial physical site locations will be chosen to implement the failover and recovery platform architecture, central control, and other agreed upon sites. Beyond the five initial locations, develop typical migration recommendations by groupings for all other existing SCADA locations.
- H. Develop a bid specification for equipment, software and installation required to develop the initial building blocks of the platform and backbone.
- I. Define and evaluate the use of City IT, third party fiber carrier, satellite, third party cell phone, reuse or modification of existing radio networks, or other Engineer chosen option of conveying data that would meet the needs of the project. Radio investigations will include up to three different frequency bands. (Note: Availability of licensed frequencies is not guaranteed, therefore, the possibility of unlicensed bands is included in the optional services.) In a workshop, Engineer will work with WSD to develop a decision tree that may be used in the future for how to connect new locations.
- J. ENGINEER will document the discussions along with the findings and recommendations of this task in a TM. A draft copy will be transmitted to WSD in pdf format for review and comment. ENGINEER will revise the draft memorandum incorporating ENGINEER's responses to WSD's comments. The final memorandum will be provided to the WSD electronically in pdf format and will be incorporated into the Conceptual Design Report at the end of the phase.
- B.0.4.4 TM4 Wastewater SCADA System Standards. This TM will reproduce, enhance, and expand on the existing Wastewater Master Plan Instrumentation and Control and SCADA System Standards Document that will be maintained and updated by WSD staff after the Project is completed. The purpose of the document is to provide guidelines to engineers, consultants and system integrators that are designing or implementing additions to the Instrumentation and Control and SCADA System.
 - A. Instrumentation, control and SCADA system standards will include the following, at a minimum:
 - Directory Development User, Groups, Assets, Access Hierarchy

- > SCADA hardware and software standards
- > HMI graphic displays
- Historical data, reporting and trending
- ➤ Alarming (per ISA 18.02 Management of Alarm Systems for the Process Industries)
- > Communication network equipment including decision tree develop in the conceptual design for connecting new sites.
- Security policies and procedures
- > PLC hardware requirements
- > PLC programming requirements
- Instrumentation standards and preferences
- > Consultant and vendor documentation requirements
- > Submittals and testing requirements
- > Standard Operator Procedures format and general requirement for when they are necessary.
- B. ENGINEER will revise and expand upon the existing standards contained in the Wastewater Master Plan. Draft copies will be transmitted to WSD in pdf format for review and comment. ENGINEER will revise the draft memorandum incorporating ENGINEER's responses to WSD comments. The final standards will be provided to the WSD electronically in pdf and Microsoft Word format and will be incorporated into the Conceptual Design Report at the end of the phase and become the new WSD standards document.
- B.0.5 Quality Assurance/Quality Control. The Draft Conceptual Design Report will be reviewed by ENGINEER's technical advisors or senior technical staff for quality assurance/quality control (QA/QC) purposes prior to delivery to the WSD. Results of said reviews will be maintained by ENGINEER in its record files until completion of the Project. The results of the QA/QC review will be incorporated into the Final Conceptual Design Report.
- B.0.6 <u>Draft Report.</u> ENGINEER will document the conclusions of the conceptual study in a report. The technical memoranda developed under Task B.0.4 will form the chapters or sections of the report along with the conceptual cost opinions. An executive summary will be developed and included in the Conceptual Design Report summarizing the findings, recommendations and cost opinions for the respective SCADA system improvements. One (1) electronic pdf copy and up to ten (10) hard copies of the draft report will be provided to the WSD for review and comment.
- B.0.7 <u>Draft Report Review Meeting.</u> Meet with the WSD to review the Draft Conceptual Design Report and obtain WSD's consolidated written comments. WSD and ENGINEER will discuss what elements to include in the subsequent preliminary and detailed design phases as

- limited by available funding and prioritized by WSD's engineering, operations and maintenance staff.
- **B.0.8** Final Report. Resolve questions and incorporate responses to WSD's review comments into the final report. Submit to WSD up to ten (10) copies and one (1) electronic pdf copy of the Final Conceptual Design Report.
- **B.0.9** WSD's Responsibilities. WSD will furnish, as required by the herein described Scope of Services and not at the expense of the ENGINEER, the following items:
 - A. Provide access to all WSD sites for field investigations by ENGINEER.
 - B. Provide assistance by placing at ENGINEER's disposal available information pertinent to the assignment, including previous reports, drawings, specifications, operation and maintenance records and any other data relative thereto. Provide said information within fourteen (14) calendar days of receipt of a written request by ENGINEER. When required non-disclosure agreements will be provided.
 - C. WSD hereby commits to review periods for interim deliverables of no more than fourteen (14) calendar days from receipt of deliverables from ENGINEER. WSD shall provide consolidated written review comments to ENGINEER within that period. The schedule shall be extended one day for each additional day beyond the fourteen (14) calendar day review period.
 - D. WSD's project manager will provide the services of at least one (1) WSD employee who has the right of entry to and knowledge of the existing facilities. Site visits will be required on multiple occasions over the course of the Project.
 - E. WSD's project manager will coordinate the scheduling of meetings between the WSD's management, engineering, information technology, and operations and maintenance groups and the ENGINEER.

B.1 PHASE 1 - PRELIMINARY DESIGN. The Scope of Services for Preliminary Design and the subtasks discussed below explicitly set forth what ENGINEER will perform and does not implicitly put additional responsibilities or duties upon ENGINEER. This Preliminary Design task will be completed by ENGINEER within one hundred twenty (120) calendar days from acceptance of the Conceptual Design Report.

All opinions of probable construction cost developed for Preliminary Design will follow the recommendations of the AACE International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinion level of accuracy presented by ENGINEER will be a Class 3 budget authorization or control cost opinion in accordance with accepted industry guidelines and as defined by AACE. Since ENGINEER has no control over the cost of labor, material or equipment furnished by others not under contract to ENGINEER, ENGINEER's opinion of probable cost for construction of the work will be made on the basis of experience and qualifications as an ENGINEER. ENGINEER does not guarantee or warranty that proposals, bids or actual PROJECT costs will not vary from ENGINEER's opinions of probable cost.

The level of effort for preliminary design has been based on the following assumptions:

- The five sites included in the SCADA upgrades include: Fishing River WWTP; Blue River WWTP; Santa Fe Pump Station; 87th Street Pump Station; and Turkey Creek Pump Station.
 These sites have recently been upgraded and have new instruments and electrical equipment.
- A central control room will be installed at the Blue River WWTP in the location of current
 office space in the Administration Building. An ancillary control room at Fishing River
 WWTP is also included. This will be located in the existing room currently housing SCADA
 workstations. For each location, new walls will be needed to create a server room and
 ventilation improvements will be needed.
- New fiber will be run to each site to provide the communication network. An allowance of 12,500 feet has been included for survey and design of the new fiber. Survey and utility locates will be provided for the new fiber within this 12,500 feet. An allowance of \$80,000 for survey and \$12,500 for utility locates is included in the base contract. Additional survey or utility locates will be provided through Optional Services.
- Design does not include new radio towers at any of the five sites. One of the five sites will be equipped with radio communication to establish the standards.
- Electronic versions of P&ID drawings are available for the five sites that are included in the initial SCADA project such that they don't need to be created from scratch.
- Control narratives will build on existing available control narratives. Control narratives will be provided to ENGINEER in electronic format (Word or pdf). City will obtain all temporary and permanent easements for the new fiber installation.
- City will be responsible for obtaining permits associated with the new fiber installation including but not limited to railroad companies, USACE, and other entities.
- Engineer will not be responsible for design of utility relocations for installation of new fiber.

- Engineer will not be responsible for design of new pavement associated with the installation of new fiber.
- Base scope assumes that programming/configuration of the SCADA system will be done by the construction contractor. ENGINEER can offer programming/configuration services as an optional service.

Preliminary Design shall include:

- **B.1.1** Project Initiation Meeting/Inspections. Conduct a Project Initiation Meeting with WSD to confirm PROJECT goals and objectives; to review PROJECT schedule and budget commitments; to review facilities; and to obtain records, drawings and data. Evaluate existing building space at the plant to determine adequacy of reuse. One (1) day is budgeted for the Project Initiation Meeting and plant inspection.
- **B.1.2** <u>Design Memorandum.</u> Prepare a design memorandum and preliminary drawings as required to establish agreement on the scope, design parameters, performance requirements and PROJECT approach for improvements. Submit electronic .pdf file and five paper (5) copies to WSD for review. The design memorandum will include the following:

Design Criteria (Level 1) Review Document

- Preliminary Communications architecture diagram
- Plant/pump station process and instrumentation diagrams. Since work was recently done
 on the five sites, it is assumed that existing P&IDs can be used as a starting point to show
 any required modifications.
- The plant/pump station process and instrumentation diagrams will be coordinated with WSD Operations to include reporting for support of the O&M dashboard.
- Preliminary input/output lists
- Engineer provided computer generated radio path studies if proposed and third party agreements if proposed.
- Primary equipment layouts and furnishings
- Electrical one-line with consideration of availability and reliability of control power
- Preliminary physical environment control and conditioning measures
- Preliminary lighting and security related to control room modifications and construction
- Number and size of equipment
- Regulatory and code requirements
- Preliminary cost opinions for recommended work
- Preliminary Construction methodology, sequence, and schedule
- **B.1.4** <u>Design Memorandum Review.</u> Meet with the WSD and obtain WSD's comments on the design memorandum and preliminary drawings. Resolve questions and revise documents, if

- necessary and submit ten (10) final copies and one electronic pdf copy of final Design Memorandum to WSD.
- **B.1.5** Quality Assurance/Quality Control. Designate a QA/QC review team to provide QA/QC reviews at the Preliminary Design phase. Team shall consist of a technical advisor or senior technical staff not associated with the day-to-day design work.
- **B.1.7** WSD's Responsibilities. will furnish, as required by the herein described Scope of Services and not at the expense of the ENGINEER, the following items:
 - **B.1.7.1** Provide access to sites for field investigations by ENGINEER.
 - **B.1.7.2** Provide assistance by placing at ENGINEER's disposal available information pertinent to the assignment, including previous reports, drawings, specifications, operation and maintenance records and any other data relative thereto. Provide said information within fourteen (14) calendar days of receipt of a written request by ENGINEER.
 - **B.1.7.3** WSD hereby commits to review periods for interim deliverables of no more than fourteen (14) calendar days from receipt of deliverables from ENGINEER. WSD shall provide consolidated written review comments to ENGINEER within that period. The schedule shall be extended one day for each additional day beyond the fourteen (14) calendar day review period.
 - **B.1.7.4** WSD's project manager will provide the services of at least one (1) WSD employee who has the right of entry to and knowledge of the existing facilities.
 - **B.1.7.5** WSD's project manager will coordinate the scheduling of meetings between the WSD's management, engineering and operations and maintenance groups and the ENGINEER.

B.2 PHASE 2 - FINAL DESIGN. The Scope of Services for Final Design and the subtasks discussed below explicitly set forth what ENGINEER will perform and does not implicitly put additional responsibilities or duties upon ENGINEER. The same assumptions made for Preliminary Design are included in the Final Design Phase. This Final Design task will be completed by ENGINEER within two hundred ten (210) calendar days of WSD's written acceptance of the Final Design Memorandum. The time required for bidding, award and construction contracting is expected to take one hundred fifty (150) calendar days; this is in addition to the time required for Final Design.

All opinions of probable construction cost developed for Final Design will follow the recommendations of the AACE International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinion level of accuracy presented by ENGINEER for the 60-percent deliverable will be a Class 2 control or bid cost opinion in accordance with accepted industry guidelines and as defined by AACE. The cost opinion level of accuracy presented by ENGINEER for the 95-percent and final deliverable will be a Class 1 check estimate or bid cost opinion in accordance with accepted industry guidelines and as defined by AACE. Since ENGINEER has no control over the cost of labor, material or equipment furnished by others not under contract to ENGINEER, ENGINEER's opinion of probable cost for construction of the work will be made on the basis of experience and qualifications as an ENGINEER. ENGINEER does not guarantee or warranty that proposals, bids or actual PROJECT costs will not vary from ENGINEER's opinions of probable cost.

Final Design shall include:

B.2.2 Construction Contract Documents. Prepare detailed drawings, specifications and other Construction Contract Documents for the proposed construction work and for materials and equipment required. The documents shall be prepared for selection of a private construction Contractor on a competitive bid basis. Construction Contract Documents shall be in accordance with WSD standards, detailed specifications and approved preliminary plans developed in Preliminary Design. Construction Contract Documents will be prepared in stages to facilitate review by WSD and provide an orderly progression of the design. Interim deliverables will be as follows:

60-percent (Level 2) Review Documents

- Equipment Physical Locations and Layouts
- P&ID drawings as described in Level 1
- Engineer provided physical radio path study if required
- Complete but not final construction methodology, sequence, and schedule
- Electrical systems one-line including generator if required
- Communications Network architecture diagram including major components
- Site plans required for fiber duct banks, if required
- Draft technical specifications for major equipment

Control narratives required to support SCADA upgrades at each of the five sites.

95-percent (Level 3) Review Documents

- Complete specifications
- Remaining drawings, details and specifications
- Signed and sealed drawings and specifications
- **B.2.3** Construction Cost Opinions. At each design level, prepare an opinion of probable construction cost for the proposed work covered by the Construction Contract Documents.
- **B.2.4** Quality Assurance/Quality Control. Designate a QA/QC review team to provide QA/QC reviews at the Final Design phase. Team shall consist of a technical advisor or senior technical staff not associated with the day-to-day design work.
- B.2.5 <u>Design Reviews.</u> ENGINEER shall provide to WSD for review five (5) sets of Construction Contract Documents for the 60- and 95-percent complete sets of Construction Contract Documents. Drawings will be half size. Meet with WSD at the 60- and 95-percent complete stages to present the design and obtain WSD review comments. Resolve questions and address WSD comments at each level.
- **B.2.6** Permitting and Regulatory Reviews. ENGINEER will provide documentation required for local building permits and three (3) sets (half-size drawings) of Construction Contract Documents. Respond to questions from agencies via telephone or through written correspondence.
- **B.2.7** <u>Final Cost Opinion.</u> Upon completion of the Construction Contract Documents reviews, update the opinion of probable construction cost and revise as required.
- B.2.8 Mylar Submittal/CAD Files. ENGINEER will incorporate review comments concerning the 95-Percent Complete Construction Contract Documents and will furnish one (1) full-size check set printed on bond paper. Upon WSD approval of check set, ENGINEER shall submit signed and sealed full-size mylars for final WSD signatures. The electronic CAD Drawings and reference files will be provided on a single thumb drive to be archived by the City. The construction as-built drawings will supplement or replace these files at the digression of the City.
- **B.2.9** Bidding Services. The Project will be advertised for construction by a general contractor as one bid package for all five sites, control room, and ancillary control room. ENGINEER will provide the following services prior to, during and immediately following Project advertisement.
 - **B.2.9.1** Prepare Advertisement and Bidding Documents. Assist WSD in establishing bid opening dates and prepare Construction Contract Documents for distribution by the WSD for the construction project.

Provide the following numbers of copies to the WSD for copying and reproduction by WSD for distribution to prospective bidders:

> Specifications

1 loose copy

> Final Mylar drawings

1 set

➤ Electronic Drawing and

Specification Files

1 CD containing pdf files

➤ Electronic Proposal

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- **B.2.9.2** Pre-Bid Assistance. Address inquiries prior to the bid opening from contractors, subcontractors, suppliers and public officials. Interpret bidding documents. Prepare up to two (2) addenda to the Construction Contract Documents, as required. Create conformed drawings and specifications prior to award.
- **B.2.9.3** <u>Pre-Bid Conference</u>. Attend and assist WSD, at a date and time selected and a place provided by WSD, with a pre-bid conference to:
 - > Confirm the types of information required by the Construction Contract Documents and the format in which bids are to be presented.
 - > Review special PROJECT requirements and Construction Contract Documents in general.
 - > Receive requests for interpretations that will be issued to plan holders by addendum, if necessary.
- **B.2.9.4** Bid Opening/Final Cost Opinion. Submit a sealed, final opinion of probable construction cost prior to bid opening. Assist WSD in reviewing the bids for completeness and accuracy.
- **B.2.9.5** Pre-Award Services. Consult, advise, and submit information on the responsiveness of the apparent low Bidder, the acceptability of its major subcontractors and the substitution of material and equipment proposed by the apparent low Bidder. Pre-award services will include:
 - ➤ Qualifications of Apparent Successful Bidder. Review and evaluate the qualifications of the apparent successful bidder and the proposed major or specialty subcontractors. The review and evaluation will include financial resources and reference checks on previous experience.
 - ➤ Bid Tabulations. Prepare and distribute a signed and sealed bid tabulation sheet, evaluate bids and make a recommendation to Owner concerning contract award.
- **B.2.11** WSD's Responsibilities. WSD will furnish, as required by the herein described Scope of Services and not at the expense of the ENGINEER, the following items:
 - **B.2.11.1** WSD will handle all copying and reproduction and all aspects of bidding document distribution during PROJECT advertisement.

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- B.2.11.2 WSD will issue all addenda during bidding services.
- **B.2.11.3** WSD hereby commits to review periods for interim deliverables of no more than fourteen (14) calendar days from receipt of deliverables from ENGINEER. WSD shall provide consolidated written review comments to ENGINEER within that period. The schedule shall be extended one day for each additional day beyond the fourteen (14) calendar day review period.
- **B.2.11.4** WSD's project manager will coordinate the scheduling of meetings between WSD's management, engineering and operations and maintenance groups and the ENGINEER.
- B.3 PHASE 3 GENERAL SERVICES DURING CONSTRUCTION. Construction phase services will be added as an amendment to the contract after the design of the project is complete.
- B.4 PHASE 5 Annual Security Audits and Performance Measurement. Three annual performance audits will be included in the Construction Phase Services Amendment.
- **B.5** Optional or Supplemental Services. The following elements are <u>not</u> included in the Project's Scope of Services for Preliminary Design, but can be added as Supplemental or Optional Services by separate written authorization.
- **B.5.1** Development of unavailable Record Documents. ENGINEER will research, document, develop drawings, tables, data bases, or other agreed upon format in the interest of project development.
- **Engineering Services associated with adding SCADA sites.** ENGINEER will specify and provide construction phase services related to SCADA sites beyond the initial five sites included in the base agreement. This work may be also be related to design assistance with new WSD construction projects to aid in the transition between SCADA systems.
- **B.5.3** Control Room or other ancillary site. ENGINEER will design and provide construction phase services related to construction of spaces required to house system components and allow use of the system by operators whether that is a control room, office, or other spaces.
- **B.5.4** Remote Site Visits Up to two remote site visits within a six hour drive for up to four City participants or for an overnight trip including airfare may be included to discuss details and strategies of other operating utilities. All travel expenses will paid by the Engineer's Agreement Fees and include airfare (if needed), 2 rental cars, fuel, meals for two days, and hotel rooms for one overnight stay per trip.

- B.5.5 Radio Tower. Provide design memo and preliminary drawings for construction of a radio tower. Tower location is assumed to be on City-owned property.
- B5.6 Easement and Permitting Assistance. Providing assistance with developing easement documents and permitting coordination for installation of the new fiber network.
- B5.7 Additional Survey and Utility Locates. Provide additional survey or utility locations as needed beyond the base contract budgeted allowance.

#	Name	Function	Address
600	Southwest Blvd	Pumping/Flood	2800 SW Blvd
601	25 th Street	Flood	2501 Fairmont
602/617	Santa Fe	Pumping/Flood/ILS	1200 Woodsweather Rd
603	Broadway	Flood	101 Broadway
604	North Airport	Flood	1150 Richards Rd
606	Gillis	Flood	1000 E. Riverfront Dr
607	Lydia	Flood	1400 E. Riverfront Dr
608	Prospect	Flood	2600 E, Owen St
609	Milwaukee	Flood	1827 N. Chouteau Trfwy
610	Truman	Flood	7700 E. Levee Rd
611	Hawthorn	Flood	9100 E. Levee Rd
612	Blue Banks	Flood	7601 Rochester
614	S. Airport	Flood	95 N. Richards Rd
616	Westside	Eff. Pumping	1501 Woodweather Rd.
618	Swope Ind.	Pumping	4300 E. 75th Terrace
619	N. Church Estates	Pumping	8908 NE 72nd St
620	Blue River	Eff. Pumping	7800 Front St
623	Pied Creek	Pumping	6615 Eastside Dr
631	First Creek	Pumping	2450 NW 134 th St
632	Interim Second Creek	Pumping	5757 NW Cookingham Dr.
637	S Airport Relief Well	Flood	95 N. Richards
642	Wildwood West	Pumping	8727 N. Winfield Ave.
643	KCI Industrial	Pumping	9900 N Amity
646	Briarcliff West	Pumping	3498 N. Wyoming
647	15th and Crystal	Pumping	7601 E. Truman Rd
648	Line Creek	Pumping	2599 NW Tullison
649	Riverside	Pumping	Hwy 9 and Northwood
651	Blue River	Pumping	7300 Hawthorne Rd
652	Buckeye Creek	Pumping	5001 Birmingham Rd
658	NEID	Pumping	7300 Hawthorne
661	Turkey Creek	Pumping/ILS	2300 State Line
662	Riverside Horizons	Pumping	Mo Hwy 9 & Interstate 635
663	Birchwood	Pumping	10320 Indiana
667	12th Street	Pumping	7801 E 12th Street
669	Round Grove	Pumping	5901 Coal Mine Rd
676	S. Air Pumping	Pumping	101 Lou Holland Dr.
677	118th & Lawndale	Pumping	5799 E 118th
678	87 th St	Pumping	7800 Prospect
682	Lake Waukomis	Pumping	5801 NW 78th Terrace
684	White Aloe	Pumping	6510 N.W. Platte Hills Rd.

WSD Contract No. 1443

686	Brush Creek	Pumping	4640 Prospect
687	Upper Rush	Pumping	8100 Eastside Drive
688	Harlem	Pumping	250 East Harlem Street
691	Burlington Creek	Pumping	4700 Green Hills Road
692	83rd Street	Pumping	8100 Blue River Rd
693	Birmingham	Pumping	11011 Birmingham Rd
694	Mace Road	Pumping	7500 N. Mace Rd
696	Weatherby Lake	Pumping	8100 Westside Drive
697	Platte Woods	Pumping	74th and Chatam Ave
699	Kemper	Flood	1701 W. American Royal Ct
***	Chouteau	Pumping/ILS	5300 Municipal
	Gooseneck Creek	Pumping/ILS	TBD – in design
702	Blue River Secondary	Treatment	7600 Front St
703	Chemical Storage Fac	Treatment	7601 Front St
711	Birmingham	Treatment	10801 NE 28 th St
712	Westside	Treatment	1649 Woodsweather Rd
713	Westside Disinfection	Treatment	1649 Woodsweather Rd
715	Todd Creek	Treatment	7600 NW 144 th St
718	Rocky Branch	Treatment	500 NE 132 nd Street
720	Fishing River	Treatment	10600 NE 118 th St
745	KCI De-icing	Flood	West of Paris/Brasilia
746	Northland Mobile	Pumping	3500 NE 118 th Terrace
	City Farm	Land Application	Adjacent to Birmingham WWTP

ATTACHMENT B

ELECTRONIC DATA REQUIREMENTS

A. Kansas City Plan Room - Electronic Format Requirements and Naming Conventions

- 1. In addition to other deliverables included in this Contract, items listed below are requirements to accommodate posting bids documents, plans and specifications on the Kansas City Plan Room.
- 2. Prime Design Professional/Consultant and Sub-Consultants shall adhere to the following electronic format requirements and use the naming conventions as set out below:

a. Drawings/plans

- (1) Drawings/plans should be rendered as 200-300 dpi **PDF Format** images. No files may be larger than 5 megabytes in size. Plans/Drawings numbering should follow Form 00015 List of Drawings.
- (2) File names may not include any symbols such as <>:. "/\|? " & # % ^ * ()[] {}+
- (3) FILE NAMES: Plans/Drawings numbering should follow Form 00015 List of Drawings. All plans should be named in the following manner: three digit sequential number-brief descriptor. For example: 001-Cover.pdf or 002-arc1.pdf

b. CSI specification sections (project manuals)

- (1) CSI specification sections should be named by division, using DIV as a prefix. For example:
 - (a) DIV01.PDF (Technical, Project Specific)
 - (b) DIV02.PDF
 - (c) DIV03.PDF

c. Summary:

- (1) Division 00 and 01 in Microsoft Word or Excel
- (2) Division 2-16 in PDF Format
- (3) Completed document originals of Plans and Diagrams of project must be submitted as 200-300 dpi PDF Format images.

ATTACHMENT C

ENGINEER FEE SUMMARY AND SCHEDULE OF POSITION CLASSIFICATIONS

Block Vestels Corneati

Owner: Oilty of Kannes City, MO

Dunianta Missaurreian GCADa

	Project Director	Project Manager	Project Admin	Finance	Senior Structural Engineer	Structural Technician	Structural Engineer	SCADA Technical Advisor / GC	Leed ISC/ Engineering Menager	IBC Engineer	Technician	IAC Engineer	IB.C Technician	Cyber Security Specialist	HM) Specialist	SGADA Radio Specialist	SCADA Fiber Specialist	SCADA Technician	Coet Estimating	O&M Opecialist	Project Controja	SUBTOTAL,	SUBTOTAL, Brillings \$	Major Repro- duction	Com- Search Foe	Auto / Travel	SUBTOTAL, EXPENSES	Subcontract Custom Engineering	Subcontract Tallaterro & Browne	Subcontract -	SUBTOTAL, SUB- CONTRACTS	TOTAL COST
PHASE/Tank																																
Tends A. PROJECT MANGEMENTS TO Soundary A.1 Project Administration (18 months)		144				_									_																Yes	
A.4 Progress Reporting / Invoicing	19	144				_	-														10		3 41,678				\$	8 6,451		\$ 6,000	0 70,101	
A. Progress responsing / involving		_					·			199											- 35	184	\$ 25,872	2			3 -			\$ 2,300	3 2,300	
Subtotal, Houre	16	180	20	38					_														\$ -				\$ -				3 -	3 -
			-							36			-			-		•			84											
	5 4,000	\$ 43,020	\$ 1,000	\$ 4,000		\$ -	3 -	8 -	3 -	8 0,510	\$ -	3 -	8 -	\$ -	8 .	3 -	\$.	\$ -	\$ -	8 -	\$ 7,506		\$ 67,790	3 -		-	3 - !	8,451		\$ 7,300	\$ 15,751	8 83,591
Yee's B.O Granuptuel Beelgn and Standarde B.O.1 Review System Documentation				-						45					- 40	-	-															
8,0.2 Project intilation Meeting		4						4	0	10					78	80	80						\$ 31,808				5 -				\$ -	
		-					-		0							- 4		-					\$ 9,000	-			\$ - I	1,632		\$ 560	\$ 2,192	11,192
B.0.3 Conduct Ori-Dits interviews and Field investigations for WAY Facilities		16			1.0			2	20							10	10					178	\$ 35,600			300	\$ 300			54,347	\$ 54,347	90,345
B.O.4.1 TM1 - SCADA System Readiness and Vision 8.O.4.2 TM2 - WW SCADA System Investigation Results and Recommendations								4	37	84		18		20	.17	32	8			24		232	\$ 45,112	3 100		1,000	\$ 1,100	3,800			\$ 3,500	50,712
BLO.4.2 TN2 - VVW SCADA System Investigation Results and		2						4	32	02		18		24	16	80	A					294	\$ 58,430	8 100			400	1,000				
Control of the contro												- "	-		10	-						204	00,430	190			\$ 100	1,000			\$ 1,000	59,530
B.G.4.3 Platform Support		2						4	31	72				24		120	12					286	\$ 58,630	\$ 200	\$ 20,000 \$	1,000	s 21,200 I	14,770			\$ 14,770	94,600
B.O.A.A TMA - WAY SCADA Byelem Standards		4	4	1	-				24	24		88	20	18	24							242	3 39,684				3 .				3 - 1	39,684
B.0.5 Quality Assurance / Quality Control		2						24							-	20	12						\$ 13,294				-	1,491			\$ 1,881 5	
B.O.S Draft Report				1			 		16	- 44		24		18		15	A.					180					\$ 300				\$ 1,881	
8.0.7 Draft Report Review Meeting	2	4							4	4		4				4	4						\$ 5,636			200		1,001				
8.0.8 Final Report		2	4					4		12		16				7					-		\$ 14,888			200	_	4 400			8 - 1	
Subtotal, Hours		- 60	26		12		-	54	184	440		200		100	- 00	344	122	18		24		1,734	3 19,000				\$ - [1,490			\$ 1,400 \$	16,288
	\$ 1,860					-		\$ 14,634	101	\$ 79,840				\$ 21,000	9 44 990		\$ 20,862		3 1,344			-	A 441 744			0.500		20.000	-		2 15 100	
Rich B.T Freihninsty Bestyn	,	10,500	9 8,500		- 2,027			9 114,000	9 00,000	\$ 10,000		4 40,040	\$ 0,100	9 21,000	0 11,220	9 79,272	\$ 207,00Z	\$ 2,000	3 1,344	3 4,346	3 -	-	\$ 343,732	\$ 700	3 30,000 3	2,000	\$ 23,200 \$	25,270	3 -	9 54,997	\$ 80,177 1	447,109
B.1.1 Project initiation Meeting / Inspections	4								4			0				-		-					4 44 574									
B.1.2 Design Memorandum	7	20		-	2	4	16	-	12	80		45	40	18	16	- 10	18	-	40	40		56			_		\$ - 1	5,910			\$ 5,910 \$	
8.1,4 Design Mornstandum Review	- 9	4			-		10		- 4	4	_	4	77	10	14	10	- 4			40		358					\$ 500					69,604
E.1.5 Curvey		4				_																28					S - 1	11011			3 1,047 1	
B.1.5 Quality Assurance / Quality Control						+		48														4		-		200			\$ 80,000	-		93,656
Subtotat, Hours		30				4	16	82	20	92	-	52	40	18	16	34	32	9	40	40		611	3 10,204	-				3,178			3 3,178 1	19,442
	\$ 1,000			3 -	\$ 404	\$ 520		\$ 14,092		\$ 10,682				\$ 3,200			\$ 8,472		\$ 6,720			911	A			400	2 700 0	44.000				
Total R. S. C. C. College	,	0,000			-	-	2,100	9 14,000	0 0,300	0 (0,002		0 0,100		* 5/200	. 2,000	, r,	0 0,014	* 6,170	9 0,720	4 1,240	-		\$ 10,480	8 500		200 :	5 /00 \$	14,636	3 80,000 [\$ 12,800	\$ 107,136 \$	297,331
B.2.2 Construction Contract Documents - 80% (Level 2)		20	18	-	1	16	40		48	200	20	110	120	10	99	- 40	20.1	40				740	B 407.048	20 4 200		4001		40.000				
B.2.3 Construction Cost Opinion - 60% (Level 2)		4	10				-	- 2	4			110	(40)	10	-		40	10	40				3 125,014			1001	1,100	18,280		3 7,393		151,787
B.2.4 Cluality Assurance / Cluality Control - 80% (Level 2)	9	- 2			9				-	-									40			62					- 1	600			\$ 500 \$	
B.2.5 Owner Deelon Review - 80% (Level 2)	4	20			-						20		_				- 0						\$ 27,034				- 1	1,632			\$ 1,632 \$	
B.2.2 Construction Contract Documents - 96% (Level 3)		- 4				10	40		32		20	E4	100		40	20	20	40				70						800			\$ 500 \$	
B.2.3 Construction Cost Opinion - 90% (Level 3)		4	70			- 19		-					120		10	4	20	12	00				\$ 73,750	8 1,000	i i	100		14,000		\$ 6,002	\$ 20,072 \$	
B.2.4 Quality Assummes / Quality Control - 96% (Level 3)		7						64	7										20			42					-				\$ - 3	0,174
B.2.5 Owner Design Review - 95% (Level 3)	4	18	40		2			94	4		46					- 6	8						\$ 21,688				4 400				8 - 3	
	-	10	1							****	10						12	-					\$ 11,402			100 1	1,100 3	5,854		9 1,120		
B.2.6 Permitting and Regulatory Roviews B.2.7 Final Cost Opinion		4						-								4	12		400			24		9 1,000		- 1	1,000				8 - 3	5,048
B.2.8 Myler Submittel / CAD Files							4				47					4		-	16			32					- 3	1,000			\$ 1,000 \$	
8.2.0 Bidding Services	-					2					10		24			-	2	-				84		÷ 1,000		204	1,264	1,634		5 442	\$ 2,078 \$	12,866
R.2.9.1 Proper Adversement and Bidding Decuments							-											-								- 1	-					- 1
B.2.0.2 Pre-Bid Assistance		4					- 2		- 2	- 4	2						- 1	-				26	-	5 500		1	500					
B.2.9.2 Pre-Bid Conference		2								- 40		-					4	-				42					8	860		1,200	\$ 1,700 \$	
8.2.9.4 Bid Opening / Pinet Cost Opinion		2	$\overline{}$	-													4					10				100] \$	100				5 - 8	2,362
		- 4								2							Z					6				- 1	-				5 - 8	
B.2.1.5 Pre-Ameril Bendage	12		50			-	-	4	400	4	-	404					3	*				10	\$ 3,696				-				- 3	3,696
Subjected, Hours					4						74		204	24	48	50	114	47			-	1,886										
	÷ 3,729	\$ 24,370	9 4,872		2 406	* 4,429	14,/86	8 40,990	3 21,/98	5 QU,UNZ	3 3,642	> 31,000	30,594	7 4,800	9 7,900	\$ 19,500	# 19,49d :	9 6,710	\$ 12,766	8 -			\$ 331,200	8 5,500	\$	884 3	6,184 \$	44,140	9 - 1	\$ 16,147 (8 60,287 8	397,731
Task B.A. Optional or Supplemental Serologs B.4.1 Optional Services		40					60	40	-		004					0.40	- 40															
							-	- 10	70	100	364					248	40	- 1					\$ 182,586	\$ 3,010		3	14,216	3,461	15,947	18,800	38,198 \$	236,000
															-			50				1,012				- 1						
Subtotal, Heure		40					00		70							249			\rightarrow													
	8 -					\$ -				\$ 15,100									\rightarrow				\$ 102,500	3 3,916	8	10,300 \$	14,216 \$	3,481	\$ 15,947 1	\$ 18,800 \$	36,196 \$	235,000
Subtotel, Muras Subtotel, Militigs		\$ 9,990	8 -	5 -		\$ -	\$ 16,200	8 10,840	3 19,250	\$ 15,100	\$ 48,412	3 -	8 -	\$ -	\$ -	\$ 82,824	\$ 6,840	4,800	\$ -	1 -			\$ 162,500	3 3,916	8	19,300 \$	14,216 8	3,481	\$ 15,947 1	\$ 18,800 \$	36,196 8	235,000
Substotal, Hours Substotal, Billings Total, Hours	40	\$ 9,990	106	5 - 38	10	\$ -	\$ 16,200 102	8 10,840	3 19,250 382	1,000	\$ 48,412 430	432	384	140		\$ 62,824 720		122	124		84	8,604									36,196 \$	

CONFIDENTIAL

ATTACHMENT C

BLACK & VEATCH CORPORATION SCHEDULE OF POSITION CLASSIFICATIONS AND SALARY RATES FOR CITY OF KANSAS CITY, MISSOURI

Hourly Billing Rates Effective April 1, 2018 through March 31, 2019

JOB CLASSIFICATION	CLASSIFICATION	SALARY RATE						
		MINIMUM RATE	MAXIMUM RATE					
Administrative Business (ADM)	ADM 009	90.11	117.68					
	ADM 008	62.03	94.25					
	ADM 007	51.02	72.35					
	ADM 006	38.67	70.51					
	ADM 005	33.31	65.44					
	ADM 004	26.76	48.88					
	ADM 003	22.35	40.35					
	ADM 002	17.60	30.32					
	ADM 001	17.00	26.52					
Administrative Support (ADO)	ADO-005	16.56	46.83					
	ADO-004	17.74	35.71					
	ADO-003	14.32	28.75					
	ADO-002	12.79	22.40					
Architectural (ARC)	ARC-008	70.24	72.35					
	ARC-007	56.18	65.28					
	ARC-006	44.94	61.94					
	ARC-005	38.48	48.73					
	ARC-004	34.57	39.98					
	ARC-003	28.89	35.35					
	ARC-001	25.32	26.08					
Corporate Management Group (CMG)	CMG-40	125.05	128.80					
	CMG-30	135.29	150.01					
	CMG-20	94.36	124.40					
	CMG-10	77.87	97.69					
Construction Services (CNS)	CNS-012	99.05	106.40					
	CNS-011	86.43	103.18					
	CNS-010	70.11	101.74					
	CNS-009	63.95	94.11					
	CNS-008	54.98	79.86					
	CNS-007	48.14	78.54					

JOB CLASSIFICATION	CLASSIFICATION	SALARY RATE	
		MINIMUM RATE	MAXIMUM RATE
Construction Services (CNS) Cont.	CNS-006	42.30	66.70
	CNS-005	35.00	58.12
	CNS-004	31.20	52.23
	CNS-003	27.10	40.59
······································	CNS-002	24.77	35.17
	CNS-001	32.14	33.10
Consulting (CST)	CST-008	176.70	182.00
	CST-007	107.45	153.42
	CST-006	79.23	132.19
	CST-005	59.42	105.28
 	CST-004	42.15	103.56
	CST-003	38.34	56.07
	CST-002	34.22	49.11
	CST-001	29.08	39.33
Engineering (ENG)	ENG-136	88.42	105.19
	ENG-135	74.57	109.84
	ENG-134	68.39	105.80
	ENG-133	54.73	105.88
	ENG-132	50.89	89.22
	ENG-131	42.89	75.14
	ENG-130	36.91	64.41
	ENG-129	33.73	51.50
	ENG-128	29.70	44.96
	ENG-127	27.89	43.38
Engineering & Technical Specialties (ENS)	ENS-134	78.65	84.43
	ENS-133	62.68	79.10
	ENS-132	46.22	76.91
	ENS-131	37.26	70.88
	ENS-130	35.89	61.02
	ENS-129	30.24	45.33
	ENS-128	22.48	43.98
	ENS-127	24.04	31.00
Engineering Technician (ENT)	ENT-134	71.80	83.09
	ENT-133	48.25	82.92
	ENT-132	50.51	71.79
	ENT-131	42.00	62.94
	ENT-130	34.13	54.19
	ENT-129	30.71	50.73

JOB CLASSIFICATION	CLASSIFICATION	SALAI	RYRATE
		MINIMUM RATE	MAXIMUM RATE
Engineering Technician (ENT) Cont.	ENT-128	26.09	41.10
	ENT-127	21.86	38.32
	ENT-126	20.00	32.73
	ENT-125	19.08	29.72
Palmain /PCT	FCT OCC	05.46	00.00
Estimating (EST)	EST-008	85.16	92.32
	EST-007	57.21	87.76
	EST-006	52.00	76.07
	EST-005	44.52	61.20
	EST-004	39.81	54.95
	EST-003	32.69	40.60
	EST-002	29.47	35.61
Finance (FIN)	FIN-008	55.29	76.88
	FIN-007	49.52	65.72
	FIN-006	40.62	63.77
	FIN-005	33.68	48.49
	FIN-004	27.00	39.73
	FIN-003	22.57	35.33
	FIN-002	19.35	31.03
	FIN-001	20.00	20.90
General Management (GMT)	GMT-009	147.41	192.38
	GMT-008	108.68	155.32
	GMT-007	110.68	159.59
	GM:T-006	92.84	137.72
	GMT-005	76.94	132.92
	GMT-004	72.75	100.91
	GMT-003	67.50	90.49
	GMT-002	72.60	84.61
	GMT-001	48.91	68.30
nformation Technology Services (ITS)	ITS-10	122.79	126.47
	ITS-9	92.25	95.02
	ITS-8	74.48	90.15
	ITS-7	45.90	80.73
	ITS-6	49.52	63.76
	ITS-5	41.31	52.53
	ITS-4	27.40	48.17
	ITS-3	25.33	38.17
	(TS-2	23.01	23.70
	113-2	23.01	23./0
Legal (LGL)	LGL-10	126.27	131.09
	LGL-9	107.17	126.28

JOB CLASSIFICATION	CLASSIFICATION	SALA	RY RATE
		MINMUM RATE	MAXIMUM RATE
Legal (LGL) Cont.	LGL-8	92.48	103.81
	LGL-7	71.82	95.35
	LGL-6	55.17	69.67
	LGL-5	44.57	46.20
	LGL-4	39.49	40.67
	LGL-3	33.09	42.41
	LGL-2	34.46	35.49
Marketing & Communications (MAC)	MAC-010	116.83	120.33
, , , , , , , , , , , , , , , , , , , ,	MAC-009	87.18	93.26
	MAC-008	61.96	83.96
	MAC-007	43.92	71.46
	MAC-006	37.25	60.64
	MAC-005	31.02	50.09
	MAC-004	28.05	42.97
	MAC-003	21.40	36.35
	MAC-002	19.23	29.23
	MAC-001	20.57	22.02
Procurement (PCR)	PCR-008	69.93	84.37
The same of the sa	PCR-007	57.41	85.87
	PCR-006	45.48	62.95
	PCR-005	39.83	61.80
	PCR-004	33.99	49.86
	PCR-003	28.44	40.88
	PCR-002	25.24	38.07
	PCR-001	19.45	30.62
Project Controls (PJC)	PJC-009	90.49	93.20
	PJC-008	89.94	97.06
	PJC-007	64.02	86.40
"	PJC-006	52.58	79.53
	PJC-005	48.71	74.75
	PJC-004	32.91	59.20
	PJC-003	34.61	45.63
	PJC-002	31.93	40.61
	PJC-001	23.77	32.38
Project Management (PMT)	PMT-008	110.44	119.81
	PMT-007	95.09	120.33
	PMT-006	91.21	115.80
	PMT-005	82.25	118.45
	PMT-004	73.39	116.81

JOB CLASSIFICATION	CLASSIFICATION	SALARY RATE	
		MINIMUM RATE	MAXIMUM RATE
Project Management (PMT) Cont.	PMT-003	66.65	100.50
	PMT-002	52.34	95.66
	PMT-001	42.38	86.20
Sales (SAM)	SAM-011	153.55	158.31
	SAM-010	108.12	124.82
	SAM-009	90.95	137.73
	SAM-008	69.23	113.20
	SAM-007	52.73	90.19
	SAM-006	45.56	75.65
	SAM-005	48.04	72.88
	SAM-004	31.38	51.04
	SAM-003	34.34	35.37
	SAM-002	26.42	27.21
Security Services (SEC)	SEC-008	69.67	71.76
	SEC-007	55.87	57.55
	SEC-006	46.60	56.86
Specialized Staff (SPC)	SPC-009	99.40	102.38
	SPC-008	58.48	90.80
	SPC-007	56.95	72.76
	SPC-006	40.37	74.38
	SPC-005	32.53	49.35
	SPC-004	33.06	41.37

End of Attachment C

ATTACHMENT D

CITY - LICENSED GEOGRAPHICAL INFORMATION SYSTEM DATA

CITY will provide licensed materials for Geographical Information Systems to be used for the project as follows:

Grant of License. CITY grants to DESIGN PROFESSIONAL and DESIGN PROFESSIONAL hereby accepts, upon the express terms and conditions contained in this Agreement, a non-exclusive License to use the information described herein in the form produced and maintained by the Geographical Information System produced and maintained by City.

License Materials. The materials licensed for use by DESIGN PROFESSIONAL under this Agreement are the forms which can be read or manipulated by computer of the geographical and physical characteristic information collected and assimilated in the records of City ("Licensed Materials").

Use of Licensed Materials. Subject to the terms, conditions and prohibitions of this Agreement, DESIGN PROFESSIONAL shall be entitled to use the information contained in the Licensed Materials to accomplish the scope of services provided by DESIGN PROFESSIONAL. At the completion of the Agreement, DESIGN PROFESSIONAL shall return all materials to the CITY, and shall permanently remove the Licensed Materials from any media used by DESIGN PROFESSIONAL. At the end of the Agreement, DESIGN PROFESSIONAL shall provide a written certification that all materials are returned and that all Licensed Materials, including copies, have been removed from the equipment or media of DESIGN PROFESSIONAL.

Transfer of Licensed Materials. This license is expressly nontransferable and DESIGN PROFESSIONAL shall not transfer any interest, entitlement or obligation under this Agreement to any other person or entity.

Data. The data and information contained in the Licensed Materials shall be those files and systems as recorded and existing as of the time DESIGN PROFESSIONAL requests the information.

Title. The custody and title and all other rights and interests in the Licensed Materials are and shall at all times remain with the CITY and with the Offices or officials of the CITY having official custody of the Licensed Materials.

Not Public Records. The database in the form of the Licensed Materials is proprietary, intellectual property of the CITY and shall not be considered or deemed as open, public records, except as provided in §256.670, RSMo. DESIGN PROFESSIONAL shall and hereby expressly agrees that it will, recognize the property interests of CITY and CITY agrees that it is not,

pursuant to this License, a custodian of any open, public records, except as may exist pursuant to §256.670 RSMo.

Access to Materials. Pursuant to the terms and conditions of this agreement, DESIGN PROFESSIONAL shall be provided access to obtain the Licensed Materials in a periodic basis for the term of this Agreement. As provided in this Agreement, DESIGN PROFESSIONAL, shall be entitled to any Modifications, updates, renewals or additional data or information under the License granted by this Agreement.

Updated Material and Modifications. CITY shall in accordance with this Agreement and upon request of the DESIGN PROFESSIONAL provide to DESIGN PROFESSIONAL updates to or modifications of all or any specific parts of the data or information in the Licensed Materials. Any such updates or modifications provided by CITY shall be covered by and subject to each and all of the terms and conditions of this Agreement. Furthermore, upon completion or termination of this Agreement, DESIGN PROFESSIONAL, will provide to CITY in a compatible form, updated information developed during the execution of the Scope of Services provided by DESIGN PROFESSIONAL.

Data Contents. The data contained in the materials licensed by CITY to DESIGN PROFESSIONAL under this Agreement shall include that information necessary to allow DESIGN PROFESSIONAL to perform scope of services outlined in the Agreement.

Waiver. The waiver of any breach of any provision of this license shall not constitute a waiver of any subsequent breach of the same or other provisions of the Agreement.

Modifications. Any modification to the rights provided herein for licensed materials shall be in writing executed by each party.

ATTACHMENT E

HRD DOCUMENTS

- 1. 00450 HRD Form 08: Contractor Utilization Plan & Request for Waiver
- 2. 00450.01: HRD Letter of Intent to Subcontract
- 3. 00460 HRD Form 10: Timetable for MBE/WBE Utilization
- 4. 00470 HRD Form 11: Request for Modification or Substitution
- 5. 01290.14: Contractor Affidavit for Final Payment
- 6. 01290.15: Subcontractor Affidavit for Final Payment

ATTACHMENT E

CONTRACTOR UTILIZATION PLAN/REQUEST FOR WAIVER

Pro	roject Number 81000819, Contract No. 1443	
Pro	roject Title Wastewater SCADA	
	astewater SCADA	Water Services Department
(D	Department Project)	Department
Bla	ack & Veatch Corporation	
	(Bidder/Proposer)	
ST	TATE OF MISSOURI) ss	
CC	OUNTY OF JACKSON)	
	I, Patrick O'Neill, of lawful ag	ge and upon my oath state as follows:
1.	This Affidavit is made for the purpose of complying submittal requirements on the above project and the behalf of the Bidder/Proposer listed below. It sets o MBE and/or WBE contractors on the project.	e MBE/WBE Program and is given on
2.	The project goals are 14 % MBE and 8 that it will utilize a minimum of the following percentabove project:	
	BIDDER/PROPOSER PARTICIPATION: 14	4% MBE8_% WBE
3.	The following are the M/WBE subcontractors whose will meet or exceed the above-listed Bidder/Programmer warrants that it will utilize the M/WBE subcontractors whose warrants that it will utilize the M/WBE subcontractors whose warrants that it will utilize the M/WBE subcontractors whose will meet or exceed the above-listed Bidder/Programmer that it will utilize the M/WBE subcontractors whose will meet or exceed the above-listed Bidder/Programmer than the M/WBE subcontractors whose warrants that it will utilize the M/WBE subcontractors whose warrants that it will utilize the M/WBE subcontractors whose warrants that it will utilize the M/WBE subcontractors whose warrants that it will utilize the M/WBE subcontractors whose warrants that it will utilize the M/WBE subcontractors whose warrants that it will utilize the M/WBE subcontractors whose warrants that it will utilize the M/WBE subcontractors whose warrants warrants are subcontractors whose warrants whose warrants warrants are subcontractors.	poser Participation. Bidder/Proposer ractors to provide the goods/services Subcontract, copies of which shall
	a. Name of M/WBE Firm Custom Engineeri	
	Address 12760 E. US Highway 40, Indepe	endence, Missouri 64055
	Telephone No. (816) 350-1473 I.R.S. No. 43-1031915	

b.	Name of M/WBE Firm Taliaferro & Bro			(MBE)
	Address 1020 East 8th Street, Kansas Cit	<u>y, Missouri 641(</u>)6	
	I.R.S. No. <u>48-0758891</u>			
	N	1 0 7	777 A 777	(TIPE)
Ç.	Name of M/WBE Firm Environmental A	dvisors & Engin	eers (EAE)	(WBE)
	Address 19211 West 64th Terrace, Shaw	nee, Kansas 662	18	
	Telephone No. (913) 599-4326			
	I.R.S. No. <u>43-1806626</u>			
đ.	Name of MAIDE Eims			
a.	Name of M/WBE Firm			
	Address			
	Telephone No.			
	I.R.S. No.			
e.	Name of M/WBE Firm			
	Address Talanhara Na			
	Telephone No.			
	I.R.S. No.			
4. The fol	onal M/WBEs, if any, on additional page and lowing is a breakdown of the percenta Proposer agrees to pay to each listed M/WBE	ge of the total		amount that
	MBE/WBE BREAKDOW	/N SHEET		
MBE FIRM	is:			
	_	Subcontract	Weighted	% of Total
Name of M			Value**	
Custom Eng	ineering	<u>\$95,947</u>		7 %
Гaliaferто &	Browne	\$95,947		7 %
TATE ME	BE \$ / TOTAL MBE %:	\$101.904		1.4 02
OTAL WI	DE 37 I O I ALL NIDE 70:	\$ <u>191,894</u>	_	<u>14</u> %

WBE FIRMS: Name of WBE Firm Environmental Advisors and Engineers	Supplier/Broker/Contractor	Subcontract Amount* \$109,654	Weighted Value**	% of Total Contract 8 %
	200,020			
TOTAL WBE \$ / TOTAL	WBE %:	\$ <u>109,654</u>	(8_%

- **"Weighted Value" means the portion of the subcontract amount that will be credited towards meeting the Bidder/Proposer participation. See HRD Forms and Instructions for allowable credit and special instructions for suppliers.
- 5. Bidder/Proposer acknowledges that the monetary amount to be paid each listed M/WBE for their work, and which is approved herein, is an amount corresponding to the percentage of the total contract amount allocable to each listed M/WBE as calculated in the MBE/WBE Breakdown Sheet. Bidder/Proposer further acknowledges that this amount may be higher than the subcontract amount listed therein as change orders and/or amendments changing the total contract amount may correspondingly increase the amount of compensation due an M/WBE for purposes of meeting or exceeding the Bidder/Proposer participation
- 6. Bidder/Proposer acknowledges that it is responsible for considering the effect that any change orders and/or amendments changing the total contract amount may have on its ability to meet or exceed the Bidder/Proposer participation. Bidder/Proposer further acknowledges that it is responsible for submitting a Request for Modification or Substitution if it will be unable to meet or exceed the Bidder/Proposer participation set forth herein.
- 7. If Bidder/Proposer has not achieved both the M/WBE goal(s) set for this Project, Bidder/Proposer hereby requests a waiver of the MBE and/or WBE goal(s) that Bidder/Proposer has failed to achieve

^{*&}quot;Subcontract Amount" refers to the dollar amount that Bidder/Proposer has agreed to pay each M/WBE subcontractor as of the date of contracting and is indicated here solely for the purpose of calculating the percentage that this sum represents in proportion to the total contract amount. Any contract amendments and/or change orders changing the total contract amount may alter the amount due an M/WBE under their subcontract for purposes of meeting or exceeding the Bidder/Proposer participation.

- 8. Bidder/Proposer will present documentation of its good faith efforts, a narrative summary detailing its efforts and the reasons its efforts were unsuccessful when requested by the City.
- 9. I hereby certify that I am authorized to make this Affidavit on behalf of the Bidder/Proposer named below and who shall abide by the terms set forth herein:

Bidder/Proposer primary contact:	Black & Veatch Corporation
Address: 8400 Ward Parkway	
Kansas City, Missouri 64114	
Phone Number: 913-458-4308	
Facsimile number: 913-458-4308	

E-mail Address: oneillpa@bv.com

By: State O'Seill

Title: Associate Vice President Date: 5/18/2018

(Attach corporate seal if applicable)

Subscribed and sworn to before me this 18th day of May 2015

My Commission Expires:

July 30 2019

ALICIA SHOEMAKER
Notary Pubic • Notary Seel
STATE OF MISSOUR! • Clay County
Commission # 15161885
My Commission Expires: July 30, 2019



LETTER OF INTENT TO SUBCONTRACT

Project Number 81000819, Contract No. 1443

MANNAN SELV	Project Title Wastewater	SCADA	
4 1 1 0			
Black & Veatch Corpora	ation ("Prir	me Contractor*) agrees to en	ter into a contractual
agreement with Custon	Engineering, Inc.	("M/ W/D BE Subc	ontractor"), who will
provide the following go	oods/services in connection with	the above-referenced contra	act:
electrical," "plumbing,"	describing the goods/services t etc.) or the listing of the NAICS and may result in this Letter of	Codes in which MAW/DBE S	ubcontractor is
Custom Engineering wi	ill assist with electrical, I&C, ar	nd HVAC study and design to	isk.
for an estimated amoun	nt of \$ <u>95,947</u> or <u>7 9</u>	6_of the total estimated	
contract value.			
MAW/DBE Subcontracto	or is, to the best of Prime Contra	actor's knowledge, currently o	certified with the City
of Kansas City's Humar	n Relations Department to perfo	orm in the capacities indicate	d herein. Prime
Contractor agrees to uti	ilize MA W/DB E Subcontractor In	the capacities indicated here	ain, and MA W/D BE
Subcontractor agrees to	work on the above-referenced	contract in the capacities in	dicated herein,
contingent upon awar	d of the contract to Prime Co	ntractor.	
Signature: Prime Contra	<u>Jesel</u>	Signature: MAW/DBE Sub	contractor
Patrick O'Neill Print Name		Joe Davis Print Name	
Associate Vice Presider	nt 5/19/2018 Date	CEO ·	5/18/18 Date



LETTER OF INTENT TO SUBCONTRACT

Project Number 81000819, Contract No. 1443 Project Title Wastewater SCADA Black & Veatch Corporation ("Prime Contractor") agrees to enter into a contractual agreement with Environmental Advisors & Engineers, Inc. ("MW/DBE Subcontractor"), who will provide the following goods/services in connection with the above-referenced contract: (Insert a brief narrative describing the goods/services to be provided. Broad categorizations (e.g., "electrical," "plumbing," etc.) or the listing of the NAICS Codes in which MAVABE Subcontractor is certified are insufficient and may result in this Letter of Intent to Subcontract not being accepted.) Environmental Advisors & Engineers will conduct site assessment, staff interviews, and architectural design. for an estimated amount of \$ 109.654 or 8 % of the total estimated contract value. MAW/DBE Subcontractor is, to the best of Prime Contractor's knowledge, currently certified with the City of Kansas City's Human Relations Department to perform in the capacities Indicated herein. Prime Contractor agrees to utilize MAW/DBE Subcontractor in the capacities indicated herein, and MAW/DBE Subcontractor agrees to work on the above-referenced contract in the capacities indicated herein. contingent upon award of the contract to Prime Contractor. Signature: Prime Contractor gnature: MAW/DBE Subcontractor Patrick O'Neill Jill R. Biesma **Print Name** Print Name Vica Associate Vice President President Title



LETTER OF INTENT TO SUBCONTRACT

	Project Number 8100	00819, Contract No. 14	43
1417	Project Title Wastewa	iter SCADA	
MISSOURI			
Black & Veatch Corpor	atlon ("Prime Contractor") agrees	to enter into a contractual
agreement with Taliafe	rro & Browne, Inc.	(*M/W/DBE	Subcontractor"), who will
provide the following go	oods/services in connection	with the above-referenced	contract:
"electrical," "plumbing,"	describing the goods/servicetc.) or the listing of the NA and may result in this Lette	ICS Codes in which MAN/E	BE Subcontractor is
Taliaferro & Browne w	ill provide surveying servic	es associated with the fiber	optic design.
		and the state of t	allementing kangangang pelajara melajakamantahahan pelahanganang peri segara sangsa
			- 4
for an estimated amoun	at of \$ <u>96,947</u> or	7_% of the total estin	nated
contract value.			
MANIDBE Subcontracto	r is, to the best of Prime Co	ntractor's knowledge, cums	ntly cartified with the City
of Kansas City's Human	Relations Department to p	erform in the capacities ind	icated herein. Prime
Contractor agrees to util	ilize M/W/DBE Subcontracto	r in the capacities indicated	I herein, and W/W/DBE
Subcontractor agrees to	work on the above-referen	ced contract in the capacitie	es indicated herein,
continuent upon aware	d of the contract to Frime	Contractor.	
Signature: Prime Contra	Les Coor	Signature: MANADBE	Subcontractor
Patrick O'Neili Print Name		Hagos Andebrhan Print Name	
Associate Vice President	5/18/2018 Date	CEO Title	5/18/2018 Date

TIMETABLE FOR MBE/WBE UTILIZATION

(This form should be submitted to the City after contract award.)

I, Patrick O'Neill	, acting in my capacit	y as Associate Vice President
(Name) of Black & Veatch Corporation		(Position with Firm)
OI DIACK & VEATER GOI POTACION	, with the submittal	of this limetable, certify that
(Name of Firm)		
the following timetable for MBE/WB	E utilization in the fulfillment	nt of this contract is correct and
true to the best of my knowledge.		
ALLOTTED TIME FOR	THE COMPLETION OF (Check one only)	THIS CONTRACT
15 days	75 days	135 days
30 days	90 days	150 days
-	105 days	165 days
60 days	120 days	180 days
Other 540 Days	(Specify)	
	(Specify)	
Throughout 7/2/18 thru 12/23/	/19 Beginning 1/3	180 days
Middle 1/3180 days		dava
Beginning 1/3%	Middle 1/3/%	Final 1/3 <u>8</u> %
PLEASE NOTE: Any changes in Department in advance	this timetable require appr	roval of the Human Relations
If you have any questions regarding to of Human Relations at: (816) 513-1		please contact the Department
	Petrit.	Signature)
	Asaiste (Positi	on with Firm)
	6/1	/26/8 (Date)



REQUEST FOR MODIFICATION OR SUBSTITUTION

Black & Veatch Corporation

(This Form must be submitted to HRD to request substitutions for an MBE/WBE listed in the Contractor Utilization Plan or for modification of the amount of MBE/WBE participation listed in the Contractor Utilization Plan. This Form shall be an amendment to the Contractor Utilization Plan.)

BIDDER/PROPOSER/CONTRACTOR: Black & Veatch Corporation ADDRESS: 8400 Ward Parkway. Kansas City. MO 64114
PROJECT NUMBER OR TITLE: 81000819, Contract No. 1443 AMENDMENT/CHANGE ORDER NO: (if applicable)
Project Goals:% MBE% WBEContractor Utilization Plan:% MBE% WBE
1. I am the duly authorized representative of the above Bidder/Contractor/Proposer and am authorized to request this substitution or modification on behalf of the Bidder/Contractor/Proposer.
2. I hereby request that the Director of HRD recommend or approve: (check appropriate space(s))
a A substitution of the certified MBE/WBE firm, (Name of new firm)
to martinum
(Scope of work to be performed by new firm)
for the MBE/WBE firm which is currently (Name of old firm)
(Name of old firm) listed on the Bidder's/Contractor's/Proposer's Contractor Utilization Plan to
perform the following scope of work: (Scope of work of old firm)
b. A modification of the amount of MBE/WBE participation currently listed on the Bidder's/Contractor's/Proposer's Contractor Utilization Plan from
% MBE% WBE (Fill in % of MBE/WBE Participation currently listed on Contractor Utilization Plan)
то
% MBE% WBE (Fill in New % of MBE/WBE Participation requested for Contractor Utilization Plan)
 c. Attach 00450.01 Letter of Intent to Subcontract letter for each new MBE/WBE to be added. d. Attach a copy of the most recent 00485.01 or on-line M/WBE Monthly Utilization Report
3. Bidder/Contractor/Proposer states that a substitution or modification is necessary because: (check

applicable reason(s))

	The MBE/WBE listed on the Contractor Utilization Plan is non-responsive or cannot perform
	The MBE/WBE listed on the Contractor Utilization Plan has increased its previously quoted price without a corresponding change in the scope of work.
	The MBE/WBE listed on the Contractor Utilization Plan has committed a material default of breach of its contract.
	Requirements of the scope of work of the contract have changed and make subcontracting no feasible or not feasible at the levels required by the goals established for the contract.
	The MBE/WBE listed on the Contractor Utilization Plan is unacceptable to the City contracting department.
	Bidder/Contractor/Proposer has not attempted intentionally to evade the requirements of the Act and it is in the best interests of the City to allow a modification or substitution.
4.	The following is a narrative summary of the Bidder's/Contractor's/Proposer's good faith efforts exhausted in attempts to substitute the MBE/WBE firm named above which is currently listed on the Contractor Utilization Plan with other qualified, certified MBE/WBE firms for the listed scope of work or any other scope of work in the project:
5. J	Bidder/Proposer/Contractor will present documentation when requested by the City to evidence its good faith efforts.
Dat	ed: (Bidder/Proposer/Contractor)
	By: (Authorized Representative)



CONTRACTOR AFFIDAVIT FOR FINAL PAYMENT

		Project Number 81000819, Contract No. 1443	
		Project Title Wastewater SCADA	
	ANSAS CITY		
ST	ATE OF MI	SSOURI	
		JACKSON)SS	
CC	JUNTY OF)	
Γh	e Undersigned,	of lawful (Name)	
ago	e, being first du	ly sworn, states under oath as follows:	
1.	I am the	of who is the general (Title) (CONTRACTOR)	
	CONTRACT	OR for the CITY on Project No and Project Title	
2.		material bills, use of equipment and other indebtedness connected with the Work for this Project d and all Claims of whatever nature have been satisfied, as required by the Contract.	
3	(~)Prev	vailing wage does not apply; or	
	projects have provisions and Work. Cothe Contract	souri Revised Statutes, pertaining to the payment of wages to workmen employed on public works been fully satisfied and there has been no exception to the full and complete compliance with these d requirements and the Annual Wage Order contained in the Contract in carrying out the Contract ONTRACTOR has fully complied with the requirements of the prevailing wage law as required in and has attached affidavits from all Subcontractors on this Project, regardless of tier, affirming ith the prevailing wage law as stipulated in the Contract.	
1 .	I hereby certify that (a) at project completion and pursuant to contractor's final request for payment, contractor achieved (%) Minority Business Enterprise (MBE) participation and (%) Women Business Enterprise (WBE) participation on this contract, and (b) listed herein are the names of all certified M/WBE subcontractors, regardless of tier, with whom I, or my subcontractors contracted.		
		Name of MBE/WBE FirmAddress	
	1	Telephone Number () IRS Number Area/Scope*of Work Subcontract Final Amount	
	2.	Name of MBE/WBE FirmAddress	
	1 <i>A</i>	Telephone Number () IRS Number Area/Scope*of Work Subcontract Final Amount	

Lis	t additional subcontractors, if any, on a similar form and attach to the bid.			
Su	pplier** Final Amount:			
*R	eference to specification sections or bid item number.			
	 (*) Met or exceeded the Contract utilization goals; or (*) Failed to meet the Contract utilization goals (attach waiver, substitution or modification); or (*) No goals applied to this Project. 			
5.	CONTRACTOR certifies that each Subcontractor has received full payment for its respective work in connection with the Contract.			
6.	6. If applicable, I hereby certify that (a) at project completion and pursuant to contractor's final request for payment, contractor achieved, company-wide, at least ten percent (10%) minority workforce participation and two percent (2%) women workforce participation and (2) a true and accurate copy of my final project workforce monthly report (HRD Form 00485.02 and final company-wide workforce monthly report (HRD Form 00485.03 are attached. NOTE: This paragraph is only applicable if you completed a construction contract that was estimated by the City, prior to solicitation, as requiring more than 800 construction labor hours and costing in excess of \$324,000.01. If applicable you MUST attach copies of your final monthly workforce reports.			
	This affidavit is made in behalf of the CONTRACTOR for the purpose of securing from Kansas City, Missouri, certification of completion of the Project and receiving payment therefore.			
ordi Sub the has	If the Contract amount exceeded \$150,000, CONTRACTOR has submitted proof of compliance with the City tax inances administered by the City's Commissioner of Revenue and has on file proof of tax compliance from all contractors. If the Contract term exceeded one (1) year, CONTRACTOR has provided proof of compliance with City tax ordinances administered by the City's Commissioner of Revenue prior to receiving final payment and on file proof of tax compliance from all Subcontractors prior to the Subcontractor receiving final payment from NTRACTOR.			
	CONTRACTOR			
	By(Authorized Signature)			
	(Authorized Signature)			
	Title			
On	this, day of, before me			
app	eared, to me personally known to be the			
	of the			
and	who executed the foregoing instrument and acknowledged that (s)he executed the same on behalf of			
	as its free act and deed.			
IN V	WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the day and year first above ten.			
Му	commission expires:			
_	Notary Public			



SUBCONTRACTOR AFFIDAVIT FOR FINAL PAYMENT

, IIII	Project Number 81000	819. Contract No. 1443
1	Project Title Wastewa	ater SCADA
KANSAS CI		
STATE O	F MISSOURI)	
) ss:	
COUNTY	OF JACKSON	
After being	g duly sworn the person whose name and	signature appears below hereby states under penalty of perjury that:
affidavit or	on behalf of Subcontractor in accordance v	ness indicated below (hereinafter Subcontractor) and I make this with the requirements set forth in Section 290.290, RSMo. ed under the terms and conditions of a subcontract as follows:
Su	abcontract with:	Contractor
W	ork Performed:	
То	otal Dollar Amount of Subcontract and all	Change Orders: \$
	ity Certified	BE □ NA
in Sections Business E	abcontractor fully complied with the provi is 290.210, RSMo through 290.340, RSMo Entity Type: issouri Corporation	sions and requirements of the Missouri Prevailing Wage Law set forth b. Subcontractor's Legal Name and Address
For	oreign Corporation ctitious Name Corporation	
	le Proprietor mited Liability Company	Phone No.
	rtnership	Fax:
	int Venture	E:mail:
() Otl	her (Specify)	Federal ID No.
Ih	ereby certify that I have the authority to e	xecute this affidavit on behalf of Subcontractor.
Ву	(Signature)	
	(Signature)	
NOTARY	(Title)	(Date)
Subscribed	l and sworn to before me this day o	f,20
My Commi	ission Expires:	By
Pri	int Name	Title

ATTACHMENT F

EMPLOYEE ELIGIBILITY VERIFICATION AFFIDAVIT

(Required for any contract with the City of Kansas City, Missouri in excess of \$5,000.00)

STATE OF MISSOURI

On this day of 2016, before me appeared Patrick O'Neill

personally known by me or otherwise proven to be the person whose name is subscribed on this affidavit and who, being duly sworn, stated as follows:

I am of sound mind, capable of making this affidavit, and personally swear or affirm that the statements made herein are truthful to the best of my knowledge. I am the Associate Vice President (title) of Black & Veatch Corporation

(business entity) and I am duly authorized, directed or empowered to act with full authority on behalf of the business entity in making this affidavit.

I hereby swear or affirm that the business entity does not knowingly employ any person in connection with the contracted services who does not have the legal right or authorization under federal law to work in the United States as defined in 8 U.S.C. § 1324a(h)(3).

I hereby additionally swear or affirm that the business entity is enrolled in an electronic verification of work program operated by the United States Department of Homeland Security (E-Verify) or an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, under the Immigration Reform and Control Act of 1986, and that the business entity will participate in said program with respect to any person hired by the business entity to perform any work in connection with the contracted services. I have attached hereto documentation sufficient to establish the business entity's enrollment and participation in the required electronic verification of work program.

I am aware and recognize that unless certain contractual requirements are satisfied and affidavits obtained as provided in Section 285.530, RSMo, the business entity may face liability for violations committed by its subcontractors, notwithstanding the fact that the business entity may itself be compliant.

I acknowledge that I am signing this affidavit as the free act and deed of the business entity and that I am not doing so under duress.

My Commission expires:

ALICIA SHOEMAKER Notary Public • Notary Seal STATE OF MISSOURI • Clay County Commission # 15161665 My Commission Expires: July 30, 2019





Client Company ID Number: 771013

THE E-VERIFY MEMORANDUM OF UNDERSTANDING FOR EMPLOYERS USING AN E-VERIFY EMPLOYER AGENT

ARTICLE I PURPOSE AND AUTHORITY

The parties to this agreement are the Department of Homeland Security (DHS), the Black & Veatch Corporation (Employer), and the E-Verify Employer Agent. The purpose of this agreement is to set forth terms and conditions which the Employer and the E-Verify Employer Agent will follow while participating in E-Verify.

E-Verify is a program that electronically confirms an employee's eligibility to work in the United States after completion of Form I-9, Employment Eligibility Verification (Form I-9). This Memorandum of Understanding (MOU) explains certain features of the E-Verify program and describes specific responsibilities of the Employer, the E-Verify Employer Agent, the Social Security Administration (SSA), and DHS.

Authority for the E-Verify program is found in Title IV, Subtitle A, of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA), Pub. L. 104-208, 110 Stat. 3009, as amended (8 U.S.C. § 1324a note). The Federal Acquisition Regulation (FAR) Subpart 22.18, "Employment Eligibility Verification" and Executive Order 12989, as amended, provide authority for Federal contractors and subcontractors (Federal contractor) to use E-Verify to verify the employment eligibility of certain employees working on Federal contracts.

ARTICLE II RESPONSIBILITIES

A. RESPONSIBILITIES OF THE EMPLOYER

- 1. The Employer agrees to display the following notices supplied by DHS in a prominent place that is clearly visible to prospective employees and all employees who are to be verified through the system:
 - a. Notice of E-Verify Participation
 - b. Notice of Right to Work
- 2. The Employer agrees to provide to the SSA and DHS the names, titles, addresses, and telephone numbers of the Employer representatives to be contacted about E-Verify. The Employer also agrees to keep such information current by providing updated information to SSA and DHS whenever the





Company ID Number: 11557

Client Company ID Number: 771013

If you have any questions, contact E-Verify at 1-888-464-4218.

Approved by:

Employer		
Black & Veatch Corporation		
Name (Please Type or Print)	Title	
Christopher Gould		
Signature	Date	
Chathous	04/04/2014	
E-Verify Employer Agent		
HireRight, Inc. (v25)		
Name (Please Type or Print) Orvella Cartwright	Title	
Signature	Date	
Electronically Signed	04/04/2014	•
Department of Homeland Security Verification Division		•
lame (Please Type or Print) USCIS Verification Division	Title	
ignature	Date	
Electronically Signed	04/07/2014	

ATTACHMENT G

Non-Construction Subcontractors Listing

Contractor shall submit Subcontractor information on this form prior to Subcontractor beginning Work. Contractor shall update this listing and keep it current for the life of the Contract.

	Company Name Contact Name and Email	Address Phone No. and Fax No.
1.	Name: Custom Engineering, Inc., Joe Davis Email: <u>JTDAVIS@customengr.com</u>	Address: 12760 East 40 Highway, Independence, MO 64055 Phone: 913-350-1473 Fax:816-350-1579
2.	Name: Taliaferro & Browne, Hagos Andebrhan Email: hagos@tb-engr.com	Address: 1020 East 8th Street, Kansas City, MO 64106 Phone: 816-283-3456 Fax: 816-283-0810
3.	Name: Environmental Advisors & Engineers, Inc., Jill R. Biesma Email: JBiesma@EAEI.com	Address: 19211 W. 64th Terrace, Shawnee, Kansas 66218 Phone: 913-599-4326 Fax: 913-631-6011
4.	Name:Email:	Address: Phone: Fax:
5.	Name: Email:	Address: Phone: Fax:
6.	Name: Email:	Address: Phone: Fax:
7.	Name: Email:	Address: Phone: Fax:
8.	Name: Email:	Address: Phone: Fax:
9.	Name: Email:	Address: Phone: Fax:
10.	Name:Email:	Address: Phone: Fax:

Contractor – Company Name:
Submitted By:
Patrick O'Neill
Associate Vice President
Telephone No.:
Fax No.:
Pax N

Subcontractor List Non-Construction 112309