

AGREEMENT
For
PROFESSIONAL ENGINEERING SERVICES
Between
THE CITY OF COLUMBIA, MISSOURI
And
BLACK & VEATCH CORPORATION

THIS AGREEMENT made by and between the City of Columbia, Missouri (hereinafter called "City"), and **Black & Veatch Corporation** (hereinafter called "Engineer"), is entered into on the date of the last signatory noted below (the "Effective Date").

WITNESSETH, that whereas City intends to make improvements as described below, hereinafter called the Project, consisting of the following:

**Engineering services related to compliance with the Lead
and Copper Rule Revisions.**

(Description of Project)

NOW, THEREFORE, in consideration of the mutual covenants set out herein the parties agree as follows:

Engineer shall serve as City's professional engineering contractor in those assignments to which this Agreement applies, and shall give consultation and advice to City during the performance of the services. All services shall be performed under the direction of a professional engineer registered in the State of Missouri and qualified in the particular field.

SECTION 1 - AUTHORIZATION OF SERVICES

1.1 Engineer shall not undertake to begin any of the services contemplated by this agreement until directed in writing to do so by City. City may elect to authorize the Project as a whole or in parts.

1.2 Authorized work may include services described hereafter as Basic Services or as Additional Services of Engineer.

SECTION 2 - BASIC SERVICES OF ENGINEER

2.1 General

2.1.1 Perform professional engineering services as set forth in Exhibit A - "Scope of Basic Services," dated **3/21/2023** (hereinafter referred to as "Scope of Basic Services").

2.1.2 Engineer will designate the following listed individuals as its project team with responsibilities as assigned. Engineer shall dedicate whatever additional resources are necessary to accomplish the Project within the specified time frame but will not remove these individuals from the assigned tasks for any reason within the control of Engineer without the written approval of City.

<u>Name and Title</u>	<u>Assignment</u>
Ben Freese, Engineering Manager	Design Team Leader

All of the services required hereunder will be performed by Engineer or under its supervision and all personnel engaged in the work shall be fully qualified and authorized or permitted under state and local law to perform such services.

None of the work or services covered by this Agreement shall be subcontracted without the prior written approval of City and any work or services so subcontracted shall be subject to the provisions of this Agreement.

2.2 Engineer shall furnish such periodic reports as City may request pertaining to the work or services undertaken pursuant to this Agreement, the costs and obligations incurred or to be incurred, and any other matters covered by this Agreement.

2.3 Engineer shall maintain accounts and records, including personnel, property and financial records, adequate to identify and account for all costs pertaining to the Agreement and any other records as deemed necessary by City to assure proper accounting for all project funds. These records must be available to City or its authorized representatives, for audit purposes, and must be retained for three (3) years after expiration or completion of this Agreement.

SECTION 3 - ADDITIONAL SERVICES OF ENGINEER

3.1 General

If authorized in writing by City, and agreed to in writing by Engineer, Engineer shall furnish or obtain from others Additional Services of the following types which are not considered normal or customary Basic Services. The scope of Additional Services may include:

3.1.1 Financial Consultation

Consult with City's fiscal agents and bond attorneys and provide such engineering data as required for any bond prospectus or other financing requirements.

3.1.2 Property Procurement Assistance

Provide consultation and assistance on property procurement as related to professional engineering services being performed.

3.1.3 Obtaining Services of Others

Provide through subcontract the services or data set forth in Scope of Basic Services. Engineer is prohibited from holding a retainage on any payment to a subcontractor that provides any services or work on this Project.

3.1.4 Preliminary or final engineering design of capital facilities except as specifically identified herein.

3.1.5 Preparation of reports, data, application, etc., in connection with modifications to FEMA floodplain definition and/or mapping.

3.1.6 Extra Services

Services not specifically defined heretofore that may be authorized in writing by City.

SECTION 4 - RESPONSIBILITIES OF CITY

4.1 Provide full information as to City's requirements for the Project.

4.2 Assist Engineer by placing at Engineer's disposal available information pertinent to the assignment including previous reports and other data relative thereto, including the items outlined in Scope of Basic Services.

4.3 Guarantee access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform Engineer's services under this Agreement.

4.4 Examine all studies, reports, sketches, estimates, Bid Documents, Drawings, proposals and other documents presented by Engineer and render in writing decisions pertaining thereto.

4.5 Provide such professional legal, accounting, financial and insurance counseling services as may be required for the Project.

4.6 Designate **Shawn Carrico, Engineering Supervisor**, as City's representative with respect to the services to be performed under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to materials, equipment, elements and systems to be used in the Project, and other matters pertinent to the services covered by this Agreement. The City's designated representative may be changed during the duration of this Agreement by written notice from the City Manager, or City Manager's designee, to Engineer.

4.7 Give prompt written notice to Engineer whenever City observes or otherwise becomes aware of any defect in the Project.

4.8 Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.

4.9 Furnish Engineer data such as probings and subsurface explorations, with appropriate professional interpretations; property, boundary, easement, right-of-way, topographic and utility surveys; zoning and deed restriction; and other special data or consultations, all of which Engineer may rely upon in performing his services under this Agreement.

SECTION 5 - PERIOD OF SERVICE

5.1 This Agreement will become effective upon the first written notice by City authorizing services hereunder.

5.2 This Agreement shall be applicable to all work assignments authorized by City subsequent to the date of its execution and shall be effective as to all assignments authorized.

5.3 Services shall be started within 10 calendar days of Notice to Proceed and completed within **450** calendar days from the issuance of the Notice to Proceed. City shall have the right to establish performance times for individual phases or elements of the Project by delivering a written schedule setting out the performance times to the Engineer.

SECTION 6 - PAYMENTS TO ENGINEER

6.1 Amount of Payment

6.1.1 For services performed, City agrees to pay Engineer the sum of **\$249,546**, which shall constitute complete compensation for all services and payment of expenses to be rendered under this Agreement.

6.1.2 It is expressly understood that in no event will the total amount paid to Engineer under the terms of this Agreement, or any amendment thereto, exceed the sum set forth in paragraph 6.1.1 unless otherwise agreed to in writing between the parties in advance of the provision of such services.

6.2 Payments

6.2.1 Engineer shall submit an invoice to City for the percentage of services rendered to date under this Agreement not more than once every month. Upon receipt of the invoice and progress report, City will, as soon as practical, pay Engineer for the services rendered, provided City does not contest the invoice.

SECTION 7 - GENERAL CONSIDERATIONS

7.1 Insurance

7.1.1 **ENGINEER'S INSURANCE:** Engineer agrees to maintain, on a primary basis and at its sole expense, at all times during the life of this contract the following insurance coverages, limits, including endorsements described herein. The requirements contained herein, as well as City's review or acceptance of insurance maintained by Engineer is not intended to and shall not in any manner limit or qualify the liabilities or obligations assumed by Engineer under this contract.

Commercial General Liability Engineer agrees to maintain Commercial General Liability at a limit of liability not less than **\$2,000,000** per occurrence and **\$3,000,000** aggregate covering both bodily injury and property damage, including accidental death. Coverage shall not contain any endorsement(s) excluding nor limiting Contractual Liability or Cross Liability. If the contract involves any underground/digging operations, the general liability certificate shall include X, C and U (Explosion, Collapse and Underground) coverage.

Professional Liability Engineer agrees to maintain Professional (Errors & Omissions) Liability at a limit of liability not less than **\$2,000,000** per occurrence and **\$3,000,000** aggregate. For policies written on a "Claims-Made" basis, Engineer agrees to maintain a Retroactive Date prior to or equal to the Effective Date of this contract. In the event the policy is canceled, non-renewed, switched to an Occurrence Form, retroactive date advanced; or any other event triggering the right to purchase a Supplemental Extended Reporting Period (SERP) during the life of this contract, Engineer agrees to purchase a SERP with a minimum reporting period not less than two **(2)** years. The requirement to purchase a SERP shall not relieve Engineer of the obligation to provide replacement coverage.

Business Automobile Liability Engineer agrees to maintain Business Automobile Liability at a limit of liability not less than **\$2,000,000** per occurrence and **\$3,000,000** aggregate, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the Engineer's own automobiles, and trucks; hired automobiles, and trucks; and automobiles both on and off the site of work. Coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event Engineer does not own automobiles, Engineer agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Workers' Compensation Insurance & Employers' Liability Engineer agrees to take out and maintain during the life of this contract, Employers' Liability and Workers' Compensation Insurance for all of their employees employed at the site of the work, and in case any work is sublet, the Engineer shall require the subcontractor similarly to provide Workers' Compensation Insurance for all the latter's employees unless such employees are covered by the protection afforded by the Engineer. Workers' Compensation coverages shall meet Missouri statutory limits. Employers' Liability minimum limits shall

be \$500,000 each employee, \$500,000 each accident and \$500,000 policy limit. In case any class of employees engaged in hazardous work under this contract is not protected under the Workers' Compensation Statute, the Engineer shall provide and shall cause each subcontractor to provide Employers' Liability Insurance for the protection of their employees not otherwise protected.

Excess/Umbrella Liability The above liability limits may be satisfied by any combination of primary and excess/umbrella liability policies.

Additional Insured Engineer agrees to endorse City as an Additional Insured with a CG 2026 Additional Insured – Designated Person or Organization endorsement, or similar endorsement, to the Commercial General Liability. The Additional Insured shall read "City of Columbia."

Waiver of Subrogation Engineer agrees by entering into this contract to a Waiver of Subrogation for each required policy herein except professional liability. When required by the insurer, or should a policy condition not permit Engineer to enter into an pre-loss agreement to waive subrogation without an endorsement, then Engineer agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition specifically prohibiting such an endorsement, or voids coverage should Engineer enter into such an agreement on a pre-loss basis.

Certificate(s) of Insurance Engineer agrees to provide City with Certificate(s) of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and in full force and effect. Said Certificate(s) of Insurance shall include a minimum thirty (30) day endeavor to notify due to cancellation or non-renewal of coverage. The Certificate(s) of Insurance shall name the City as additional insured in an amount as required in this contract and contain a description of the project or work to be performed.

Right to Revise or Reject City reserves the right, but not the obligation, to review and revise any insurance requirement, not limited to limits, coverages and endorsements based on insurance market conditions affecting the availability or affordability of coverage; or changes in the scope of work / specifications affecting the applicability of coverage. Additionally, City reserves the right, but not the obligation, to review and reject any insurance policies failing to meet the criteria stated herein or any insurer providing coverage due of its poor financial condition or failure to operating legally.

7.1.2 **HOLD HARMLESS AGREEMENT:** To the fullest extent not prohibited by law, Engineer shall indemnify and hold harmless the City of Columbia, its directors, officers, agents and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any negligent act or failure to act, or willful misconduct, of Engineer, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with Engineer or a subcontractor for part of the services), of anyone directly or indirectly employed by Engineer or by any subcontractor, or of anyone for whose acts Engineer or its subcontractor may be liable, in connection with providing these services except as

provided in this Agreement. This provision does not, however, require Engineer to indemnify, hold harmless or defend the City of Columbia from its own negligence, except as set out herein.

7.2 Professional Responsibility

7.2.1 Missouri Licensure & Certificate of Authority

Engineer certifies that it is currently in compliance, and agrees to maintain compliance for the duration of this Agreement, with all licensure requirements of the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors and Professional Landscape Architects (hereinafter "APEPLSPLA") to practice in Missouri as a professional engineer as provided under chapter 327 of the Missouri Revised Statutes. To the extent required by Section 327.401 of the Missouri Revised Statutes, Engineer understands and agrees that the person personally in charge and supervising the professional engineering services of Engineer under this Agreement shall be licensed and authorized to practice engineering in Missouri, and that Engineer will keep and maintain a valid certificate of authority from APEPLSPLA.

7.2.2 Engineer will exercise reasonable skill, care, and diligence in the performance of its services and will carry out its responsibilities in accordance with customarily accepted good professional engineering practices. If Engineer fails to meet the foregoing standard, Engineer will perform at its own cost, and without reimbursement from City, the professional engineering services necessary to correct errors and omissions which are caused by Engineer's failure to comply with above standard, and which are reported to Engineer within one year from the completion of Engineer's services for the Project.

7.2.3 In addition, Engineer will be responsible to City for damages caused by its negligent conduct during its activities at the Project site or in the field.

7.2.4 Professional Oversight Indemnification

Engineer understands and agrees that City has contracted with Engineer based upon Engineer's representations that Engineer is a skilled professional and fully able to provide the services set out in this Agreement. In addition to any other indemnification set out in this Agreement, Engineer agrees to defend, indemnify and hold and save harmless City from any and all claims, settlements and judgments whatsoever arising out of City's alleged negligence in hiring or failing to properly supervise Engineer. Engineer agrees to provide City with Certificate(s) of Insurance evidencing that all coverages, limits and endorsements are maintained and in full force and effect.

7.3 Estimates and Projections

Estimates and projections prepared by Engineer relating to construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, and operating results are based on Engineer's experience, qualifications and judgment as a design professional. Since Engineer has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction

contractor's procedures and methods, unavoidable delays, construction contractor's methods of determining prices, economic conditions, competitive bidding or market conditions and other factors affecting such estimates or projections, Engineer does not guarantee that actual rates, costs, performance, schedules, etc., will not vary from estimates and projections prepared by Engineer.

7.4 On-Site Services

Project site visits by Engineer during construction shall not make Engineer responsible for construction means, methods, techniques, sequences or procedures; for construction safety precautions or programs; or for any construction contractor(s') failure to perform its work in accordance with the plans and specifications.

7.5 Changes

City shall have the right to make changes within the general scope of Engineer's services, with an appropriate change in compensation and/or schedule, upon execution of a mutually acceptable amendment or change order signed by an authorized representative of City and the President or any Vice President of Engineer.

7.6 Suspension of Services

Should City fail to fulfill its responsibilities as provided under Section 4 to the extent that Engineer is unduly hindered in Engineer's services or if City fails to make any payment to Engineer on account of its services and expenses within ninety (90) days after receipt of Engineer's bill therefor, Engineer may, after giving seven (7) days' written notice to City, suspend services under this Agreement until City has satisfied his obligations under this Agreement.

7.7 Termination

Services may be terminated by the City at any time and for any reason, and by Engineer in the event of substantial failure to perform in accordance with the terms hereof by City through no fault of Engineer, by ten (10) days' notice. If so terminated, City shall pay Engineer all uncontested amounts due Engineer for all services properly rendered and expenses incurred to the date of receipt of notice of termination.

7.7.1 In the event of City's termination of this Agreement pursuant to the above section, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared under this Agreement, shall at the option of City become its property.

Further, Engineer shall not be relieved of any liability to City for any damages sustained by City by virtue of any breach of this Agreement by Engineer and City may withhold any payments due Engineer for the purpose of set-off until such time as the exact amount of damages to City, if any, is determined.

7.8 Publications

Recognizing the importance of professional development on the part of Engineer's employees and the importance of Engineer's public relations, Engineer may

prepare publications, such as technical papers, articles for periodicals, and press releases, pertaining to Engineer's services for the Project. Such publications will be provided to City in draft form for City's advance review. City will review such drafts promptly and will provide comments to Engineer. City may require deletion of proprietary data or confidential information from such publications but otherwise will not unreasonably withhold its approval. The cost of Engineer's activities pertaining to any such publication shall be paid entirely by Engineer.

7.9 Nondiscrimination

During the performance of this Agreement, Engineer agrees to the following:

7.9.1 Engineer shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation, gender identity or expression, or any other protected category designated by local, state, or federal law. Engineer shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation, gender identity or expression, or any other protected category designated by local, state, or federal law. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. Engineer agrees to post notices in conspicuous places, available to employees and applicants for employment.

7.9.2 Engineer shall, in all solicitation or advertisements for employees placed by or on behalf of Engineer, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation, gender identity or expression, or any other protected category designated by local, state, or federal law.

7.9.3 Engineer shall comply with all provisions of State and Federal Laws governing the regulation of Equal Employment Opportunity including Title VI of the Civil Rights Act of 1964.

7.10 Successor and Assigns

City and Engineer each binds himself and his successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement; except as above, neither City nor Engineer shall assign, sublet or transfer his interest in the Agreement without the written consent of the other.

7.11 Rights and Benefits

Engineer's services will be performed solely for the benefit of the City and not for the benefit of any other persons or entities.

7.12 Compliance with Local Laws

Engineer shall comply with all applicable laws, ordinances and codes of the state and city.

7.13 Law; Submission to Jurisdiction Governing

This Agreement shall be governed by, interpreted and enforced in accordance with the laws of the State of Missouri and/or the laws of the United States, as applicable. The venue for all litigation arising out of, or relating to this Agreement, shall be Boone County, Missouri or the United States Western District of Missouri. The parties hereto irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of Missouri and waive any defense of forum non conveniens.

7.14 Employment of Unauthorized Aliens Prohibited

7.14.1 Engineer agrees to comply with Missouri State Statute section 285.530 in that they shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

7.14.2 As a condition for the award of this Agreement, Engineer shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Engineer shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services.

7.14.3 Engineer shall require each subcontractor to affirmatively state in its contract with Engineer that the subcontractor shall not knowingly employ, hire for employment or continue to employ an unauthorized alien to perform work within the state of Missouri. Engineer shall also require each subcontractor to provide Engineer with a sworn affidavit under the penalty of perjury attesting to the fact that the subcontractor's employees are lawfully present in the United States.

7.15 Missouri Anti-Discrimination Against Israel Act: To the extent required by Missouri Revised Statute Section 34.600, Engineer certifies it is not currently engaged in and shall not, for the duration of this Agreement, engage in a boycott of goods or services from the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel. If any provision of this paragraph, or the application of such provision to any person or circumstance, shall be held invalid, the remainder of this Agreement, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby. This paragraph shall not apply to contracts with a total potential value of less than one hundred thousand dollars (\$100,000.00) or to contractors with fewer than ten (10) employees.

7.16 No Waiver of Immunities

In no event shall the language of this Agreement constitute or be construed as a waiver or limitation for either party's rights or defenses with regard to each party's applicable sovereign, governmental, or official immunities and protections as provided by federal and state constitutions or laws.

7.17 Counterparts and Electronic Signatures

This Agreement may be signed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same document. Faxed signatures, or scanned and electronically transmitted signatures, on this Agreement or any notice delivered pursuant to this Agreement, shall be deemed to have the same legal effect as original signatures on this Agreement.

7.18 Agreement Documents

This Agreement includes the following exhibits, which are incorporated herein by reference:

<u>Exhibit</u>	<u>Description</u>
A	Scope of Work
B	Work Authorization Affidavit

In the event of a conflict between the terms and conditions of this Agreement and any exhibit hereto, the terms contained in this Agreement shall prevail and the terms contained in any exhibit shall subsequently prevail in the order attached hereto.

7.19 Entire Agreement

This Agreement represents the entire and integrated Agreement between Engineer and City relative to the Scope of Basic Services herein. All previous or contemporaneous agreements, representations, promises and conditions relating to Engineer's services described herein are superseded.

[SIGNATURES ON FOLLOWING PAGE]

CITY OF COLUMBIA, MISSOURI

By: _____

City Manager



Date: _____

ATTESTED BY:

Sheela Amin, City Clerk

APPROVED AS TO FORM:

Nancy Thompson, City Counselor

CERTIFICATION:

I hereby certify that the above expenditure is within the purpose of the appropriation to which it is charged, Account No. **07040923-504023**, and that there is an unencumbered balance to the credit of such appropriation sufficient to pay therefor.

By: _____

Director of Finance

BLACK & VEATCH CORPORATION

By: _____

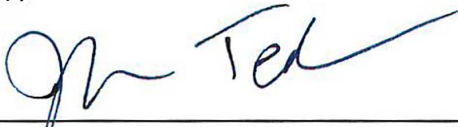


Date: _____

03/22/2023

ATTEST:

By: _____



Name: _____

Joshua Tedder

EXHIBIT A

SCOPE OF WORK

Owner: Columbia, Missouri

Project Title: Compliance with Lead & Copper Rule Revisions (LCRR)

Engineer: Black & Veatch Corporation

Background

On December 22, 2020, United States Environmental Protection Agency (EPA) finalized the first major update to the Lead and Copper Rule (LCR) in nearly 30 years. The finalized Lead and Copper Rule Revisions (LCRR) were promulgated in the Federal Register on January 15, 2021 with a focus on switching from a reactive to proactive approach to improve water quality at the customers' tap. The compliance deadline for the LCRR was January 16, 2024 when it was initially published.

On March 10, 2021, EPA announced the delay of the effective date for the LCRR so the agency could seek further public input, especially from communities that are most at-risk of exposure to lead in drinking water. Following virtual hearings in April 2021 and discussions with key stakeholders in May and June, 2021, the EPA further delayed the effective date to December 16, 2021 with a corresponding extension of the LCRR's compliance deadline to October 16, 2024.

Additionally, on December 16, 2021, the EPA provided a notification that the Agency is developing another rule that will be titled the "Lead and Copper Rule Improvements (LCRI)". The EPA noted that they expect to publish the proposed LCRI in 2023 to achieve a final LCRI prior to the LCRR compliance date of October 16, 2024.

As the regulatory landscape is changing, it is critical that utilities and State Primacy Agencies begin preparing for changes to the LCR to meet implementation and enforcement of compliance. Modifications finalized in the LCRR were focused on better protecting children and communities from the risks of lead exposure by identifying areas most impacted by lead contamination and developing plans to mitigate the risk.

This project will complete activities required to comply with the LCRR and share compliance deliverables with the Missouri Department of Natural Resources (MDNR) for approval. The LCRR encompasses water quality evaluations, distribution system materials assessment and replacements, testing for lead at schools and childcare facilities, public education, increased notification, etc., which requires numerous disciplines to be involved in this Project.

Specialized personnel will be involved in this project to streamline the Project execution and ensure that the details of the LCRR are effectively communicated and implemented. Additionally, environmental justice and equity will be considered in all aspects of the Project to align with the EPA's ongoing review of the LCRR and industry best practices.

The Scope is based on a 15-month schedule and is intended to achieve LCRR compliance by October 16, 2024. This Task Order will achieve the following goals:

- Complete remaining activities necessary to meet compliance deadlines with the LCRR (i.e., service line inventory, service line replacement plan, selection of new LCR compliance sites). Note: Missouri passed legislation to have lead testing completed at schools, so the school and childcare sampling plan is not included in as we await further details on this program.
- Creates an open line of communication between the City, Engineer, and MDNR to understand how the LCRR (and future LCRI) will be enforced and what activities could be started prior to compliance dates as a proactive desire.
- Public education assistance and templates that the City can use.

Scope of Services

Services to complete LCRR compliance deliverables prior to the compliance date of Oct. 16, 2024 are included. Task 2.1 (Service Line Inventory) will be completed by December 31, 2023 so the City can submit the inventory to MDNR. Task 2.2 thru 2.5 will be completed by October 16, 2024. Future phases, as outlined in the supplemental services, could complete field investigations and predictive modeling to fill gaps in the service line inventory.

Task 1 – Project Management and Administration

1. Provide Project Management and Administration for the project. Engineer will provide access to the designated support team to provide Owner support for the program and assist the Owner with implementing the data management solution as budgeted.
2. Coordinate the activities of the project team, subconsultants, and subcontractors.
3. Prepare monthly project invoices for ENGINEER's services in format acceptable to Owner.
4. Maintain a project filing system throughout the life of the project to use for storage and retrieval of project documents.
5. Develop and update project schedule based on input from Owner
6. Conduct Project kick-off Workshop to:
 - a. Review goals and expectations
 - b. Confirm schedules and deliverable dates.
 - c. Review communication protocols
 - d. Develop smaller focus teams for specific tasks.
7. Conduct meetings every two weeks for the first six months of the project and then monthly meetings through the end of the project with Owner Leadership team to review progress, schedules, resolve issues, and receive guidance. Engineer will issue meeting summaries.
8. Deliverables:
 - a. Meeting/workshop agendas, summaries
 - b. Invoices

Task 2 – LCRR Compliance Deliverable Execution

1. Service Line Inventory

- a. A collaborative workshop will be held with the Owner and Engineer to review the service line inventory that the City has developed. Discussion topics will also include the following:
 - i. Compare the City's data with what is required in the Service Line Inventory deliverable to be approved by MDNR.
 - ii. Establish when certain materials were allowed/used – City Standards for pipe materials, building permits, plumbing codes/home plumbing records, EPA/MDNR regs (EPA lead ban in 1986, Missouri on 8/31/1988 per 10CSR 60-10.040 and 60-8.020; and MS Released Statutes, Chapters 311.060) to determine if additional unknowns can be eliminated from the inventory
 - iii. Determine if any galvanized lines were downstream of lead lines utilizing Owner's records of any lead lines removed in the past.
 - iv. Identify data gaps that could be filled with field investigations, customer input, during the City's meter replacement project, or with predictive modeling. Field services and other methods to fill data gaps would be considered supplemental services .
- b. Develop an electronic Customer Survey/Form using the Esri software ecosystem to determine if the customer can identify the material of their service line and share the information and pictures with the City. The customer survey/form will include directions for how to locate the service line where it enters the property and how to determine material type of service line or internal plumbing (scratch/magnet test). The information provided by customers will be able to be reviewed by City staff and then added to the service line inventory.
- c. Review the City's Service Line Inventory spreadsheet prior to submittal to MDNR for approval.
- d. Quantify the different service line materials in the system (i.e., lead, galvanized requiring replacement, unknown, and non-lead).
- e. Deliverables:
 - i. Workshop agendas and meeting minutes
 - ii. Tables providing total counts of different service line materials in the system

- iii. List of locations with unknown service line material on the customer side where the customer survey/form should be prioritized
- 2. LCRR Monitoring Sites and Sampling Plan
 - a. Based on the City's completed service line inventory, identify a list of LCRR compliance sampling sites based on the updated LCRR Tier structure.
 - b. Develop a LCRR compliance monitoring plan detailing the type of sample kit that should be provided to each Tier, the instructions to provide to customers for sample collection, and customer notification details.
 - c. Develop "Find-and-Fix" plan.
 - d. Develop plan for notification in case of a lead Action Level exceedance requiring 24-hour notification.
 - e. Finalize the LCR monitoring sites list and provide it to MDNR for approval.
 - f. Deliverables:
 - i. Updated LCRR compliance monitoring sampling sites
 - ii. LCRR sampling plan for notification and "Find-and-Fix"
- 3. Service Line Replacement Plan (SLRP)
 - a. Based on the City's completed service line inventory, prepare a Service Line Replacement Plan (SLRP) for review and comment by Owner that will include:
 - i. Quantity of service line materials requiring replacement or unknown on both the public and private side.
 - ii. Prioritized replacement plan based on social and environmental equity.
 - iii. Standard Operating Procedures (SOPs) for customer notification, replacement, whole house flushing, pitcher filter delivery, and follow-up sampling.
 - b. Finalize SLRP and provide it to MDNR for approval.
 - c. Deliverables:
 - i. Service Line Replacement Plan
- 4. Coordination with MDNR
 - a. Present approach to MDNR personnel responsible for LCRR implementation and compliance to confirm agreement with approach and deliverables.
 - b. Determine what MDNR will classify as "galvanized requiring replacement".
 - c. Determine how lead pigtails will be handled.
 - d. Establish semi-annual check-in calls.
 - e. Deliverables:

- i. Meeting minutes
- 5. Public Education and Outreach
 - a. A collaborative workshop will be held with the City and Engineer to define level of detail for communications required for customers based on the service line materials and the potential need for field investigations and replacements.
 - b. A critical path will be outlined with timeframes required for notifications.
 - c. FAQs will be prepared for the City to post on the City's website or to use on printed materials.
 - d. Example notification letter templates with the City's logo and program details will be prepared for the City. Printing and mailing will be completed by the City.
 - e. Deliverables:
 - i. Workshop agenda and meeting minutes
 - ii. Public education critical path
 - iii. FAQ list
 - iv. Example customer notification letter templates

Supplemental Services

Supplemental services shall include, but are not limited to:

1. Field investigations and predictive modeling, including:
 - a. Use statistical analysis to quantify number of field investigations needed for various confidence levels in predictive modeling.
 - b. Complete service line field investigations (potholing/vacuum excavations, home inspections, meter pit inspections, etc.) for the number of sites determined to calibrate the predictive model.
 - c. Public communication assistance with field investigations, right-of-entry approvals, scheduling, and tracking.
 - d. Predictive modeling to estimate unknown service line materials.
 - e. Additional community outreach and public education.
 - f. Service line replacements.
 - g. Funding/financing evaluation and application assistance.
 - h. School and childcare sampling plan (if needed)
2. Any work requested by Owner that is not included in one of the items listed will be classified as supplemental services.
3. Changes in the general scope, extent, or character of the project, including, but not limited to:
 - a. Changes in size or complexity.
 - b. Owner's schedule.
 - c. Revision of previously accepted studies, reports, design documents, or construction contract documents when such revisions are

required by changes in laws, rules, regulations, ordinances, codes, or orders enacted subsequent to the preparation of such studies, reports, documents, or designs; or are required by any other causes beyond Engineer's control.

4. Hazardous materials testing and subsequent provisions for hazardous material handling and disposal.
5. Special consultants or independent professional associates requested or authorized by Owner.
6. Surveying.
7. Geotechnical services.

NOTICE TO VENDORS

Section 285.525 – 285.550 RSMo Effective January 1, 2009

Effective January 1, 2009 and pursuant to RSMo 285.530 (1), No business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

As a condition for the award of any contract or grant in excess of five thousand dollars by the state or by any political subdivision of the state to a business entity, or for any business entity receiving a state administered or subsidized tax credit, tax abatement, or loan from the state, the business entity shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Every such business entity shall sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. [RSMO 285.530 (2)]

An employer may enroll and participate in a federal work authorization program and shall verify the employment eligibility of every employee in the employer's hire whose employment commences after the employer enrolls in a federal work authorization program. The employer shall retain a copy of the dated verification report received from the federal government. Any business entity that participates in such program shall have an affirmative defense that such business entity has not violated subsection 1 of this section. [RSMO 285.530 (4)]

For vendors that are not already enrolled and participating in a federal work authorization program, E-Verify is an example of this type of program. Information regarding E-Verify is available at:

http://www.dhs.gov/xprevprot/programs/gc_1185221678150.shtm.

**CITY OF COLUMBIA, MISSOURI
WORK AUTHORIZATION AFFIDAVIT
PURSUANT TO 285.530 RSMo
(FOR ALL CONTRACTS IN EXCESS OF \$5,000.00)**

County of Jackson)
State of Missouri) ss.
)

My name is Andrew Hansen. I am an authorized agent of Black & Veatch Corporation (Bidder). This business is enrolled and participates in a federal work authorization program for all employees working in connection with services provided to the City of Columbia. This business does not knowingly employ any person who is an unauthorized alien in connection with the services being provided.

Documentation of participation in a federal work authorization program is attached to this affidavit.

Furthermore, all subcontractors working on this contract shall affirmatively state in writing in their contracts that they are not in violation of Section 285.530.1 RSMo and shall not thereafter be in violation. Alternatively, a subcontractor may submit a sworn affidavit under penalty of perjury that all employees are lawfully present in the United States.

Andrew Hansen
Affiant

Andrew Hansen
Printed Name

Subscribed and sworn to before me this 22nd day of March, 2023

[Signature]
Notary Public

