

CITY OF HIGH POINT

AGENDA ITEM



Title: Compliance with Lead & Copper Rule Revisions (LCRR)- Phase 1
Black and Veatch

From: Robby Stone – Public Services Director
Derrick Boone – Public Services Asst. Director

Meeting Date: July 18, 2022

Public Hearing: N/A

Advertising Date: N/A

Advertised By: On-Call

Attachments: Attachment A – Scope of Services for Compliance with Lead & Copper Rule Revisions (LCRR) Phase 1 Project
Attachment B- Basis of Compensation

PURPOSE:

To contract Black and Veatch to provide assistance to the Public Services Department with developing an implementation plan to achieve compliance with the federal Lead and Copper Rule Revisions (LCRR).

BACKGROUND:

On December 22, 2020, the 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 is October 16, 2024. The Scope for Phase 1 is based on an 8-month schedule and is intended to organize data, develop a service line inventory and dashboard, and develop public education and outreach strategies to position the City of High Point to achieve compliance upon completion of Phase 2 of the project.

BUDGET IMPACT:

Funds for this are available in the adopted FY 22/23 budget.

RECOMMENDATION / ACTION REQUESTED:

The Public Services Department recommends approval and asks for the Council to award the professional engineering services to Black and Veatch in the amount of \$576,080.



BLACK & VEATCH
Building a world of difference.®

BLACK & VEATCH INTERNATIONAL COMPANY

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June 16, 2022

City of High Point
211 S. Hamilton Street
High Point, NC 27260

Attention: Derrick Boone, PE
Assistant Public Services Director

Subject: Compliance with Lead & Copper Rule Revisions (LCRR) Phase 1 Project

Dear Derrick:

Attached for your approval is Attachment A Scope of Services and Attachment B Basis of Compensation for the subject Project. The 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 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 is October 16, 2024. The Scope for Phase 1 is based on an 8-month schedule and is intended to organize data, develop a service line inventory and dashboard, and develop public education and outreach strategies to position the City of High Point to achieve compliance. Compliance will be achieved in Phase 2 of the project.

We appreciate and look forward to the opportunity to work with you and your staff on this important project.

Very truly yours,

BLACK & VEATCH INTERNATIONAL COMPANY

Jeff Coggins, PE
Associate Vice President

Mike Osborne, PE
Sr. Project Manager/Client Director

ATTACHMENT A SCOPE OF SERVICES

Owner: City of High Point (CITY)
Engineer: Black & Veatch International Company
Project: Compliance with Lead & Copper Rule Revisions (LCRR)

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.

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 illustrates the City of High Point's desire to remain proactive and begin activities right away to improve public education on risks from lead while evaluating materials throughout the distribution system to ensure that customers are receiving the highest quality water. 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 along with detailed program management including the use of internal and external (public) dashboards to monitor progress. Specialized personnel and companies will be involved in this project to streamline the Project execution and ensure that the details of the LCRR are effectively communicated and implemented.

The Scope for Phase 1 is based on an 8-month schedule and is intended to organize data, develop a service line inventory and dashboard, and develop public education and outreach strategies. Phase 2, which is not part of this Scope of Services or fee, would achieve LCRR compliance through execution of deliverables. Phase 3, which is not part of this Scope of Services or fee, is for post LCRR compliance activities. This Phase 1 Task Order will achieve the following goals:

- Gather and organize City's data regarding LCRR tasks into a centralized platform with various dashboards to track project status, share information with the public, and plan for next steps in the Project.
- Identify IT system modifications needed to facilitate data capture, analysis, and display on City systems including – GIS, CMMS, business intelligence (power BI), etc.

- Identify integration requirements needed to share applicable LCRR data between key systems of record (example: development of requirements to extract childcare, and education facility data from a utility billing system).
- Develop a service line inventory that meets LCRR compliance.
- Creates an open line of communication between the City, Engineer, and North Carolina Department of Environmental Quality (NCDEQ) to understand how the LCRR will be enforced and what activities could be started prior to compliance dates as a proactive desire.

Scope of Services

- Phase 1 includes the services to complete the service line inventory, data management organization for system integrations dashboard development, and develop plans for public outreach.
- Phase 2, which will be completed as part of second contract, will complete the remaining LCRR compliance deliverables prior to the compliance date of Oct. 16, 2024, including predictive model and calibration, field work for predictive model calibration, public outreach and education, service line replacement plan, remaining compliance dashboards, as well as additional services the City wants to complete proactively. Phase 2 scope and fee to be negotiated at close of Phase 1.
- Phase 3, which will be completed as part of a third contract, will complete compliance activities after the LCRR compliance date of Oct. 16, 2024. Phase 3 scope and fee to be negotiated at close of Phase 2.

Phase 1 – LCRR Data Management and Service Line Inventory

A. Data Analysis and Management

1. Review available service line data sources and coordinate with Owner to determine/confirm data quality, data formats, and ability to export data (both at the start of the project and ongoing as new information is added). Owner data sources may include historical records (both electronic and hard copies like tap cards – Hard copy data to be converted to digital by Owner), data residing in the Owners GIS, CMMS work order history, data detailing existing asset management programs, financial records for budgeting, any permitting/tax records of schools, childcare facilities, and individual residences/businesses and previous testing requests, data on public outreach communication strategies, etc.
2. Meet with Owner to determine how new data generated on the project will be captured, stored and managed. Map a data management strategy for data deliverables. It is assumed three (3) meetings will be conducted with Owner. Discussion topics will also include the following:
 - a. Meeting 1: Review software/data quality and security requirements with Owner IT, GIS, Legal, etc. Data quality will focus on completeness of service laterals and core asset attributes. Data management meeting will be held to identify and document data needs for key performance indicators (KPI) including:
 - 1) Systems of record
 - 2) Systems of use
 - 3) Data owners

- 4) Methods to access and update key data sources throughout the project
 - 5) Owner IT security policies and procedures required for associated data management
 - b. Meeting 2: Define and document requirements for development of dashboards to track progress and KPIs such as:
 - 1) Types of dashboards needed
 - GIS based vs. program analytics
 - Internal program dashboards
 - Publicly shared external dashboards
 - 2) Dashboard types (Engineer assumes four (4) dashboards will be created with the following content):
 - Service line inventory dashboard with GIS map (Task B)
 - Program status tracking dashboard
 - LCR compliance monitoring/notification and school/childcare sampling dashboard (Phase 2 Scope)
 - Public education and outreach dashboard (Phase 2 Scope)
 - 3) Data defined for each KPI within a dashboard will be documented to the appropriate system of record and tables required to obtain data.
 - c. Meeting 3: Modifications/upgrades to system input screens to allow for tracking the way it is needed for LCRR
 - 1) Adding new dropdown options
 - 2) Add fields for new input data
 - 3) Methods to access and update key data sources
 - 4) Decision on modifications to be made by Owner or Engineer
 3. Develop data management strategy/plan to coordinate with Owner so that final data associated with inventory and assessment is entered into proper system of record such as:
 - a. How new data obtained from pipe materials encountered in the field is entered in GIS or Cityworks, and
 - b. Method to import field inspection results into Cityworks.
 4. Note that initial data collection and hosting will be performed by Engineer. Engineer will provide data to Owner for incorporation into their GIS environment.
 5. Deliverables:
 - a. Meeting agendas and minutes
 - b. Data management strategy/plan
 - c. Program status tracking dashboard
 - d. Updates to system input screens
- B. Service Line Inventory
1. A collaborative workshop will be held with the Owner and Engineer to define level of detail in the service line inventory and document requirements for development of service line inventory dashboard with GIS map. An example dashboard will be shared with Owner to get Owner's input on display and functionality.
 2. Build service line inventory through use of available data including GIS, tax, real estate records, maintenance records, meter inspections, rehab projects, crew chief

reports, line repairs, contracted line repairs, engineering/planning, developers and tap card records for compliance with the LCRR and for use later (Phase 2) by the Predictive Model. An allowance of \$35,000 has been included for Blue Conduit to develop the inventory and map.

- a. Establish when certain materials were allowed/used – City’s Standards for pipe materials, building permits, plumbing codes/home plumbing records, EPA/NCDEQ regs (EPA lead ban in 1986, NC in 1988)
 - b. Determine if any galvanized lines were downstream of lead lines utilizing Owner’s records of lead lines removed in the past.
 - c. Identify Data gaps and field investigations needed.
 3. Develop the service line inventory dashboard with GIS map. The service line inventory dashboard and GIS map will be hosted on Engineer’s server, and a link can be added to the Owner’s website so that the Owner’s customers can click and go directly to the inventory map. If the Owner chooses to host the inventory map, then the information outputs will be provided to the Owner so it could be added to the Owner’s GIS and dashboard environment(s). The service line inventory dashboard will be created with the following content, if available:
 - a. Interactive service line inventory map noting the public and private service line type for every parcel (GIS)
 - b. Schools and state-licensed childcare facilities (Utility Billing or similar system)
 - c. Conduct testing of feature functionality and display within Owner’s IT environment.
 4. Deliverables:
 - a. Workshop agendas and meeting minutes
 - b. Service line inventory dashboard with GIS map
- C. Coordination with NCDEQ
 1. Coordinate with NCDEQ during Phase 1.
 - a. Present approach/updates to NCDEQ personnel responsible for LCRR implementation and compliance to confirm agreement with approach and deliverables.
 - b. Establish quarterly check-in calls.
 2. Deliverables:
 - a. Meeting minutes
- D. Public Outreach and Education
 1. Through a subcontract, engage a public relations subconsultant to develop a public relations plan. The following is required in the LCRR:
 - a. Notification letters of service line material
 - b. Notification letter of service line replacement, follow-up testing, pitcher filters, results
 - c. Notification letter to schools and childcare facilities for testing
 - d. Public education flyers for how to minimize lead
 - e. Public education on remediation steps for elevated lead in schools/childcares
 - f. Public education on how to use filters

We will conduct a workshop with Owner to discuss current efforts/strategies employed and develop a framework and strategies for Public Outreach. An allowance of \$20,000.00 has been included for public relations subcontracting services to develop the public relations plan, identify stakeholders, and other activities that can be completed within the allowance amount. It is intended that the bulk of the public relations efforts will take place in Phase 2.

- 2. Deliverables
 - a. Public Relations Plan
- E. Schools & Childcare Inventory and Planning
 - 1. Prepare inventory of public and private elementary schools, licensed childcare facilities. The inventory will include name, contact, location, date facility constructed, type of facility, etc. Coordinate with Owner Customer Service/billing for information.
 - 2. Develop approach for communicating with schools and childcares included with the Task D – Public Outreach and Education communication plan.
 - 3. Deliverables
 - a. Schools and Childcare Inventory

Project Management and Administration

- 1. Provide Project Management and Administration for Phase 1 (8 months) of the project.
- 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. Conduct monthly meetings (8) with Owner Leadership team to review progress, schedules, resolve issues, and receive guidance. Engineer will issue meeting summaries.
- 6. Establish MS TEAMS Project site for use by project team.
- 7. Develop a critical path schedule and a key action items/decision list to track decisions and project progress.
- 8. Conduct Project kick-off meeting to:
 - a. Confirm project goals
 - b. Establish project team communication plan and Owner's key points of contact for each Task.
 - c. Present Schedule
- 9. Deliverables:
 - a. Meeting/workshop agendas, summaries
 - b. Invoices

List of deliverables for each Task:

- A. Data Analysis and Management
 - 1. Meeting agendas and minutes

2. Data management strategy/plan
 3. Program status tracking dashboard
 4. Updates to system input screens
- B. Service Line Inventory
1. Workshop agendas and meeting minutes
 2. Service line inventory dashboard with GIS map
- C. Coordination with NCDEQ
1. Meeting Minutes
- D. Public Education and Outreach
1. Public Relations Plan
- E. Schools and Childcare Inventory and Planning
1. Schools and Childcare Inventory
- F. Project Management and Administration
1. Meeting/Workshop Agendas, summaries
 2. Invoices

Supplemental Services

- A. Any work requested by Owner that is not included in one of the items listed in any other phase will be classified as supplemental services.
- B. Supplemental services shall include, but are not limited to:
1. 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.
 2. Hazardous materials testing and subsequent provisions for hazardous material handling and disposal.
 3. Services extending beyond the specified durations of the scope of services.
 4. Special consultants or independent professional associates requested or authorized by Owner.
 5. Surveying and/or Geotechnical services.
 6. Predictive model services.
 7. Field investigations and field work.

Key Assumptions:

- Scope assumptions included above.
- Owner PM will coordinate attendance at workshops and meeting of key staff participants.

PERIODS OF SERVICES –

Phase 1 – 8 months

ATTACHMENT B
BASIS OF COMPENSATION

PROJECT NAME: Compliance with Lead & Copper Rule Revisions (LCRR)

Below is a cost breakdown by Task:

A.	Data Analysis and Management	\$193,670.00
B.	Service Line Inventory	\$216,750.00
C.	Public Education and Outreach	\$55,200.00
D.	Coordination with NCDEQ	\$11,380.00
E.	Schools and Childcare Inventory and Planning	\$34,820.00
F.	Project Management and Administration	\$64,260.00

For the Phase 1 Scope of Services in Attachment A, Owner will compensate Engineer in accordance with the Bill Rate Schedule below, plus reimbursable expenses times 1.0, plus subconsultant expenses times 1.10 a fee not to exceed \$576,080.00. The maximum billed for these services shall not exceed this amount without further written approval from the Owner. Funds may be transferred from one task to another without amendment, as long as the total cost is not exceeded. Standard hourly rates are subject to review and adjustment annually. For Supplemental Services, Owner and Engineer will negotiate a written Amendment to this contract.

Hourly rates effective on the date of this Agreement are as follows:

HOURLY RATE SCHEDULE	
Effective through December 31, 2022	
Principal	\$255-310
Sr. Planning Manager	\$220-280
Sr. Project Manager	\$220-280
Project Manager	\$190-250
Sr. Engineering Manager	\$225-295
Engineering Manager	\$180-230
Sr. Engineer	\$195-290
Project Engineer	\$155-210
Staff Engineer 4	\$145-180
Staff Engineer 3	\$135-170
Staff Engineer 2	\$125-150
Staff Engineer 1	\$100-135
Sr. Architect	\$160-240
Architect	\$140-190
Sr. Construction Manager	\$175-240
Construction Manager	\$150-190
Resident Project Representative	\$120-180
Construction Inspector	\$80-150
Technical Specialist	\$170-280
Sr. Engineering Technician	\$155-190
Engineering Technician	\$105-155
Sr. Drafter	\$95-150
Drafter	\$80-120
Project Controls	\$100-185
Finance/Accountant	\$95-175
Project Administrator	\$95-135
Clerical	\$74-105

The following expenses are reimbursable work items and will be billed at cost: bulk reproduction of documents (outside reproduction services will be treated as a subconsultant); charges for review of drawings and specifications by government agencies, if any; vehicular transportation costs at the rate established by the Internal Revenue Service; airline tickets, meals, and lodging with out-of-town travel.