PROFESSIONAL SERVICES AGREEMENT

This Agreement is made and entered into this _____ day of _____, 2021, by and between the City of Gahanna, Ohio ("City"), an Ohio Municipal Corporation with offices located at 200 South Hamilton Road, Gahanna, Ohio 43230 and AECOM Technical Services, Inc. ("Consultant") located at 277 West Nationwide Blvd, Columbus, Ohio 43215.

The Consultant will provide services in connection with the Claycraft Road Water Main Replacement Project ("Project") which are more fully described in the Attached Exhibit A (Scope of Work) and Exhibit B (Consultant's Proposal).

The following Terms and Conditions will apply to this Agreement:

1.1 Contract Type: This contract shall be in form and content satisfactory to the City and shall include, without limitation, the terms and conditions provided for in the RFP and such other terms and conditions as the City deems necessary and appropriate. The standard of performance for the Project shall be in accordance with the level of care and skill of similar professionals practicing similar services in a similar geographic location in the water distribution engineering services industry. This contract shall include professional/implementation services on a not to exceed basis. The initial contract price will be based on prices submitted by the Consultant, subject to contract negotiations with the City, and shall remain firm for the initial term of the contract.

1.2 Contract Term / Termination: This contract shall be effective upon the date the contract is signed by both the City and the Consultant and shall expire upon completion of the Services covered by the contract. This Agreement may be terminated by the City upon thirty (30) days written notice of such termination. In the event of the City's termination of the Agreement, there shall be no further obligation on the part of the City to the Consultant save and except for payment of sums due and owing for expenses and work incurred by the Consultant prior to the date of termination, minus any City incurred damages if such termination is for cause. In the event of any termination, Consultant shall agree to cooperate in connection with any necessary transition services and shall be reimbursed for such transition services at Consultant's standard rates. Additional detail regarding the duration and schedule of the Project has been included in Part C. Technical Approach of the Consultant's Proposal (Exhibit B).

1.3 Payment Terms: Compensation for Services provided under this Agreement shall be in accordance with the Proposal Pricing Form of the Consultant's Proposal (Exhibit B). For the base scope of services (Tasks 1 through 5 of the Proposal Pricing Form) performed for this Project, except any work covered through Contract Changes, the Consultant's 'not to exceed' fee shall be **\$102,856**.

1.4 Contract Changes: Written requests for price changes in a resulting term contract after the firm price period must be submitted in writing to the City at least thirty (30) days prior to the commencement of any extension period. Any proposed price increase will be based on the Consultant's actual cost increase only, as shown in written documentation provided to the City. All requests for price increases must be in writing, must not constitute increases in profit, and must contain data establishing or supporting the increase in cost. In connection with any Consultant request for price increases in term contracts after the firm

price period, at the option of the City, (1) the request may be granted; (2) the contract may be cancelled by either party; or (3) the contract may be extended without change with the consent of both parties.

The City will accept or reject all such written requests within fifteen (15) days of the date of receipt of Consultant's request for price increase or receipt of proper written documentation, whichever is later.

If a price increase is approved, the City will issue an amendment to the contract specifying the date the increase will be effective. The Consultant will be required to send notice to all users of the contract. All Services and related accessories are to be billed at prices in effect at the time the service was rendered, or order was placed. All contract changes will be effective only on written agreement signed by both parties.

1.5 Contract Approval: The City's obligation will commence only following the City's and the Consultant's execution of this Agreement. Upon written notice to the Consultant, the City may set a different starting date for the contract. The City will not be responsible for any work done or expense incurred by the Consultant or any subcontractor, even such work was done or such expense was incurred in good faith, if it occurs prior to the contract start date set by the City.

1.6 Contract Dispute: In the event of contract dispute, dispute proceedings will be held in the State of Ohio. Mediation, subject to written agreement of the parties, will be a mandatory first step in the event of a dispute, prior to any legal action as set forth in the contract.

1.7 Confidential Information: Any written, printed, graphic, electronic, or magnetically recorded information furnished by the City for the Consultant's use are the sole property of the City. This proprietary information includes, but is not limited to, customer requirements, customer lists, marketing information, and information concerning City employees, products, services, prices, operations, security measures, and subsidiaries.

The Consultant and its employees shall keep this confidential information in the strictest confidence, and will not disclose it by any means to any person except with City approval, and then only to the extent necessary to perform the work under the contract. These confidentiality obligations also apply to the Consultant's employees, agents, and subcontractors and Consultant shall be liable for a breach of the confidentiality obligations by any such party. On termination of the contract, the Consultant, its employees, agents, and subcontractors will promptly return any confidential information in its possession to the City.

1.8 Insurance Requirements: Consultant shall, at Consultant's expense, secure and maintain in effect throughout the duration of the contract, insurance of the following kinds and limits set forth in this Section. The Consultant shall furnish a certificate of insurance and endorsements in a form acceptable to the City before starting work or within ten (10) days after the notice of award of the contract, which ever date is reached first. All insurance policies, except professional liability insurance, shall be written with insurance companies licensed to do business in the State of Ohio and having a rating of at least A-VII, according to the latest edition of the Best's Key Rating Guide; and shall include a provision preventing cancellation of the insurance policy unless fifteen (15) days prior written notice is given to the City.

The following provision shall also be stated on each applicable certificate of insurance: "Should any of the above described policies be canceled before the expiration date, the issuing company shall mail fifteen (15) days' written notice to the certificate holder named to the left." Consultant shall require any of its subcontractors to secure and maintain insurance as set forth in this Section and indemnify, hold harmless and defend the City, its officers, employees, and attorneys.

The limits of liability for the insurance required shall provide coverage for the following amounts, or greater where required by law:

A. Commercial General Liability:

i. Coverage to include, Broad Form Property Damage, Contractual and Personal Injury.

ii. Limits:

a. General Aggregate b. Each Occurrence

c. Personal Injury

\$1,000,000.00

- \$1,000,000.00
- \$1,000,000.00

iii. Coverage for all claims arising out of the Consultant's operations or premises, anyone directly or indirectly employed by the Consultant.

B. Professional Liability:

i. Per Claim/Aggregate

\$1,000,000.00

ii. Coverage for all claims caused by the Consultant's negligence, anyone directly or indirectly employed by the Consultant, and the Consultant's obligations under the indemnification provisions of the contract to the extent same are covered.

C. Workers' Compensation:

i. Workers' compensation insurance shall be in accordance with the provisions of the laws of the State of Ohio, including occupational disease provisions, for all employees who perform work pursuant to the contract, and in case work is subcontracted, the Consultant shall require each subcontractor similarly to provide Workers' Compensation Insurance. All such policies of workers' compensation insurance shall include a waiver of subrogation in favor of the City. In case employees engaged in hazardous work under the contract are not protected under said worker's compensation insurance, the Consultant shall provide, and shall cause each subcontractor to provide, adequate and suitable insurance for the protection of employees not otherwise provided.

D. Comprehensive Automobile Liability:

i. Coverage to include all owned, hired, non-owned vehicles, and/or trailers and other equipment required to be licensed, covering personal injury, bodily injury, and property damage.

- ii. Limits:
 - a. Combined Single Limit \$1,000,000.00

E. Umbrella:

- i. Limits:
 - a. Each Occurrence/Aggregate \$1,000,000.00
- F. The City, its officials, officers, employees, and agents shall be included as an

additional insured on all insurance policies identified herein except Workers' Compensation and Professional Liability. All such insurance shall be primary and noncontributory coverage as respects a covered loss. The Consultant shall be responsible for the payment of all premiums and deductibles for said insurance policies. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officers, agents, and employees.

Consultant understands and agrees that, except as to Professional Liability, any insurance protection required by the contract or otherwise provided by the Consultant, shall in no way limit the Consultant's responsibility to indemnify, keep and save harmless the City, its officers, employees, agents as herein provided.

1.9 Conflict of Interest: Consultant shall at all times observe and comply with all federal, state, and local laws, ordinances, and regulations including all amendments and revisions thereto, which in any manner affect Consultant or the services and/or items to be provided, specifically and not limited to any laws relating to conflicts of interest. Failure to comply with any applicable laws may result in: i) the termination of the contract; ii) the forfeiture by Consultant of all benefits of the Contract; iii) the retainage by City of all Services performed by Consultant and iv) the recovery by City of all consideration, or the value of all consideration, paid to Consultant pursuant to any awarded contract.

1.10 Pending and Recent Litigation: Consultant must disclose any pending or recent litigation they are involved in as a company. Recent is defined as the past three (3) years. Information provided should include the timeline of the litigation history, the subject of the litigation, and the current status of the litigation.

1.11 Rights to Submitted Material: It shall be understood that all Proposals, responses, inquiries, or correspondence relating to or in reference to this Project, and all reports, charts, and Proposals or referencing information submitted in response to this Project, shall become the property of the City, and will not be returned. The City will use discretion with regards to disclosure of proprietary information contained in any response but cannot guarantee information will not be made public. As a government entity, the City is subject to making records available for disclosure.

1.12 Indemnity; Hold Harmless: The Consultant shall indemnify, and hold and save the City and all officials, officers, agents, and employees of City harmless from and against third-party claims or losses for personal injury or property damage caused by the negligence of Consultant or any officers, agents, servants, employees, or subcontractors of Consultant.

1.13 Statutory Information: Any contract or agreement resulting from this Project shall be construed in accordance with the laws of the State of Ohio. Any litigation between the parties arising out of, or in connection with, the contract shall be initiated and prosecuted in any federal or state court in Ohio. Mediation, subject to written approval of both parties, will be a mandatory first step in the event of a dispute, prior to any legal action as set forth in the contract.

All Project Vendors, participants, consultants, engineers, and subcontractors must comply with all applicable federal, state, and local laws pertaining to contracts entered into by governmental agencies, including, without limitation, non-discriminating employment. Contracts entered into on the basis of submitted Proposals are revocable if contrary to law.

1.14 Non-Discrimination Clause: During the performance of the contract, the Consultant and all subcontractors will not discriminate against any employee or applicant for employment because of race, color, creed, religion, ancestry, national origin, sex, sexual orientation, disability, age, marital status, or status with regard to public assistance. The Consultant and all subcontractors will take affirmative action to ensure that all employment practices are free of such discrimination. Such employment practices include, but are not limited to, the following: hiring, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff, termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

1.15 ADA: The Consultant and all subcontractors agree to comply with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 and not discriminate on the basis of disability in the admission or access to, or treatment of, employment in its services, programs, or activities. The Consultant and all subcontractors agree to hold harmless and indemnify the City from costs, including but not limited to damages, attorney's fees, and staff time, in any action or proceeding brought alleging a violation of ADA and/or Section 504 caused by the Consultant and any subcontractor.

1.16 Laws: The Consultant and all subcontractors will comply with all applicable local, state, and federal laws, ordinances, and regulations in the performance of the contract. The contract will comply with and be governed by all laws of the State of Ohio. Any violation shall constitute a material breach of the executed contract.

1.17 Force Majeure: Neither Party shall be in default by reason of any failure in performance of this Agreement if such failure is proximately caused by causes beyond their reasonable control and without the fault or negligence of said Party including, without limitation, unforeseeable acts of nature; terrorism or other acts of public enemy; war and epidemics or quarantine restrictions ("force majeure").

If either Party is delayed at any time in the progress of the work governed by the contract by force majeure, the delayed Party shall notify the other Party in writing of such delay, as soon as is practical, of the commencement thereof and shall specify the cause(s) of such delay in the notice. The notice shall be hand-delivered or mailed certified-return receipt and shall make a specific reference to this provision. The delayed Party shall cause such delay to cease as soon as practicable and shall notify the other party in writing when it has done so. The time of completion shall be extended by contract modification for a period of time equal to the time that results or effects of such delay prevent the delayed Party from performing in accordance with this contract.

1.18 Policy Compliance: The Consultant shall, as a condition of being considered for award of the contract, require each of its agents, officers, and employees to abide by the City's policies prohibiting sexual harassment, firearms, and smoking, as well as all other reasonable work rules, safety rules, or policies regulating the conduct of persons on City property at all times while performing duties pursuant to the contract. The Consultant agrees and understands that a violation of any of these policies or rules will constitute a breach of the contract and will be sufficient grounds for immediate termination of the contract by the City.

1.19 Public Information: It shall be understood that all Proposals, responses, inquiries, or correspondence relating to or in reference to this Project, and all reports, charts and Proposals or referencing information prepared by the Consultant through this this Project,

shall become the property of the City, and will not be returned. The City will use discretion with regards to disclosure of proprietary information contained in any response but cannot guarantee information will not be made public. As a governmental entity, the City is subject to making records available for disclosure pursuant to applicable public record disclosure laws, and Proposers, including the Consultant ultimately awarded the contract, shall cooperate in complying with such public disclosure laws at no additional cost to the City.

1.20 Ownership of Data and Transition: Any and all City data stored on the Consultant's servers or within the Consultant's custody, is the sole property of the City. The Consultant, subcontractor(s), officers, agents and assigns shall not make use of, disclose, sell, copy or reproduce the City's data in any manner, or provide to any entity or person outside of the City without the express written authorization of the City.

In the event this Agreement is terminated for any reason, or upon expiration, and in addition to all other rights to property set forth, the Consultant shall:

- a. Incur no further financial obligations for materials, Services, or facilities under the Agreement without prior written approval of the City;
- b. Terminate all purchase orders or procurements and any subcontractors and cease all work, except as the City may direct, for orderly completion and transition; and
- c. Make available to the City, at no cost, all City data stored within the system, stored on the Consultant's servers, or within the Consultant's custody, within fifteen (15) days of termination or City request.
- d. Retain ownership of all data, work products, and documentation, created pursuant to the Agreement.

In the event this Agreement is terminated for any reason, or upon expiration, and in addition to all other rights to property set forth, upon payment of all amounts due to the Consultant under this Agreement, the City shall retain ownership of all data, work products and documentation created pursuant to the this Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement

AECOM TECHNICAL SERVICES, INC.

Date:				
By:				
	Signature			
	Printed Name			
	Title			
	GAHANNA, OHIO			
Date: _				
By:				
	Signature			
	Printed Name			
	The			
Approv	Approved as to Form:			

Raymond J. Mularski, City Attorney

EXHIBIT A – SCOPE OF WORK

Scope of Work

Scope Overview

City is seeking professional engineering services for the replacement of the existing 12-inch ductile iron water main located in the Claycraft Road right-of-way between Morrison Road and Taylor Station Road. The design shall also include associated improvements including new service line installations crossing Claycraft Road, hydrant replacements and site restoration. The new water main material shall be PVC. Construction within public roadway pavement should be minimized as much as reasonably possible. All improvements should be located in public right-of-way such that no easements (temporary or permanent) will be required. The design of this project shall be coordinated with the City's proposed improvements at the intersection of Taylor Station Road and Claycraft Road (see Attachment G for planning-level figure); these intersection improvements will be constructed soon after this water main replacement is completed.

Scope of Services

Task 1. Site Survey and Design

- a. Consultant will complete all necessary project surveying using North American Datum 1983 (NAD83) State Plane Coordinates, South Zone and North American Vertical Datum 1988 (NAVD88), South Zone. In addition to basemapping information typical for a water main replacement, the site survey shall also include the location and size of trees within the work limits (minimum 6-inch caliper).
- b. Consultant will obtain existing private utility information within the project area.
- c. Consultant will perform geotechnical borings of at least 6 feet in depth at five (5) locations approved by the City and provide a geotechnical report of the findings. Boring locations shall be shown on the design drawings.
- d. Consultant will prepare a letter for any affected property owners informing them of survey work before the beginning of fieldwork. The City will send the letter after its review / approval.
- e. Consultant shall prepare construction drawings including, title sheet, plan and profile view, quantities, general notes, maintenance of traffic, erosion and sediment control plan, survey coordinates, specifications and miscellaneous details. These plans must meet City of Gahanna, City of Columbus Division of Water (DOW) and any applicable Ohio Environmental Protection Agency (OEPA) standards.
- f. The current City of Columbus Construction and Material Specifications shall be the standard specifications for this project. The Consultant will prepare any necessary supplemental specifications.
- g. Consultant shall prepare an Erosion and Sediment Control Plan that will meet all City and OEPA requirements.
- h. Consultant shall meet with City staff at a kick-off meeting and at 5% design, 50% design and 90% design stages. Consultant will provide written progress reports at these meetings. These reports are to include a description of work since previous meeting, anticipated work before the next meeting.
- i. The 5% design deliverable shall incorporate all site survey basemapping and shall serve

as the basis for the selection of the alignment used for the 50% and 90% designs.

- j. Consultant will provide an Engineer's Estimate of Construction Cost with the 50% and 90% design submissions. At the 50% design stage, separate construction cost estimates shall be prepared for proposed water main diameters of 12-inch and 16-inch. The final design shall be based on the City's selection of a preferred water main diameter.
- k. Consultant shall submit three sets (two full-size and one half-size) of plans along with a CD containing all CAD files and a PDF of the plans with each submission (5%, 50% and 90%).
- I. For the final design, consultant will provide:
 - Mylar title sheet
 - Two sets of all electronic files on thumb drive.
 - Two (2) half-sized sets
 - Two (2) full-size sets

Task 2. Design Coordination and Permitting

- a. Consultant shall coordinate the detailed design with all public and private utilities within the project areas.
- b. Consultant shall submit plans to private utilities for their comment and coordinate any relocation of other utilities that may be necessary.
- c. Consultant shall be required to prepare any required permit application documents for the OEPA. The City will be responsible for submission of any OEPA permit applications and payment of fees.
- d. Consultant shall review / assess potential grant funding sources for the construction of proposed improvements and provide an opinion to the City regarding the feasibility of such funding. If feasible sources are identified, any services performed by the Consultant to prepare / submit grant funding application(s) will be covered through a contract amendment.

Task 3. Public Meeting

a. Consultant shall assist the City with the preparation of materials and attendance at one (1) public meeting. City staff will make the presentation at the meeting and the Consultant will be present to assist with any questions. The desired time in the schedule for this meeting will be after the 50% submission.

Task 4. Construction Bidding and Submittal Review

- a. The City will compile and issue bidding documents and any necessary addenda.
- b. Consultant will assist the City with addressing questions from bidders.
- c. Consultant shall review all submittals during construction. Consultant shall determine that each submittal is:
 - i. accepted,
 - ii. accepted as noted,
 - iii. rejected, or
 - iv. directed to amend and resubmit with comments.
- d. The Consultant's submittal review process must be completed within fifteen (15) calendar days of receipt from the Contractor or according to an expedited review schedule mutually agreeable to the City and Consultant.

Task 5. As-Built Drawings

a. Consultant shall formally revise the plan sheets according to documentation prepared during construction (including survey coordinates obtained by the Contractor) and provide the City with two (2) hard-copy and an electronic set of final "As-Constructed" drawings for review and comment. The electronic set shall be submitted as one set of PDFs and a thumb drive containing AutoCAD "As-Constructed" drawings.

Task 6. Construction Management (As-Authorized Service)

- a. Construction Manager: The Consultant shall furnish a Construction Manager (CM) that shall serve as the City's representative with the Contractor during construction.
- b. Limits to the CM's Responsibility and Liability: Neither the activities of CM, nor the presence of the CM's employees or sub-consultants at the construction/project site, shall relieve the Contractor, subcontractors, suppliers, and any other entity of their obligations, duties, and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending, or coordinating the work in accordance with the Contract Documents, City regulations, and any health or safety precautions required by any regulatory agency having jurisdiction.
- c. Schedule Review and Monitoring: The CM shall review and monitor all construction schedules, the schedule of Shop Drawing and Sample submittals and any other schedules prepared by the Contractor and consult with the City concerning acceptability of such schedules. When reviewing and monitoring schedules, the CM shall:
 - i. Verify that schedule-related items, including activities, milestones and phasing, are in compliance with the Contract Documents.
 - ii. Verify the reasonableness of activity durations with regard to the quantities of work involved.
 - iii. Consider submittals, material deliveries and lead times, and related inspection requirements.
 - iv. Include recommendations to the City for acceptance, acceptance as noted, rejection, or revision and resubmittal of any Contractor schedule.
- d. Record Keeping: The CM shall maintain appropriate project records. Project records shall include contracts, correspondence issued and received, construction documents, change orders, inspections and claims. Project records that cannot be electronically recorded or filed, such as material samples, shall be maintained at an City-approved location.
- e. Submittal Review and Monitoring: The CM shall develop a list of required submittals, coordinate the Submittal review process and monitor all Submittals to support timely processing. The CM shall receive samples that are furnished at the site and notify the City of the availability of the samples for examination. The CM shall advise the City of the commencement of any portion of the Work requiring a Submittal if the CM believes that the Submittal has not been received from the Contractor. The CM will receive and log the Submittal and review the Submittal without delay for completeness.
- f. Requests for Information or Interpretation (RFI): The CM shall review and monitor all RFI's from the Contractor to support timely responses by the City and

Consultant. During this process, the CM shall:

- i. Receive from the Contractor submittal of any matters in question concerning the requirements of the Construction Contract Documents, or relating to the acceptability of the Work under the Construction Contract Documents.
- ii. Return RFI's to the Contractor that are not valid because the requested information is within the contract documents or do not contain adequate information for a response.
- iii. Report any valid RFI to the City requesting a response.
- iv. Facilitate responses, typically within five (5) calendar days of receipt of notification. Responses may require changes to specifications and/or drawings by the Consultant.
- v. Return RFI response(s) to the Contractor.
- g. Claims and Disputes: The CM will assist the City in researching and managing potential claims and provide documentation, correspondence, and recommendations to the City.
- h. Conferences and Meetings: The CM shall attend and participate in meetings with the City and/or Contractor, such as preconstruction conferences, monthly progress meetings, and other Project-related meetings, and distribute copies of minutes thereof (draft minutes within one week of a meeting and final minutes presented at the next meeting).
- i. Contractor's Application for Payment: The CM shall coordinate with the Construction Inspector (CI) to confirm that Contractor's payment applications are accurate / complete and can be recommended to the City for payment.
- j. Contract Modification and Change Order Management: The CM shall coordinate, evaluate, and process Potential Change Order requests by the Contractor. Where necessary the CM, in coordination with the City, shall analyze and negotiate cost, scope, and schedule change requests, ensuring adequate supporting documentation has been provided by the Contractor. The CM's evaluation of Change Order requests includes, but is not limited to, the following:
 - i. Scope, schedule, and costs are reasonable
 - ii. Unit costs are reasonable
 - iii. Quantities are accurate
 - iv. The level of detail is appropriate
- k. Inspections, Tests, and System Start-ups: The CM shall:
 - i. Consult with the City in advance of any scheduled inspection, tests, and systems start-ups.
 - ii. Observe, record, and report to City appropriate details relative to the test procedures.
- I. Substantial Completion: The CM shall assist the City and Engineer in the preliminary inspection of the project, including development and distribution of the Project Punchlist, to verify substantial completion.
- m. Final Completion and Closeout: The CM shall assist the City in the final inspection of the project, which includes confirming the Contractor's completion of work listed on the Project Punchlist.
- n. The CM shall not:
 - i. Authorize any deviation from the Construction Contract Documents or substitution of materials or equipment (including "or-equal" items).
 - ii. Advise on, issue directions relative to, or assume control over any aspect of

the means, methods, techniques, sequences, or procedures of the Work, by the Contractor or any other Constructor.

- iii. Accept Shop Drawing or Sample submittals from anyone other than the Contractor.
- iv. Supervise, direct, or have control over the Contractor's work.

Task 7. Construction Inspection (As-Authorized Service)

- a. The Consultant shall furnish a full-time Construction Inspector (CI) to observe the progress and quality of the Work. The CI shall be the City's representative at the Site and will confer with the City throughout the duration of construction. Inspection services shall include verifying adherence to contract documents, preparing daily inspection reports, photo-documentation of work performed and reviewing the Contractor's applications for payment.
- b. Limits to the Cl's Responsibility and Liability: The activities of the Cl shall not relieve the Contractor, subcontractors, suppliers, and any other entity of their obligations, duties, and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending, or coordinating the work in accordance with the Contract Documents, and any health or safety precautions required by any regulatory agency having jurisdiction.
- c. The Cl's inspection duties and services shall include the following:
 - i. Be familiar with and knowledgeable of all Contract Documents including plans, specifications, applicable standards (e.g. AWWA, ASTM, etc.).
 - ii. Maintain daily report of site activities and document work performed through site photos.
 - iii. Verify adherence of construction performed to the contract documents.
 - iv. Review draft applications for payment with Contractor for accuracy and compliance with contract requirements. This shall include confirmation of quantities of work completed.
 - v. If an instance arises where the Contractor proceeds with work that does not conform to the contract documents, immediately notify the City and document non-compliant work on the daily report and with photos.
 - vi. Verify that the Contractor is maintaining a marked-up set of redline construction documents and regularly coordinate with the Contractor to reconcile any observed differences.

EXHIBIT B -CONSULTANT PROPOSAL



Proposal for Claycraft Road Water Main Replacement

Engineering Services

City of Gahanna, Ohio

June 25, 2021

Delivering a better world



AECOM 277 West Nationwide Blvd Columbus, OH, 43215 aecom.com

June 25, 2021

City of Gahanna Attn: Director of Public Service and Engineering 200 S. Hamilton Road Gahanna, OH 43230

Dear Selection Committee,

AECOM is pleased to submit this proposal for the Claycraft Road Waterline Replacement Project. We believe the AECOM Team is uniquely qualified to assist the City in executing this work due to our team's experience with the Division of Water and our overall experience in water line design and construction.

Project Leadership: Our project team is led by Brian Schmude, who has managed and designed all aspects of water distribution systems, from local service lines to water mains to booster stations. He is currently managing the design of the Greenway Avenue Area Water Line Improvements and coordinates regularly with the Division of Water on water main relocation and lead service line replacement with his work on DOSD projects. His experience along with his ability to oversee all the technical work aspects make him an excellent fit to lead this project.

Team Experience: AECOM and our surveyor, Korda, have worked closely on multiple projects and have an excellent working relationship. Korda's experience in the City of Gahanna will support AECOM's DOW experience to meet the City of Gahanna's project goals. Additionally, our geotechnical subconsultant, DHDC, has provided geotechnical services on multiple projects for AECOM over the past several years.

Technical Experience: Our experience in the evaluation of alignments and our knowledge of the DOW standards as well as coordination with other departments, utilities, and municipalities provide us with the technical experience to work with Columbus on these projects. Our lead designer, Miranda Scheitlin, understands the decisions that need to be made to successfully design this project. She will be supported by Shawn Hooker and Patrick Dodds who have significant experience delivering projects for DOW. As part of this proposal, our team investigated key issues associated with each of the project areas based on our knowledge of potential issues in developing new water main alignments and in coordinating with other departments.

We believe our team offers the right mix of experience and skillsets to provide the very best service to the City in the execution of this project. If you have any questions or need anything additional, please do not hesitate to let us know.

Yours sincerely,

B. Moder

Brian Schmude, PE Project Manager T: 614-493-3478 brian.schmude@aecom.com

Vint Man

Tim McCann, PE Operations Manager



Please include with sealed proposal due on June 25, 2021 at 11:00 AM.

ADDENDUM #1 is hereby acknolwedged:

i Sh.

Brian Schmude, Project Manager

Signature and Title

AECOM Technical Services, Inc.

Company Name

June 25, 2021

Date

Issued: June 15, 2021

A. Project Team

AECOM is a full-service, multi-discipline engineering firm with over 150 professionals in our Columbus office in the Arena District. With over 60,000 professionals around the world, AECOM is a leader in water distribution systems and water main design and construction. In Ohio and across the Midwest, AECOM has worked with many utilities to design improvements to their water distribution system.

As part of the AECOM Team, Korda will be supporting AECOM with surveying, maintenance of traffic, and general water main design oversight. DHDC is also part of the team for geotechnical services as needed.

AECOM, Korda, and DHDC have worked directly or indirectly together on numerous projects for the City of Columbus including water main design, sewer design, and green infrastructure projects.

AECOM has put together a Project Team that has the expertise to complete this work locally, as shown in the organizational chart below and the resumes that follow.



AECOM's office in the Arena District is home to over 150 professionals that provide full service engineering services to the City of Columbus as well as across the US and internationally.





Resumes

Delivering a better world

Project Manager

Brian Schmude, PE will serve as the primary contact and overall project manager for AECOM. Brian has a long history of managing projects for the City of Columbus and brings a detailed approach and understanding to all of the issues associated with this project. Brian is currently managing the Greenway Ave Area Water Line Improvements projects and recently completed managing AECOM's engineering during construction of the Mound St. Booster Station for the City of Columbus. In addition, he has worked on numerous projects such as the Markison Inflow Redirection and various Blueprint projects for the City, which required replacement/lowering of service lines and relocation/replacement of water mains in the Clintonville neighborhood.



Brian brings an understanding of the needs of the City of Columbus and of working with DOW on the development and construction of successful designs. His attention to detail and knowledge of design make him an excellent project manager for this project

Home Office Columbus, Ohio Years of Experience 20

Education

MSCE, Civil Engineering, Purdue University, 2001 BSCE, Civil Engineering, Purdue University, 1999

Relevant Experience

Greenway Avenue Waterline Improvements, City of Columbus, OH. Role: Project Manager, **Project Relevance:** City of Columbus, Division of Water, Detailed Water Main Design. **Project Description:** Managed the design of over 9,000 LF of 8-inch replacement water mains for the City of Columbus to replace undersized 6-inch mains.

Mound St. Booster Station, City of Columbus, OH. Role: Project Manager, **Project Relevance:** City of Columbus, Division of Water, Detailed Design **Project Description:** Provided management of project during final design, bidding, and construction services. Coordinated with DOW during construction and provided submittal review and RFI responses. The new booster station consists of new 20" piping, three 75 HP, 5 MGD pumps, a 35' x 60' building, other miscellaneous equipment, and site work including bioretention.

Overbrook-Chatham Blueprint Project, City of Columbus, OH. Role: Technical Advisor, **Project Relevance:** City of Columbus, Water Main Relocation and Service Line Replacement, DPS and DOSD Coordination **Project Description**: Blueprint project that included design of green infrastructure, included significant impacts to water mains, including water main relocation and changes to water service lines. Project also included coordination with Acton Rd. water main improvements during design, bidding, and construction

South Broadleigh Water Main Improvements, City of Columbus, OH Role: Technical Advisor, Project Relevance: City of Columbus, Division of Water, Detailed Water Main Design Project Description: Project included design of approximately 20,000 If of 6-inch and 8-inch water main replacement for the City of Columbus. Included difficult utility crossing and alignment selection as well as acquisition of easements for final selected alignment.

Old Beechwold (Blueprint and Stormwater), City of Columbus, OH Role: Project Manager **Project Relevance:** Communications Experience **Project Description:** As part of the Blueprint project in the historic Old Beechwold area of Columbus, <u>communicating with community groups (Old Beechwold Association)</u>, Recreation and Parks, and DPS to ensure that the overall design project will meet the goals of the area.

AFCOM

Technical Team

Miranda Scheitlin, El will serve as the design engineer for the development of the construction drawings. Miranda brings an understanding of the DOW design plans from her recent work on the Greenway Ave Area Water Line Improvements as well as work for DOSD such as the Markison Inflow Redirection project that includes waterline relocation in coordination with a recent DOW project. Miranda's attention to detail, creative thinking, and understanding of DOW's design requirements will allow her to perform the design efficiently while identifying critical decision points to discuss with DOW.

Relevant Experience

- City of Columbus Greenway Ave Area Water Line
 Improvements
- City of Columbus South Broadleigh Water Distribution System Improvements
- City of Columbus Markison Inflow Redirection
- Detroit Water and Sewerage Department, Watermain Improvements Projects

Shawn Hooker, PE will serve as a design engineer/reviewer on the development of construction drawings. Shawn brings an understanding of the DOW design plan requirements from his recent work on the S. Broadleigh Water Distribution System Improvements. He also brings experience of water main and pressure main design from his work with other municipalities.

Relevant Experience

- City of Columbus South Broadleigh Water Distribution System Improvements
- City of Columbus Overbrook-Chatham Blueprint and Acton Rd. Water Distribution System Improvements
- City of Hollywood, FL Water Main Replacement Program
- City of Cape Coral, FL Utilities Extension Program

Patrick Dodds, PE will serve as a design engineer and provide constructability reviews for each submittal. Pat has over 9 years of experience in water main design projects, ranging in size from 6" up to 20" in diameter. He has laid out water utilities in highly urbanized areas with aged waterlines of various materials, and has experience with various construction methods, including open-cut and trenchless methods such as jack and bore and horizontal directional drilling.

Relevant Experience

- City of Columbus Greenway Ave Area Water Line
 Improvements
- City of Columbus Mound St Booster Station
- Butler County Waterline Relocation for Millikin Road Roundabout

Education BS Environm

BS, Environmental Engineering, The Ohio State University, 2017





Education MSCE, Cleveland State University, 2017 BSCE, Geneva College, 2011

on Columbus, Ohio Years of Experience

Home Office

Years of

9

Experience

Columbus. Ohio

14

Home Office

Home Office

Columbus. Ohio

Years of

4

Experience



Education

1983

1990

Education

BS, Civil Engineering, The

Ohio State University, 2000

B.S. Environmental

Geography, Ohio University,

M. Landscape Architecture,

The Ohio State University,

Brian Benedict will manage the construction portion of the project. Brian has 33 years of experience in the engineering field, including 26 years in construction management and observation. He has successfully completed projects ranging in size from \$500,000 to \$38,000,000. These projects include site development, roadways, parking lots, buildings, sanitary sewer systems, water distribution systems, pump stations, lagoons, reservoirs, water treatment plants and wastewater treatment plants. He is familiar with EJCDC, AIA, ODAS and USDA contract documents.

Relevant Experience

- Water Treatment and Transmission Lines, Lancaster, OH
- Little Walnut Creek Water System, Fairfield County, OH
- City of Fairborn Raw Waterline Improvements, Fairborn, OH

Daniel Biru, PE will serve as the technical advisor throughout the design process. Dan's experience with the City of Gahanna will help bridge the gap between Columbus DOW guidelines and Gahanna-specific requirements. With over 20 years of experience as a civil engineer and project manager, Dan is responsible for preliminary and detail design of storm and sanitary sewers, waterlines, roadways, stormwater detention facilities, site grading, cost estimating, specifications, and sustainable site and utility design. His sewer and stormwater management projects involve hydraulic analysis of sewers, floodways, and open channels, and

report preparation and development of alternatives to improve sewer systems. Dan's additional project experience includes development of major site improvements including access roadway configurations and utility service planning and coordination.

Home Office

Years of

38

Experience

Columbus, Ohio

Relevant Experience

- Gahanna Jefferson School District Lincoln Elementary School Improvements, Gahanna, Ohio
- East Johnstown Road Multi-Use Trail Extension Improvements, Gahanna, Ohio
- East Gates Street Waterline Improvements, City of Columbus

Tony Meacham, PS will manage the field survey. With more than 30 years of surveying experience, Tony is Korda's Survey Manager and is responsible for project management and the coordination of field crews, administration, client relations, meeting attendance, quality control, project scheduling, monitoring of project progress, preparation of proposals, and final project approval.

Relevant Experience

- Gahanna Jefferson School District Lincoln Elementary School Improvements, Gahanna, Ohio
- East Johnstown Road Multi-Use Trail Extension Improvements, Gahanna, Ohio
- McCoy Road/Street and Waterline Improvements, Upper Arlington, Ohio

Home Office

Home Office

Years of

20

Experience

Columbus, Ohio

Columbus, Ohio Years of Experience 30

Education

Columbus State Community College, 1993 The Ohio State University, 1987





B. Past Performance

The strength of our team is based on the successful execution of multiple related projects for the City of Columbus DOW and other clients and our history of working together on water distribution and related projects. Our team brings a significant amount of experience in project delivery on DOW projects. In addition, our experience in communication and working with diverse groups of stakeholders and regulatory agencies on multiple projects provides our team with the tools to execute this work.

Project	Team Members/Role	Client Contact	Design Contract Award Date and Amount		
Greenway Ave Area Water Line Improvements	Brian Schmude – Project Manager Miranda Scheitlin – Design Engineer Patrick Dodds – Conceptual Design	David Soldaini-PM City of Columbus DMSoldaini@columbs.gov 614-724-0192	Start Date: 2018 Amount: \$242k		
Project included design of approximately 9,000 If of 6-inch and 8-inch water main replacement for the City of Columbus. Included multiple scattered small "mini project areas". The project is currently on schedule and budget.					
Mound Street Booster Station	Brian Schmude – Project Manager Patrick Dodds – Project Engineer	Evan DiSanto-PM City of Columbus <u>EMDiSanto@columbs.gov</u> 614-645-6165	Start Date: 2013 Amount: \$242k		
This project included a new booster station consisting of new 20" piping, three 75 HP, 5 MGD pumps, a 35' x 60' building, other miscellaneous equipment, and site work including bioretention. The project was completed within schedule and budget					
South Broadleigh Water Main Improvements	Brian Schmude – Project Manager Shawn Hooker – Project Engineer Miranda Scheitlin – Design Engineer	Bob Arnold-PM City of Columbus <u>RJArnold@columbus.gov</u> 614-645-6558	Start Date: 2014 Amount: \$224k		
Project included design of approximately 20,000 If of 6-inch and 8-inch water main replacement for the City of Columbus. Included difficult utility crossing and alignment selection and acquisition of easements for final selected alignment. The as-builts for this project were completed last week within budget.					
Markison CSO Structure Modification and Inflow Redirection	Brian Schmude – Project Manager Shawn Hooker – Project Engineer Miranda Scheitlin – Design Engineer Daniel Biru – East Gates PM Tony Meacham – East Gates Survey DHDC – Geotech/SUE	Greg Barden-PM City of Columbus <u>GRBarden@columbus.gov</u> 614-645-1953	Start Date: 2019 Amount: \$2.3 M		
Project includes new storm sewer and waterline in the Markison project area. New storm sewer is being installed to separate out storm flow from the combined sewer, mitigating CSO occurrences. Coordination with the East Gates Street Waterline Improvements (Korda) was required.					

C. Technical Approach

Statement of Understanding

AECOM has reviewed the Request for Proposal for the Claycraft Road Waterline Replacement Project, including the GIS files provided, the existing as-built drawings, and the proposed roundabout improvements at Claycraft and Taylor. Per the RFP, the City's existing 12-inch ductile iron water main located in Claycraft Road (originally constructed in 1968) has been the site of at least four (4) breaks over the last 5 years. Corrosion appears to be the primary cause of most breaks. This project will provide a new PVC water main to be located in the Claycraft Road right-of-way between Morrison Road and Taylor Station Road along with related improvements (new service lines at road crossings, hydrant replacements, site restoration, etc.). The design of this water main project will be coordinated with the City's planned roundabout at the Taylor Station Road / Claycraft Road intersection.

Through current projects with the City of Columbus Division of Water (DOW), our team is thoroughly knowledgeable on the latest Design Guidelines for Water Distribution System Capital Improvement Projects, Revised May 17, 2021. AECOM is cognizant of the obstacles the project design must overcome to meet DOW's requirements and the City of Gahanna's goals. Some of these project obstacles will include the following:

- the existing water line and appurtenances located 1-3 feet off the roadway;
- sufficient clearances to existing sanitary and storm sewers, gas mains, electric (underground and overhead), and underground fiber/communication lines;
- employee and residential access to commercial buildings and an apartment complex,
- limited open area available in the rights-of-way; and
- traffic impacts during construction along Claycraft Road as well as multiple intersections.

Project Overview

Following DOW's standards for water main design requires the design team to be experienced in completing similar projects; however, the inherent difficultly of this project also demands a strong eye for detail relating to defining the rights-of-way, verifying existing water service tap locations, complex water main connections, various construction methods and maintenance of traffic issues. Our team has completed numerous projects for DOW that have required these types of attention to detail in the past and selected members of both the AECOM and Korda staff to build a competent team, capable of executing this project efficiently to meet budget and schedule needs.

To meet the City of Gahanna's tentative schedule, the AECOM Project Team has developed a detailed schedule to accomplish the desired completion dates. This schedule, shown on the next page, assumes the Notice to Proceed for Design is provided on September 6, 2021.

TASK			2	021							20	22					
NO.	ACTIVITY	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Kickoff Meeting																
	Site Survey																
1-2	5% Design / Alignment Selection																
	Geotechnical Borings																
	50% Design			1													
3	Public Meeting																
10	90% Design					2											
1-2	100% Design																
	Bidding						3										
4-7	Construction								4								
	As-Built Drawings																
NOTES																	
1	Submittal to Private Utilities at the completion of 50% plans																
2	Submittal to Private Utilities at the completion of 90% plans, po	nting ou	t any s	signific	ant cha	nges											
3	Advertisement 2/11/22																
4	Construction NTP 4/18/22																

Rather than discuss our team's project approach by the tasks described in the RFP, the approach will be discussed based on the above schedule.

Kickoff Meeting

Upon receiving the Notice to Proceed with Design, the AECOM Team will meet with the City of Gahanna to review the project goals, schedule, standard invoice (attached to this proposal).

Site Survey

Prior to the field survey, the AECOM team will request all available records such as record plans, sanitary sewer tap permits, and water service tap cards pertaining to the project. This is standard procedure for City of Columbus DOW projects and based on the comprehensive GIS data provided with the RFP, it appears that the City of Gahanna has similar records. This information, such as the tap records, assists the surveyors in ensuring that all relevant data is obtained in the field. Gahanna's GIS data includes links to utility record plans and roadway improvement plans which will be downloaded and utilized for building the project basemap.

The AECOM team will review the site and determine the potential traffic impacts during survey to work in the right-ofway. Additionally, all impacted property owners along Claycraft Road will be notified with a letter briefly describing the project and the survey services and schedule.

The field survey will be performed in accordance with DOW's Design Guidelines for Water Distribution System Capital Improvement Projects but only for the "For All Plans" items. Under AECOM's direction, Korda will collect topographic features including pavement, curbs, fence, water valves, curb boxes, utilities, manholes, etc. For DOW CIP projects, the survey requires the area within the right-of-way and 10' outside of the right-of-way limits as well as extensions 100 feet past the project limits and at each side street. While this is not required in the "For All Plans" items, the AECOM team does recommend surveying within the right-of-way only (not 10' outside of the right-of-way too) and 25 feet past the project limits and at each side street. Surveying outside of the right-of-way for DOW projects is valuable should temporary or permanent easements be necessary to place the new waterline. Upon preliminary review (to be discussed in the next section), there are numerous available alignments that will not require easements. The survey limits can be discussed during negotiations to ensure that alignments that will require any types of easements are not desired. Extending the survey down the side streets (Gahanna Parkway, Science Blvd, Landrum Ct) as well as Morrison Road will help with determining how best to connect to the existing water mains to the new water main. Coordination with Gahanna's design team for the Claycraft/Taylor roundabout is recommended to determine survey needs at that location.



The field survey shall include reasonable diligent effort to locate all curb boxes and right-of-way pins. This may require multiple field visits if parked cars are "hiding" features beneath them.

Trees which could be impacted by not only the water main work but also the transfer of existing services and hydrants will be surveyed for size and dripline to determine if the work could impact the critical root zone of the tree.

Additional underground utility locating may be required, but is not currently in the proposed scope of services. OUPS will be contacted to mark ground surface of all underground utility locations and compared to record plans for generating the project basemap. If there is conflicting information, the design team will work with the City of Gahanna to resolve the differences in utility locations.



Most of the trees along Claycraft appear to be newly planted, but could be impacted by an alignment on the north side of the road.

5% Design / Alignment Selection

After the field survey information is collected, the AECOM Team will finalize the survey basemapping and lay out preliminary alignments for discussion with the City of Gahanna. Utilizing the record plans and GIS information provided with the RFP, as well as field observations of the project site, the AECOM Team identified several factors that should be considered for alignment selection, including:

- Access to all parking lots. While many of the commercial parking lots have multiple access points along Claycraft Road, some of the lots may be temporarily inaccessible during construction. The construction documents could require restricted shut-down hours and maintenance of traffic planning to minimize these impacts to businesses.
- Spacing from sanitary and storm sewers. A sanitary sewer runs along the south side of most of Claycraft Road. A storm sewer runs along the north side with several crossings, including a culvert crossing. Maintaining 10 feet of horizontal separation from both may mean the water main winds up being in the road.
- Spacing from R/W and Existing Water. Columbus DOW requires a 7.5 foot offset from the existing right-of-way. It will be challenging to construct a new watermain north of the existing water main while still providing adequate spacing for trench construction (generally 5 feet "out to out" between piping).



The new waterline will require at least 18" vertical clearance to the existing 18" storm culvert extending under Claycraft Road.

 New warehouse at 870 Claycraft Road. The GIS provided did not include information on this connection, but Google Earth pictures taken during construction shows a 12-inch line to the warehouse that was installed in 2019.



• Other utilities in Treelawns. A site visit and record plans revealed that the both treelawns are very crowded with existing utilities including gas, electric, drainage, and communication utilities.



- Connections at Intersections.
 - Morrison Road: Some of the water infrastructure in this area was built more 2 decades after the 12" water main being replaced from year 1968, including a new booster pump station installed around 1993 on the northeast corner of Morrison and Claycraft. Connections to the booster pump station will be reinstated (shown in Orange in the figure on the next page) and the entire section of the existing water main constructed in 1968 will be replaced up until the point of connection to the existing water main along the eastern edge of pavement of Morrison Road. Design of the connection. A 12" water main that runs parallel to Morrison Road water main (shown in Green in the figure on the next page) will also require reconnection at this location.



- Taylor Station Road: The RFP stated the roundabout will be constructed after the new Claycraft water main is installed. Placement of the tie-in to the water main on Taylor Station will consider ease of access to system valves after the roundabout is constructed. The ROW will be expanded as part of the roadway project but the new WL alignment will be restricted by tying into the existing WL to the north along Taylor-Station Road and providing sufficient clearance to other utilities.



- Side Street Connections and Commercial Property Connections. There is a minimum of 5 water mains along
 side streets between Morrison Road and Taylor Station Road or adjacent commercial properties that will require
 re-connection to the replacement Claycraft Road water main. These connections range in size from 6" to 12".
 Each re-connection will be designed to maintain service during construction and provide isolation valves for any
 future maintenance projects to minimize service interruptions to properties nearby. Site survey will work to identify
 any additional water mains that are not shown in GIS or Record Plans or have been recently constructed including
 the newly constructed warehouse development at 870-950 Claycraft Road.
- Service Connections. All services connected to the Claycraft Road water main will be reinstated to the proposed replacement water main. New service lines from the new water main to the existing curb stop will be installed for services on both sides of Claycraft. Trenchless installation of services on the opposite side of Claycraft Road from the water main will be considered to minimize pavement disturbance. The existing curb stop will be replaced, and any damaged curb box will be replaced. A contingency amount of curb box replacements will be included to cover this work. Based on GIS and Record Plans, it is anticipated that there will be a minimum of 6 service reconnections, however there are many more properties that do not have services shown which are anticipated to require a service re-connection.



 Hydrant Locations / Spacing. Hydrants are currently spaced at 350, 400, and 500-ft intervals along Claycraft Road. The new waterline will be designed to either match (using the existing hydrant locations) or reduce spacing between hydrants. If the project were within City of Columbus limits, the DOW would require hydrant spacing at maximum 300-ft intervals since the area is zoned for commercial/industrial. Roadway and Right-of-Way Width. While the uncurbed roadway is 22-24 feet wide, the right-of-way is 60-feet
wide along Claycraft, leaving significant spacing outside of the pavement. However, the position of the existing
utilities presents challenges in getting adequate spacing.

The figure below shows a representation of the existing utilities along Claycraft Road which is typical along the entire waterline replacement as well as three potential alignment options. Providing adequate clearance to existing utilities and the ROW will be a critical focus for the design.



or south side of the existing waterline. Each of these alignments is shown in the above figure.

The AECOM team identified some advantages and disadvantages for each option. The below table highlights these advantages and disadvantages that will be considered with the City's input during the selection of an alignment.

Waterline Location	Advantages / Disadvantages
Replace in Same Trench	 Location is already established meeting separation requirements as well as keeping existing locations of side street, service and hydrant connections nearby Pavement restoration can be minimized Requires temporary water service during main replacement May require underdrain replacement and will require restoration of the drainage swale that was constructed in 1990's
North of Ex. WL	No pavement restoration of Claycraft Road Potential impacts to existing underground utilities (storm sewer, gas, electric) Requires bracing overhead electric poles during construction Does not meet clearance requirements to ROW and other existing utilities
South of Ex. WL in Roadway	 Meets clearance requirements to ROW and other existing utilities while impacting only one (1) lane of traffic Pavement restoration required for at least one (1) lane of roadway Requires Maintenance of Traffic plan for the construction lane along Claycraft Rd.

Geotechnical Borings

The RFP calls for 5 borings at approved locations. Based on a preliminary review of the alignment, AECOM recommends geotechnical borings at the locations shown in the following figure. These boring locations will provide an understanding of the subsurface materials and soil parameters as it pertains to trenchless installation as a potential construction method to maintain access to the surrounding properties and minimize construction within public roadway pavement during construction. As shown, only 4 boring locations are documented with a spacing of approximately 1000 feet between borings. These borings are located near private commercial access drives or a public roadway (Science Boulevard) that may require trenchless installation to remain open and accessible. A fifth boring location can either be located during the 5% Design/Alignment Selection or non-performed if determined to be unnecessary. A potential location for the 5th boring could be near the recently completed warehouse development located between the Residents at Central Park apartment complex and MHI Ohio Commerce Center properties near the west end of the project. However, due to the property having multiple ingress/egress drives and the need to tie in the existing watermain for this property, trenchless installation at this location seems impractical



The AECOM Team includes DHDC who will lead the geotechnical borings. DHDC will do drilling and sampling of test borings, laboratory testing of soil samples, and preparation of a geotechnical investigation report for evaluation of the subject site. DHDC has provided geotechnical engineering and testing services to various governmental and non-governmental organizations throughout the state of Ohio and has extensive experience in geotechnical engineering for projects of similar scope of work.

Based on DHDC's experience, they recommend that the borings be taken ten (10) feet below the exposed grade or to auger refusal depth rather than 6 feet. While 6 feet would be enough if the water main is at normal depth, it may have to go below a utility crossing. Having an extra four feet of soil information could be valuable.

Additionally, based on the statement in the RFP that the existing water main failed due to corrosion, there may be some value in running a corrosivity test on the soil. This may also be required to be exempt from Ohio EPA plan approval (see discussion in 90% Design section). While the Claycraft water main will be PVC and corrosion resistant, there are still other DIP water mains in the area that may require monitoring if there is an exterior corrosion issue. The value of this test can be discussed during negotiations but is not included in the pricing proposal as it is not required for the Claycraft Road water main.

50% Design

Once an alignment is selected as part of 5% design, the AECOM Team will proceed with 50 % Design creating plan and profile drawings of the proposed water main. These will be prepared in accordance with the most current version of Design Guidelines for Water Distribution System Capital Improvement Projects for anything under "For All Plans". Plans will be prepared on 22" x 34" sheets and shall contain, but are not limited to, the following drawings:

- Title Sheet (1 sheet)
- Index Map, Bench Marks & Survey Control (1 sheet)
- General Notes & Quantities (3 sheets)

- Survey Coordinates / As-Built Chart (1 sheets)
- Legend & Miscellaneous Details (1 sheet)
- Plan and Profile, 1"=30' horizontal and 1"=5' vertical (6 sheets)
- · Cross-Connection and Hydrant Profiles (1 sheet)
- Surface Restoration Details (1 Sheet)
- Maintenance of Traffic Details (1 Sheet) Wait until 90%

AECOM estimates that 16 plan sheets will be required to complete this project.

During the course of design, AECOM will coordinate with public and private utilities for any potential critical conflicts. Once the 50% design is complete, drawings will be sent to all utilities for comment to ensure that what is shown on the plans is accurate.

Included as part of the 50% design submittal will be the Engineer's Opinion of Probable Construction Cost (OPCC).



The RFP notes that at the 50% submittal, pricing should be provided comparing a 12-inch and 16-inch water main. Based on recent (pre-COVID) bid tabs from the City of Columbus, the average price per foot of 12-inch piping on larger quantities of water main replacement (i.e., greater than 100 feet) is approximately \$220/lf while the average price per foot for 16-inch piping was slightly higher (\$225/lf). While the larger water main requires a second shut off valve typically, AECOM team does not anticipate any significant alignment differences if the replacement water main is designed as a 16-inch water main or a 12-inch water main.

Rather than making a decision at the 50% phase, this could potentially be carried through to bidding and select one size as a "base bid" with the other size as an alternate to see where the pricing lands and decide after bidding.

Public Meeting

Upon completion of the 50% design submittal, AECOM will work with the City to prepare materials for a public meeting. Gathering feedback from property owners along Claycraft Road regarding access to their property will be a critical component of the public meeting.



90% Design

AECOM will advance the design of the 50% plans to 90% by incorporating all comments from private utilities, public utilities, and concerns expressed during the public meeting. Drawings will be updated and the OPCC will be adjusted as needed.

At this point, the alignment should be finalized and MOT details will be added. None of the proposed alignments will result in full road closures of Claycraft Road. There will likely only be a single lane closure and standard ODOT "typical applications" will suffice for traffic control such as TA-10 (flagger) and TA-11 (no flagger). MOT will need to be coordinated with the work at Claycraft and Taylor Station depending on the timing and phasing of the work.

At the conclusion of the 90% submittal, the Ohio EPA permits will be submitted, if applicable. For many Columbus DOW Community Water Systems, this is done using the Columbus self-certification process, which requires only a flat fee of \$185. It is our team's understanding that the City of Gahanna is a "master meter" community and is not part of the self-certification process. Therefore a full permit would be required. However, OAC Rule 3745-91-02 provides plan approval exemptions for certain water line replacements provided conditions are met:



 "The increase in main size...is not greater than four inches in diameter." Regardless of whether the existing
 inches water main is replaced with a 12 inch or a 16 inch water main this

12-inch water main is replaced with a 12-inch or a 16-inch water main, this falls within these requirements.

- 2. "The replacement of the waterline complies with the requirements of Sections 8.0 through 8.12 of (Ten States Standards), except if the sanitary isolation requirements in Section 8.8 cannot be met, the replacement results in a greater sanitary isolation radius than was previously in place." None of the proposed alignments will violate the sanitary spacing requirements of Ten States Standards.
- 3. "The public water system has been appropriately investigated to ensure pipe replacement does not take place in an area of known water or soil contamination." This can be checked during the geotechnical investigation.
- 4. "The public water system submits an annual project summary to the district office on or before January 15 that includes each exempted waterline project completed that here. Each project summary shall identify the locations of exempted replacement waterlines, the type and size of pipe replaced/installed, and the length of pipe installed. The project summary shall be signed by an Ohio P.E." It is assumed that the City of Gahanna does or could provide this.

Based on those conditions, the AECOM Team assumes that a permit will not be required and will work with the City of Gahanna to ensure that all conditions are met to make the water line replacement exempt from the Ohio EPA permit.

100% Design

Any comments received on the 90% submittal from utilities or the City will be addressed. AECOM will address all departmental and private utility comments in a detailed comments sheet, describing how each comment was addressed, to advance the Drawings to the "Signature Stage". Following that, AECOM will prepare final plans, specifications and contract documents based on the stakeholder reviews and input.

Bidding

AECOM will prepare complete detailed plans, specifications, and estimates of cost for the project. AECOM will prepare addenda for the City to issue to all prospective bidders and suppliers of record. Prior to construction, AECOM will prepare "Conforms To Contract" Drawings, incorporating all addenda, for submission to the proposed Contractor and the Inspector on the project.

Construction

AECOM will develop a list of required submittals. This will likely include, but not be limited to, pipe and fitting material, valves, hydrants, a sequencing plan, chlorination plan, surface restoration, and maintenance of traffic.

Construction Management

AECOM's Brian Benedict has performed construction management services on similar projects throughout Ohio. As an optional service, AECOM can provide Construction Management services.

- Preconstruction Meeting: AECOM will organize a preconstruction meeting with the selected contractor. We will
 print and assemble conformed sets of drawings, specifications, and contracts for delivery and execution at the
 preconstruction meeting. AECOM will assist the City in preparing the Notice of Award, Notice to Proceed, and
 the Notice of Commencement.
- 2. Monthly Progress Meetings: AECOM will hold monthly progress meetings to review progress made during the previous month. Minutes will be distributed to all attendees.
- 3. Shop Drawing Review: AECOM will review and approve or take other appropriate action in respect to shop drawings, samples, and other data the Contractor is required to submit, for conformance with the information given in the Contract Documents and compatibility with the design concept as a whole. These will be tracked on the submittal log.
- 4. Change Orders: AECOM will recommend, prepare, and distribute change orders for appropriate approval.
- 5. Claims and Disputes: AECOM will assist the City in researching and managing potential claims
- 6. Contractor's Application for Payment: AECOM shall coordinate with the Construction Inspector (CI) to confirm that Contractor's payment applications are accurate and complete.
- 7. Record Drawings: AECOM will compile record drawings indicating as-built measurements, changed construction details, and additions to the plans furnished by the Contractor and Resident Project Representative at the completion of construction.
- 8. Field Orders (FO), Engineer Notification Memos (ENM), Requests for Information (RFI): AECOM will issue FOs and ENMs as required throughout construction. We will also respond to RFIs from the contractor.
- Punch List: Once the Contractor notifies AECOM that the work is ready for its intended purpose, AECOM will
 conduct a substantial completion inspection and issue a punch list of items remaining to be completed and
 monitor completion of the punch list items.

Construction Inspection

If desired, the AECOM Team can also provide a construction inspector. A generic rate is provided in the Proposal Pricing Form as the ultimate rate will be determined by employee availability. **AECOM has also successfully worked with temp agencies to provide inspection services** on recent large wastewater treatment projects, including projects in Tiffin and Upper Sandusky. As the temp agency can have lower overhead rates, the billing rate for these employees can be lower, saving the Client money.

As-Built Drawings

AECOM will submit the Record Drawings in accordance with the Design Guidelines for Water System Capital Improvement Projects. AECOM will change, revise, or if necessary, redraw the various sheets of the originally prepared plans or prepare additional sheets or drawings to correctly depict the complete details of the work as actually constructed.

PROPOSAL PRICING FORM

Task	Task Description in Brief	Fee	Estimated Hours to Complete Task
1.	Site Survey and Design	\$81,052	630
2.	Design Coordination and Permitting*	\$4,495	40
3.	Public Meeting	\$4,965	32
4.	Construction Bidding and Submittal Review	\$6,782	58
5.	As-Built Drawings	\$5,562	48
	Total (Tasks 1-5)***	\$102,856	808
6.	Construction Management (Optional Service)	\$19,200	120
		Billing Rate	
*7.	Construction Inspection	\$60-\$100**	N/A

*It is assumed that a permit will not be required, per this exemption discussion provided in the proposal.

**The lower end of the billing rate scale assumes an inspector hired through AECOM from a temp agency.

***Design Contingency is not included in the total fee presented in this table

Travel Rate will be based on the current IRS Standard Mileage Rates. Billing rate ranges are shown in the table below. AECOM will bill at the actual rate based on the employee's cost rate and a multiplier of 2.90.

Job Classification	Billing Rate
Principal (PR)	\$250-\$350
Project Manager (PM)	\$200-\$250
Senior Project Engineer (SPE)	\$150-\$200
Project Engineer (PE)	\$120-\$150
Design Engineer (DE)	\$100-\$120
Engineering Technician (ET)	\$60-\$100
Clerical (CL)	\$60-\$100
Lead Surveyor (LS)	\$140-\$160
Field Person (FP)	\$60-\$100
Construction Manager (CM)	\$150-\$170

This proposal is binding upon the undersigned for 90 days after the Proposal Submittal Deadline.

COMPANY: <u>AECOM Technical Services</u> , Ir	ıc.
ADDRESS: 277 W. Nationwide Blvd, Colur	nbus, OH 43215
DIR NUMBER: 614.464.4500	
CONTACT PERSON: Brian Schmude	
TELEPHONE: 614.493.3478	
SIGNATURES FOR PROPOSER:	
If INDIVIDUAL, Sign Below	If CORPORATION, Sign Below
	(Show Names of Non-signing Officers)
	AECOM Technical Services, Inc.
Signature Date	A CORPORATION
۰	California
Post Office Address	Name of State Where Chartered
TIMOTHYF. McCann	Signature Date
If PARTNERSHIP, Sign Below	
(Show Names of Non-signing Partners)	PRESIDENT Date
Name of Partners	SECRETARY Date
Signature Date	TREASURER Date
Post Office Address	Post Office Address

AFTER SIGNING, PLEASE SUBMIT ALL PAGES OF THIS PROPOSAL PRICING FORM, INCLUDING THE SIGNATURE PAGES. AS IT RELATES TO THIS PROPOSAL, PLEASE TURN IN ALL PAGES.

Check Payment to: AECOM Technical Services, Inc. An AECOM Company 1178 Paysphere Circle Chicago, IL 60674 ACH Payment to: AECOM Technical Services, Inc. An AECOM Company Bank of America Account Number 5800937020 ABA Number 071000039

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Wire Transfer Payment to: AECOM Technical Services, Inc. An AECOM Company Bank of America New York, NY 10001 Account Number 5800937020 ABA Number 026009593 SWIFT CODE BOFAUS3N



8,964.39

277 West Nationwide Boulevard, Columbus, OH 43215-2566 Tel: 614-464-4500 Fax: 614-464-0588

Federal Tax ID No. 95-2661922

ATTN: D. GRANT CRAWFORD CITY OF GAHANNA 200 SOUTH HAMILTON ROAD GAHANNA, OHIO 43230 United States

NET 30

Payment Term: 30 NET

Invoice Date: 01-OCT-21

Invoice Number: 2000181923

Please reference Invoice Number and Project Number with Remittance

Project Number : 60533719 Bill Through Date :06-SEP-21 - 01-OCT-21 Project Manager: Brian Schmude

Project Name: Claycraft Road Waterline Replacement Project

Task Number: 1

Task Name : Site Survey and Design

Labor Mult	iplier					
Employee Name/Title	Title/Expenditure	<u>Hours</u>	Rate	Raw Cost	<u>Multiplier</u>	Billed Amt
Name	Administrative	5.00	24.51	122.55	3.0000	367.65
Name	Engineer	8.00	30.15	241.20	3.0000	723.60
Name	Architect	5.00	58.28	291.40	3.0000	874.20
Total Labor Multiplier		18.00	-	655.15	_	1,965.45
Task Total : Site S	Survey and Design					1,965.45

Task Number: 2

Task Name : Design Coordination and Permitting

Labor Mul	tiplier					
Employee Name/Title	Title/Expenditure	<u>Hours</u>	Rate	Raw Cost	<u>Multiplier</u>	Billed Amt
Name	Construction Engineer	26.00	49.06	1,275.56	3.0000	3,826.68
Name	Engineer	1.50	45.39	68.09	3.0000	204.27
Name	Electrical Engineer	1.00	48.98	48.98	3.0000	146.94
Name	Civil/Site Engineer	2.00	41.36	82.72	3.0000	248.16
Name	Sr. Engineer	12.50	65.46	818.25	3.0000	2,454.75
Name	Engineer	1.00	39.38	39.38	3.0000	118.14
Total Labo	or Multiplier	44.00	-	2,332.98	_	6,998.94
Task Total : Desig	gn Coordination and Permitting					6,998.94

Project Total :	Clavcraft Road	Waterline Re	placement	Project
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Invoice Summaries	S				
Total Current Amount :					8,964.39
Retention Amount :					0.00
Pre-Tax Amount :					8,964.39
Tax Amount :					0.00
Total Invoice Amount :					8,964.39
Billing Summaries	;				
Billing Summary	<u>Current</u>	<u>Prior</u>	<u>Total</u>	<u>Limit</u>	<u>Remain</u>
Billings	8,964.39	0.00	8,964.39	112,000.00	103,035.61
Billing Total :	8,964.39	0.00	8,964.39		

ATTACHMENT C – REFERENCE LIST

Please list three (3) public agency clients, along with a very brief description of the work, which the City may contact regarding the Consultant's work performance.

REFERENCE # 1	
AGENCY / CITY NAME:	City of Columbus, Ohio
DEPARTMENT:	Division of Water
CONTACT PERSON:	David Soldaini, Robert Arnold
TELEPHONE:	614-724-0192, 614-645-6558
EMAIL ADDRESS:	DMSoldaini@columbus.gov, RJArnold@columbus.gov
DOLLAR VALUE OF AGREEMENT:	\$242,571, \$223, 743
DATE RANGE OF AGREEMENT:	Dec 2014 and November 2018 - Current (two projects)
NATURE OF WORK PERFORMED:	Replacement/upsizing of 25,650 feet of water main (two proejcts).
REFERENCE # 2	
AGENCY / CITY NAME:	Allen County Water District (Lima, OH)
DEPARTMENT:	Water
CONTACT PERSON:	Kimberly Stiles
TELEPHONE:	419-995-4679
EMAIL ADDRESS:	allenwaterdistrict@allencountyohio.com
DOLLAR VALUE OF AGREEMENT:	\$101,000
DATE RANGE OF AGREEMENT:	February 2021 - Current
NATURE OF WORK PERFORMED:	New elevated storage tank and 1000 LF of 12" water main at intersection undergoing ODOT modifications.
REFERENCE # 3	
AGENCY / CITY NAME:	Butler County Water and Sewer
DEPARTMENT:	Water and Sewer
CONTACT PERSON:	Jeff Frechtling, PE
TELEPHONE:	513-887-3220
EMAIL ADDRESS:	Jeff.Frechtling@bcohio.us
DOLLAR VALUE OF AGREEMENT:	\$9,000 (part of \$50,000 roadway contract)
DATE RANGE OF AGREEMENT:	December 2019 - March 2020
NATURE OF WORK PERFORMED:	Designed water main relocation at proposed roundabout.

AFTER COMPLETING, PLEASE SUBMIT ALL PAGES OF THIS REFERENCE LIST. AS IT RELATES TO THIS PROPOSAL, PLEASE TURN IN ALL PAGES.

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