

**TOWN OF PLYMOUTH CAPITAL IMPROVEMENT PLAN REQUEST FORM
FY25 ANNUAL FALL TOWN MEETING REQUEST FORM**

Department:	WATER DIVISION		Two
Project Title and Description:	Cherry Street Water System Improvements	Total Project Cost:	\$2,664,450.00

Department/Division Head: **Peter Gordon**

Cost estimate was developed: Internally ☐ Externally ☒

Basis of Estimated Costs (attach additional information if available)			If project has impact on 5 Year Plan and future operating budgets, insert estimated amounts.		
Capital:	Cost	Comments	Fiscal Year:	Capital	O & M
<i>Planning and Design</i>	\$512,800.00	Includes 25% Contingency	<i>FY23</i>		
<i>Labor and Materials</i>	\$2,051,200.00	Includes construction cost and paving, full width mill and overlay	<i>FY24</i>		
<i>Administration</i>			<i>FY25</i>		
<i>Land Acquisition</i>			<i>FY26</i>		
<i>Equipment</i>			<i>FY27</i>		
<i>Other</i>	\$100,450.00	Police Details			
<i>Contingency</i>					
Total Capital	\$2,664,450.00				

Possible sources and amounts of funding, if known: _____

Project Justification and Objective: Replacement of approximately 5,200' of 1930's cast iron water main on Cherry St. from Court St. to Industrial Park Rd. This water main has reached the end of its useful life and is no longer reliable.

For Capital Project Requests:

Will this project be phased over more than one fiscal year? If yes, enter it on the next 5 Year Plan Yes ☐ No ☒

Can this project be phased over more than one fiscal year? Yes ☐ No ☒

For Capital Equipment Requests:

☐ Check if equipment requested is replacement and enter the year, make & model, VIN and present condition of existing equipment

Attach additional information, estimates, or justification.



TOWN OF PLYMOUTH

Water Division
169 Camelot Drive
Plymouth, Massachusetts 02360

MEMO

To: Lynne Barret, Finance Director

From: Peter Gordon, Water Division Superintendent

**CC: Derek Brindisi, Town Manager
Silvio Genao, Assistant Town Manager
William Coyle, Director of Public Works**

In late July of 2023, the water main on Cherry St. near the Route 3 overpass experienced a significant failure causing the loss of thousands of gallons of water and the disruption of service for customers from South Cherry St. west to the Kingston town line. This was the first of three major breaks that would occur in less than six months. This water main is constructed of cast iron and was installed between 1930-1931. The valves used to isolate sections of the main for repair have also been buried for ninety plus years and no longer function properly. It is apparent that this section of water main is no longer reliable for continued uninterrupted service and additional issues will be anticipated until it is replaced. The Water Division is requesting funding to replace this main from Court St. to Industrial Park Rd.

**Peter Gordon
Water Division Superintendent
Plymouth MA. 02360
508-830-4162 ex. 12141**

August 5, 2024

Peter Gordon, Water Superintendent
Department of Public Works – Water Division
169 Camelot Drive
Plymouth, MA 02360

**RE: Cherry Street Water Main Replacement
Letter Proposal for Professional Engineering Services**

Dear Mr. Gordon,

Environmental Partners Group, LLC (Environmental Partners/EP) is pleased to submit this letter proposal for professional engineering services to assist the Town of Plymouth (Client) with the Cherry Street Water Main Replacement project. Environmental Partners developed the proposed scope of services based upon your email dated July 16, 2024.

Project Understanding

We understand the proposed project includes replacement of approximately 5,200 linear feet of an unreliable 8-inch cast iron water main on Cherry Street between Court Street (Route 3A) and Industrial Park Road with new 12-inch ductile iron water main. The project will also include new fire hydrants and valves, replacing service connections with new services from the new main to the curb stop, trench pavement, and full width curb to curb mill and overlay.

Based on our preliminary review and further discussions with the Plymouth Conservation Commission Agent, the project site is not located in the vicinity of any wetland resource areas and therefore, no wetland delineation or wetland permitting will be required for this project.

Upon further review, there is a portion of Cherry Street below the Pilgrims Highway (Route 3) bridge, that is in the Massachusetts Department of Transportation (MassDOT) jurisdiction. It is EP's understanding that any work performed within this jurisdiction will require a State Highway Access Permit through MassDOT.

Scope of Services

Environmental Partners proposes the following scope of services to assist the Client with the Cherry Street Water Main Replacement project.

Task 1 – Field Work, Survey, & Data Collection

Task 1A – Subsurface Investigation

Environmental Partners will subcontract a driller to complete up to two days of geoprobe drilling. The geoprobes will be advanced to a depth of ten feet below grade to confirm the presence of bedrock, depth of groundwater, pavement thickness, and other soil parameters that will assist with

the design of the pipeline and bedding material and trench backfill. Borings will include collection of soil samples for visual and manual classification, and preparation of boring logs. A maximum of 20 geoprobes will be completed under this Task. Geoprobes will not be performed within the State Highway Layout (SHLO) on Cherry Street under the Pilgrims Highways (Route 3) bridge to avoid permitting implications for this phase of the project.

EP will summarize the subsurface exploration in a memorandum. The memo will include recommendations for pipe bedding, backfill, compaction requirements, and final restoration.

Task 1B – Private Utility Markouts

EP will subcontract with a private utility mark-out company and map subsurface utilities in 10 foot square boxes centered on the proposed geoprobe locations within the limits of the proposed water main using ground penetrating scanning equipment. This service will be used to support subsurface investigations and base mapping.

Task 1C – Drone Survey & Basemapping

Environmental Partners will conduct an in-house survey of the limit of work with an unmanned aerial vehicle (UAV), or drone, and GPS field locations that will extend 15 feet from the edge of pavement along the limit of work. The scope of the aerial survey will include the following:

- An abbreviated aerial survey will be completed to record the approximate horizontal and vertical location of the surface features for design, utilizing UAV and real-time kinematics (RTK). The flight and mapping produced from the flight will be prepared in accordance with the 2014 American Society for Photogrammetry and Remote Sensing Accuracy Standards.
 - Environmental Partners will coordinate a mutually agreeable flight day with the Client, recognizing that rain, high winds, and dense fog are limiting weather factors.
- Roadway (centerline, edges of pavement, sidewalks, curbing).
- Underground utilities as marked out in the field.
- Additional ground surface points to establish topography.
- Visible surface utility features such as sewer and drain manhole covers, catch basins, gas boxes, and electrical and telephone utilities.
- Geoprobe locations will be located with GPS coordinates and integrated into the survey.
- Record invert measurements for existing located sewer and drainage infrastructure.

Environmental Partners will prepare a base plan using the aerial and GPS survey data that includes existing contours and grades to create an existing conditions surface and visible existing features within the right of way, such as utility poles, signs, and utility structures.

- The base plan will be prepared in an AutoCAD Civil 3D 2018, or later, file with one-foot contour interval mapping and an ortho-image electronic file (SID format) with approximately 1.2"/pixel ground resolution and 40-scale mapping.-

Utility information provided by the Client and the responsible utility owner will be included in the base plans, including underground pipe/conduit sizes, configurations, and materials, as available.

Task 2: Water Main Design

EP's water main engineering design services and activities shall include the following:

- Prepare 50% design plans and 50% opinion of probable construction costs to be reviewed and discussed with the Client at an in-person meeting.
- Prepare final engineering design plans and specifications for public bidding.
- Prepare an opinion of probable construction cost based on final design.

Task 3: MassDOT Permitting

EP will provide the following permitting services:

- Prepare and submit a Traffic Management Plan and Application for Permit to Access State Highway to MassDOT Highway Division, District 5, to perform water main work in Cherry Street below the Pilgrims Highway (Route 3) bridge crossing including the following:
 - Coordinate with MassDOT and revise the Traffic Management Plan and other permit materials to reflect MassDOT's comments.
 - Incorporate MassDOT comments and requirements into the final design plans and specifications.
 - Coordinate with MassDOT to submit a Work Request when the water main work is set to take place.

The Scope of Services is based on the assumption Court Street at the intersection with Cherry Street is not within MassDOT jurisdiction and working in that intersection will not require a MassDOT State Highway Access Permit.

Task 4: Bidding Assistance

EP will assist the Client with the bidding of the Cherry Street Water Main Replacement project. This task shall include:

- Obtain Massachusetts Prevailing Wage Rates.

- Assist in soliciting public bids from general contractors in accordance with Massachusetts public bid laws. Environmental Partners will provide electronic files of the contract documents including plans and specifications for reproduction.
- Coordinate the bidding process including preparation of addenda and responding to questions from prospective bidders.
- Attend the public bid opening held at Plymouth Town Hall.
- Tabulate and analyze bid results.
- Assist the Client in evaluating bids, qualifications, checking references, and in assembling and awarding the contract.
- Prepare a written recommendation to the Client for the selection of the lowest responsible and eligible bidder.
- Assist the Client with the execution of the Construction Contract documents by reviewing contract submittals for conformance with the bid requirements and forwarding the Client.

Task 5: Construction Administration

Under this task, Environmental Partners will assist the Client with the administration of the construction contract and will serve as a liaison between the Client and the Contractor throughout construction for the Cherry Street Water Main Replacement project. Environmental Partners will provide the following construction administration services for the duration of construction, estimated to total 17 weeks:

1. Assist in the coordination of the project and maintain communication with Client's Project Team and their designee(s).
2. Attend a project kick-off meeting with the selected Contractor, the Client, and other interested parties to discuss the construction of the project, as outlined in the Construction Contract Documents, including: (1) scheduling; (2) methodology for dispute resolution; (3) substitutions of materials and/or construction procedures; (4) clarifications of the Contract Documents; and (5) coordination with the Client.
3. Review and coordination of shop drawings and project submittals for materials, equipment, and other project requirements.
4. Environmental Partners will participate in the following meetings during construction:
 - a. Coordination and attendance at in-person construction progress meetings (up to 3). Environmental Partners will prepare meeting agendas, prepare meeting minutes, and distribute meeting minutes to participants.
5. The preparation of project correspondences to the Client and Contractor for execution of construction activities in accordance with the construction contract requirements. This includes preparation of up to 17 weekly email summaries to the Client.

6. Coordination with the resident project representative Task #6 on project progress, submittals, project claims, and change orders.
7. Review and take action with respect to shop drawings and samples, results of tests and inspections, and other data which the Contractor is required to submit, but only for conformance with the design concept of the project and compliance with the information given in the Contract Documents (but such review or other action shall not extend to means, methods, sequences, techniques, or procedures of construction, or to safety precautions and programs incident thereto); determine the acceptability of substitute materials and equipment proposed by Contractor(s); and receive and review (for general content, as required by the Specifications) maintenance and operating instructions, schedules, guarantees, bonds, and certificates of inspection, which are to be assembled by Contractor(s) in accordance with the Contract Documents.
8. Issue instructions of Client to Contractor(s); issue necessary interpretations and clarifications of the Contract Documents and in connection therewith prepare change orders as required; have authority, as Client's consultant, to require special inspection or testing of the work; act as initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the work thereunder and make decisions on all claims of Client and Contractor(s) relating to the acceptability of the work or in the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work; but Environmental Partners shall not be liable for the result of any such interpretations or decisions rendered in good faith.
9. Make visits to the site at intervals to the various stages of construction to observe as an experienced and qualified design professional the progress and quality of the executed work of Contractor(s) and to determine in general if such work is proceeding in accordance with the Contract Documents. (Environmental Partners construction administrative staff shall not be required to make exhaustive or continuous on-site observations to check the quality or quantity of such work). Environmental Partners construction administrative staff shall not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by Contractor(s) or the safety precautions and programs incident to the work of Contractor(s). Environmental Partners' efforts will be directed toward providing a greater degree of confidence for the Client that the completed work of Contractor(s) will conform to the Contract Documents, but Environmental Partners shall not be responsible for the failure of Contractor(s) to perform the work in accordance with the Contract Documents. During such visits, and on the basis of on-site observations, Environmental Partners shall endeavor to keep the Client informed of the progress of the work, shall endeavor to guard the Client against defects and deficiencies in such work and may recommend the Client disapprove or reject work failing to conform to the Contract Documents. Environmental Partners anticipates up to 10 site visits during the course of construction.
10. Based on Environmental Partners' on site observations as an experienced and qualified design professional on review of applications for payment and the accompanying data and schedules, determine the amounts owing to Contractor(s) and recommend in writing to the Client payments to Contractor(s) in such amounts; such recommendations for payment will constitute a representation to the Client, based on such observations and review, that the

work has progressed to the point indicated, that, to the best of Environmental Partners' knowledge, information and belief, the quality of such work is in accordance with the Contract Documents (subject to an evaluation of such work as a functioning Project upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, and to any qualifications stated in his recommendation), and that payment of the amount recommended is due Contractor(s); but by recommending any payment Environmental Partners will not thereby be deemed to have represented that continuous or exhaustive examinations have been made by Environmental Partners to check the quality or quantity of the work or to review the means, methods, sequences, techniques or procedures of construction or safety precautions or programs incident thereto or that Environmental Partners has made an examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or that title to any of the work, materials or equipment has passed to the Client free and clear of any lien, claims, security interest or encumbrances, or that Contractor(s) have completed their work exactly in accordance with the Contract Documents.

11. Conduct a review to determine if the Project is substantially complete and to determine if, to the best of Environmental Partners' knowledge, the work has been completed in substantial conformance with the Contract Documents and the intent of the design and if Contractor has fulfilled their obligations thereunder so that Environmental Partners may recommend, in writing, final payment to Contractor(s) and may give written notice to Client and the Contractor(s) that the work is acceptable (subject to any conditions therein expressed), but any such recommendations and notice shall be subject to the limitations expressed above.
12. Environmental Partners shall complete the following project closeout tasks:
 - a. Prepare preliminary punch list, prepare valued punch list, and conduct up to 2 site visits to observe punch list work completed by Contractor.
 - b. Coordinate project closeout including review of substantial completion requests and preparation of closeout documentation (certificate of substantial completion, contractor's affidavit of payment, contractor's waiver of liens, and consent to final payment).
 - c. Coordinate and assist Client with closeout activities as required by the following local and state permits:
 - i. MassDOT State Highway Access
13. Environmental Partners shall collect and store certified payrolls from the Contractor(s) or Subcontractor(s) and provide the Client with copies as requested.

Environmental Partners shall not be responsible for the acts or omissions of any Contractor, or Subcontractor, or any of the Contractor(s)' or Subcontractors' agents or employees or any other persons at the site or otherwise performing any of the Contractor(s)' work. The actual cost of this task will depend on the total construction duration and activities of the Contractor.

Task 6: Resident Project Representative

Environmental Partners will provide a resident project representative onsite whose duties, responsibilities and limitations of authority are outlined below, for duration of up to seven hundred sixty five (765) hours. The actual cost of this task will depend on the total construction duration. Construction duration is currently estimated at 17-weeks.

- A. ENVIRONMENTAL PARTNERS shall not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by the Contractor(s), or the safety precautions and programs incident to the work of the Contractor(s), but ENVIRONMENTAL PARTNERS shall be responsible for notifying the Contractor and Client of any work that is cause for concern with respect to consistency with the requirements of the contract plans and specifications. ENVIRONMENTAL PARTNERS' efforts will be directed toward providing a greater degree of confidence for Client that the completed work of the Contractor(s) will conform to the Contract Documents, but ENVIRONMENTAL PARTNERS shall not be responsible for the failure of the Contractor(s) to perform the work in accordance with the Contract Documents. On the basis of on-site observations, ENVIRONMENTAL PARTNERS shall keep Client informed of the progress of the work, shall guard Client against defects and deficiencies in such work, and shall recommend the Client disapprove or reject work failing to conform to the Contract Documents.
- B. The Resident Project Representative's duties, responsibilities, and limitations of authority are outlined below.

a. General:

The Resident Project Representative is ENVIRONMENTAL PARTNERS' Agent, and shall act under the supervision of the ENVIRONMENTAL PARTNERS Project Manager. He shall confer with the ENVIRONMENTAL PARTNERS Project Manager regarding his actions. His dealings in matters pertaining to on-site work will be, in general, with the ENVIRONMENTAL PARTNERS Project Manager and the Contractor, keeping the Client advised as indicated below and as necessary. His dealings with subcontractors will only be through or with the full knowledge of Contractor or his on-site representative. He shall generally communicate with Client with the knowledge of the ENVIRONMENTAL PARTNERS Project Manager.

b. Duties and Responsibilities:

Resident Project Representative shall:

1. **Schedules:** Review the progress schedule, schedule of shop drawing submissions, and schedule of values prepared by Contractor, and consult with the ENVIRONMENTAL PARTNERS Project Manager concerning their acceptability.
2. **Conferences:** Attend progress meetings and other job conferences, as required, in consultation with the ENVIRONMENTAL PARTNERS Project Manager.
3. **Liaison:**
 - i. Serve as ENVIRONMENTAL PARTNERS' liaison with the Contractor and the Client, working principally through Contractor's designated on-site representative, and assist them in understanding the intent of the Contract Documents. Assist the ENVIRONMENTAL PARTNERS Project Manager in

serving as the Client's liaison with Contractor when the Contractor's operations affect Client's on-site operations.

- ii. Assist in obtaining from the Client additional details of information required at the job site for proper execution of the work.

4. **Shop Drawings and Samples:**

- i. Receive samples from the Contractor's on-site representative and notify the ENVIRONMENTAL PARTNERS Project Manager of their availability for examination.
- ii. Immediately advise the ENVIRONMENTAL PARTNERS Project Manager and the Contractor, or his on-site representative, of the commencement of any work requiring a shop drawing or sample submission, if the submission has not been reviewed by ENVIRONMENTAL PARTNERS.

5. **Review of Work, Rejection of Defective Work, Inspections and Tests:**

- i. Conduct periodic on-site reviews of construction in progress, or as otherwise necessary, to determine, to the best of his knowledge, (1) if work is proceeding in general accordance with the Contract Documents; and (2) that completed work is in substantial conformance with the Contract Documents. During such visits, and on the basis of on-site observations, ENVIRONMENTAL PARTNERS shall keep Client informed of the progress of the work, shall guard Client against defects and deficiencies in such work, and shall recommend the Client disapprove or reject work failing to conform to the Contract Documents.
- ii. Report to the ENVIRONMENTAL PARTNERS Project Manager, who, in turn, will notify the Client whenever any work is, to the best of his knowledge and belief, unsatisfactory, faulty or defective, or is not in substantial conformance with the Contract Documents, or has been damaged, or does not meet the requirements of any inspections, tests, or approvals required to be made; and advise the ENVIRONMENTAL PARTNERS Project Manager when he believes work should be corrected or rejected or should be uncovered for observation, or requires special testing or inspection or approval. Record and advise the Contractor of work failing to meet the Contract requirements.
- iii. Verify that tests, equipment, and operating and maintenance instructions are conducted, as required by the Contract

Documents, and in the presence of the required personnel, and that the Contractor maintains adequate records thereof; observe, record, and report to the ENVIRONMENTAL PARTNERS Project Manager appropriate details relative to the test procedures and start-ups.

- iv. Obtain records of all on-site testing and site visits from the Contractor's on-site representative, and report these to the ENVIRONMENTAL PARTNERS Project Manager.
 - v. Performance of the services outlined in Section 5., parts (i.) through (iv.) is to protect Client against defects and deficiencies in the work, and to verify compliance with the Contract Documents. Nothing in Section 5 relieves the Contractor of their independent obligations under their contract with Client.
6. **Interpretation of Contract Documents:** Transmit to the Contractor clarification and interpretation of the Contract Documents, as issued by the ENVIRONMENTAL PARTNERS Project Manager.
7. **Modifications:** Consider and evaluate the Contractor's suggestions for modifications in Drawings and Specifications, and report them, with recommendations, to the ENVIRONMENTAL PARTNERS Project Manager.
8. **Records:**
- i. Maintain at the job site orderly files for correspondence; reports of job conferences and sample submissions; and reproductions of original Contract Documents, including all addenda, change orders, field orders, additional drawings issued subsequent to the execution of the Contract, ENVIRONMENTAL PARTNERS' clarifications and interpretations of the Contract, ENVIRONMENTAL PARTNERS' clarifications and interpretations of the Contract Documents, progress reports, and other project-related documents.
 - ii. Keep a diary or log book recording hours on the job site; weather conditions; data relative to questions of extras or deductions; list of principal visitors and representatives of fabricators, manufacturers, suppliers, and distributors; daily activities; decisions; and observations in general and specific observations in more detail, as in the case of observing test procedures. Send copies to the ENVIRONMENTAL PARTNERS Project Manager.

- iii. Record names, addresses, and telephone numbers of all Contractors, subcontractors, and major suppliers of equipment and materials.

9. **Reports:**

- i. Furnish periodic reports, as required, of progress of the work and of the Contractor's compliance with the progress schedule and schedule of shop drawing submissions.
- ii. Prepare field memorandum, preliminary change orders and extra work orders, obtaining all back-up material. Recommend to the ENVIRONMENTAL PARTNERS Project Manager Field Memorandum, Change Orders, Extra Work Orders, and Field Changes.

10. **Payment Requisitions:** Review applications for payment with the Contractor for compliance with the established procedure for their submission, and forward them, with recommendations, to the ENVIRONMENTAL PARTNERS Project Manager, noting particularly their relation to the schedule of values, work completed, and materials and equipment delivered at the site but not incorporated in the work.

11. **Certificates, Maintenance and Operations Manuals:** During the course of the work, verify that certificates, maintenance and operation manuals, as appropriate, and other data required to be assembled and furnished by Contract are applicable to the items actually installed, and deliver this material to the ENVIRONMENTAL PARTNERS Project Manager for his review and forwarding to Client prior to final acceptance of the work.

12. **Completion:** Conduct a review to determine if the Project is substantially complete, and to determine if, to the best of ENVIRONMENTAL PARTNERS' knowledge, the work has been completed in substantial conformance with the Contract Documents and the intent of the design, and if Contractor has fulfilled all of his obligations there-under, so that ENVIRONMENTAL PARTNERS may recommend, in writing, final payment to Contractor(s), and may give written notice to Client and the Contractor(s) that the work is acceptable (subject to any conditions therein expressed), but any such recommendations and notice shall be subject to the limitations expressed in paragraph E above.

- i. Before ENVIRONMENTAL PARTNERS issues a Certificate of Substantial Completion, assist the ENVIRONMENTAL PARTNERS Project Manager in developing a list of observed items requiring correction or completion.

- ii. Conduct final review in the company of the ENVIRONMENTAL PARTNERS Project Manager, Client and Contractor, and assist in preparation of a final list of items to be corrected.
- iii. Verify, to the best of his knowledge, that all items on final list have been completed or corrected, and make recommendations to the ENVIRONMENTAL PARTNERS Project Manager concerning acceptance.

c. **Limitations of Authority - Resident Project Representative:**

- 1. Shall not authorize any deviation from the Contract Documents, or approve any substitute materials or equipment, unless authorized by the ENVIRONMENTAL PARTNERS Project Manager.
- 2. Shall not undertake any of the responsibilities of Contractor, subcontractors, or Contractor's superintendent.
- 3. Shall not expedite work for the Contractor.
- 4. Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences, or procedures of construction, unless such is specifically called for in the Contract Documents.
- 5. Shall not advise or issue directions as to safety precautions and programs in connection with the work.
- 6. Shall not authorize Client to occupy the project in whole or in part.
- 7. Shall not participate in specialized field or laboratory tests or inspections conducted by others, except as specifically authorized by ENVIRONMENTAL PARTNERS.
- 8. Shall not exceed limitations on ENVIRONMENTAL PARTNERS' authority as set forth in the Contract Documents.

Task 7: Record Drawings and UDF Program Update

Environmental Partners will locate as-built valves, fire hydrants, and water services for work on Cherry Street with a GPS unit. Environmental Partners will use collected GPS information to prepare record drawings, and will also furnish GPS information in shapefile format to the Client.

Environmental Partners shall prepare record drawings and furnish three (3) sets of prints to the Client containing those changes made during the construction process which are reflected on the marked up prints and drawings prepared by our Resident Project Representative and as furnished by the Contractor to Environmental Partners. In addition, Environmental Partners shall prepare and furnish one (1) sets of gate valve, hydrant, and service tie cards for the Client. In addition, Environmental Partners shall furnish a USB containing the AutoCAD 2018 or later Version of the record drawings and a PDF version of the tie cards. As part of this task, Environmental Partners will

also update the Client's Hydraulic Model and Uni-Directional Flushing Program to reflect the water main replacement work performed as part of this project.

Fee and Payment

Environmental Partners proposes to perform the indicated scope of services as previously described for a fee of **Three Hundred Ninety Eight Thousand Dollars (\$398,000)**. Task 1 through 4 and Task 7 are lump sum (LS) basis, and Tasks 5 and 6 are time and materials (T&M) basis. Environmental Partners' current time charge rates are attached. Billing rates shall be subject to adjustment annually every April. All expenses and consultants shall be marked-up 12%. A breakdown of the fee by task is as follows:

Task	Fee Structure	Fee
Task 1 – Field Work, Survey, & Data Collection	Lump Sum	\$70,500
Task 2 – Water Main Design	Lump Sum	\$55,600
Task 3 – MassDOT Permitting	Lump Sum	\$13,400
Task 4 – Bidding Assistance	Lump Sum	\$8,600
Task 5 – Construction Administration	Time & Materials	\$75,200
Task 6 – Resident Project Representative	Time & Materials	\$116,700
Task 7 – Record Drawings and UDF Program Update	Lump Sum	\$58,000
Total		\$398,000

Invoices will be issued to the Client on a monthly basis and will be based upon percentage complete and/or time and materials spent for tasks identified above. The compensation indicated above is based on an estimate of the character and extent of work involved. Unforeseen conditions, which become evident during the course of the work, may alter or increase the effort required. The amount indicated will not be exceeded without written amendment between the Client and Environmental Partners.

Preliminary Opinion of Probable Construction Cost

Construction Cost Estimate ¹	\$1,690,000
Full Width Mill and Overlay ²	\$361,200
Planning Level Contingency (25%)	\$512,800
Police Details ³	\$100,450
Total	\$2,664,450

Notes:

1. Assumes \$325/lf all-in cost.

2. Developed using recent projects and accounts for inflation costs.
3. Police Detail fees assume 2 officers per day at current rate of \$62/hour.

Anticipated Project Schedule

Environmental Partners proposes the following project schedule to perform the above referenced scope of services. This schedule assumes that Environmental Partners will receive a Notice to Proceed from the Client in early January 2025.

Task	Estimated Start Date	Estimated End Date
Task 1 – Field Work, Survey, & Data Collection	Early January 2025	Early March 2025
Task 2 – Water Main Design	Early March 2025	Early July 2025
Task 3 – MassDOT Permitting	Early March 2025	Early July 2025
Task 4 – Bidding Assistance	Early July 2025	Early September 2025
Task 5 – Construction Administration	Early September 2025	Late January 2026
Task 6 – Resident Project Representative	Mid August 2025	Late January 2026
Task 7 – Record Drawings and UDF Program Update	Late January 2026	Mid April 2026

Please note that the timeline of this project is contingent on MassDOT's permit review duration and could also change depending on whether MassDOT is amenable to waiving their winter construction restrictions of no work permitted in a Massachusetts State Highway from December 1st to March 15th.

The proposed fee and effort are based upon Environmental Partners' best faith effort to fully understand the needs of this proposal. If the scope of the services to be rendered is changed materially or if the period of time required to render services hereunder is extended beyond the completion dates proposed, the amount of compensation provided shall be adjusted appropriately (if required), upon approval of the Client and Environmental Partners. If project delays outside of Environmental Partners' control cause the completion date to extend substantially, additional compensation may be requested through a written amendment to account for additional coordination time.

Assumptions and Exclusions

- The Client will prepare Division 00 of the contract specifications, with the exception of the Bid Form, which EP will prepare.
- The Client will host the bid documents and host the bid opening. Electronic bid hosting and bid opening is not included in the Scope of Services.
- If a police detail is required to facilitate any field work, it will be paid directly by the Client.
- It is assumed that the Client will assist EP staff with utility location and access to utility structures in the field as needed.
- It is assumed that because all surrounding wetlands are over 300-feet away from the project area that neither wetland delineation nor wetland permitting are required for this project.
- A pre-bid meeting is not included in the Scope of Services.

- It is assumed that Court Street at the intersection of Cherry Street is not in MassDOT jurisdiction and work in the intersection will not require a MassDOT State Highway Access Permit.
- It is assumed that the Client will be responsible for paying all fees associated with MassDOT directly to MassDOT.
- It is assumed in the anticipated project schedule that MassDOT will furnish permit comments and approvals in a timely manner, and that MassDOT will waive winter construction restrictions.
- It is assumed in the anticipated project schedule that weather conditions will be favorable to perform field work and survey in late winter/early spring 2025.
- Approximate right-of-way and property line information will be shown on the base plan based on available GIS information only. Precise right-of-way and property line information adequate for easements or land acquisitions is not included. Individual parcel surveys to locate precise right-of-way or property lines are not included.
- The UAV corrects the positional accuracy of the onboard GPS in real-time (during the flight) by connecting to a virtual reference station (VRS). The RTK7VRS system is commonly used in conventional manned GPS survey equipment and typically produces up to 3cm horizontal and 5cm vertical accuracy. This Scope of Services does not include a more precise topographic field survey typically required for detailed engineered design.
- Please note that there has been Legislation introduced into the United States House of Representatives referred to as H.R. 2864-Countering CCP Drones Act, regarding the prohibition of the use of certain drones produced or provided by Shenzhen Da-Jiang Innovations Science and Technologies Company Limited (DJI). In the event that this Legislation passes and becomes law prior to or during the performance of the work that is anticipated under this proposal, and this proposal includes the use of DJI Drone, Environmental Partners reserves the right to re-negotiate our approach, scope of work, performance schedule, and/or fee.

Acceptance

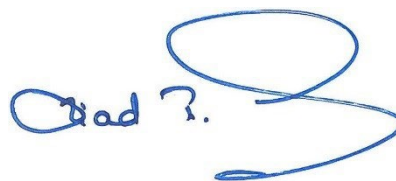
We look forward to working with you on this important project. We would be pleased to discuss the scope of services and proposal with you. If you find the proposed scope and fee acceptable, we can coordinate the preparation and execution of an Agreement. Please feel free to contact us with any questions or concerns.

Sincerely,

Environmental Partners Group, LLC



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Attachment: EP Standard Billing Rates Effective 4-1-24 through 3-31-25

Environmental Partners Group, LLC Standard Billing Rates

Effective until March 31, 2025

CATEGORY	HOURLY RATE
Principal	\$265
Senior Project Manager	\$250
Project Manager	\$238
Senior Project Engineer/Scientist	\$210
Project Engineer	\$180
Project Scientist GIS Coordinator	\$178
Engineer GIS Specialist	\$160
Hydrogeologist	\$145
Scientist	\$140
GIS Technician	\$135
Technician	\$115
<u>Resident Project Representatives</u>	
Horizontal Construction	\$135
Vertical Construction	\$140
Clerical	\$99