



September 16, 2022

Mr. Paul Mantello
Town Manager
Town of Boonsboro
21 North Main Street
Boonsboro, Maryland 21713

Re: Proposal to Provide Preliminary Engineering Report (PER) for Looping of the Water Supply Main on Alt. Route 40

Dear Mr. Mantello:

Whitman, Requardt and Associates, LLP (WRA) is pleased to present our proposal to the Town of Boonsboro for completing a Preliminary Engineering Report (PER) for looping of the water supply main to the north of Town on Alt. Route 40. The PER will be in standard MDE format, to assist the Town with pursuing funding.

Similar to the Water and Wastewater System Master Plan, and Reservoir PER projects, Andy Cooper will provide proactive project management to the Town of Boonsboro while engineering oversight will be provided by Allyson Merola, P.E., who was instrumental in the development of the water system model and completion of the 2019 Water Master Plan and 2021 Reservoir PER.

The following information is enclosed regarding the above referenced project.

1. Background and Scope of Services
2. Schedule and Deliverables
3. Compensation
4. Manhour Estimate and Cost Breakdown

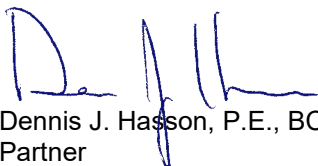
WRA proposes to provide services as described in the attached Scope of Services. The estimated fee for this work is **\$21,471.00**.

If this proposal is acceptable, please sign and date in the space provided on Page 4.

Thank you for the opportunity to present our Proposal. We look forward to working with you on this project.

Very truly yours,

Whitman, Requardt and Associates, LLP



Dennis J. Hasson, P.E., BCEE
Partner

Enclosures

cc: File
Andy Cooper, P.E.
Allyson Merola, P.E.

1. BACKGROUND AND SCOPE OF SERVICES

BACKGROUND

In accordance with the Town of Boonsboro's (the Town's) request, we are pleased to offer our proposal to perform engineering services for development of a Preliminary Engineering Report (PER) to review pipe looping options for the existing water main at the northern edge of the distribution system, along Alternate Route 40.

In 2009, to resolve local contamination of the groundwater and ensure safe drinking water for all local residents, the Town worked with MDE and the County to extend water service, beyond Town limits, to all the affected Washington County Residents along Alt. Route 40. The Town installed 7,600 linear feet of new 12" and 8" water main to serve 100 out-of-town customers, however, the installed main is a dead-end and water quality (such as low chlorine residual) is a concern.

To make sure adequate water quality is maintained, the Town has an ongoing flushing program to circulate water within this portion of the distribution system. This results in loss of over 1.0 million gallons of water and the associated revenue every year. The goal of the water main looping is to reduce or eliminate the need for flushing the system, and to maintain adequate water quality through improved circulation.

Upon authorization from the Town, WRA will proceed as described below.

1. Scope of Services:

For this project, WRA will review up to three alternatives for the proposed system looping. Possible alternatives include system looping to the west or to the east, with differing points of connection. WRA will review available plans and reports, review regulatory requirements and permits, and review the system hydraulic model. A summary is as follows:

- A. **Project Management** – WRA will assign a project manager to this project who will maintain contact with the Town on a regular basis. WRA will submit monthly invoices and will maintain a project schedule and furnish updated schedules on an as-needed basis for the duration of the project.
- B. **Project Initiation Meeting** – A project initiation/ kickoff meeting will be conducted with the Town to discuss the goals and objectives of the project. This meeting will be utilized to discuss materials needed for the study, and the Town's preference for formatting and presentation of the PER. Schedules, progress reports and other project-related issues will be discussed. We have assumed this meeting will be virtual.
- C. **Data Gathering/Data Review** – WRA will provide a request to the Town for pertinent reports and background information, mapping, engineering studies, as-built drawings, field data, survey information, etc. related to the project, in either printed or electronic form.
- D. **Develop/Evaluate Alternatives** – WRA will identify and evaluate up to three (3) alternatives. This evaluation will consist of the following tasks:
 1. Conduct a review of the potential water main looping sites to document existing conditions, identify potential replacement alternatives, determine areas for additional consideration, and document construction and access constraints.
 2. Limited Hydraulic Investigations - Review 2019 Water Master Plan model runs and recommendation, perform up to 5 model runs to determine suitability of proposed system looping locations and sizes. Note that pipe routing locations will be limited to general areas identified by the model or specific



- properties identified by the Town. No site plans, detailed alignment studies, geotechnical borings or surveyor services are included.
3. Using the models and input from the Town above, identify three alternatives for the Alt. route 40 water main looping.
 4. Prepare preliminary cost estimate for each alternative developed. Develop ranking system for cost, environmental and public impacts for comparison of the alternatives.
- E. **Preliminary Engineering Report (PER)**– A summary of the water main looping information will be compiled into a PER, defining the key elements of the effort and the basis for determining the recommended alternative. A matrix will also be included, which will compare economic and non-economic factors in order to rank the alternatives. A detailed cost estimate for the recommended alternative will be included.
- F. **Submit Draft PER to the Town of Boonsboro** - Submit an electronic (PDF) copy of the “Draft” PER to the Town for review. Attend an in-person meeting with the Town to discuss comments on the Draft PER.
- G. **Revise PER** – WRA will revise the draft PER, based on the review comments received from the Town. Submit two (2) hard copies of the “Final” PER and an electronic pdf to the Town.

ITEMS FURNISHED BY THE TOWN OF BOONSBORO AT NO COST TO THE ENGINEER

- A. Attendance at and participation in project meetings and presentations
- B. Review of all memoranda and reports
- C. As-built drawings, previous reports and studies, mapping and property information (and other data listed in Section 1.C Data Gathering) as required
- D. Current Town GIS information

2. SCHEDULE AND DELIVERABLES

Assuming an October 3, 2022 Notice to Proceed, this proposal assumes that the PER will be completed in November of 2022.

Milestone	Duration
1 Data Request	1 week after Notice to Proceed
2 Draft PER	4 weeks after Notice to Proceed
3 Final PER	1 week after comments received on Draft PER

3. COMPENSATION

We will perform the Scope of Services on a time and material basis. The estimated cost for the Scope of Services is included below. This fee will not be exceeded without your authorization.

Invoices will be rendered every four weeks for the actual services performed during the previous four-week period and are due within 30 days of receipt.

Scope Item	Cost
A. Project Management	\$762
B. Project Initiation Meeting	\$552
C. Data Gathering / Data Review	\$961



D. Develop / Evaluate Alternatives	\$7,583
E. Preliminary Engineering Report	\$7,421
F. Submit Draft PER	\$1,967
G. Finalize PER	\$2,225
Total	\$21,471

4. MANHOUR ESTIMATE AND COST BREAKDOWN

A detailed Manhour Estimate and Cost Breakdown by task is included as Attachment A.

5. TERMS AND CONDITIONS

This work will be completed in accordance with our October 2018 Water System Contract as amended on September 27, 2021.

Approval:

Signature

Date



PROJECT NAME: TOWN OF BOONSBORO - WATER MAIN LOOPING P.E.R.													REVISION		0.00																
MANHOUR ESTIMATE AND PROPOSAL													DATE		9/16/2022																
CLIENT: Town of Boonsboro, MD													BY		A. Cooper																
TASK	PROJECT DESCRIPTION: Town of Boonsboro - Preliminary Engineering Report for Alt. Route 40 Water Main Looping												QA/QC	Project Manager - Civil Assoc.	Senior Project Eng. - Civil	Design Eng. - Civil	GIS Specialist	Geotechnical Eng.	Mechanical Eng.	.	.	WRA TOTAL HOURS	WRA TOTAL PAYROLL	WRA EXPENSES	Subcontractor hours	Subcontractor Payroll	Subcontractor Expenses	Line Item Totals			
Use Labor Cost Rates for year:													2021	\$80	\$78	\$62	\$35	\$48	\$79	\$60	\$0	\$0	\$0			T, R, E S, or L (See Legend)			T, R, E S, or L (See Legend)		
A.	Project Management													4									4	\$762	- \$		\$	- \$	\$762		
B.	Project Initiation Meeting													2		2								4	\$552	- \$		\$	- \$	\$552	
C.	Data Gathering / Data Review													2		4	2							8	\$961	- \$		\$	- \$	\$961	
D.	Develop / Evaluate Alternatives																								0	\$0	- \$		\$	- \$	\$0
1	Identify Alternatives													4		8								12	\$1,448	- \$		\$	- \$	\$1,448	
2	Perform Hydraulic Investigations													8		16								24	\$2,896	- \$		\$	- \$	\$2,896	
3	Develop Alternatives													4		16								20	\$2,134	- \$		\$	- \$	\$2,134	
4	Rank Alternatives													4		4							8	\$1,105	- \$		\$	- \$	\$1,105		
E.	Preliminary Engineering Report												2	20		32	4							58	\$7,421	- \$		\$	- \$	\$7,421	
F.	Submit Draft PER													8		4								12	\$1,867	T \$100		\$	- \$	\$1,967	
G.	Finalize PER												1	6		8								15	\$2,025	T, R \$200		\$	- \$	\$2,225	
SUBTOTALS =													3	62	0	94	6	0	0	0	0	0	0	165	\$21,171	\$300	Subcontractor Total		\$0	\$21,471	
SUB-TOTAL DOLLARS =													\$588	\$11,810	\$0	\$8,061	\$712	\$0	\$0	\$0	\$0	\$0	\$0	\$21,171			Profit on Sub		0.0%		
														156	Civil	\$19,871	6	Other	\$712	0		\$0					WRA Total		\$21,471		
																											TOTAL		\$21,471		

Bare Labor Cost rates for year		2021	QA/QC	Project Manager - Civil Assoc.	Senior Project Eng. - Civil	Design Eng. - Civil	GIS Specialist	Geotechnical Eng.	Mechanical Eng.	.	.	
County IDQ Contract Rates - LOADED LABOR AT A FACTOR OF:		2.45	\$196.00	\$190.49	\$151.90	\$85.75	\$118.70	\$192.94	\$147.49	\$0.00	\$0.00	\$0.00

WR&A EXPENSES

T = Travel
R = Reproduction
E = Equipment Rental

