



TOWNSEND WATER DEPARTMENT
540 Main Street West Townsend, Massachusetts 01474

Todd Melanson, *Chairman*
David Vigeant, Superintendent

Michael MacEachern, *Vice-Chairman*
(978) 597-2212

Christopher Jones, *Clerk*
Email water@townsendwater.org

WATER COMMISSIONERS MEETING MINUTES

October 4, 2021 – 7:00 P.M.

Water Department 540 Main Street, Meeting Room

NOTE REGARDING ACCESS AND PARTICIPATION

Governor Baker updated the State of Emergency to respond to COVID-19 on June 16, 2021 and ordered an extension of certain provisions of the Open Meeting Law M.G.L. c. 30A, s 20 put into effect on March 12, 2020, until April 1, 2022 at which time the extension will be repealed.

<https://us02web.zoom.us/j/83284628340?pwd=Y29LTHdGZEHRRjVuZzBHem54WGhjdz09>

Meeting ID: 832 8462 8340 Passcode: 558766 Log on Monday October 4, 2021, at 7:00 P.M. to participate.

I. PRELIMINARIES:

- 1.1 TM called the meeting of the Board of Water Commissioners to order at 7:03 PM at 540 main St and by Zoom.
- 1.2 TM announced that the meeting is being recorded on Zoom.
- 1.3 Roll call showed members present- Todd Melanson (TM)-Chairman, Michael MacEachern (MM)-Vice Chairman, Christopher Jones (CJ)-Clerk. Roll call showed citizens present: Elaine Staton & Richard Bowen of 46 Highland St, Tonia Carroll of 44 Highland St, Roger Helou and 50 Highland St, Doug DeNatale from AECOM, Marie Kinter from Westfield State University, Mike Doyle of 85 Ash St, Chaz Sexton-Diranian (CSD) from the Board of Selectmen and David Vigeant (DV) Water Superintendent.
- 1.4 Chairman's additions or deletions. None
- 1.5 Review correspondence. None available.

II. APPOINTMENTS-VOTES MAY BE TAKEN

- 2.1 7:05 PM Update/Discuss Main Street Well with Doug DeNatale from AECOM. Mr. DeNatale reported that the Town has received approval from Mass DEP on September 22, 2021, to move forward with the construction of the new well. The bid opening was scheduled for September 30, 2021. The award was presented to the lowest qualified bidder Maher Services, Inc. TM read the Notice of Award into record (see attached) and motioned to accept to award Maher Services, Inc. the contract in the amount of \$276,592.00. MM seconded. Unanimous vote.
- 2.2 7:35 PM Ashley and Brian Macdonald 11 Virgo Lane, Michael Doyle 85 Ash Street, Thomas Whalen 10 Chestnut Drive, RE: Request abatement of \$50.00 fine. TM motioned to abate the \$50.00 non-compliance fine so long as there is a good payment history on the account and the meter is changed prior to the second fine being charged. MM seconded. Unanimous vote.
- 2.3 7:50 PM Robin Derome, 27 Hickory Drive, RE: Water quality issues. Did not attend.
- 2.4 8:00 PM Elaine Staton, 46 Highland Street, RE: Water quality issues. Ms. Staton explained the conditions of the water in her home and the surrounding neighbors. The department has flushed the hydrant and it has not resolved the issue. The section of homes that are experiencing the issues are connected to an old 6" main instead of the nearby 16". MM expressed concerns about it creating a dead end in the system, but DV said there are plans to create a loop in the future. There was discussion that bringing the Cross St well online caused a reverse of flow in the system that could take years to clear up entirely. DV presented two solutions to the problem (see attached.) TM motioned to move forward with option 2 of DV's proposals. CJ seconded. MM abstained. Vote carries.

III. MEETING BUSINESS-VOTES MAY BE TAKEN:

- 3.1 Update/Discuss Cross Charge Agreement. Tabled.
- 3.2 Discuss/Review 169 Main St and Greely Rd. Town Counsel has suggested that a temporary easement be placed on the property so the homeowner can sell with a guarantee from the department that the problem will be fixed, just

not right away. There was also discussion of adding a provisional easement on the driveway. **TM motioned to direct Town Counsel to write a temporary easement, contingent on having a working utility easement on the driveway, and the owner of 169 Greely Rd, at the time, will be responsible for any reconnection costs. MM seconded. TM, yes. MM, abstained, CJ, yes. Vote carries.**

3.3 Update/Discuss PFAS. The Harbor Trace well has been offline since August 27, 2021. It will only be needed for emergencies. DEP has been notified; customers have been notified as well. The well does need to continue to be tested. TM suggested that DV double check that quarterly testing is acceptable.

3.4 Discuss/Review Rate Study. Tighe and Bond submitted the lowest bid for the rate study. **MM motioned to accept Tighe and Bond for the rate study for \$9,800.00. TM seconded. Unanimous vote.**

3.5 Discuss/Review Capital Planning. Tabled.

IV. COMMISSIONERS UPDATES AND REPORTS-VOTES MAY BE TAKEN:

4.1 Discuss/review DEP staffing plan for Harbor Trace treatment plant. DV provided the regulation regarding staffing the treatment plant and the distribution system separately. TM asked DV to obtain something from Margo or Bostwick to confirm this. This topic will continue to be discussed.

V. LIASON UPDATES AND REPORTS-VOTES MAY BE TAKEN:

5.1 CSD sent email to DV looking for infrastructure ideas. The Chairman of the BOS is starting to investigate those things.

5.2 CSD is looking for letters of support for Representative Harrington and Senator Cronin for them to fill in the blanks and sign for support regarding the local PFAS issues.

VI. SUPERINTENDENT'S UPDATES AND REPORTS-VOTES MAY BE TAKEN:

6.1 Update/Discuss Harbor Trace Treatment Plant. Previously discussed.

6.2 Review/Discuss Lead and Copper Rule requirements. Because the Cross St station is back online, the system is back to the standard monitoring of 40 tests bi-annually. TM suggested CSD ask residents to volunteer to be a sample site at the next BOS meeting.

6.3 Update/Discuss Employee education. The T2 class is ongoing for Kevin and Mistie.

6.4 Update/Discuss 12 South St-Deluxe. There is an 8" line coming in from the street, they are working on a correction to the problem.

6.5 Update/Discuss Meter exchange program. There are 17 accounts that need to be scheduled for Route 1. There are 266 gallon meters left in the system.

6.6 Update/Discuss 2016 Ford Fusion. The Town no longer wants the car. **TM motioned to list 2016 Ford Fusion as surplus. CJ seconded. MM abstained. Vote carries.** TM requested that if the town passes, that the car get listed on Municibid.

6.7 Review/Discuss 91 Wallace Hill Road. In the past, there was an easement granted for no-charge water at this property. The property is now being sold, and that agreement will no longer be honored.

VII. OFFICE ADMINISTRATOR'S UPDATES AND REPORTS-VOTES MAY BE TAKEN:

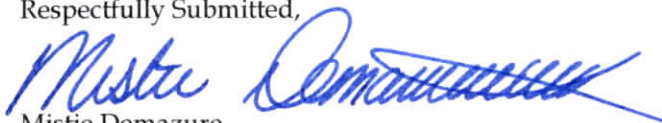
7.1 Schedule next BOWC meeting. The next Board of Water Commissioners Meeting will be held on Monday, November 8, 2021, at 7:00 PM.

7.2 Review and sign September's end of month reports.

ADJOURNMENT:

TM motioned to adjourn the meeting of Board of water commissioners at 9:10. CJ seconded. Unanimous vote.

Respectfully Submitted,



Mistie Demazure

Accounts Manager

Townsend Water Department

Main St Well

Remaining Task List

- 1) Install 820 HDPE pipe inhouse install Oct**
- 2) Install 820 Electric Conduit inhouse Install Oct**
- 3) Install 820 Fiber Optic Conduit for depth probe inhouse Install Oct**
- 4) Submit BRP WS25 application**
- 5) Install foundation 6' by 6' or 8' by 8' foundation Permit town**
- 6) Install 6' by 6' or 8' by 8' building. Building for VFD only \$7000**
- 7) Relocate spare 60 amp VFD from Main st wellhouse to new building \$2000**
- 8) Drill Well Mahar 1 Nov to 15 Nov start**
- 9) Purchase submersible Pump and Motor \$30,000 to \$40,000**
- 10) Install pump \$5,000 to \$10,000**
- 11) Electrical prep front building \$4,000 to \$5,000**
- 12) Connect Well to VFD building \$3,000**
- 13) Scada connections for depth probe**
- 14) Town Meeting fix spring warrant article for \$150,000 to system upgrades and left over can be spent on other projects.**
- 15) Engineering cost left \$20,000 to \$30,000**
- 16) Develop Ground water monitoring program**
- 17) Dep Final permits**
- 18) Switch over April**



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Central Regional Office • 8 New Bond Street, Worcester MA 01606 • 508-792-7650

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

September 20, 2021

Town of Townsend
Attn: Board of Water Commissioners
540 Main Street
West Townsend, MA 01474

Re: Town: Townsend
PWS Name: Townsend Water Department
PWS ID #: 2299000
Program: System Modification WS19 & WS20
Transmittal: W015497 WS19 addendum
X288295 WS20
Action: Approval

Dear Water Commissioners,

The Central Regional Office of the Massachusetts Department of Environmental Protection (MassDEP) received on August 30, 2021, supplemental pumping test information for Townsend Water Department's (Townsend) proposed Main Street Well (aka TW 3-98). The information was submitted by AECOM in response to instructions provided by MassDEP on the requirements to finish the New Source Approval process for an approved source that was not developed and used within five years of the date of approval. A BRP WS19 approval for the Main Street Well was first issued by MassDEP on January 17, 2001.

Project Description

In 2001 Townsend sought approval of the pumping test conducted on a new gravel packed well at the existing Main Street Tubular Wellfield site. The new well site was assigned an approved rate of 603 gallons per minute (gpm) or 0.86 million gallons per day (MGD). The tubular wellfield was originally proposed to remain in operation, but the current plan is to decommission the tubular wells. In May and July 2021, an 8-inch diameter test well was constructed two feet from test wells TW 3-98 and TW 3A which have been damaged over the years and are no longer usable as observation wells. The test well was installed to 80 feet with a 20-foot section of 60-slot stainless steel wire-wound well screen.

Pumping Test

A 5-day pumping test was conducted on an 8-inch test well at a constant flow rate of 438 gallons per minute (gpm) from July 23 to July 28, 2021. Less than 0.1 inches of rain was recorded at NOAA weather stations in Fitchburg on July 25 and approximately 0.5 inches on July 27th and 28th. The Main Street Tubular Wellfield was in normal operation during the pumping test. Water levels were measured in the pumping well and at observation well TW 7-98 which is 60

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

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feet east of the pumping well. The static water at the beginning of the test in the pumping well was 3.93 feet below the top of the stilling well. Maximum drawdown of 23.91 feet was recorded at the end of the test and the water levels achieved stabilization in the final 24 hours of the test. Water levels in the pumping well recovered 97% within 22 hours after shutdown.

Water Quality

Field samples for temperature, pH, specific conductance, and carbon dioxide were collected during the pumping test at startup, midpoint, and shutdown. The temperature was 10.5°C to 10.7°C, the pH was 5.6 SU to 6.1 SU, specific conductance was 126 µmho/cm to 144 µmho/cm, and carbon dioxide was 30 mg/L.

Water quality samples for total coliform, nitrate, nitrite, and secondary contaminants were collected at startup, midpoint, and shutdown of the pumping test. Total coliform was absent, nitrate was less than 1 mg/L, and nitrite was not detected. The iron concentration was 0.012 mg/L to 0.029 mg/L and manganese was 0.003 mg/L in the startup sample and not detected at shutdown.

Water quality samples for perchlorate, inorganic contaminants, volatile organic compounds (VOCs), synthetic organic compounds (SOCs), radionuclides (radon, gross alpha, gross beta, uranium, radium 226 and radium 228) and per and poly-fluorinated compounds (PFAS6) were collected at the end of the pumping test. The perchlorate concentration was 0.038 µg/L which is well below the MCL of 2.0 µg/L. The only inorganic contaminants detected were antimony, barium, fluoride, and sodium. All detections were below the respective MCL or guideline. VOCs, SOCs, and PFAS6 were not detected. Radon was detected at 1,030 pCi/L and all other radionuclides were not detected.

Well Construction

The proposed final production well is a 24" x 18" well with a glass bead filter pack, constructed to a depth of 82 feet with a 20-foot, continuous slot, wire wound, stainless steel screen set to 81 feet. A concrete sanitary seal is proposed to be installed to 20 feet below ground surface. A well house will be constructed over the final production well with a well level probe and electricity to run the pump. The well pump information will be submitted with an application to construct the pump house. The design flow will likely be 600 gpm and it is not yet decided whether a turbine pump or submersible pump will be proposed. Water from the Main Street Well will receive pH adjustment with sodium hydroxide for corrosion control.

Pursuant to MassDEP's authority under 310 CMR 22.04(7) that each supplier of water operates and maintains its system in a manner that ensures the delivery of safe drinking water to consumers, this approval is made subject to the conditions set forth below.

1. Low Water Cutoff - Instrumentation and control equipment shall be installed to ensure that the operating water level in the well is at least 5 feet above the top of the well screen, or 5 feet above the pump intake, whichever is higher.

2. BRP WS25 application – Prior to construction of the well house and raw water piping, submit to MassDEP for review and approval a BRP WS25 application. The application shall include detailed specifications on the well pump (including make, model, horsepower, gpm, intake setting (if submersible), low water cutoff, etc), the well house design, and the connection to the existing chemical feed building.
3. Lead and Copper Sampling – The activation of a new source (including replacement wells) or a long-term change in treatment have the potential to impact the effectiveness of Corrosion Control Treatment and therefore warrants more frequent lead and copper monitoring in accordance with 310 CMR 22.06B(2)(b)3.c. Following activation of the Main Street Well, the Supplier of Water shall conduct lead and copper sampling for two consecutive six-month monitoring periods for a minimum of one year at 40 approved sites (standard monitoring). Contact Josephine Yemoh-Ndi at Josephine.Yemoh-Ndi@mass.gov to find out if submittal of a new lead and copper sampling plan is also required. Alternatively, the standard monitoring requirement may be able to be waived if MassDEP and US EPA approve a desktop or demonstration study submitted six (6) months prior to activation of the Main Street Well. For guidance on what an acceptable study would entail, please contact Andrea Lemerise of MassDEP at Andrea.Lemerise@mass.gov.
4. Groundwater and Surface Water Monitoring Program – Pumping test data from the original pumping test at the well site indicated that some drawdown in the wetlands in the vicinity of the Main Street Well is likely to occur. Pumping from the Main Street Well should not significantly alter the annual frequency and duration of flooding and low water periods and events. Significant reduction of stream flow at any time of the year would negatively impact both the Wood and Blanding's turtle, therefore water level monitoring in surface and groundwater is required as a condition of activation of the new well. MassDEP previously accepted the following water level monitoring plan and required implementation of the plan in the Water Management Act Permit issued May 29, 2002. The requirement was removed from the WMA Permit in 2006 when the well construction was not expected to be completed. MassDEP hereby requires implementation of the following plan:

Bimonthly water level measurements shall be collected from March 15 to October 15 each year from selected drive points and monitoring wells for a minimum of three years. Groundwater levels shall be monitored in observation wells 3-98, 1-98, and 6-98 and surface and groundwater levels shall be monitored in drive points DP-1, DP-3, DP-4, DP-7, and DP-8. Water level data, precipitation and pumping records shall be tabulated, graphed, and interpreted. Observations concerning flow or absence of flow in Pearl Hill Brook and the unnamed brook should be recorded along with the water level measurements. For example, note that the drive point is located in a dry channel of the brook, but flow is still observed in the streambed. Indications of beaver activity should also be noted. The summary report with an evaluation of impacts shall be submitted annually to MassDEP by February 28 of the following year.
5. Groundwater Supply Protection – Prior to activation of the Main Street Well, Townsend is required to adopt the Zone II for the Main Street Well into Townsend's bylaws for groundwater supply protection.

6. Groundwater Quality Monitoring Plan – In lieu of a water quality sampling plan, MassDEP approves the proposed management plan including 1) communication with farm owners within the Zone II on the importance of groundwater supply protection, 2) diligent oversight of power line maintenance by third parties in the Zone I, 3) frequent review of publicly available inspection reports for gasoline and diesel storage tanks at the Massachusetts Highway Department maintenance facility on New Fitchburg Road, and 4) continual monitoring of beaver activity in Pearl Hill Brook.
7. Water Quality Sampling – At a minimum, a sample for total coliform shall be collected and analyzed from the source water sample tap for the Main Street Well and a sample for volatile organic compounds shall be collected and analyzed from the finished water tap within ten (10) days of the proposed activation date for the replacement well and the results submitted to MassDEP. Additional water quality sample requirements will be included, as needed, in the WS25 approval.
8. Construction Certification – Prior to the final inspection of the project, submit a Registered Professional Engineer's certification letter on the construction of the project and its compliance with MassDEP's regulations, guidance, and policies. The certification shall include a set of as-built plans.
9. Final Inspection – MassDEP must be notified upon completion of the construction of the project so that MassDEP personnel may conduct a final inspection. Please allow at least ten (10) days for MassDEP to conduct the final inspection. MassDEP's written approval must be obtained prior to placing the replacement well in service.
10. Abandonment application – After the Main Street Well is activated, a WS36 abandonment application shall be submitted to approve the decommissioning of the Main Street Tubular Wellfield.
11. Compliance with MassDEP Approvals – The Supplier of Water shall conduct activities in accordance with the approved plans, reports, and other submissions, except as may be modified by the conditions set forth in this Approval. No material changes in the design or activities described in the approved documents shall be performed without prior written MassDEP approval.
12. Compliance with Other Approvals – The activities at this Public Water System shall be performed in compliance with all other applicable local, state and federal laws and regulations. This approval does not relieve the owner or operator of this Public Water System from complying with all other applicable local, state and federal requirements, licenses and permits.
13. Duty to Mitigate – The Supplier of Water shall remedy and shall act to prevent all potential and actual adverse impacts to public health or the environment resulting from noncompliance with the terms or conditions of the permit or approval.

14. Duty to Provide Information – The Supplier of Water shall furnish to MassDEP, within a reasonable time, any information MassDEP may request, and which is deemed by MassDEP to be relevant in determining compliance with permits, regulations, guidelines, and policies.

If you have any questions regarding this approval, please contact Susan Connors of the Drinking Water Program at 857-248-1594 or by email at Susan.Connors@mass.gov.

Sincerely,



Robert A. Bostwick
Section Chief
Drinking Water Program

ecc: David Vigeant, Superintendent, Townsend Water Department (dvigeant@townsendwater.org)
Doug DeNatale, AECOM (doug.denatale@aecom.com)
Carla Hitzenbuhler, Townsend Health Administrator (cwalter@townsendma.gov)

DOCUMENT 00440
NOTICE OF AWARD

To: Maher Services, Inc., 71 Concord Street, North Reading, MA 01864

Project Description: Contract No. 2022-01, Construction of Gravel Packed Well, Main Street Well Field, Townsend, Massachusetts.

The Owner has considered the Bid submitted by you for the above described Work in response to its Document 00020, Invitation to Bid dated September 30, 2021 and Document 00100, Instructions to Bidders. You are hereby notified that your Bid has been accepted in the amount of \$276,592.00.

You are required by Document 00100, Instructions to Bidders to execute the Agreement and furnish the required Performance and Payment Bonds within 10 calendar days from the date of this Notice of Award. If you fail to execute said Agreement and to furnish said Bonds within 10 days from the date of this Notice of Award, the Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid as abandoned and as a forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by law. You are required to return an acknowledged copy of this Notice of Award to the Owner. Dated this _____ day of _____,

Owner: Town of Townsend, Massachusetts

By its Board of Water Commissioners:

_____, Chairman, Todd Melanson

_____, Vice Chairman, Mike MacEachern

_____, Clerk, Chris Jones

Acceptance of Notice of Award:

Receipt of the above Notice of Award is hereby acknowledged by Maher Services, Inc., 71 Concord Street, North Reading, MA 01864, this _____ day of _____, 2021.

By: _____
(Authorized Signature)

Title: _____

END OF DOCUMENT



AECOM
250 Apollo Drive
Chelmsford, MA 01824
www.aecom.com

978-905-2100 tel
978-905-2101 fax

September 30, 2021

Board of Water Commissioners
Townsend Water Department
540 Main Street
West Townsend, MA 01474

Re: Notice of Award
Construction of Gravel Packed Well
Main Street Well Field
Contract No. 2022-01
Summary of Bids and Award

Dear Members of the Board:

We have reviewed the two (2) bids received by the Water Department on September 30, 2021 for the above-referenced Project. We have prepared the enclosed canvass of bids for your information and review. We checked the bidder's computations and compared the numerical values with those written in words. The bids received were submitted in accordance with the Contract Documents.

Based on the Canvass of Bids, the low bidder is Maher Services, Inc., 71 Concord Street, North Reading, MA. 01864 (Contractor). We have considered the Contractor's eligibility to perform the work of this Project based on their prior experience and performance on projects of a similar nature and scope. We find no reason for the Board not to award this Contract to Maher Services, Inc. for the bid amount of \$276,592.00.

We have enclosed five (5) copies of the Notice of Award for execution by the Board of Water Commissioners. Should the Board decide to award this Project to Maher Services, Inc., we ask the Board to execute all five (5) copies of the Notice of Award, return them to AECOM and AECOM will initiate the execution of the Contract Documents.

If you have any questions or require any additional information, please call me at 617-320-8670, or contact me at doug.denatale@aecom.com.

Very truly yours,
AECOM

Douglas DeNatale, PG
Senior Project Manager

Enclosures

Townsend, Massachusetts				Bidder No. 1		Bidder No. 2	
Construction of GP Well, Main Street				Maher Services, Inc.		Veston & Sampson CMR, Inc. d/b/a SB Church	
Contract No.: 2022-01				71 Concord Street		55 Walkers Brook Dr, Suite 100	
AECOM 250 Apollo Drive, Chelmsford MA. 01824				North Reading, MA 01864		Reading, MA 01867	
Bid Date: September 30, 2021				Ph No.: 978-664-9355		Ph No.: 978-532-1900	
AECOM Project No. 60652472				E-Mail: pmaher@maherserv.com		E-Mail: HydroT@wseinc.com	
Item No.	Item Description	Quantity	Unit	Unit Price	Total	Unit Price	Total
1	Mobilization/Demobilization	1	LS	13,000.00	13,000.00	15,400.00	15,400.00
2	For furnishing, installing & removing erosion control barriers as specified, the unit price of	200	LF	\$15.00	\$3,000.00	\$32.50	\$6,500.00
3A	Removal of 2-inch dia. steel test wells including galv screens as specified, the unit price of	166	VF	\$21.00	\$3,486.00	\$75.00	\$12,450.00
3B	Removal of 8-inch dia. steel test wells including screens as specified, the unit price of	81	VF	\$75.00	\$6,075.00	\$100.00	\$8,100.00
4	For furnishing, installing and removal of 30-inch minimum dia. Temporary steel casing as specified, the unit price of	50	VF	\$800.00	\$40,000.00	\$1,394.00	\$69,700.00
5A	For furnishing, installing and removal of 24-inch diameter temporary steel casing as specified, the unit price of	62	VF	\$700.00	\$43,400.00	\$676.00	\$41,912.00
5B	For furnishing, installing and leaving-in-place 24-inch diameter steel casing as specified, the unit price of	30	VF	\$720.00	\$21,600.00	\$712.00	\$21,360.00
6	For furnishing and installing 18-inch diameter Type 304 stainless steel well casing as specified, the unit price of	62	VF	\$460.00	\$28,520.00	\$474.00	\$29,388.00
7	For furnishing and installing 18-inch diameter Type 304 stainless steel well screen as specified, the unit price of	20	VF	\$400.00	\$8,000.00	\$517.50	\$10,350.00
8	For placing manufactured glass beads (furnished by Owner) as filter pack, as specified, the unit price of	60	VF	\$100.00	\$6,000.00	\$80.00	\$4,800.00
9	For furnishing and placing concrete seal as specified, the unit price of	30	VF	\$175.00	\$5,250.00	\$100.00	\$3,000.00

Townsend, Massachusetts				Bidder No. 1		Bidder No. 2	
Construction of GP Well, Main Street				Maher Services, Inc.		Veston & Sampson CMR, Inc. d/b/a SB Church	
Contract No.: 2022-01				71 Concord Street		55 Walkers Brook Dr, Suite 100	
AECOM 250 Apollo Drive, Chelmsford MA. 01824				North Reading, MA 01864		Reading, MA 01867	
Bid Date: September 30, 2021				Ph No.: 978-664-9355		Ph No.: 978-532-1900	
AECOM Project No. 60652472				E-Mail: pmaher@maherserv.com		E-Mail: HydroT@wseinc.com	
Item No.	Item Description	Quantity	Unit	Unit Price	Total	Unit Price	Total
10	For furnishing and installing pitless well unit as specified, the unit price of	1	EA	\$43,700.00	\$43,700.00	\$37,350.00	\$37,350.00
11	For furnishing and placing clean fill, as specified, the unit price of	2	CY	\$650.00	\$1,300.00	\$800.00	\$1,600.00
12	For well development, as specified, the unit price of	120	HR	\$225.00	\$27,000.00	\$240.00	\$28,800.00
13	For furnishing, installing and subsequently removing pumping test equipment as specified, the unit price of	1	EA	\$5,800.00	\$5,800.00	\$12,750.00	\$12,750.00
14	For continuous pumping of permanent gravel packed well for performance testing purposes, as specified, the unit price of	48	HR	\$145.00	\$6,960.00	\$168.00	\$8,064.00
15	For reading and recording recovery water levels after the 48-hour continuous pumping performance testing as specified, the unit price of	24	HR	\$138.00	\$3,312.00	\$114.00	\$2,736.00
16	For furnishing, installing and removing discharge piping and appurtenances as specified, the unit price of	250	LF	\$5.00	\$1,250.00	\$20.00	\$5,000.00
17	For video inspecting permanent gravel-packed well as specified, the unit price of	2	EA	\$500.00	\$1,000.00	\$900.00	\$1,800.00

Townsend, Massachusetts				Bidder No. 1		Bidder No. 2	
Construction of GP Well, Main Street				Maher Services, Inc.		Veston & Sampson CMR, Inc. d/b/a SB Church	
Contract No.: 2022-01				71 Concord Street		55 Walkers Brook Dr. Suite 100	
AECOM 250 Apollo Drive, Chelmsford MA. 01824				North Reading, MA 01864		Reading, MA 01867	
Bid Date: September 30, 2021				Ph No.: 978-664-9355		Ph No.: 978-532-1900	
AECOM Project No. 60652472				E-Mail: pmaher@maherserv.com		E-Mail: HydroT@wseinc.com	
Item No.	Item Description	Quantity	Unit	Unit Price	Total	Unit Price	Total
18A	For mobilizing/demobilizing equipment for sole purpose of installing 2- or 2.5-inch diam test wells, as specified, the unit price of	1	EA	\$750.00	\$750.00	\$3,340.00	\$3,340.00
18B	For driving and removing 2.5- or 4.5-inch diam well casing for small diameter test well, as specified, the unit price of	82	VF	\$50.00	\$4,100.00	\$125.00	\$10,250.00
18C	For furnishing, installing and later removing 2-inch diameter PVC test well casing, as specified, the unit price of	77	VF	\$7.00	\$539.00	\$10.00	\$770.00
18D	For furnishing, installing and later removing SS W/W well screen for 2- or 2.5-inch diam test well, as specified, the unit price of	1	5-ft	\$225.00	\$225.00	\$475.00	\$475.00
18E	For developing and pumping of 2- or 2.5-inch diameter test well, as specified, the unit price of	5	HR	\$285.00	\$1,425.00	\$175.00	\$875.00
18F	For grain-size analysis of soils obtained from 2- or 2.5-inch diameter test wells, as specified, the unit price of	12	EA	\$75.00	\$900.00	\$100.00	\$1,200.00
Total Amount of Bid					\$276,592.00		\$337,970.00



2.2

TOWNSEND WATER DEPARTMENT
540 Main Street West Townsend, Massachusetts 01474

Nathan Mattila, Chairman
David Vigeant
Water Superintendent

Todd Melanson, Vice Chairman

Michael MacEachern, Clerk
(978) 597-2212
water@townsendwater.org

February 19, 2021

Dear Resident,

We have started a town wide initiative to update all water meters. Your meter is on our list of outdated meters and we would love to be able to upgrade it to our newest model at no cost to you.

The new meters will allow you to monitor your water usage on a website or a free application on your phone. It will even notify you if you have a leak, which could save you hundreds of dollars! The same information reports back to the office so we will be able to monitor your meter remotely and inform you of anything that seems out of the ordinary.

Please contact us today to schedule your meter upgrade and have access to this newest feature. We typically schedule the maintenance Monday through Friday from 7:30AM to 2:00PM. We can be reached by phone at 978-597-2212 or by email at water@townsendwater.org.

We look forward to hearing from you and setting you up with the newest technology we have to offer.

Sincerely,

The Townsend Water Department
(978) 597-2212
water@townsendwater.org



2.2

TOWNSEND WATER DEPARTMENT
540 Main Street West Townsend, Massachusetts 01474

Todd Melanson, *Chairman*
David Vigeant
Water Superintendent

Michael MacEachern, *Vice Chairman*

Christopher Jones, *Clerk*
(978) 597-2212
water@townsendwater.org

June 9, 2021

YOUR UPCOMING BILL WAS ESTIMATED

Dear Resident,

We previously reached out regarding our Town-Wide Meter Upgrade Program. As a resident with one of the oldest meters, we can no longer get an accurate reading causing us to estimate your bill. It is very important that we schedule an appointment to upgrade you to a new model. This will be completed at no cost to you.

The new meters will allow you to monitor your water usage on a website or a free application on your phone. It will even notify you if you have a leak, which could save you hundreds of dollars! The same information reports back to the office so we will be able to monitor your meter remotely and inform you of anything that seems out of the ordinary.

Because of the age of your meter, it causes the system to be out of compliance with the Mass DEP regulations. For this reason, we will be required to charge a **\$50.00 fee** if we do not hear from you by September 1st. **If we do not hear from you by October 1st your account will be flagged for shutoff beginning October 16th.**

Please contact us today to schedule your meter upgrade and have access to this newest feature. We typically schedule the maintenance Monday through Friday from 8:00AM to 2:00PM. We can be reached by phone at 978-597-2212 or by email at water@townsendwater.org.

We look forward to hearing from you and setting you up with the newest technology we have to offer.

Sincerely,

The Townsend Water Department
(978) 597-2212
water@townsendwater.org

3.7 Customers shall allow access to the water meter at all reasonable times. Adequate space around the meter shall be maintained at all times to provide Water Department personnel the ability to use all tools necessary to install, repair, replace or upgrade the water meter without obstruction. Failure by customers to arrange and provide access to the water meter after repeated attempts by the Water Department to schedule an appointment by phone, email or, mail to perform the work previously described shall constitute a violation of this section. A violation of this section may result in an additional \$50.00 to the customer's bill.

Approved by Board of Water Commissioners on 4/11/2016

Highland Rd
6 inch Watermain

Problems:

- A) Discolored water.
- B) Stagnant Water from low flows
- C) Customer complaints
- D) Hydrant Flushing ineffective.
- E) Road recently repaved and not be disturbed

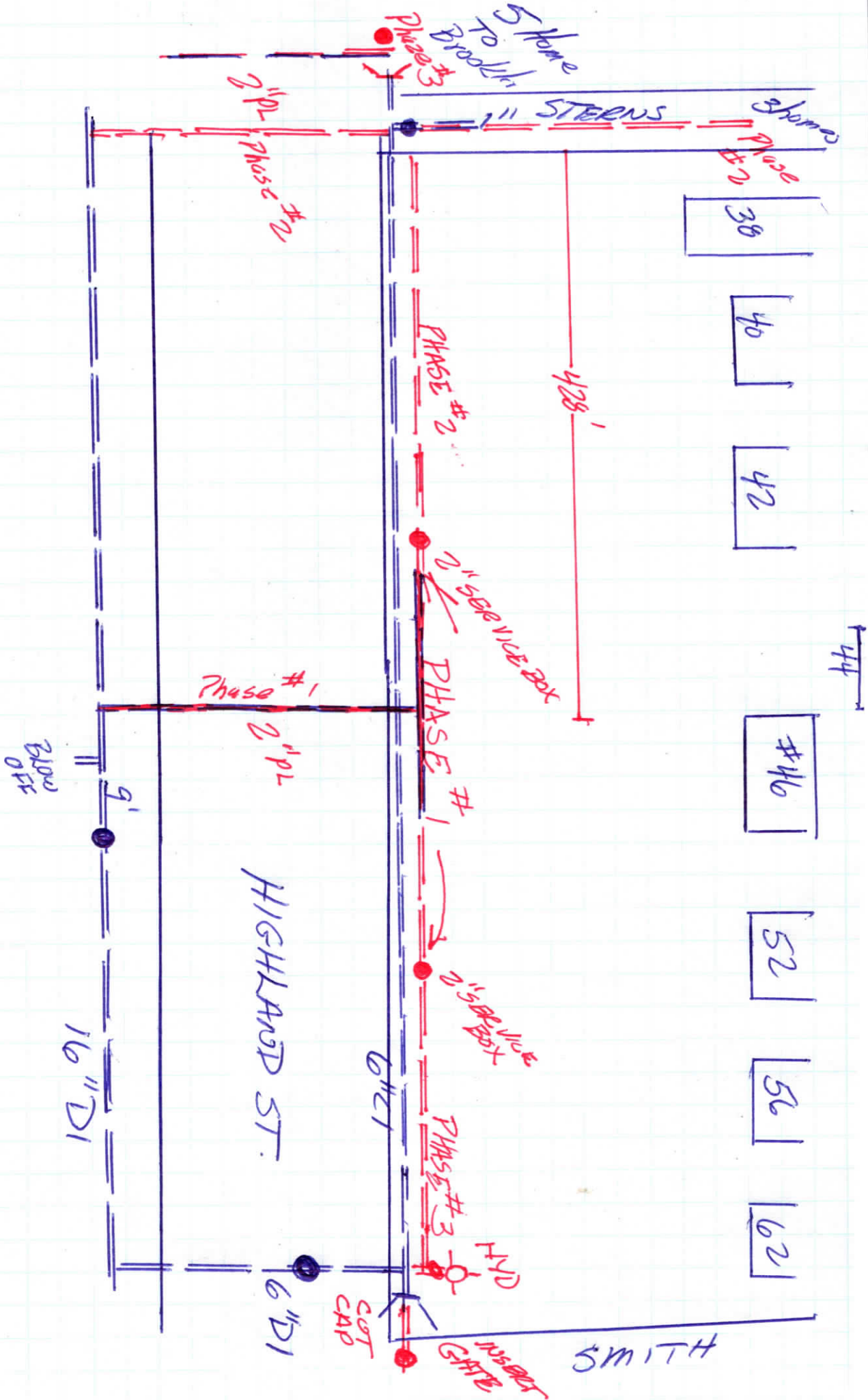
Solutions: Option one \$32,000 to \$40,000 for A-D

- A) Install 4 in tap and gate on 16 inch DI main. Main is 7 feet off the Highland Road.
- B) Directional drill 35 feet under Highland Road install 3 4inch gates and hydrant.
- C) Extend watermain 100 feet in both directions and cap ends.
- D) Tap service for house 42, 44 and 46
- E) To be done no earlier than spring of 2022 if it can be funded
- F) Summer 2023 extend main to Sterns Ave and up Sterns Ave (3 house on a 1 inch line. Loop watermain to existing 16 inch Main and 6 inch main connections eliminated 6 in main.
- G) Problem High Cost whole Project cost \$100,000 to \$120,000

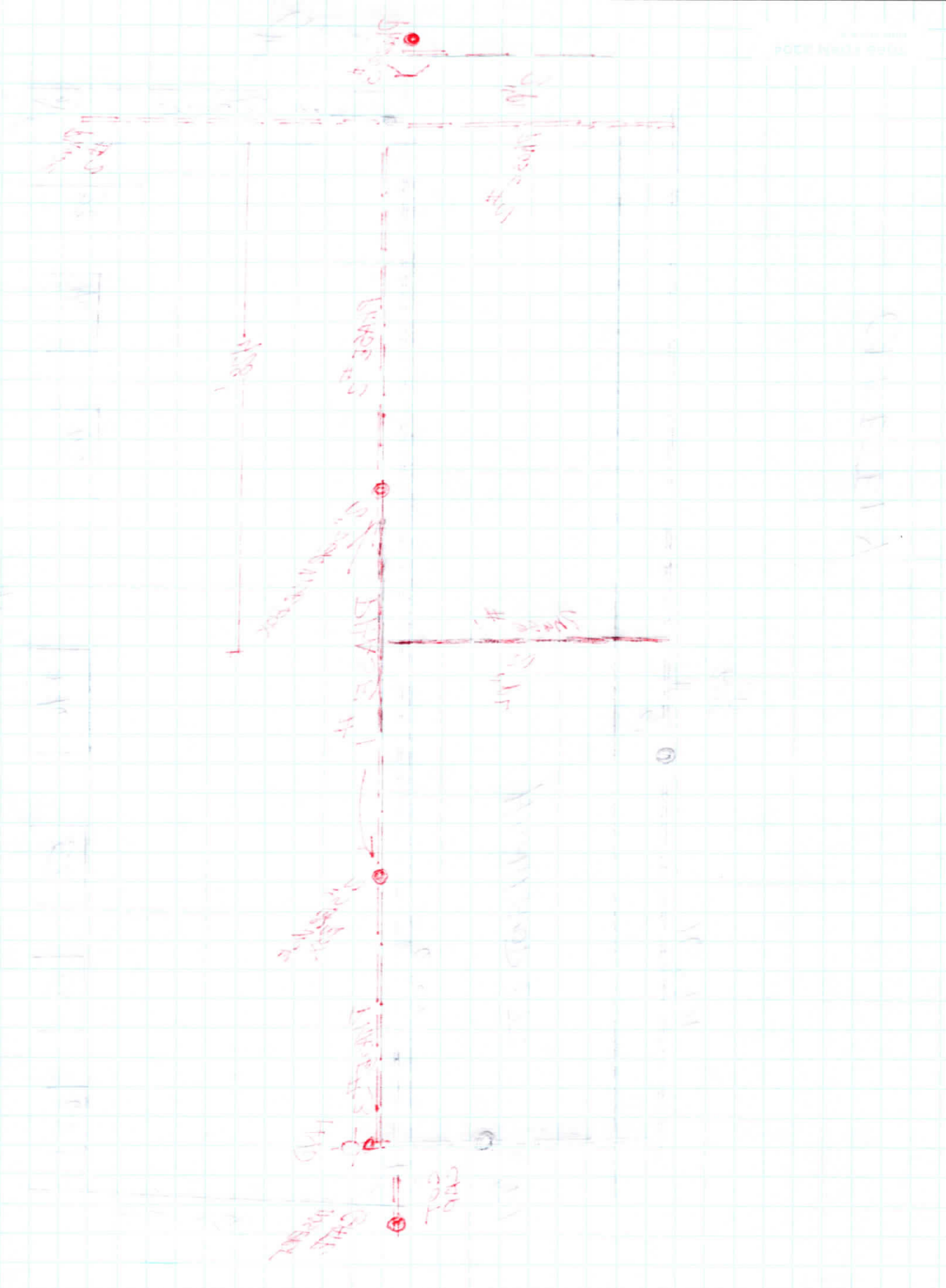
Option two \$8,000 to \$10,000 for A-D

- A) Tap 2inch plastic service to 16 inch and install service Box
- B) Directional Drill 35feet under highland road.
- C) Install 200 to 300 feet 2 in Plastic in Both direction and install service box.
- D) Tie in services 40 to 56 Highland.
- E) Can be done with existing funds. And completed Fall 2021

- F) Summer 2022 Directional Drill opposite Sterns Ave and install 2 inch line up Sterns Rd tie in Sterns Homes. And Tie in the 2 inch line in front of 40 Highand Rd creating a loop. Tie into 16 by 6 connection at a later date**
- G) Much Lower Costs \$25,000 to \$30,000 for the entire project. Project can be done quicker with the same results.**



CEMETERY



Greeley Rd

Water Main

Problem: A) 4 inch water Main in poor Condition.

B) Water Department has no access to watermain on private property with no easements.

C) Watermain through Basement of 169 Main St.

D) 5 Buildings are off the watermain that started as a private service.

E) No existing fire protection.

Solution: Relocate watermain inside the Greeley Rd Layout. Acquire a watermain easement of 30 by 120 feet through 169 Main St to service 169 Main and 1 Greeley Rd

Tasks to be done:

A) 4in Tap and Sleeve Gate on the 10 inch Cast iron watermain on Main St opposite Greeley Rd

B) Directional drill 70 feet (installing 4in HDPE pipe) under Main St and Greeley Rd to the 30 to 120 easement.

C) Install 4inch by 2inch tee with 2 in service box for future 2 in line up easement

D) Install approx. 280 Feet of 4in HDPE pipe install 4inch by 1 inch tee at the crossing of the existing 4inch water line with Greeley Rd and add a 1 inch service box to the left.

E) Install approx. 10 feet HDPE pipe install 4 by 4in tee with 4inch gate to the right.

F) Install approx. 10 feet of HDPE pipe to a 4 by 4 inch tee and install 2- 4inch gates at ends and hydrant to the left.

- G) Install approx. 320 feet of 4 inch HDPE pipe and install 4 inch gate and hydrant.**
- H) Test Water Main till passes and turn on new water main.**
- I) Shut 4 inch gate in back of 1 Greeley Rd cut existing 4inch main by new hydrant connect new 4 inch main to old 4 inch watermain the old main using 2 couplings and 3 feet of plastic pipe. This line will service 157 and 161 main which is the Farm Stand and house. Install 1in line through the 4 inch line from Greeley Rd to the meter pit for 3 Greeley Rd. Cut and cap 4in line and connect exciting .75 inch service line to new 1 in service line.**
- J) Install 2 inch pl line approx. 100 feet to existing 4 inch line in the 30 by 120 foot easement. Install 2 1inch service lines and service boxes.**
- K) Shut off 4 inch waterline on Main St.**
- L) Cut 4 feet of the old 4 inch waterline inside of easement. Cap both ends and tap a 1inch corporation to both capped ends and connect the 2 new 1inch service to corporations. And turn on services. Homeowners are responsible for service lines to their homes.**
- M) Restore pavement on Greeley and landscape easement.**

Timetable: Dependent on funding at the Fall/Winter 2021 Town Meeting. And acceptance of the easement. Tentative date to begin project early spring 2022.

Townsend Water

Rate Study

Spec Sheet

- 1) Quote Needed by 1 Oct 2021**
- 2) The rate study is to be used for the following reasons**
 - a) Normal cost of living increases. \$60,000**
 - b) Paying for debt of the new Harbor Trace PFAS Treatment Plant \$320,000 per year.**
 - c) Hiring of 3 workers to man the plant 7 days a week rotating shifts. \$240,000 per year.**
 - d) Additional cost to run the treatment plant. \$80,000 per year**
- 3) Current Rates: Unit Charges \$37.50 per quarter or \$150.00 per year on 2550 units.**
- 4) Current Rates: water usage \$0.0432 per cu ft, no tiers(would like to move to a tiered system).**
- 5) All additional information will be sent on request**

Thank You
David Vigeant
Superintendent
Townsend Water
540 Main St
Townsend Mass 01474
978-332-0391
Dvigeant@townsendwater.org



September 24, 2021

Townsend Water Department
540 Main Street
Townsend, MA 01474

Attention: David W. Vigeant
Superintendent

Subject: Proposal for Water Rate Study Services

Dear Mr. Vigeant:

Per your request, Dewberry Engineers Inc. (Dewberry) has prepared this proposal to provide professional engineering services for performing a water rate study so that the costs of upcoming capital improvements and related operations are adequately funded within an equitable manner.

PROJECT UNDERSTANDING

It is our understanding that the Town will be financing the construction of a new PFAS Water Treatment Plant at its Harbor Trace supply site. In addition to paying off the debt associated with the cost of the new plant, the Town will need to cover the cost of hiring three (3) new employees to staff the plant and operating the plant 7 days a week. The Town's current rate structure is a single block rate system consisting of a base rate of \$37.50 per quarter plus a constant water use rate of \$4.32/100 cubic feet (ft³). The Town is interested in utilizing a tiered rate structure which would have set blocks of rates based on actual water usage. This type of structure would likely promote water conservation as the cost of water would increase in conjunction with the usage rate. An example of this type of tiered system would be as follows:

- \$25 for first 2,000 gallons used
- \$2.50 per 1,000 for 2,001 to 6,000 gallons
- \$3.00 per 1,000 for 6,001 to 10,000 gallons
- \$3.50 per 1,000 for everything over 10,001 gallons

SCOPE OF WORK

Dewberry proposes to complete the following scope of services to perform a water rate study to update the Town's current rate structure to a tiered system that will cover the expenditures associated with the new water treatment plant and other expected improvements.

Task 1 – Water Rate Study

- 1.1 Examine the current rate structure with Town staff along with the total revenues and expenditures for operating the water system over the last three years to establish a baseline for developing a new rate structure.
- 1.2 Estimate the revenue needed to cover the expenditures associated with the construction and operation of the new Harbor Trace water treatment plant while continuing to operate the water system including paying off the long-term debts and maintaining adequate reserve funds. Prepare a worksheet itemizing the expenditures into fixed and variable costs monthly.

- 1.3 Collect and review available metering data for commercial and residential customers to determine the monthly water usage for each customer within an established usage range over the last 12 months. Large users consuming more than 15,000 gallons per day will be evaluated individually.
- 1.4 From the data collected in Task 1.3, calculate the target revenue for each customer usage range to determine any inequities within the current rate structure. The results of this task will be used to establish a new tiered system consisting of increasing block rates that will spread rate increases fairly among all customers.
- 1.5 Estimate the new base rate to be charged to each customer type (residential, commercial, etc.) and usage tier to cover the fixed costs associated with operating the water system including the new Harbor Trace water treatment plant. Estimate the flow rates to be charged for each usage tier or block to cover the variable costs associated with operating the water system including the new Harbor Trace water treatment plant.
- 1.6 Calculate the total revenue to be generated by the new tiered rate structure to confirm that all budgeted expenditures for the water system will be covered as needed. Adjust rate structure as needed.
- 1.7 Prepare and submit letter report summarizing the results of the rate study including completed worksheets and tables to Town staff for review. The report will be provided electronically in PDF format.
- 1.8 Attend meeting with Town staff to review the findings of the report and discuss comments on the newly created rate structure. Adjust the rate structure per Town comments and provide an updated letter report.

FEE

Dewberry proposes to provide engineering services to complete Task 1 as described in this proposal for an estimated lump sum price of \$13,500 including expenses which will be billed on a percent complete basis and will not exceed the estimated fee without prior authorization.

STANDARD TERMS AND CONDITIONS

Dewberry Engineers Inc.'s Standard Terms and Conditions as amended and appended hereto as Attachment B are made part of this Contract.

AUTHORIZATION

We have made provisions below for your acceptance of this proposal to serve as Authorization to Proceed with the scope of work described herein. Please sign below and return one scanned copy to us for our records. If you have any questions or wish to discuss the proposal further, please feel free to contact me (pcalderazzo@dewberry.com).

Sincerely,

Dewberry Engineers Inc.

Peter Calderazzo

Peter Calderazzo, P.E.

Associate

ACCEPTANCE OF PROPOSAL

Townsend Water Department

By: _____

Title: _____

Date: _____

Enclosures – Attachment B Standard Terms and Conditions



**ATTACHMENT B
STANDARD TERMS AND CONDITIONS**

These Standard Terms and Conditions ("STCs") are incorporated by reference into the foregoing agreement or proposal, along with any future modifications or amendments thereto made in accordance with Paragraph 23 below (the "Agreement") between Dewberry ("we" or "us" or "our") and its client ("you" or "your") for the performance of services as defined in our proposal ("Services"). These STCs are fully binding upon you, just as if they were fully set forth in the body of the Agreement, and shall supersede any term or provision elsewhere in the Agreement in conflict with these STCs.

1. **Period of Offer.** Unless we decide, in writing, to extend the period for acceptance by you of our proposal, you have 90 days from our proposal date to accept our proposal. We have the right to withdraw the proposal at any time before you accept. Delivery of a signed proposal—whether original or copy—to us constitutes your acceptance of the proposal, including attachments expressly incorporated into the proposal by reference. The proposal and incorporated attachments shall constitute the entire Agreement between you and us. If you request us to render Services before you deliver a signed proposal to us, and we render Services in accordance with the proposal, you agree that the proposal and these STCs constitute the Agreement between you and us even if you fail to return a signed proposal to us.
2. **Scope of Services.** For the fee set forth in the Agreement, you agree that we shall only be obligated to render the Services expressly described in the Agreement. Our Services shall not be construed as providing legal, accounting, or insurance services. Unless the Agreement expressly requires, in no event do we have any obligation or responsibility for:
 - a. The correctness or completeness of any document which was prepared by another entity.
 - b. The correctness or completeness of any drawing prepared by us, unless it was properly signed and sealed by a registered professional on our behalf.
 - c. Favorable or timely comment or action by any governmental entity on the submission of any construction documents, land use or feasibility studies, appeals, petitions for exceptions or waivers, or other requests or documents of any nature whatsoever.
 - d. Taking into account off-site circumstances other than those clearly visible and actually known to us from on-site work.
 - e. The actual location (or characteristics) of any portion of a utility which is not entirely visible from the surface.
 - f. Site safety or construction quality, means, methods, or sequences.
 - g. The correctness of any geotechnical services performed by others, whether or not performed as our subcontractor.
 - h. The accuracy of earth work estimates and quantity take-offs, or the balance of earthwork cut and fill.
 - i. The accuracy of any opinions of construction cost, financial analyses, economic feasibility projections or schedules for the Project.Should shop drawing review be incorporated into the Services, we shall pass on the shop drawings with reasonable promptness. Our review of shop drawings will be general, for conformance with the design concept of the Project to which this Agreement relates ("Project") and compliance with the information given in the construction documents, and will not include quantities, detailed dimensions, nor adjustments of dimensions to actual field conditions. Our review shall not be construed as permitting any departure from contract requirements nor as relieving your contractor of the sole and final responsibility for any error in details, dimensions or otherwise that may exist.
3. **Your Oral Decisions.** You, or any of your directors, officers, partners, members, managers, employees or agents having apparent authority from you, may orally: (a) make decisions relating to Services or the Agreement; (b) request a change in the scope of Services under the Agreement; or (c) request us to render additional Services under the Agreement, subject to our right to require you to submit the request in writing before your decision or request shall be considered to have been effectively made. You may, at any time, limit the authority of any or all persons to act orally on your behalf under this Paragraph 3, by giving us seven (7) days advance written notice.
4. **Proprietary Rights.** The drawings, specifications and other documents prepared by us under this Agreement are instruments of our service for use solely for the Project and, unless otherwise provided, we shall be deemed the author of these documents and shall retain all common law, statutory, and other reserved rights, including the copyright and rights to any Dewberry trademarks. Upon payment in full for our Services, you shall be permitted to retain copies, including reproducible copies of our instruments of service for information and reference for the Project. Our instruments of service shall not be used by you or others on other projects for any reason or for completion or modification of this Project by other professionals, unless you enter into a written agreement with us allowing for such use. Submission or distribution of documents to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication inconsistent with our reserved rights. You shall defend, indemnify and hold us harmless, and release us, from any and all liability, loss, damages, claims and demands for loss, damages, property damages or bodily injury, arising out of any use (including, without limitation, the means or media of transfer, possession, use, or alteration) of our instruments of service by (i) you, if such use is inconsistent with our reserved rights or this Paragraph 4, or (ii) any third party, regardless of the manner of use, if such third party received our instruments of service directly or indirectly from you (including if we or others have transmitted such instruments of service to the third party at your request or direction, for your benefit, or, and without limiting the foregoing, pursuant to a contractual obligation that is directly or indirectly derived (or flowed down) from a contract to which you have privacy).
5. **Fees and Compensation.** If you request us to render services not specifically described in the Agreement, or, if we or anyone in our employ, is called upon to be deposed or to testify in a matter in which we are not a named party, that relates to the Project, you agree to compensate us for such services in accordance with the hourly rates as set forth on Attachment A of this Agreement or in any subsequently effective schedule, unless otherwise agreed in writing. If no compensation rate is set forth on Attachment A, or through written agreement between you and us, we shall be compensated for such services at our then current hourly rates. We may unilaterally increase our lump sum or unit billing rates on each anniversary of your acceptance of this Agreement by as much as five percent or the percentage increase in the CPI-W (U.S. Department of Labor Consumer Price Index-Washington), whichever is greater. Hourly rates are subject to periodic revision at our discretion.
6. **Period of Service.** The provisions of this Agreement and the compensation provided for under the Agreement have been established in anticipation of the orderly and continuous progress of the Project. Our obligation to render the Services will extend only for that period which may reasonably be required to complete the Services in an orderly and continuous manner, and we may then, at our sole option, terminate the Agreement.
7. **Reimbursable Expenses.** Unless the Agreement otherwise provides, you shall reimburse us, or our affiliates, for all expenses we incur to render the Services for you under this Agreement, plus fifteen percent. We may submit invoices for reimbursable expenses separately from invoices for Services.
8. **Payment Terms.** We may submit invoices at any time to you for Services and for reimbursable expenses incurred. Invoices are payable within 30 days of the invoice date, and you agree to pay a finance charge of 1½% per month on any unpaid balance not received by us within 30 days of the invoice date. If you require payment via credit card, Dewberry will assess a 3% processing fee on the total amount invoiced. Invoices may be based either upon our estimate of the proportion of the total Services actually completed at the time of billing for lump sum or fixed fee services, or in the case of hourly services, upon rendering of the Services. If any invoice is not paid within 30 days of the invoice date, we shall have the right either to suspend the performance of our Services until all invoices more than 30 days past due are fully paid or to terminate the agreement and to initiate proceedings to recover amounts owed by you. Additionally, we shall have the right to withhold from you the possession or use of any drawings or documents prepared by us for you under this or any other agreement with you until all delinquent invoices are paid in full. You shall not offset payments of our invoices by any amounts due or claimed to be due for any reason. If you do not give us written notice disputing an invoice within 20 days of the invoice date, the invoice shall conclusively be deemed correct. All payments made by you should specify the invoice numbers being paid. If we receive payments that do not specify the invoices being paid, you agree that we may apply payments in our sole discretion. Time is of the essence of your payment obligations; and your failure to make full and timely payment shall be deemed a material breach.
9. **Information from You and Public Sources.** You shall furnish us all plans, drawings, surveys, deeds and other documents in your possession, or that come into your possession, which may be related to the Services, and shall inform us in writing about all special criteria or requirements related to the Services (together, "Information"). We may obtain deeds, plats, maps and any other information filed with or published by any governmental or quasi-governmental entity (together, "Public Information"). Unless we are engaged in writing as an additional service to independently verify such, we may rely upon Information and Public Information in rendering Services. We shall not be responsible for errors or omissions or additional costs arising out of our reliance on Information or Public Information. You agree to give prompt notice to us of any development or occurrence that affects the scope or timing of Services, or any defect in the final work submitted by us, or errors or omissions of others as they are discovered. We shall not be responsible for any adverse consequence arising in whole or in part from your failure to provide accurate or timely information, approvals and decisions, as required for the orderly progress of the Services.
10. **Plan Processing.** We may submit plans and related, or other, documents to public agencies for approval. However, it may be necessary, in order to serve your interests and needs, for us to perform special processing, such as attending meetings and conferences with different agencies, hand carrying plans or other documents from agency to agency, and other special services. These special services are not included in the basic fee and shall be performed as additional services on an hourly fee basis in accordance Paragraph 5 above.



- 11. Meetings and Conferences.** To the extent the Agreement provides, we will attend meetings and conferences that you, or your representatives, reasonably require. Furthermore, we will meet on an as-needed basis with public agencies that might be involved in the Project. Because we cannot forecast the scope and nature of these meetings and conferences, we will perform meeting and conference services on an hourly fee basis in accordance with our applicable hourly rate schedule.
- 12. Your Claims.** You release us from, and waive, all claims of any nature for any and all errors or omissions by us related to our performance under this Agreement, or in the performance of any supplementary services related to this Agreement, unless you have strictly complied with all of the following procedures for asserting a claim, as to which procedures time is of the essence:
- a. You shall give us written notice within 10 days of the date that you discover, or should, in the exercise of ordinary care, have discovered that you have, or may have, a claim against us. If you fail to give us written notice within such 10 days, then such claim shall forever be barred and extinguished.
 - b. If we accept the claim, we shall have a reasonable time to cure any error or omission and any damage. This shall be your sole remedy, and you must not have caused the error or omission, or any damage resulting from the error or omission, to be cured, if we are ready, willing and able to do so.
 - c. If we reject the claim, we shall give you written notice of our rejection within 30 days of our receipt of your notice of claim. You shall then have 60 days to give us an opinion from a recognized expert in the appropriate discipline, corroborating your claim that we committed an error or omission, and establishing that the error or omission arose from our failure to use the degree of care ordinarily used by professionals in that discipline in the jurisdiction local to the Project. If you fail to give us such an opinion from a recognized expert within 60 days from the date we send you notice of our rejection of the claim, then such claim shall forever be barred and extinguished.
 - d. We shall have 60 days from receipt of your expert's written opinion to reevaluate any claim asserted by you. If we again reject such claim, or if the 60-day period from receipt of the written opinion of your expert elapses without action by us, then you may have recourse to such other remedies as may be provided under this Agreement.
- 13. Hazardous or Toxic Wastes or Substances, Pollution or Contamination.** You acknowledge that Services rendered under this Agreement may be affected by hazardous or toxic wastes or substances, or pollution or contamination due to the presence of hazardous or toxic wastes or substances. To induce us to enter into this Agreement, you agree to indemnify, defend and hold us harmless from and against any and all liability, loss, damages, claims and demands for loss, damages, property damages or bodily injury, that relate, in any way, to both (a) hazardous or toxic wastes or substances, or pollution or contamination due to the presence of hazardous or toxic wastes or substances, and (b) the performance by us of our obligations under the Agreement, whether or not such performance by us is claimed to have been, or was, or may have been, negligent. Unless otherwise expressly set forth in this Agreement, we shall have no responsibility for searching for, or identifying, any hazardous or toxic wastes or substances, or pollution or contamination due to the presence of hazardous or toxic wastes or substances; but if we discover or suspect the presence of any such wastes, substances, pollution or contamination due to the presence of hazardous or toxic wastes or substances, then we, in our sole discretion, and at any time, may stop work under, or terminate, this Agreement, in which event we will have no further liability to you for performance under this Agreement, and you shall make the payments to us required by Paragraph 14 of the STCs.
- 14. Termination.** Either party may terminate the Agreement if the other party materially breaches the Agreement and does not cure the breach within 7 days after receiving notice of the breach from the non-breaching party. You shall immediately pay us for our Services rendered and expenses incurred through the termination date, including fees and expenses that we incur as a result of the termination.
- 15. Payment of Other Professionals.** If this Agreement includes continuation of services begun by other architects, engineers, planners, surveyors, or other professionals, we may suspend our Services until you make arrangements satisfactory to such other professionals for payment. If satisfactory arrangements have not been made within a time determined by us to be reasonable, then we may in our sole discretion terminate this Agreement.
- 16. Assignment and Third-Party Beneficiaries.** Neither party shall assign or transfer any rights, interests or claims arising under this Agreement without the written consent of the other, provided, however, that we are permitted to (i) employ independent consultants, associates, and subcontractors as we may deem necessary to render the Services, (ii) assign our right to receive compensation under this Agreement, and (iii) transfer the Agreement to an affiliate of ours, in our sole discretion, with written notice to you (an affiliate for purposes of this Paragraph 16 is defined as any other business entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, us). This Agreement does not confer any benefit or right upon any person or entity other than the parties, except that our partners, members, managers, directors, officers, employees, agents and subcontractors shall have and be entitled to the protection afforded us under Paragraphs 9, 12, 13, 16, 20 and 22 of this Agreement.
- 17. Applicable Law and Forum Selection.** The Commonwealth of Virginia's laws shall govern this Agreement in all respects, including matters of construction, validity, and performance. Except as provided in Paragraph 18, the parties agree that the courts of Fairfax County, Virginia, and the Federal District Court, Eastern District of Virginia, Alexandria Division, (together, "Courts") shall have exclusive jurisdiction over any controversy, including matters of construction, validity, and performance, arising out of this Agreement. The parties consent to the jurisdiction of the Courts and waive any objection either party might otherwise be entitled to assert regarding jurisdiction. The parties irrevocably waive all right to trial by jury in any action, proceeding, or counterclaim arising out of or related to this Agreement.
- 18. Arbitration of Our Claims for Compensation.** Instead of proceeding in court, we, in our sole and absolute discretion, may submit any claim for compensation due us under this Agreement to arbitration in Fairfax County, Virginia in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the arbitration award may be entered in any court having jurisdiction. You agree not to assert any counterclaim or any defense by way of set-off in such arbitration, and that the arbitrator or panel shall have no authority to consider, or to render, an award based upon any such counterclaim or defense by way of set-off. We shall have the right to withdraw our demand for arbitration at any time before the arbitration hearing starts by giving written notice to the arbitrator or panel and you; and upon the giving of such notice by us, the arbitration shall terminate, no award shall be rendered, and we may then pursue our remedies in accordance with Paragraph 17 above.
- 19. Severability.** If any part, term, or provision of this Agreement is held to be illegal or unenforceable, the validity and enforceability of the remaining parts, terms, and provisions of this Agreement shall not be affected, and each party's rights shall be construed and enforced as if the Agreement did not contain the illegal or unenforceable part, term, or provision.
- 20. Limitations on Liability.** In recognition of the relative risks and benefits of the Project to you and us, you agree, that our liability for any loss, damages, property damages or bodily injury of or to you caused in whole or in part by us in the performance of this Agreement or any supplementary services in any way related to this Agreement, shall be limited in the aggregate to the amount of fees that you have paid to us for the Services. The parties intend that the foregoing limitation on liability shall apply to all claims, whether sounding in tort, contract, warranty, or otherwise. You release, waive, and shall not seek contribution from, or indemnification by, us for any claims of any nature made against you by any other person who may suffer any loss, damages, property damages or bodily injury in any manner associated with our services, or any supplementary services in any way related to this Agreement. Notwithstanding anything to the contrary elsewhere in the Agreement, we shall not be liable to you, in any event or for any amount, for delays; or for consequential, special or incidental damages; or for punitive or exemplary damages; or for the cost to add an item or component that we omitted from the instruments of service due to our negligence, to the extent that item or component would have otherwise been necessary, or adds value or betterment, to the Project. Should you find the terms of this Paragraph 20 unacceptable, we are prepared to negotiate a modification in consideration of an equitable surcharge to pay our additional insurance premiums and risk.
- 21. Payment of Attorney's Fees.** The losing party shall pay the winning party's reasonable attorney's fees and expenses for the prosecution or defense of any cause of action, claim or demand arising under this Agreement in any court or in arbitration.
- 22. Indemnification.** You agree to indemnify, defend and hold us harmless from and against any and all liability, loss, damages, claims and demands for loss, damages, property damages or bodily injury, arising out of acts or omissions by you, or your contractor, subcontractor or other independent company or consultant employed by you to work on the Project, or their respective partners, members, managers, directors, officers, employees, agents or assigns; or arising out of any other operation, no matter by whom committed or omitted, for and on behalf of you, or such contractor, subcontractor or other independent company or consultant, whether or not due in part to errors or omissions by us in the performance of this Agreement, or in the performance of any supplementary service in any way related to this Agreement, provided that you are not required to indemnify and hold us harmless under this Paragraph 22 in the event of our sole negligence.
- 23. Integration Clause.** The Agreement represents the entire agreement of the parties. No prior representations, statements, or inducements made by either us, you, or the respective agents of either, that is not contained in the Agreement shall enlarge, modify, alter, or otherwise vary the written terms of the Agreement unless they are made in writing and made a part of the Agreement by attachment, incorporated by reference in the Agreement or signed or initialed on behalf of both parties.
- 24. Notice.** Any notices issued to us shall be sent to our project manager with a copy sent via email to Notices@dewberry.com or mailed to 8401 Arlington Blvd, Fairfax VA 220131, Attn: Legal Department.

3.4

29-0354-P013
September 24, 2021

Mr. David Vigeant, Superintendent
Water Department
540 Main Street
West Townsend, MA 01474

Re: **Proposal for Engineering Services
Water Rate Evaluation**

Dear Mr. Vigeant:

As requested, Tighe & Bond has prepared this scope and approach for a water rate evaluation.

Project Approach

Townsend, like many communities is facing a significant increase in expenses associated with a new PFAS treatment facility. The estimated cost of debt and additional labor for the new PFAS facility is over \$560,000 per year. Including an additional \$60,000 for Cost of Living Adjustments (COLA) brings the total increase to \$620,000 per year, which represents a **60% increase** over the FY22 Budget. This does not include other capital needs or cost increases.

In order to meet this future increase in expenses the Town must raise its water rates. Under the current rate structure, all customers pay the same base charge and a flat volumetric usage rate regardless of user type (i.e. residential versus commercial). This rate structure does not reflect the 'readiness to serve' concept, which is based upon the fact that water systems are designed around peak demands and that a customers potential impact on a water system is directly dependent on their meter size. Additionally, a flat usage fee does not encourage water conservation. We will work with you to develop rate structures that meet your revenue needs and reflect the makeup of your customer base.

Tighe & Bond has developed a robust and highly customizable spreadsheet-based rate model that we have successfully used to assist many communities in similar situations. Our model combines operational, financial, and customer impact data in a holistic fashion and is designed to support the challenges and scenarios that Townsend is facing. This tool will be used to develop a long-term financial plan (5 or 10 years based upon your preference) based upon a combination of historic data analysis, projected water usage, and capital improvements. The model can evaluate three different rate alternatives simultaneously, including customer impact analysis to support data driven, informed decision making.

Scope of Services

The proposed scope of services includes the following tasks and deliverables:

- 1. Kickoff Meeting** - At this meeting we will review our scope and approach as well as alternative rate structures to be considered.
- 2. Develop Electronic Rate Model** - Tighe & Bond will develop a customized spreadsheet-based rate model which incorporates the following information:

a. Water Usage - Billed usage is the primary source of revenue; thus, projecting future usage is one of the most important aspects of this evaluation. Using the last five years of historical data, we will identify trends and project usage for the next ten years.

b. Revenue and Expenses

i. Expenses - Expenses consist of operating and capital costs.

1. Operating expenses will be based upon a review of the last five years of budget to actual reports and projected increases. We will review each line item for trends, develop a suggested value and escalation factor, and compare this to the most recent budget data.
2. Capital expenses consist of existing and future capital expenditures. This module is designed to facilitate capital planning. Inputs include funding source (debt or reserve funded), implementation year, and cost year. Costs can be spread over a user defined period. Capital costs can be sorted by type (engineering, construction, vehicles, etc.) and by category (distribution or collection system, treatment, etc.) to fully understand the source of future costs.

ii. Revenue - Revenue consists of rate revenue (from customer bill payments) and non-rate revenue (all other sources). Non-rate revenue will be projected based upon review and discussion of historical data.

Rate revenue will be calculated based upon the usage projections under existing and proposed rate structures. The calculated revenue under the current rate structure will be compared to the last two years of commitments to determine model accuracy and calibrate if necessary. Calculated revenue will be adjusted to projected receipts using factors for collection ratios and projected lien revenue for future years.

c. Rate Design - Based upon our understanding and experience, we propose analyzing the existing rate structure and two incremental modifications. Future rates will be developed for each alternative in order to meet the revenue requirements including a target reserve balance. A proforma will be developed for each alternative that shows the revenue, expenses and reserve balance over the next two 5-10 years. Annual customer costs will be developed for all three alternatives. The three alternative rate structures consist of:

1. **Existing Rate Structure:** This analysis consists of applying across the board percent increases to each component of the existing rate structure.
2. **Flat usage rate with increasing base charges.** Using base charges that increase based upon the customer's meter size will increase the proportion of fixed revenue and helps shift costs to larger users.
3. **Increasing base charges with tiered usage rates.** Tiered water rate design consists of defining both the incremental volume and price of each tier. We will base proposed tier volumes on historic water usage patterns for residential customers.

- d. Rate Evaluation and Affordability.** Annual Customer costs for a typical residential customer and the top five non-residential users will be developed for each rate alternative to evaluate impacts. The residential indicator and Household Burden Indicator, the two most common affordability indicators for water costs, will be developed for each alternative as well.
- 3. Meetings** - In addition to the kickoff meeting, we will facilitate the following meetings. Note: All meetings will be conducted electronically:
- a. Data Validation Meeting** – This meeting will focus on reviewing the initial findings and structure of the financial model and review of rate impacts for each of the scenarios. The working session component is designed to get Townsend’s input on variables such capital cost fee alternatives, tier settings, and direction on desired approach. We suggest Townsend’s financial staff and key decision makers attend this meeting.
 - b. Stakeholder Meeting** - We have included participating in one working session with Townsend decision makers to facilitate discussions and address concerns.
- 4. Public Meeting** - Present rate study findings to the public at a future water commissioners meeting.
- 5. Deliverables** – Technical memo documenting process, electronic financial model and presentation to Water Commissioners.

Schedule

Tighe & Bond will hold the data validation meeting within 6 weeks from receipt of data. The final report and model will be developed within 3 weeks of the public meeting.

Assumptions

Our fee is based upon the assumption that all data will be provided in a tabular, electronic format readily usable in Microsoft Excel and is reasonably consistent and accurate. Tighe & Bond reserves the right to modify our approach and scope in the event that data does not meet this standard.

Fee

Tighe & Bond will perform these services for a lump sum fee of \$9,800, invoiced monthly based on percentage complete. In the event that the scope of work is increased for any reason, the lump sum fee to complete the work shall be mutually revised by written amendment. Our attached Terms and Conditions is part of this letter agreement. The included schedule and fees are based on the above scope of work and assumptions. The schedule includes reasonable allowances for review and approval times by applicable parties. This schedule may need to be adjusted as the project progresses, allowing for changes in scope, character or size of the project requested by you, or for delays or other causes beyond our reasonable control.

We look forward to continuing to support the Water Department, if you have any questions please don't hesitate to contact us.

Very truly yours,

TIGHE & BOND, INC.



Thomas J. Mahanna, PE
Vice President



Louis A. Soracco, PE
Senior Project Manager

Enclosure: Terms and Conditions

Acceptance:

On behalf of the Town of Townsend, the scope, fee, and terms of this proposal are hereby accepted.

Authorized Representative

Date

Board of Selectmen:

Veronica Kell, Chairman

Date

Joseph Shank, Vice Chairman

Date

Charles Section-Diranian, Clerk

Date

"CLIENT" is defined in the acceptance line of the accompanying proposal letter or the name the proposal is issued to; Tighe & Bond, Inc. is hereby referenced as "CONSULTANT"; "PROJECT" is defined in the accompanying proposal letter

1. SCHEDULE OF PAYMENTS

1.1 Invoices will generally be submitted once a month for services performed during the previous month. Payment will be due within 30 days of invoice date. Monthly payments to CONSULTANT shall be made on the basis of invoices submitted by CONSULTANT and approved by CLIENT. If requested by CLIENT, monthly invoices may be supplemented with such supporting data as reasonably requested to substantiate them.

1.2 In the event of a disagreement as to billing, the CLIENT shall pay the agreed portion.

1.3 Interest will be added to accounts in arrears at the rate of one and one-half (1.5) percent per month (18 percent per annum) or the maximum rate allowed by law, whichever is less, of the outstanding balance. In the event counsel is retained to obtain payment of an outstanding balance, CLIENT will reimburse CONSULTANT for all reasonable attorney's fees and court costs.

1.4 If CLIENT fails to make payment in full within 30 days of the date due for any undisputed billing, CONSULTANT may, after giving seven days' written notice to CLIENT, suspend services and retain work product until paid in full, including interest. In the event of suspension of services, CONSULTANT will have no liability to CLIENT for delays or damages caused by such suspension.

2. SUCCESSORS AND ASSIGNS

2.1 CLIENT and CONSULTANT each binds itself, its partners, successors, assigns and legal representatives to the other parties to this Agreement and to the partners, successors, assigns and legal representatives of such other parties with respect to all covenants of this Agreement. CONSULTANT shall not assign, sublet or transfer its interest in this Agreement without the written consent of CLIENT, which consent shall not be unreasonably withheld.

2.2 This Agreement represents the entire and integrated Agreement between CLIENT and CONSULTANT and supersedes all prior negotiations, representations or Agreements, whether written or oral. This Agreement may be amended only by written instrument signed by both CLIENT and CONSULTANT. References to this agreement include these Terms & Conditions, any accompanying proposal or description of services, as well as any other documents referenced or incorporated therein. In the event one or more provisions of any of the foregoing documents conflict with the provisions of these Terms & Conditions, the provisions of these Terms & Conditions shall control.

2.3 Nothing contained in this Agreement shall create a contractual relationship or cause of action in favor of a third party against CLIENT or against CONSULTANT.

3. STANDARD OF CARE

3.1 In providing services, CONSULTANT will use that degree of care and skill ordinarily exercised under similar circumstances by individuals providing such services in the same or similar locality for similar projects.

4. TERMINATION

4.1 This Agreement may be terminated by either party upon seven days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. In addition, CLIENT may terminate this Agreement for its convenience at any time by giving written notice to CONSULTANT. In the event of any termination, CLIENT will pay CONSULTANT for all services rendered and reimbursable expenses incurred under the Agreement to the date of termination and all services and expenses related to the orderly termination of this Agreement.

5. RECORD RETENTION

5.1 CONSULTANT will retain pertinent records relating to the services performed for the time required by law, during which period the records will be made available upon reasonable request and upon reimbursement for any applicable retrieval/copying charges.

5.2 Samples - All soil, rock and water samples will be discarded 30 days after submission of CONSULTANT's report, unless mutually agreed otherwise or unless CONSULTANT's customary practice is to retain for a longer period of time for the specific type of services which CONSULTANT has agreed to perform. Upon request and mutual agreement regarding applicable charges, CONSULTANT will ship, deliver and/or store samples for CLIENT.

6. OWNERSHIP OF DOCUMENTS

6.1 All reports, drawings, specifications, computer files, field data, notes, and other documents, whether in paper or electronic format or otherwise ("documents"), are instruments of service and shall remain the property of CONSULTANT, which shall retain all common law, statutory and other reserved rights including, without limitation, the copyright thereto. CLIENT's payment to CONSULTANT of the compensation set forth in the Agreement shall be a condition precedent to the CLIENT's right to use documents prepared by CONSULTANT.

6.2 Documents provided by CONSULTANT are not intended or represented to be suitable for reuse by CLIENT or others on any extension or modification of this PROJECT or for any other projects or sites. Documents provided by CONSULTANT on this PROJECT shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party, other than regulatory agencies, without the prior written consent of CONSULTANT. Reuse of documents by CLIENT or others on extensions or modifications of this project or on other sites or use by others on this PROJECT, without CONSULTANT's written permission and mutual agreement as to scope of use and as to compensation, if applicable, shall be at the user's sole risk, without liability on CONSULTANT's part, and CLIENT agrees to indemnify and hold CONSULTANT harmless from all claims, damages, and expenses, including attorney's fees, arising out of such unauthorized use or reuse.

6.3 Electronic Documents - CONSULTANT cannot guarantee the authenticity, integrity or completeness of data files supplied in electronic writeable format. If CONSULTANT provides documents in writeable electronic format for CLIENT's convenience, CLIENT agrees to waive any and all claims against CONSULTANT resulting in any way from the unauthorized use, alteration, misuse or reuse of the electronic documents, and to defend, indemnify, and hold CONSULTANT harmless from any claims, losses, damages, or costs, including attorney's fees, arising out of the unauthorized use, alteration, misuse or reuse of any electronic documents provided to CLIENT.

6.4 Electronic Data Bases – In the event that CONSULTANT prepares electronic data bases, geographical information system (GIS) deliverables, or similar electronic documents, it is acknowledged by CLIENT and CONSULTANT that such PROJECT deliverables will be used and perhaps modified by CLIENT and that CONSULTANT's obligations are limited to the deliverables and not to any subsequent modifications thereof. Once CLIENT accepts the delivery of maps, databases, or similar documents developed by CONSULTANT, ownership is passed to CLIENT. CONSULTANT will retain the right to use the developed data and will archive the data for a period of three years from the date of PROJECT completion.

7. INSURANCE

7.1 CONSULTANT will retain Workmen's Compensation Insurance, Professional Liability Insurance with respect to liabilities arising from negligent errors and omissions, Commercial General Liability Insurance, Excess Liability, Unmanned Aircraft, Cyber Liability, and Automobile Liability during this PROJECT. CONSULTANT will furnish certificates at CLIENT's request.

7.2 Risk Allocation – To the fullest extent permitted by law, and notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of the CONSULTANT to the CLIENT and anyone claiming by or through the CLIENT, for any and all claims, losses, costs or damage, of any nature whatsoever, the liability of CONSULTANT to all claimants with respect to this PROJECT will be limited to an aggregate sum not to exceed \$100,000 or CONSULTANT's compensation for consulting services, whichever is greater. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

7.3 Damages – Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither CLIENT nor CONSULTANT, their respective officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the PROJECT or to this Agreement. This mutual waiver of certain damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation and any other consequential damages that may be incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty. Both CLIENT and CONSULTANT shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this PROJECT.

7.4 CLIENT agrees that any and all limitations of CONSULTANT's liability or waivers of damages by CLIENT to CONSULTANT shall include and extend to those individuals and entities CONSULTANT retains for performance of the services under this Agreement, including but not limited to CONSULTANT's officers, partners, and employees and their heirs and assigns, as well as CONSULTANT's subconsultants and their officers, employees, and heirs and assigns.

8. DISPUTE RESOLUTION

8.1 In the event of a disagreement arising out of or relating to this Agreement or the services provided hereunder, CLIENT and CONSULTANT agree to attempt to resolve any such disagreement through direct negotiations between senior, authorized representatives of each party. If any disagreement is not resolved by such direct negotiations, CLIENT and CONSULTANT further agree to consider using mutually acceptable non-binding mediation service in order to resolve any disagreement prior to proceeding to litigation.

9. SITE ACCESS

9.1 Right of Entry - Unless otherwise agreed, CLIENT will furnish right-of-entry on the land for CONSULTANT to make any surveys, borings, explorations, tests or similar field investigations. CONSULTANT will take reasonable precautions to limit damage to the land from use of equipment, but the cost for restoration of any damage that may result from such field investigations is not included in the agreed compensation for CONSULTANT. If restoration of the land is required greater than those included in the scope of work, upon mutual agreement this may be accomplished as a reimbursable additional service at cost plus ten percent.

9.2 Damage to Underground Structures - Reasonable care will be exercised in locating underground structures in the vicinity of proposed subsurface explorations. This may include contact with the local agency coordinating subsurface utility information and/or a review of plans provided by CLIENT or CLIENT representatives for the site to be investigated. CONSULTANT shall be entitled to rely upon any information or plans prepared or made available by others. In the absence of physically confirmed underground structure locations, CLIENT agrees to accept the risk of damage and costs associated with repair and restoration of damage resulting from the exploration work.

10. OIL AND HAZARDOUS MATERIALS

10.1 If, at any time, evidence of the existence or possible existence of asbestos, oil, or other hazardous materials or substances is discovered, outside of any agreed scope of work or greater than those anticipated in any agreed scope of work, CONSULTANT reserves the right to renegotiate the fees for CONSULTANT's services and CONSULTANT's continued involvement in the PROJECT. CONSULTANT will notify CLIENT as soon as practical if evidence of the existence or possible existence of such hazardous materials or substances is discovered.

10.2 The discovery of the existence or possible existence of hazardous materials or substances, outside or greater than any proposed in the agreed scope of work, may make it necessary for CONSULTANT to take accelerated action to protect human health and safety, and/or the environment. CLIENT agrees to compensate CONSULTANT for the cost of any and all measures that in its professional opinion are appropriate to preserve and/or protect the health and safety of the public, the environment, and/or CONSULTANT's personnel. To the full extent permitted by law, CLIENT waives any claims against CONSULTANT and agrees to indemnify, defend and hold harmless CONSULTANT from any and all claims, losses, damages, liability, and costs, including but not limited to cost of defense, arising out of or in any way connected with the existence or possible existence of such hazardous materials substances at the site.

11. SITE INVESTIGATIONS

11.1 In soils, groundwater, soil gas, indoor air, or other investigations, conditions may vary between successive test points and sample intervals and for locations at or between where observations, exploration, and investigations have been made. Because of the variability of conditions and the inherent uncertainties in such evaluations, explorations, or investigations, changed or unanticipated conditions may occur that may affect overall PROJECT costs and/or execution. These variable conditions and related impacts on cost and PROJECT execution are not the responsibility of CONSULTANT.

11.2 CLIENT recognizes that special risks occur whenever engineering or related disciplines are applied to provide

information regarding subsurface conditions. Even an agreed sampling and testing program, implemented with appropriate equipment and personnel with the assistance of a trained professional performing in accordance with the applicable professional standard of care, may provide data or information which differs significantly from that discovered or encountered subsequently. Environmental, geological, and geotechnical conditions, that CONSULTANT may infer to exist between sampling points may differ significantly from those discovered or encountered subsequently. The passage of time also should be considered, and CLIENT recognizes that due to natural occurrences or direct, or indirect human intervention at or near the site, actual conditions may quickly change. CONSULTANT shall not be responsible for the identification of emerging contaminants for which no current regulatory provisions exists nor shall CONSULTANT be held liable for not identifying or discussing these compounds even if those compounds are detected at a later date. CLIENT realizes that these risks cannot be eliminated. The services included in this agreement are those agreed to, or selected, consistent with CLIENT's risk preferences and other considerations including cost and schedule.

11.3 By authorizing CONSULTANT to proceed with the site investigation services, CLIENT confirms that CONSULTANT has not created nor contributed to the presence of any existing hazardous substances or conditions at or near the site. CLIENT recognizes that there is an inherent risk in drilling, borings, punching or driving probes, excavating trenches or implementing other methods of subsurface exploration at or near a site contaminated by hazardous materials. Further, CLIENT recognizes that these are inherent even through the exercise of the Standard of Care. CLIENT accepts the risk and agrees to defend, indemnify, and hold CONSULTANT and each of CONSULTANT's subcontractors, consultants, officers, directors, and employees harmless against and all claims for damages, costs, or expenses direct or consequential, in connection with a release of hazardous substances, except to the extent that such claims, damages, or losses are adjudicated to have resulted from CONSULTANT's gross negligence or willful misconduct in the performance of the services.

12. FEDERAL AND STATE REGULATORY AGENCY AUDITS

12.1 For certain services rendered by CONSULTANT, documents filed with federal and state regulatory agencies may be audited after the date of filing. In the event that CLIENT's PROJECT is selected for an audit, CLIENT agrees to compensate CONSULTANT for time spent preparing for and complying with an agency request for information or interviews in conjunction with such audit. CLIENT will be notified at the time of any such request by an agency, and CONSULTANT will invoice CLIENT based on its standard billing rates in effect at the time of the audit.

13. CLIENT'S RESPONSIBILITIES

13.1 Unless otherwise stated in the Agreement, CLIENT will obtain, arrange, and pay for all notices, permits, and licenses required by local, state, or federal authorities; and CLIENT will make available the land, easements, rights-of-way, and access necessary for CONSULTANT's services or PROJECT implementation.

13.2 CLIENT will examine CONSULTANT's studies, reports, sketches, drawings, specifications, proposals, and other documents and communicate promptly to CONSULTANT in the event of disagreement regarding the contents of any of the foregoing. CLIENT, at its own cost, will obtain advice of an attorney, insurance counselor, accountant, auditor, bond and financial advisors, and other consultants as CLIENT

deems appropriate; and render in writing decisions required by CLIENT in a timely manner.

14. OPINIONS OF COST, FINANCIAL ANALYSES, ECONOMIC FEASIBILITY PROJECTIONS, AND SCHEDULES

14.1 CONSULTANT has no control over cost or price of labor and materials required to implement CLIENT's PROJECT, unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs, competitive bidding procedures and market conditions, time or quality of performance by operating personnel or third parties, and other economic and operational factors that may materially affect the ultimate PROJECT cost or schedule. Therefore, CONSULTANT makes no warranty, expressed or implied, that CLIENT's actual PROJECT costs, financial aspects, economic feasibility, or schedules will not vary from any opinions, analyses, projections, or estimates which may be provided by CONSULTANT. If CLIENT wishes additional information as to any element of PROJECT cost, feasibility, or schedule, CLIENT at its own cost will employ an independent cost estimator, contractor, or other appropriate advisor.

15. CONSTRUCTION PHASE PROVISIONS

The following provisions shall be applicable should the CONSULTANT be retained to provide Construction Phase Services in connection with the PROJECT:

15.1 CLIENT and Contractor - The presence of CONSULTANT's personnel at a construction site, whether as onsite representatives or otherwise, does not make CONSULTANT or CONSULTANT's personnel in any way responsible for the obligations, duties, and responsibilities of the CLIENT and/or the construction contractors or other entities, and does not relieve the construction contractors or any other entity of their respective obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the construction contract documents and for providing and/or enforcing all health and safety precautions required for such construction work.

15.2 Contractor Control - CONSULTANT and CONSULTANT's personnel have no authority or obligation to monitor, to inspect, to supervise, or to exercise any control over any construction contractor or other entity or their employees in connection with their work or the health and safety precautions for the construction work and have no duty for inspecting, noting, observing, correcting, or reporting on health or safety deficiencies of the construction contractor(s) or other entity or any other persons at the site except CONSULTANT's own personnel.

15.3 On-site Responsibility - The presence of CONSULTANT's personnel at a construction site is for the purpose of providing to CLIENT an increased degree of confidence that the completed construction work will conform generally to the construction documents and that the design concept as reflected in the construction documents generally has been implemented and preserved by the construction contractor(s). CONSULTANT neither guarantees the performance of the construction contractor(s) nor assumes responsibility for construction contractor's failure to perform work in accordance with the construction documents.

15.4 Payment Recommendations - Recommendations by CONSULTANT to CLIENT for periodic construction progress payments to the construction contractor(s) are based on CONSULTANT's knowledge, information, and belief from selective observation that the work has progressed to the point indicated. Such recommendations do not represent that

continuous or detailed examinations have been made by CONSULTANT to ascertain that the construction contractor(s) have completed the work in exact accordance with the construction documents; that the final work will be acceptable in all respects; that CONSULTANT has made an examination to ascertain how or for what purpose the construction contractor(s) have used the moneys paid; that title to any of the work, materials, or equipment has passed to CLIENT free and clear of liens, claims, security interests, or encumbrances; or that there are no other matters at issue between CLIENT and the construction contractors that affect the amount that should be paid.

15.5 Record Drawings - Record drawings, if required as part of CONSULTANT's agreed scope of work, will be prepared, in part, on the basis of information compiled and furnished by others, and may not always represent the exact location, type of various components, or exact manner in which the PROJECT was finally constructed. CONSULTANT is not responsible for any errors or omissions in the information from others that are incorporated into the record drawings.

16. DESIGN WITHOUT CONSTRUCTION PHASE SERVICES

The following provisions shall be applicable should the CONSULTANT be retained to provide design services but not be retained to provide Construction Phase Services in connection with the PROJECT:

16.1 It is understood and agreed that the CONSULTANT's Scope of Services under this proposal does not include project observation or review of the Contractor's performance or any other construction phase services, and that such services will be provided by the CLIENT or others. The CLIENT assumes all responsibility for interpretation of the Contract Documents and for construction observation, and the CLIENT waives any claims against the CONSULTANT that may be in any way connected thereto.

16.2 In addition, the CLIENT agrees, to the fullest extent permitted by law, to indemnify and hold harmless the CONSULTANT, its officers, directors, employees and subconsultants (collectively, CONSULTANT) against all damages, liabilities or costs, including reasonable attorney's fees and defense costs, arising out of or in any way connected with the performance of such services by other persons or entities and from any and all claims arising from modifications, clarifications, interpretations, adjustments or changes made to the Contract Documents to reflect changed field or other conditions, except for claims arising from the sole negligence or willful misconduct of the CONSULTANT.

17. SCHEDULE

17.1 The CLIENT agrees that the CONSULTANT is not responsible for damages arising directly or indirectly from any delays for causes beyond the CONSULTANT's reasonable control. For purposes of this Agreement, such causes include, but are not limited to, strikes or other labor disputes; severe weather disruptions or other natural disasters, pandemics, or acts of God; fires, riots, war or other emergencies; failure of any government agency to act in timely manner; failure of performance by the CLIENT or the CLIENT's contractors or consultants.

17.2 The CONSULTANT's schedule includes reasonable allowances for review and approval times required by the CLIENT, performance of services by the CLIENT's consultants, and review and approval times required by public authorities having jurisdiction over the PROJECT. This schedule shall be equitably adjusted as the PROJECT progresses, allowing for changes in scope, character or size

of the PROJECT requested by the Client, or for delays or other causes beyond the Consultant's reasonable control.

18. MISCELLANEOUS TERMS

18.1 GOVERNING LAW - The CLIENT and the CONSULTANT agree that this Agreement and any legal actions concerning its validity, interpretation and performance shall be governed by the laws of the jurisdiction where the PROJECT is located, without regard to any conflict of laws provisions, which may apply the laws of other jurisdictions.

18.2 LENDERS' REQUIREMENTS - The CONSULTANT shall not be required to execute any documents subsequent to the signing of this Agreement that in any way might, in the sole judgment of the CONSULTANT, increase the CONSULTANT's contractual or legal obligations or risks, or adversely affect the availability or cost of its professional or general liability insurance.

18.3 CORPORATE PROTECTION - Notwithstanding anything to the contrary contained herein, the CLIENT agrees that as the CLIENT's sole and exclusive remedy, any claim, demand or suit shall be directed and/or asserted only against the CONSULTANT, a Massachusetts corporation, and not against any of the CONSULTANT's individual employees, officers or directors.

18.4 TITLES - The section headings used in this Agreement are intended principally for convenience and shall not be used in interpreting this Agreement or in determining any of the rights or obligations of the parties to this Agreement.

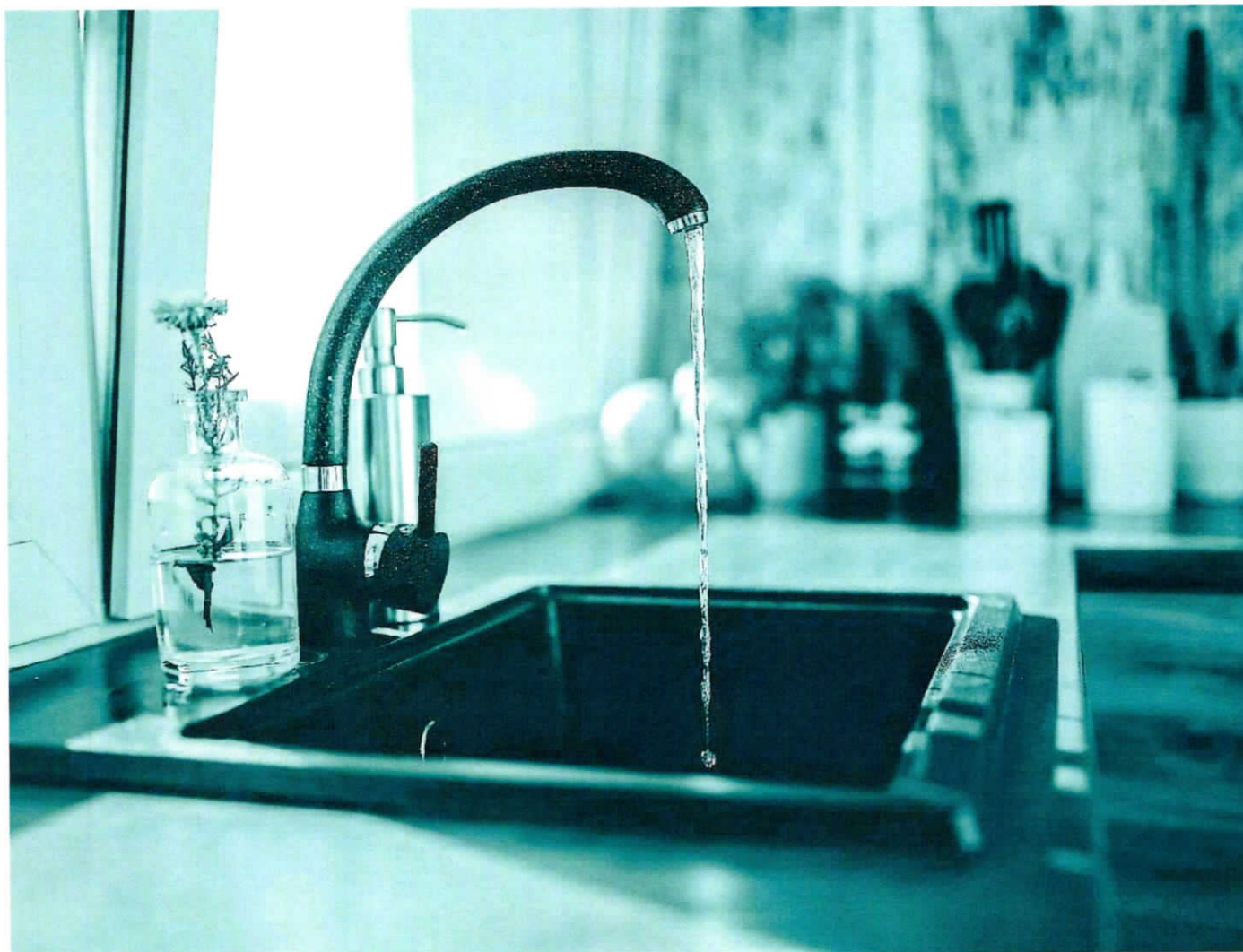
18.5 Upon execution, these terms as incorporated into the accompanying proposal represent the final intent of the parties. Any modification, rescission, or waivers of these terms shall only be effective and binding if agreed to in writing by the parties.



Townsend Water

Water Rate Study

PROPOSAL / SEPTEMBER 30th, 2021



September 30th, 2021

David Vigeant
Superintendent
Townsend Water
540 Main Street
Townsend, Massachusetts 01474

Subject: Proposal for Water Rate Study

Dear Mr. Vigeant:

Raftelis Financial Consultants, Inc. (Raftelis) is pleased to submit this proposal to assist Townsend Water (Townsend) with a water rate and financial planning study. Raftelis has developed this letter proposal to give you a brief overview of our firm, and outline our proposed scope of work, price, and schedule for the project. We feel strongly that a project's scope of work should be tailored to fit the client, so although we've utilized our expertise and experience performing similar studies for other communities in the Commonwealth and New England when developing this scope of work, we've also relied on our understanding of Townsend's specific needs. We welcome your feedback on the scope, and look forward to working with you as needed.

Raftelis is the largest firm in the country providing financial and rate consulting services to the water utility industry, with over 100 consultants. The firm is registered with the Securities and Exchange Commission and the Municipal Securities Rulemaking Board as a Municipal Advisor, which are necessary for any firm advising utilities on financing and debt issuance. I, Dave Fox, have over 10 years of water rate-setting experience and will serve as the Project Director providing direction as needed. I will ensure that the study meets your objectives. I am a Senior Manager with Raftelis and am on the New England Water Works Association Financial Management Committee and the Massachusetts Water Works Association legislative committee. Luke Eastman will assist me as Assistant Project Manager and/or Lead Consultant. Luke has been performing water rate studies for over four years and has a graduate degree in water resources management and is also a member of the NEWWA legislative committee. Alex Burkard will serve as Data Analyst, reporting to Luke and Dave. All three of us are based at our Natick, MA office.

In the following pages, we have included a detailed Scope of Work along with a proposed fee. We welcome the opportunity to discuss our proposal with you and modify our scope of work as needed to meet Townsend's needs.

Sincerely,



Dave Fox
Senior Manager

Firm Overview

Raftelis has the largest consulting practice in the nation focusing on financial, rate, and management consulting for water, wastewater, and stormwater utilities. In 1993, Raftelis was founded to provide services that help utilities function as sustainable organizations while providing the public with clean water at an affordable price. With this goal in mind, Raftelis has grown to become the largest and one of the most respected utility financial and management consulting practices in the nation. Raftelis has experience providing these services to hundreds of utilities across the country and abroad, allowing us to provide our clients with innovative and insightful recommendations that are founded on industry best practices. Throughout our history, we have maintained a strict focus on the financial and management aspects of utilities, building a staff with knowledge and skills that are extremely specialized to the services that we provide, and thus allowing us to provide our clients with independent and objective advice.

Project Understanding

We understand that Townsend is seeking a qualified rate consultant to perform the following services:

Financial Planning

We understand that Townsend projects increased costs for its water system due to cost-of-living adjustments, debt service for the new Harbor Trace PFAS Treatment Plant, hiring of new workers to staff the plant, and additional operating costs for the plant. Assuming these costs while minimizing rate increases and customer impacts will require financial planning over the short and medium-term.

Rate Design

We understand that Townsend seeks to consider changing its current rate structure, which is a combination of a fixed and uniform volumetric rate, to a tiered volumetric rate system. This will require a rate design analysis in which customer usage patterns are analyzed to calculate a new tiered volumetric rate structure that meets Townsend's new revenue requirements.

Scope of Work

The following sections detail the scope of services we propose to complete for Townsend as part of a water rate and financial planning study.

Project Kickoff and Data Collection

The first phase of the project will include a project kickoff meeting between Raftelis and key Townsend staff. The purpose of the meeting will be to confirm Townsend's financial and rate priorities so that Raftelis can best develop a recommendation for Townsend. Raftelis will then send Townsend a data request for information necessary to complete the study, such as operation and maintenance budgets and actuals, existing debt service schedules, capital improvements plan, and customer consumption and account information, among others.

Development of a Five-Year Financial Plan

Raftelis will develop a comprehensive five-year financial plan for Townsend. In preparing this plan, we will analyze Townsend's current policies and practices for funding its operations, capital facilities plan, and debt service requirements. As appropriate, and as discussed with Townsend staff, we will consider various financing options, or combination of options, such as operating revenue, new debt issuances, reserve funds and miscellaneous fees.

We will assist Townsend in achieving a suitable balance among the financing options when developing the proposed financial plan which will accomplish the following:

- Ensure financial sufficiency to meet operating and capital costs as well as prudent reserves;
- Minimize bill impact to Townsend's customer base;
- Meet Townsend's policies and objectives;
- Fairly distribute financing responsibility to appropriate users; and
- Result in an appropriate capital structure.

Maintaining detailed financial plans will ensure that Townsend is operating in a revenue self-sufficient manner and meeting all prudent financial requirements.

At the heart of any successful rate and financial planning study is the computer model that is used to develop and forecast revenue requirements; perform various scenario analyses quickly; and calculate rates and impacts on customers. The model must be sophisticated enough to perform the complex calculations involved in a comprehensive financial plan and rate analysis and yet still be simple enough to allow for future updates by Townsend staff without the need for extensive training or overhauls.

Raftelis' model will incorporate the rate structures and rate calculation methodologies that are identified in conversations with Townsend staff. Raftelis will provide Townsend staff the rate model in Microsoft Excel format so that they will be able to provide input into the development of the model as needed.

EVALUATE NEW RATE STRUCTURES

The purpose of this task is three-fold. First, we will provide Townsend staff with an understanding of the principles of water rate setting. Second, Townsend staff, with Raftelis' assistance, will identify and prioritize its rate setting objectives, and third, Townsend and Raftelis will develop the rate structure and fee conceptual designs that will serve as the framework for the rate design phases of this task. This scope includes evaluation and calculation of a simple across-the-board adjustment to the current rate structure as well as a maximum of two alternative water rate structures. Rate priorities that will be discussed with Townsend include affordability, water conservation, cost of service based allocations, minimizing rate impacts, rate stability, revenue stability, and simplicity and ease of implementation. The customer impacts of the new rate structures will be considered, specifically by calculating current and proposed bills for key Townsend customers.

DELIVERABLES

Presentation

We will prepare one PowerPoint presentation summarizing the financial planning and rate study process, findings, and recommendations in a clear and concise manner. We will provide a draft of this presentation to Townsend staff for their review and comment prior to delivering the final version. We will present this information to either Townsend staff or the local governing body overseeing water rates.

Fee and Project Schedule

The table below shows the hourly rates, hours, and total estimated fee for this project. The proposal assumes costs associated with two in-person meetings. These meetings can be moved virtual to reduce travel costs at Townsend's discretion. Regarding project schedule, Raftelis is committed to accomplishing the stated scope of services in a timely manner in line with Townsend's expectations. In our experience, project timelines can vary significantly based on timeliness of data sent to Raftelis, quality of data, meetings with stakeholders and decision makers, and any adjustments to the scope of work. Raftelis will work with Townsend to ensure the project is completed within Townsend's required timeline.

Tasks	Web Meetings	In-person Meetings	Hours				Total Fees & Expenses
			DF	LE	AB	Total	
1. Project Initiation, Management, and Kick-off Workshop		1	2	6	8	16	\$3,512
2. Financial Plan Development	1		2	6	30	38	\$6,870
3. Rate Structure Evaluation	1		2	6	30	38	\$6,870
4. Project Presentation		1	2	6	0	8	\$2,192
Total Estimated Meetings / Hours	2	2	8	24	68	100	
Hourly Billing Rate			\$275	\$215	\$155		
Total Professional Fees			\$2,200	\$5,160	\$10,540	\$17,900	
DF - Dave Fox, Senior Manager LE - Luke Eastman, Senior Consultant, AB - Alex Burkard, Associate Consultant							Total Fees \$17,900
							Total Expenses \$1,543
							Total Fees & Expenses \$19,443

If the contents of this proposal are acceptable to Townsend, please execute on the next page and return a copy for our records. We are willing and able to begin work as soon as given a notice-to-proceed from Townsend. We look forward to the opportunity to serve Townsend. If you have any questions, please don't hesitate to contact me using the contact information below.

Dave Fox, Senior Manager
 20 Main Street, Suite 301, Natick, MA 01760
 O: 774.243.0619 / M: 845.551.7531 / E: dfox@raftelis.com

Sincerely,



Dave Fox
 Senior Manager

Townsend accepts the terms of this engagement letter and proposal:

Approved: _____

Date: _____

Name of Signatory: _____

Title: _____



3.41

TOWN OF TOWNSEND
PROCUREMENT FORM – VERBAL QUOTES
Supplies or Services valued between \$5,000 and \$25,000

Date: 7 OCT 2021 Dept.: _____ Water _____

Budget Line Item # Professional Service

Purchase Description: Rate Study for Treatment Plant

Vendor #1 Date: 30 Sept 21 Time: _____ Unit Price: _____ Total: \$19,443

Company Name & Contract: Raftelis

Address: 20 Main St 301 Natick Ma 01760

Phone #: 774 243 0619

Vendor #2 Date: 24 Sept 21 Time: _____ Unit Price: _____ Total: \$9,800

Company Name & Contract: Tighe & Bond

Address: 53 Southhampton Rd Westfield Ma 01085

Phone #: 413 562 1600

Vendor #3 Date: 24 Sept 21 Time: _____ Unit Price: _____ Total: \$13,500

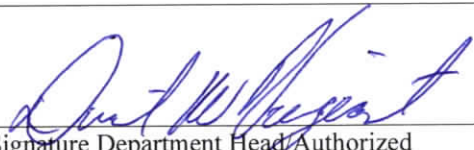
Company Name & Contract: Dewberry

Address: 99 Summer St 200 Boston Ma 02110

Phone #: 617 695 3400

Purchase Awarded To Vendor #: 2

Comments: _____


Signature Department Head Authorized
Personnel Soliciting Quotes

Signature Chief Procurement Officer

NOTE: All invoices for supplies and services over \$5,000 and up to \$25,000 must be accompanied with this completed form to the Town Accountant. Verbal quotes are required per chapter 30B of the Massachusetts General Laws.

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21.1

[Statutes, codes, and regulations](#)[Code of Massachuset...](#)[Department 310 CM...](#)[Title 310 CMR 22.00 ...](#)

310 Mass. Reg. 22.11B

Current through Register 1451, September 3, 2021

Section 22.11B - Public Water Systems Certified Operator Staffing Requirements

(1)Operation. Each Supplier of Water shall ensure that its Public Water System is operated at all times by a Primary and Secondary Operator for the treatment and distribution of drinking water, unless otherwise authorized in writing by the Department. Any Public Water System personnel who make decisions regarding the Public Water System's process control or operational integrity shall be certified pursuant to 236 CMR: *Board of Certification of Operators of Drinking Water Supply Facilities*. Exemptions to this requirement are addressed in 310 CMR 22.11B(5). The Primary Operator shall be directly responsible for the operation of a Treatment Facility and/or Distribution System. The Secondary Operator shall be directly responsible for the operation of a Treatment Facility and/or Distribution System or a major segment of the Public Water System, during the temporary absence of the Primary Operator or during operational shifts when the Primary Operator is not scheduled to work. Persons exercising official general administrative duties such as city engineers exercising engineering design duties, elected water commissioners, clerks or administrative workers involved in customer relations, billing, payroll, timekeeping, *etc.* shall not be considered directly responsible for a Public Water System, unless otherwise authorized in writing by the

CMR 22.11B(5), shall be operated as follows:

(a) Treatment - Primary Operator.

1. A Public Water System utilizing treatment shall be operated, whenever the Treatment Facility is in operation, by a Primary Operator (*i.e.*, a Certified Operator who has a grade certificate at least equal to the class of the Treatment Facility, as further defined in 310 CMR 22.02) who, except when temporarily absent, shall be:

a. present at the Treatment Facility at least one seven-hour working shift each day for five days during each work week (meaning seven consecutive days); and

b. available to respond in person to Emergencies at the Treatment Facility within one hour at all times when not present at the Treatment Facility.

2. A Supplier of Water may submit a written request for the Department to approve an alternative work schedule for the Primary Operator. The proposed alternative work schedule shall demonstrate that the Primary Operator will work at least 35 hours and at least four days each work week (as defined in 310 CMR 22.11B(2)(a)1.) at the Treatment Facility to ensure its safe and proper operation.

(b) Treatment - Secondary Operator. A Public Water System utilizing treatment shall be operated, whenever the Treatment Facility is in operation, by a Secondary Operator (*i.e.*, a Certified Operator who has a grade certificate not less than one grade lower than the classification of the Treatment Facility, as more fully defined in 310 CMR 22.02) who shall be:

1. present at the Treatment Facility on all working shifts when the Primary Operator is not required to be present; and

2. present at the Treatment Facility during any working shift when a Primary Operator is required to be present in accordance to 310 CMR 22.11B(2)(a)1. or 2., but is temporarily absent.

(c) Distribution - Primary Operator.

1. A Public Water System's Distribution System shall be operated by a Primary Operator (*i.e.*, a Certified Operator who has a grade certificate at least equal to the class of the

[JX](#)

b. available to respond in person to Emergencies with the Distribution System within one hour at all times when not present at the Distribution System.

2. A Supplier of Water may submit a written request for the Department to approve an alternative work schedule for the Primary Operator. The proposed alternative work schedule shall demonstrate that the Primary Operator will work at least 35 hours and at least four days each work week (as defined in 310 CMR 22.11B(2)(a)1.) at the Distribution System to ensure its safe and proper operation.

(d) Distribution - Secondary Operator. A Public Water System's Distribution System shall be operated by a Secondary Operator (*i.e.*, a Certified Operator who has a certification not less than one grade lower than the classification of the Distribution System, as more fully defined in 310 CMR 22.02) who shall be:

1. present at the Distribution System on all working shifts when the Primary Operator is not required to be present; and
2. present at the Distribution System during any working shift when a Primary Operator is required to be present in accordance to 310 CMR 22.11B(2)(c)1. or 2., but is not present due to a temporary absence.

(e) Multiple Treatment Facilities.

1. A Supplier of Water whose Public Water System is classified as Grade 1T or 2T and consists of multiple Treatment Facilities shall not be required to staff each Treatment Facility individually.

2. A Supplier of Water whose Public Water System is classified as Grade 3T or 4T and consists of multiple Grade 3 or 4 Treatment Facilities shall staff each facility individually, in accordance with its classification.

3. A Supplier of Water whose Public Water System is classified as Grade 3T or 4T and consists of a single Grade 3 or 4 Treatment Facility and one or more Grade 1 or 2 Treatment Facilities shall staff the higher grade Treatment Facility, but shall not be required to staff each lower grade Treatment Facility.

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Operations Plan" on a form provided by the Department and, if applicable, a Contract Operator Compliance Notice, demonstrating compliance with 310 CMR 22.11B(2).

(3)Primary and Secondary Operator Changes. Except for periods of temporary absence of no more than 30 days, whenever a Supplier of Water changes a Certified Operator responsible for primary or secondary supervision under 310 CMR 22.11B(1),

(a) the Supplier of Water shall report the change to the Department within seven days, thereafter;

(b) the Supplier of Water shall submit to the Department for review an updated "Staffing and Comprehensive Operations Plan" and, if applicable, a Contract Operator Compliance Notice, within 30 days of the change described in 310 CMR 22.11B(3)(a); and

(c) the Supplier of Water shall obtain a replacement Primary or Secondary Operator(s) of appropriate grade no later than 30 days from the date the current operator(s) ceases to perform the Primary or Secondary Operator duties.

(4)Classification of Public Water Systems. A Public Water System's Distribution System shall be classified in accordance with 310 CMR 22.11B(4)(c) and its Treatment Facilities, if any, shall be classified in accordance with 310 CMR 22.11B(4)(a). However, if the Public Water System is a free standing vending machine, it shall be classified instead in accordance with 310 CMR 22.11B(4)(b) or (d), as applicable. The overall classification of each Public Water System shall be indicated by the classification of its Distribution System followed by the numerically highest class of its Treatment Facilities, if any (e.g., III-D/II-T) or its vending classification (e.g., II-VNDT). The increasing numerical class indicates an increasing complexity of operation and a higher level of training, knowledge, and experience required for operation. The certification grades for operators established in 236 CMR 3.02:

Classification of Public Water System Operators, shall correspond to the classification of the system as required under 310 CMR 22.11B(4). The Department shall make the final determination of all such classifications.

(a)Rating Treatment Facilities. The class of each Treatment Facility within a Public Water System shall be established by adding together all rating values reflecting the complexity of operation for such Treatment Facility's treatment units, as set forth in 310 CMR 22.11B:

EMERGENCY ALERTS

[Show Coronavirus Update](#) ▼

Mass.gov

Certified Operator Staffing Requirements

Staffing Requirements at Public Water Systems

[Notices & Alerts](#)[Hide Notices & Alerts](#)

MassDEP's office buildings are currently closed to the public. | Jun. 18, 2021, 12:01 am

Massachusetts Drinking Water Regulations, 310 CMR 22.11B, require that every public water system (PWS) be operated with a primary operator and secondary operator for treatment and distribution. The primary operator must work one daily work shift per week and be certified at a grade level at least equal to the classification of the facility. The secondary operator must be certified at a grade level not less than one grade level lower than the classification of the facility and must be present "on all shifts when the primary operator is not present, unless otherwise authorized in writing by the Department and/or as exempted by 310 CMR 22.11B(5)." For most PWSs, this means that the primary operator works the weekday shift. For facilities that are operated more than one working shift per week, a secondary operator must be present on all shifts when the primary operator is not present. Properly certified operators must be present at all times in order to insure that the public health is adequately protected.

Treatment Facilities

Treatment facilities must be staffed at all times by a properly certified operator, unless the Department has granted the facility an exemption. Exemptions are typically only granted for automated operations, which must conform to MassDEP requirements detailed in 310 CMR 22.11B(5)(d) and approved in writing. A treatment facility typically has one primary operator and multiple secondary operators in order to provide coverage on all shifts. The primary and secondary operators are in direct responsible charge of the operation of the facility. Primary operators must hold Full licenses, but secondary operators may hold OIT licenses. Individuals working under the direct supervision of a properly certified primary or secondary operators, who is present and in charge, are not required by MassDEP to be certified. However, individuals who are not certified cannot provide sole coverage on any working shift, including weekends and holidays, in order to insure that proper process control and operational integrity are maintained. MassDEP strongly encourages the certification of all operators, but recognizes the need for PWSs to employ unlicensed individuals to assist primary and secondary operators so that they can be trained and become certified.

Distribution Systems

Distribution systems are required to be operated by a primary operator at least one daily working shift per week. The primary operator must also be available to respond to emergencies within one hour at all other times. Additionally, a secondary operator must operate the distribution system in the absence of the primary operator. There is no requirement that a distribution system have more than one shift. However, there must be a secondary operator present if the distribution system has more than one shift and the primary operator is not working. An unlicensed operator may respond to emergency calls when certified operators are not working, but any work must be performed under the direct supervision of a licensed operator (either primary or secondary) who is present and in charge.

Very Small Systems

Very small systems (VSS) serve a population of 500 or less. All non-community systems, including both transient (TNC) and non-transient (NTNC), are classified as VSS regardless of the population served. VSS do not require a secondary operator. However, during times when the primary operator is temporarily absent (for periods not exceeding 30 days), an operator with certification equal to or greater than the system must be retained to respond to an emergency. Emergency response time cannot exceed one hour. If a VSS has treatment, the operator is required to have a full treatment license equal to the classification of the facility.

CONTACT

MassDEP Drinking Water Program

Address

MassDEP Boston

1 Winter Street, Boston, MA 02108

Directions (<https://maps.google.com/?q=1+Winter+Street%2C+Boston%2C+MA+02108>)

Phone

Program Director 617-292-5770 (tel:6172925770)

RELATED

[Board of Certification of Operators of Drinking Water Supply Facilities](#)

([/orgs/board-of-certification-of-operators-of-drinking-water-supply-facilities](#))

7.2

FISCAL YEAR 22 SUMMARY
TOWNSEND WATER DEPARTMENT - ACCOUNTS RECEIVABLE
 September 30, 2021

UNCOLLECTED FROM JUNE 30, 2021

68,102.18

<u>CHARGED</u>	<u>07/01/21</u> <u>09/30/21</u>	<u>9/30/2021</u>	<u>Previous Balance</u>	<u>Total</u>
USER CHARGES		828.01	323,249.17	324,077.18
FEES		350.00	1,000.00	1,350.00
SERVICE CHARGES		1,500.00	5,580.00	7,080.00
BACKFLOW		0.00	385.00	385.00
SUBTOTAL		2,678.01		
TOTAL CHARGES				332,892.18
				400,994.36

<u>RECEIVED</u>	<u>07/01/20</u> <u>09/30/21</u>	<u>9/30/2021</u>		
USER CHARGES		15,078.74	293,285.30	308,364.04
FEES		500.00	707.78	1,207.78
SERVICE CHARGES		643.12	5,868.46	6,511.58
LATE CHARGES		62.73	393.98	456.71
BACKFLOW		0.00	342.80	342.80
SUBTOTAL		16,284.59		
TOTAL RECEIPTS				316,882.91

SENT TO LIEN	
LIENS COLLECTED	0.00
ABATEMENTS	-394.88
ADJUSTMENTS	
AJD TO MASTER	
UNCOLLECTED	84,506.33
	400,994.36

OUTSTANDING:	
USER CHARGES	81,295.51
FEES	225.00
SERVICE CHARGES	1,666.21
LATE CHARGES	1,264.64
BACKFLOW	54.97
TOTAL OUTSTANDING	84,506.33

7.2

2:21 PM

10/04/21

Accrual Basis

Townsend Water Department

Budget vs. Actual

July through September 2021

	Jul - Sep 21	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense				
Expense				
061.000 · General Operations 000				
061.001 · Personal Services 1				
5100 · Salaries & Wages-Water Super	19,624.62	102,600.00	-82,975.38	19.1%
5110 · Salary & Wages-Oper Staff	37,766.88	180,000.00	-142,233.12	21.0%
5112 · Salary & Wages-Support Staff	13,071.94	100,000.00	-86,928.06	13.1%
5120 · Wages - Temp. Help	6,832.50	12,000.00	-5,167.50	56.9%
5130 · Additional Gross	3,313.23	25,000.00	-21,686.77	13.3%
5134 · Additional Gross-Reg&SpecOncall	3,800.00	20,000.00	-16,200.00	19.0%
5190 · Other Stipened-Longevity	0.00	1,300.00	-1,300.00	0.0%
5191 · Other - Stipend BOWC	0.00	3.00	-3.00	0.0%
5192 · Other-Certification/Stipend	0.00	3,000.00	-3,000.00	0.0%
5193 · Retirement Benefit	0.00	0.00	0.00	0.0%
5195 · Other-Clothing Allowance	600.00	600.00	0.00	100.0%
5197 · Vehicle Allowance -Super	3,000.00	6,000.00	-3,000.00	50.0%
Total 061.001 · Personal Services 1	88,009.17	450,503.00	-362,493.83	19.5%
061.002 · Purchased Services 2				
5210 · Energy	6,877.28	100,000.00	-93,122.72	6.9%
5240 · Repair & Maint Building	10,668.80	50,000.00	-39,331.20	21.3%
5245 · Repair & Maint Equipment	567.00	40,000.00	-39,433.00	1.4%
5245006 · Repair & Maintain Equip SCADA	12,064.00	15,000.00	-2,936.00	80.4%
5245007 · Repair & Maintain-Distribution	0.00	0.00	0.00	0.0%
5270 · Rentals	300.00	1,700.00	-1,400.00	17.6%
Total 061.002 · Purchased Services 2	30,477.08	206,700.00	-176,222.92	14.7%

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10/04/21

Accrual Basis

Townsend Water Department

Budget vs. Actual

July through September 2021

	Jul - Sep 21	Budget	\$ Over Budget	% of Budget
061.003 · Purchased Services 3				
5300 · Professional Services	36,519.15	85,500.00	-48,980.85	42.7%
5300100 · Proff Service Backflow	4,350.00	10,000.00	-5,650.00	43.5%
5340 · Communication	6,855.99	23,000.00	-16,144.01	29.8%
5380 · Other Services	0.00	2,730.00	-2,730.00	0.0%
Total 061.003 · Purchased Services 3	47,725.14	121,230.00	-73,504.86	39.4%
061.004 · Purchased Supplies 4				
5420 · Office Supplies	1,356.80	5,500.00	-4,143.20	24.7%
5430 · Building Supplies	0.00	2,000.00	-2,000.00	0.0%
5435 · Equipment Maint Supplies	0.00	0.00	0.00	0.0%
5460 · Groundskeeping Supplies	0.00	1,000.00	-1,000.00	0.0%
5480 · Vehicular Supplies	6,346.41	8,118.00	-1,771.59	78.2%
Total 061.004 · Purchased Supplies 4	7,703.21	16,618.00	-8,914.79	46.4%
061.005 · Purchased Supplies 5				
5530 · Public Works Supplies	33,210.99	100,000.00	-66,789.01	33.2%
5531 · Chemicals	2,870.13	26,000.00	-23,129.87	11.0%
5580 · Other Supplies	0.00	1,000.00	-1,000.00	0.0%
5585 · Clothing Allowance	1,485.92	6,000.00	-4,514.08	24.8%
Total 061.005 · Purchased Supplies 5	37,567.04	133,000.00	-95,432.96	28.2%
061.007 · Other Charges & Exp 7				
5710 · Travel/mileage-in state	0.00	1,100.00	-1,100.00	0.0%
5720 · Out of State Travel	0.00	0.00	0.00	0.0%
5730 · Dues and Memberships	7,046.00	8,000.00	-954.00	88.1%
5780 · Other Charges	0.00	525.00	-525.00	0.0%
5785 · Water Assessment D.E.P.	0.00	2,400.00	-2,400.00	0.0%
5850 · New Equipment	6,764.50	10,000.00	-3,235.50	67.6%
Total 061.007 · Other Charges & Exp 7	13,810.50	22,025.00	-8,214.50	62.7%

2:21 PM

10/04/21

Accrual Basis

Townsend Water Department

Budget vs. Actual

July through September 2021

	Jul - Sep 21	Budget	\$ Over Budget	% of Budget
061.400 · Special Projects 400				
5012 · System Enhancement	13,184.00	51,217.67	-38,033.67	25.7%
Total 061.400 · Special Projects 400	13,262.89	51,217.67	-37,954.78	25.9%
Total 061.000 · General Operations 000	240,838.54	1,001,293.67	-760,455.13	24.1%
061.009 · Debt Service 9				
5910 · Long Term Debt-East Side Phase1	38,729.00	40,000.00	-1,271.00	96.8%
5911 · Long Term Debt-East Side Ph 2	55,170.51	58,000.00	-2,829.49	95.1%
5920 · Long term Interest-Phase1	2,016.26	5,000.00	-2,983.74	40.3%
5921 · Long Term Int East Side Ph2	3,482.01	8,000.00	-4,517.99	43.5%
5925-01 · Int Temp Loans/Bond Iss Fee	0.00	23,000.00	-23,000.00	0.0%
Total 061.009 · Debt Service 9	99,397.78	134,000.00	-34,602.22	74.2%
063.400 · Projects				
5895-22 · Main St Well-Improvements	77,986.26	350,000.00	-272,013.74	22.3%
Total 063.400 · Projects	77,986.26	350,000.00	-272,013.74	22.3%
Total Expense	418,222.58	1,485,293.67	-1,067,071.09	28.2%
Net Ordinary Income	-417,722.58	-1,485,293.67	1,067,571.09	28.1%
Net Income	-417,722.58	-1,485,293.67	1,067,571.09	28.1%