



The West Boylston Water District

Meeting Date and Time: Monday April 27, 2026; 5:00pm

Members Present: Stanley Szczurko, Robert Bryngelson, Jr., James LaMountain, Michael Mard, Stephen Muscente

Also Present: Michael Coveney, Heather Isaacs, Michael Ohl, Lori Renzoni, Robert Lopez

Mr. Szczurko called the meeting to order at 5:04 and notified the participants that the meeting would be audio recorded and Commission James LaMountain is in attendance remotely.

ITEM 1: TREASURER'S REPORT- see attachments.

Heather Isaacs presented the Water Use Charges, Profit and Loss, Balance Sheet and Aged Receivable reports through March 31, 2026. Mrs. Isaacs indicated free cash certification is still pending from the State. Mrs. Isaacs also answered questions about Other Post Employment Benefits study as being due but not required as pension liabilities were not required to be pre-funded yet. No further questions or comments.

ITEM 2: SUPERINTENDENT'S REPORT- see attached.

- 1.) Gates Brook Place/CSX Railroad project update. Hartwell St. bridge open; Beaman remains closed. No further questions or comments.
- 2.) Ripple Fiber Installation Update. No further questions or comments.
- 3.) Service & Distribution System Update: Beaman St. main installed in 1940s; gaskets keep failing.
- 4.) Tank Inspection Update: No biofilm present in two inspected tanks; all issues can be completed while tanks remain in service as they are minor. Third tank inspection to be completed shortly.
- 5.) Bowen/Franklin Sts. Main replacement: CEI continues to work on plans and specs.
- 6.) Oakdale Well Cleaning Update: Sampling at end of day of raw (untreated) water still showed high manganese levels.
- 7.) PT Admin. Position Update: Second candidate would be offered position after first declined offer.
- 8.) Well Exploration Update: Maureen Callahan of Callahan Consultants will be contacted for input.

ITEM 3: OLD BUSINESS-

Feasibility Study: Michael Ohl of CEI outlined the scope of the alternative water supply or treatment analysis to deal with manganese at Pleasant Valley Well. Noted reporting to Mass. DeP is due at end of 2026. Mr. Szczurko questioned whether well exploration would be worth investing in as most viable intown locations have been explored. Mr. Coveney noted that exploration outside of the district is possible. Mr. Ohl clarified that the feasibility study would break down the possibilities and a second hydrogeologist would be utilized in Task #3 of the study. Mr. Szczurko recommended Joel Frisch of NGI for evaluation of past data.

Oakdale Filter Plant: Mr. Ohl indicated that sediment in the filters is now being managed and the media expansion may be due to the infiltration and sediment building up. They are still investigating the issue. Mr. Szczurko questioned whether any other green-sand filter plants in the area have been contacted for input- this is still being worked on.

ITEM 4: NEW BUSINESS-

Request for Abatement- Mr. Coveney and Mr. Lopez outlined the interaction between the customer and the office/field staff and take the position that the meter is correct and the owner is responsible for the water usage and associated costs. Board will not take action until the owner representative is present and has a chance to state their case.

ITEM 5: Approval of Meeting Minutes

Mr. Bryngelson motioned to approve the March 30, 2026 meeting minutes as presented, Muscente seconded the motion; roll call vote: all voted in favor, motion carried.

ITEM 6: Future Agenda Items- None presented

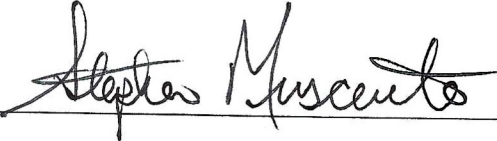


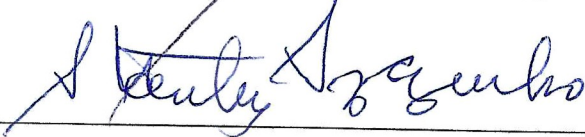
Mr. Mard made a motion to adjourn; Mr. Muscente seconded the motion; roll call vote, all voted in favor. Motion carried. Mr. Szczurko adjourned the meeting at 6:37pm. Next meeting scheduled for May 18, 2026 at 4:30pm with the Annual Meeting set for June 1 at 6pm.

Meeting Minutes of the West Boylston Water District

April 27, 2026

Members Present: Stanley Szczurko, Robert Bryngelson, Jr., James LaMountain, Michael Mard, Stephen Muscente

Date of Approval: May 18, 2026



**MEETING POSTING
IN ACCORDANCE WITH THE PROVISIONS OF MGL 30A §§ 18-25**

Board of Water Commissioners

April 22, 2026

Board/Committee Name

Date of Notice

183 Worcester St, West Boylston

WBWD OFFICE

Meeting Place

Conference Rm. No.

April 27, 2026
Monday 5:00 p.m.

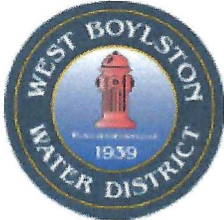
Robert Bryngelson

Date/Time of Meeting

Clerk of Board or Bd. Member Signature

Meeting canceled/Postponed to: _____

Date of cancelation/Postponement _____



Agenda

- 5:00 PM CONVENE MEETING
- 5:05 PM TREASURER'S REPORT – Review of Profit & Loss, Balance Sheet and Water Income
- 5:20 PM SUPERINTENDENT'S REPORT – Mike Coveney; Updates on repairs, maintenance and issues of wells, properties and equipment; updates on system repairs/maintenance/issues.
- 5:30 PM OLD BUSINESS – Oakdale Well Cleaning and Rehabilitation update- Mike Ohl
- 5:45 P.M. NEW BUSINESS – 93 Hillside Village abatement request
- 5:50 P.M. READING/APPROVAL OF MINUTES –03/30/26 meeting minutes review and approval
- 5:55 P.M. FUTURE AGENDA ITEMS
- 6:00 P.M. CLOSE MEETING

W.B. Water District
 Monthly Water Charges
 FY26

	FY26			months	FY25				
	FY26 Actual	FY26 Budget	variance		FY25 Actual	FY25 Budget	variance		
Jul-25	207,955.43	221,500.00	-13,544.57	April, May, June	\$147,000.00	208,865.84	205,500.00	3,365.84	\$109,000.00
Aug-25	205,609.55	195,000.00	10,609.95	May, June, July	\$163,000.00	185,140.77	181,000.00	4,140.77	\$99,000.00
Sep-25	211,776.04	198,500.00	13,276.04	June, July, Aug	\$152,000.00	174,225.16	185,500.00	-10,774.84	\$110,000.00
Oct-25	289,747.11	247,500.00	42,247.11	July, Aug, Sept	\$206,500.00	246,638.02	220,000.00	26,638.02	\$113,000.00
Nov-25	209,271.26	191,500.00	17,771.26	Aug, Sept, Oct	\$199,000.00	179,039.31	185,000.00	-5,960.69	\$102,000.00
Dec-25	175,972.96	169,500.00	6,472.26	Sept, Oct, Nov	\$152,000.00	162,220.50	143,500.00	18,720.50	\$105,000.00
Jan-26	199,585.87	190,000.00	9,585.87	Oct, Nov, Dec	\$173,000.00	190,839.08	173,500.00	17,339.08	\$117,000.00
Feb-26	155,654.48	150,000.00	5,654.48	Nov, Dec, Jan	\$165,000.00	143,843.27	132,500.00	11,343.27	\$113,000.00
Mar-26	148,150.93	150,000.00	-1,849.07	Dec, Jan, Feb	\$123,000.00	145,825.79	124,500.00	21,325.79	\$84,000.00
Apr-26		183,500.00		Jan, Feb, Mar		176,439.58	165,500.00	10,939.58	\$99,000.00
May-26		150,500.00		Feb, Mar, April		138,694.36	137,500.00	1,194.36	\$85,000.00
Jun-26		157,500.00		Mar, April, May		146,426.84	144,000.00	2,426.84	\$124,000.00
Totals	1,803,723.63	2,205,000.00	90,223.33			2,098,198.52	1,998,000.00	100,698.52	



West Boylston Water District

Aged Receivables

As of 03/31/2026

Service	0-30 days	31-60 days	61-90 days	91-120 days	> 120 days	Balance
Grand Total						
WATER USAGE	24294.72	18416.46	7494.24	5863.33	46232.81	102301.56
WATER USAGE Interest	1617.15	1339.63	1275.78	1152.35	10996.43	16381.34
WATER USAGE Penalty	639.07	390.00	333.58	80.00	1446.65	2889.30
WATER USAGE Misc	0.20	0.00	0.20	0.00	-250.00	-249.60
FIRELINES	0.00	125.00	0.00	0.00	0.00	125.00
FIRELINES Interest	1.88	0.00	0.00	0.00	0.00	1.88
NO INT ACCTS	63.80	0.00	0.00	0.00	0.00	63.80
SPCL READ	160.00	0.00	0.71	0.00	0.00	160.71
TURN OFF FEE	0.00	150.00	0.00	0.00	352.50	502.50
TURN OFF FEE Interes	7.80	5.47	5.39	5.31	234.09	258.06
	26784.62	20426.56	9109.90	7100.99	59012.48	122434.55
Number of Accounts in Each Column:	355	222	165	102	90	
Total Number of Outstanding Accounts:	420					

West Boylston Water-Profit & Loss Budget vs. Actual

Accrual Basis

July 2025 through March 2026

Ordinary Income/Expense	Jul '25 - Mar 26	Budget	\$ Over Budget	% of Budget
Income				
4175 · Interest Charges	15,124.79	6,000.00	9,124.79	252.1%
4250 · Water Charges & Services				
4251 · Worcester Corporate Water Chrg	-5,601.65	0.00	-5,601.65	100.0%
4250 · Water Charges & Services - Other	1,805,587.26	1,713,500.00	92,087.26	105.4%
Total 4250 · Water Charges & Services	1,799,985.61	1,713,500.00	86,485.61	105.0%
4260 · User Fee	50,000.00	20,000.00	30,000.00	250.0%
4261 · Back Flow	15,375.00	6,000.00	9,375.00	256.3%
4262 · Fire Line	20,735.20	20,409.00	326.20	101.6%
4270 · Merchandise & Jobbing	0.00	0.00	0.00	0.0%
4275 · Meters	8,090.00	1,500.00	6,590.00	539.3%
4320 · Rental Income	122,463.50	122,718.00	-254.50	99.8%
4820 · Investment Income				
4821 · Net investment income	-87,897.45	0.00	-87,897.45	100.0%
4822 · Accrued interest paid	0.50			
4820 · Investment Income - Other	30,116.91	37,250.00	-7,133.09	80.9%
Total 4820 · Investment Income	-57,780.04	37,250.00	-95,030.04	-155.1%
4840 · Miscellaneous Revenue				
4845 · PFAS Settlement Income	69,123.08			
4840 · Miscellaneous Revenue - Other	13,895.40	5,940.00	7,955.40	233.9%
Total 4840 · Miscellaneous Revenue	83,018.48	5,940.00	77,078.48	1,397.6%
Total Income	2,057,012.54	1,933,317.00	123,695.54	106.4%
Cost of Goods Sold	-310.00	0.00	-310.00	100.0%
Gross Profit	2,057,322.54	1,933,317.00	124,005.54	106.4%
Expense				
5000 · Operation & Maintenance				
5130A · Salaries & Employee Benefits				
5130 · Admin & Salaries				
5143 · Overtime Wages	36,729.87	28,089.00	8,640.87	130.8%
5130 · Admin & Salaries - Other	281,186.87	312,141.00	-30,954.13	90.1%
Total 5130 · Admin & Salaries	317,916.74	340,230.00	-22,313.26	93.4%
5131 · Superintendent's Salary	92,432.64	90,066.74	2,365.90	102.6%
5132 · Commissioners Salaries	2,500.00	2,500.00	0.00	100.0%
5133 · Moderator Salary	0.00	0.00	0.00	0.0%
5134 · Payroll Processing Expense	1,361.54	1,462.50	-100.96	93.1%
5135 · Worcester Retirement System	118,614.00	118,614.00	0.00	100.0%
5136A · Health Insurance				
5136 · Employee's	82,024.05	115,440.00	-33,415.95	71.1%
5137 · Retiree's	13,384.08	13,661.25	-277.17	98.0%
5136A · Health Insurance - Other	1,600.00			
Total 5136A · Health Insurance	97,008.13	129,101.25	-32,093.12	75.1%
5138 · Life Insurance	502.20	486.00	16.20	103.3%
5139 · Uniforms	3,740.72	3,775.00	-34.28	99.1%
5140 · Workers' Comp Insurance	9,916.65	9,723.00	193.65	102.0%
5141 · Employee Training	6,778.73	4,500.00	2,278.73	150.6%
5142 · Payroll Taxes	6,321.04	6,375.00	-53.96	99.2%
5130A · Salaries & Employee Benefits - Other	74.42	0.00	74.42	100.0%
Total 5130A · Salaries & Employee Benefits	657,166.81	706,833.49	-49,666.68	93.0%
5210 · Heating	7,896.70	6,900.00	996.70	114.4%
5215 · Telephone	7,876.84	8,326.51	-449.67	94.6%

West Boylston Water-Profit & Loss Budget vs. Actual

Accrual Basis

July 2025 through March 2026

	Jul '25 - Mar 26	Budget	\$ Over Budget	% of Budget
Other Expense				
8000 · Interest Expense	162,161.60	162,162.00	-0.40	100.0%
Total Other Expense	162,161.60	162,162.00	-0.40	100.0%
Net Other Income	-158,911.60	-162,162.00	3,250.40	98.0%
Net Income	626,431.02	386,081.04	240,349.98	162.3%

Balance Sheet

As of March 31, 2026

	<u>Mar 31, 26</u>
ASSETS	
Current Assets	
Checking/Savings	
1000 · Cash-Checking & Savings	1,813,936.39
1025 · Cash on Hand	125.00
Total Checking/Savings	<u>1,814,061.39</u>
Accounts Receivable	
1201 · User Charges	480,979.48
Total Accounts Receivable	<u>480,979.48</u>
Other Current Assets	
1159 · Investments	2,369,225.17
1499 · Undeposited Funds	1,530.46
Total Other Current Assets	<u>2,370,755.63</u>
Total Current Assets	4,665,796.50
Fixed Assets	
1998 · Capital Assets - Depreciable	12,534,006.71
1999 · Capital Assets - Nondepreciable	7,000.00
Total Fixed Assets	<u>12,541,006.71</u>
Other Assets	
2860 · Deferred Outflows of Resources	158,173.00
Total Other Assets	<u>158,173.00</u>
TOTAL ASSETS	<u><u>17,364,976.21</u></u>
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
2000 · Accounts Payable	37,791.88
Total Accounts Payable	<u>37,791.88</u>
Other Current Liabilities	
2100 · Payroll Withholdings	1,884.72
2430 · Accrued Vacation Pay	20,008.57
Total Other Current Liabilities	<u>21,893.29</u>
Total Current Liabilities	59,685.17
Long Term Liabilities	
1750 · Deferred Inflows of Resources	30,581.00
2600 · N/P - DEP (SRF Funding)	7,707,525.51
2800 · Other Post Employment Benefits	1,080,197.00
2850 · Net Pension Liability	1,165,142.00
Total Long Term Liabilities	<u>9,983,445.51</u>
Total Liabilities	10,043,130.68

West Boylston Water-Profit & Loss Budget vs. Actual

Accrual Basis

July 2025 through March 2026

	Jul '25 - Mar 26	Budget	\$ Over Budget	% of Budget
5220 · Electricity				
5221 · Beaman Street	80.90	114.00	-33.10	71.0%
5222 · Lawrence Street	477.05	600.00	-122.95	79.5%
5223 · Lee Street	13,237.49	19,000.00	-5,762.51	69.7%
5224 · Prospect Street	76.98	114.00	-37.02	67.5%
5225 · Temple Street	13,399.43	15,000.00	-1,600.57	89.3%
5226 · Thomas Street	11,862.41	16,500.00	-4,637.59	71.9%
5227 · West Boylston Street	11,771.96	13,500.00	-1,728.04	87.2%
5228 · Western Avenue	2,369.84	3,375.00	-1,005.16	70.2%
5229 · Worcester Street	1,306.82	1,900.00	-593.18	68.8%
5229A · Laurel Street	990.46	2,250.00	-1,259.54	44.0%
Total 5220 · Electricity	55,573.34	72,353.00	-16,779.66	76.8%
5230 · Legal & Accounting				
5231 · Audit Expenses	0.00	0.00	0.00	0.0%
5232 · Accounting Expense	4,282.00	4,500.00	-218.00	95.2%
5233 · Legal Expense	270.00	18,800.00	-18,530.00	1.4%
5234 · Consulting Expense				
5234D · Lee Street	0.00	0.00	0.00	0.0%
5234 · Consulting Expense - Other	58,834.00	75,000.01	-16,166.01	78.4%
Total 5234 · Consulting Expense	58,834.00	75,000.01	-16,166.01	78.4%
Total 5230 · Legal & Accounting	63,386.00	98,300.01	-34,914.01	64.5%
5240 · Auto & Truck Expense				
5241 · Gasoline & Oil	9,709.75	13,500.00	-3,790.25	71.9%
5242 · Repairs & Maintenance	13,412.94	7,499.99	5,912.95	178.8%
5240 · Auto & Truck Expense - Other	0.00	100,000.00	-100,000.00	0.0%
Total 5240 · Auto & Truck Expense	23,122.69	120,999.99	-97,877.30	19.1%
5300 · Property and Liability Insuranc	24,606.35	26,153.00	-1,546.65	94.1%
5420 · Office Expense				
5421 · Office Supplies	2,979.47	2,650.00	329.47	112.4%
5422 · Postage	4,553.93	5,625.00	-1,071.07	81.0%
5420 · Office Expense - Other	0.00	0.00	0.00	0.0%
Total 5420 · Office Expense	7,533.40	8,275.00	-741.60	91.0%
5423 · Computer/Tech	20,383.68	18,637.49	1,746.19	109.4%
5430 · Pump Station Supplies	3,663.44	4,500.00	-836.56	81.4%
5435 · Water Quality Control Expense	10,528.95	11,250.00	-721.05	93.6%
5440 · Water Treatment Chemicals	69,724.23	67,500.00	2,224.23	103.3%
5500 · Tools	3,528.88	3,000.00	528.88	117.6%
5600 · Repairs & Maintenance				
5601 · Equipment Repairs	15,753.67	18,749.99	-2,996.32	84.0%
5602 · Facility Repairs	18,297.79	18,749.99	-452.20	97.6%
Total 5600 · Repairs & Maintenance	34,051.46	37,499.98	-3,448.52	90.8%
5625 · Property Maintenance	15,514.92	18,749.99	-3,235.07	82.7%
5790 · State & District Expense	14,059.69	13,127.50	932.19	107.1%
5791 · GIS Projects	3,420.00	3,500.00	-80.00	97.7%
5795 · DEP Primacy Fees	1,874.81	1,868.00	6.81	100.4%
5840 · Serv & Distr. Improve.				
5840E- Emergency Repair Costs	33,651.00	0.00	33,651.00	100.0%
5840 · Serv & Distr. Improve. - Other	130,875.48	119,750.00	11,125.48	109.3%
Total 5840 · Serv & Distr. Improve.	164,526.48	119,750.00	44,776.48	137.4%
5950 · District Improvements	83,541.25	37,550.00	45,991.25	222.5%
5000 · Operation & Maintenance - Other	0.00	0.00	0.00	0.0%
Total 5000 · Operation & Maintenance	1,271,979.92	1,385,073.96	-113,094.04	91.8%
5195 · Bad Debt Expense	0.00	0.00	0.00	0.0%
Total Expense	1,271,979.92	1,385,073.96	-113,094.04	91.8%
Net Ordinary Income	785,342.62	548,243.04	237,099.58	143.2%
Other Income/Expense				
Other Income				
8400 · Insurance Reimbursement	3,250.00	0.00	3,250.00	100.0%
Total Other Income	3,250.00	0.00	3,250.00	100.0%

	<u>Mar 31, 26</u>
Equity	
3301 · Reserved for Wells/Cap. Project	1,181,223.03
3775 · Investment in PP&E-District	4,409,296.70
3900 · Retained Earnings	1,104,894.78
Net Income	<u>626,431.02</u>
Total Equity	<u>7,321,845.53</u>
TOTAL LIABILITIES & EQUITY	<u><u>17,364,976.21</u></u>



West Boylston Water District

To: Board of Water Commissioners
From: Michael Coveney
Date: 4/27/2026
Re: Superintendents Report

- 1.) 2026 Project Update:
 1. Gates Brook Place – 80 Units West Boylston St & Pierce St – Land clearing has been started for this project
 2. CSX Railroad – Beaman St & Hartwell St RR Bridges to be raised – Beaman St bridge is currently closed and still under construction. Hartwell St Bridge is open as of today.
 - 2.) Ripple Fiber Optic: We are meeting with them on Thursday this week to go over their plans for underground work near any water infrastructure.
 - 3.) Service & Distribution: We had another break last Monday 4/20 on the Beaman St field 10" water main. We repaired this on Tuesday with Hydratech.
 - 4.) Tank Inspections: DN & Diving Services Inc inspected Lawrence Tank #2 and Oakdale Tank today. They have determined that there is NO BIOFILM in either tank. They will inspect the Stockwell Tank tomorrow and issue a full report with their recommendations to DN after completing the inspections. We will then issue a written report to MassDEP as required.
 - 5.) Bowen/Franklin St main replacement: CEI is working on the plans and specs.
 - 6.) Oakdale Well Cleaning: Last week the well was shut down and the pump was removed. We performed a video inspection and found one small area of the existing screen that looked compromised. FG Sullivan installed the new 18" x 15' screen and sleeve and inserted it into the existing well along with the gravel pack. They also started to clean and redevelop the well and check for any more sand infiltration. They will be pumping and surging the well to waste this week and will see if this process has improved the well's performance.
 - 7.) Part-Time Administrative Assistant Position: We offered the position to the top candidate, but they were unable to accept the position due to family obligations. We plan to offer the position to the 2nd candidate this week.
 - 8.) Well Exploration: I would like to discuss restarting our new well exploration.
-



COMPREHENSIVE
ENVIRONMENTAL
INCORPORATED

41 Main Street
Bolton, MA 01740
www.ceiengineers.com

April 27, 2026 **DRAFT**

Re: Scope of Work for MassDEP EC Grant
West Boylston Water District
Feasibility Study for Manganese Mitigation

Project Background

The West Boylston Water District (District) has been actively working to address manganese levels that exceed the Secondary Maximum Contaminant Level (SMCL) of 0.05 mg/L and MassDEP's Health Advisory Level of 0.3 mg/L at two of its three groundwater sources, the Oakdale Well and the Pleasant Valley Well. Recently, the District completed the construction of a Manganese Removal Treatment Facility at its Oakdale Well (online since 2023) and also completed the construction of a replacement well for its Pleasant Valley Well (online since 2022).

Over the past several years of operation, the manganese levels in the Pleasant Valley Replacement Well have increased above the SMCL of 0.05 mg/L but remain below the MassDEP Health Advisory Level of 0.3 mg/L. One of MassDEP's approval criteria for the Pleasant Valley Replacement Well is to maintain manganese levels in the finished water below the SMCL of 0.05 mg/L. Since this approval criteria has been exceeded over the past couple years and does not show any indication of decreasing below the SMCL, MassDEP issued an Administrative Consent Order (ACO) dated February 2, 2026 that requires the District to conduct a Feasibility Study of potential solutions to mitigate manganese at the Pleasant Valley Replacement Well.

The District is considering the following options for long-term water supply, specifically in regards to addressing the manganese issues at the Pleasant Valley Replacement Well:

- Construction of Manganese Removal Treatment Facility for Pleasant Valley Well(s)
- Construction of a Permanent Interconnection with City of Worcester
- Investigation and development of an Alternative Groundwater Source in the District

This scope of work has been developed to provide an independent review of the various options listed above for long-term water supply, and to assist the District in deciding which option is the most advantageous for the District to pursue.

Various factors will be considered in our evaluation and prioritization, including:

- Available Supply Volume compared to long-term projected water demands
- Construction Cost
- Operation Cost (including potential future variability)
- Relative Risk of Success in mitigating manganese
- Long Term Resiliency/Reliability
- Interdependency on Others
- Impact on System Hydraulics and Ability to Serve (flows/pressures)

The evaluation will include development of conceptual designs as necessary to establish a project cost estimate for the respective alternative and will include the development of an estimated project schedule for implementation of the alternative (inclusive of design, permitting, bid and construction).

Detailed Scope of Services

The scope of work is separated into the following distinct tasks:

- Task 1 – Collection and Review of Historical Data
- Task 2 – Evaluation of Water Supply Alternatives
- Task 3 – Summary of Water Supply Alternatives and Prioritization
- Task 4 – Report & Meetings

Task 1 – Collection and Review of Historical Data

CEI will conduct an initial meeting with the District to start the project. Historical data to be collected will include:

- Previous Reports and Studies relating to Water Supply
- Historical Water Pumpage from the District's three sources
- System Operational Data (well and tank charts)
- Water Quality Parameters (District system and Worcester system)

CEI will review the historical data to familiarize themselves with the work completed to date, while keeping a fresh perspective to allow weighing of the advantages and disadvantages of each alternative and ultimately provide the District with guidance on selecting the best path forward.

Task 2 – Evaluation of Water Supply Alternatives

CEI will review existing information on the water supply alternatives/options, both a combination of written reports and anecdotal information available through the District. It is assumed that only existing information will be utilized in the evaluation with the exception of the use of the hydraulic model to simulate potential impacts on flows/pressure with the various supply alternatives; if additional information needs are identified in the evaluation, they will be highlighted as future tasks.

Manganese Removal Treatment Facility for Pleasant Valley Well(s)

CEI will develop a conceptual design (facility and site) for the proposed treatment facility inclusive of the following key design elements:

- Identification of Site Options, recognizing DCR land ownership and restrictions in the area
- Preliminary sizing of process equipment
- Investigation of options for backwash waste handling
- Transmission main routing options, assuming treatment facility will not be proximate to well(s)

CEI will utilize MassGIS and Town Assessor information to identify potential DCR property that could be utilized for the proposed treatment facility. District conversations with DCR personnel to date indicate that the DCR may be receptive to some type of land transfer for a Pleasant Valley Well treatment facility, with the understanding that the current chemical feed and storage equipment located at the well pumping station would be relocated to (or replaced by) a treatment facility that was more distant from the Wachusett Reservoir shoreline. Further discussions would be held with the District and DCR during this feasibility study to determine the likelihood of such a land transfer, based on actual parcels and land requirements for the treatment facility.

It is anticipated that the proposed manganese treatment facility would be similar to the Oakdale Manganese Removal Treatment Facility, both in terms of overall size and equipment. Provisions would

need to be made for all chemical feed systems needed at the Pleasant Valley Manganese Removal Treatment Facility, inclusive of chemicals currently being stored and used at the well pumping station.

A preliminary site layout will be developed using MassGIS topography. No onsite survey is included.

Permanent Interconnection with City of Worcester

The District has identified two potential locations for a permanent interconnection with the City of Worcester. CEI will develop a conceptual design for a permanent interconnection (with flow meter and pressure reducing) for these locations, considering both an above-grade building and a below-grade vault. A preliminary site layout for each interconnection location will be developed using MassGIS topography. No onsite survey is included.

CEI (in conjunction with District representatives) will discuss the potential for long-term sale of water with City representatives. Issues to be discussed include flows/pressures available at the interconnection locations, long-term reliability of water available for purchase, and estimated cost of water.

Based upon the information provided to the District by the City, CEI will identify the hydraulic model runs needed to simulate the impact of this supply alternative. Specifically, the models runs will focus on potential impacts on flows/pressures in the District's distribution system, given the change in location of the source (interconnection versus Pleasant Valley Well).

CEI will investigate potential water quality concerns related to the prospective interconnections, specifically for long-term use as a replacement source to the Pleasant Valley Wells. This evaluation would primarily focus on potential impacts to the District's corrosion control program and compliance with the Revised Lead and Copper Rule, recognizing that the City relies upon surface water sources while the District relies upon groundwater sources.

CEI will also investigate the applicability of the Water Management Act's (WMA) Interbasin Transfer Permitting process, to determine the potential cost and schedule impacts associated specifically with a long-term transfer of water as a replacement source to the Pleasant Valley Wells.

For this supply alternative, CEI will separately consider the interconnection's potential use for short term emergency use (e.g. problems with other sources, less than 6 month duration) and for long-term use as a replacement source to the Pleasant Valley Well(s).

Alternative Groundwater Source

CEI will evaluate potential areas for the investigation and development of a separate groundwater source, as a permanent replacement to the Pleasant Valley Wells. It is assumed that this new source would not be proximate to the existing Pleasant Valley Well(s) and that there are significant limitations to land availability based upon DCR land acquisitions completed for the protection of the Wachusett Reservoir watershed. CEI will work with the District's hydrogeologist (Northeast Geoscience) to conduct a desktop evaluation of prospective areas to investigate for new sources based upon historical information (soils and aquifer mapping) and first-hand knowledge of the area with respect to overburden wells.

Prospective areas for new sources will be overlaid with MassGIS property map information, specifically with a goal of identifying potential parcels located within higher potential aquifer areas with undeveloped

Zone I radius. It is assumed that the focus will be on privately owned and undeveloped or partially developed parcels, as it is unlikely that the District would be able to acquire any land currently owned by DCR for the purposes of a new source.

It is assumed that a new source would not require any treatment beyond corrosion control.

CEI will identify the hydraulic model runs needed to simulate the impact of this supply alternative. Specifically, the models runs will focus on potential impacts on flows/pressures in the District's distribution system, given the change in location of the source (new well versus Pleasant Valley Well).

Task 3 – Summary of Water Supply Alternatives and Prioritization

CEI will summarize the results of our evaluation and provide the District with a summary that will highlight the advantages and disadvantages of each water supply alternative. We will meet with the District in a workshop setting to review the initial findings of the evaluation. Relative risk of each alternative will be considered (i.e. likelihood of success, reliability of projected costs). A decision matrix will be used during the workshop, with each water supply alternative assigned a relative score for each factor/criterion (e.g. cost, resiliency), with the "weight" of each factor being adjustable to reflect the relative importance of each factor to the District.

CEI will prepare an updated summary of the three water supply alternatives. The updated summary will highlight the advantages and disadvantages along with a current opinion of probable cost and estimated schedule for implementation. Costs for each water supply alternative will be estimated inclusive of design, permitting, bid and construction. Land acquisition will be highlighted with a range of prospective costs, if feasible. Both initial capital (construction) cost and ongoing annual costs (purchase cost of water, maintenance requirements) will be estimated for the various options.

Estimated implementation schedules for the various alternatives will consider design, permitting, bid and construction.

The focus of this task is to provide a concise summary of the various options available to the District with the pertinent information (technical and cost) to assist the District in ultimately selecting the option that is best for the District. The evaluation criteria will be selected in consultation with the District and the relative risk (or uncertainty) of specific criteria and/or specific alternatives will be noted.

Task 4 – Report & Meetings

Upon completion of the evaluation, we will present the results and conclusions in a formal meeting with the District. A letter report will be developed summarizing the work completed for this project. A draft will be made available for review and comment by the District, with the final letter report following.

The letter report will document the evaluation process and will rely upon tabular information (comparison of alternatives with advantages, disadvantages, costs) and the decision matrix utilized during the initial alternatives screening workshop and final comparison of three selected alternatives. Existing reports of previous studies will be referenced for background information, but the background information will not be reiterated within the letter report.