TOWNSEND WATER DEPARTMENT

540 Main Street West Townsend, Massachusetts 01474

Michael MacEachern, *Chairman* Niles Busler, *Vice-Chairman* Nathan Mattila, *Clerk*

Paul L. Rafuse,
Water Superintendent

(978) 597-2212
Fax (978) 597-5561

1.5

MM noted 4-15-15

WATER COMMISSIONERS MEETING MINUTES

March 9, 2015 - 5:30P.M.

Water Department 540 Main Street, Meeting Room

I. PRELIMINARIES:

1.1 MM Called the meeting to order at 5:30 p.m. at 540 Main Street.

1.2 The roll call showed members present: Michael MacEachern-Chairman, Niles Busler-Vice Chairman and Nathan Mattila-Clerk. Guest present: Paul Rafuse, James Blanchard and Brenda Boudreau.

1.3 Announce that the meeting is being tape recorded.

1.4 Chairman's additions or deletions.

1.5 Review/Approve meeting minutes of February 18, 2015. **NB moved to approve the meeting minutes of February 8, 2015. NM seconded. Unanimous vote.**

1.6 The Board reviewed the correspondence between Carolyn and Cheryl Meservey. 3 Gemni Lane. No comment or action was made by customer.

II. APPOINTMENTS:

III. MEETING BUSINESS:

3.1 Discuss amending rules and regulations re: requirement for asbuilt drawings. **NM made a motion to approve the amendment to the Rules and Regulations for required asbuilt drawings. NB seconded. Unanimous vote.**

3.2 Modify Capital Plan to include cost to purchase and install new generators at the office and Main St station and upgrade the standby engine at Cross St station. MM asked to correct the language to reflect that Cross Street will need a NEW generator not an upgrade. It was tabled.

3.3 Review/Discuss/Sign Amendment to Personal Policies and Procedures Manual RE: Biweekly Payroll. **NM moved to approve and sign amending the personnel, policies and procedures referring to the bi-weekly payroll change. NB seconded. Unanimous vote.**

3.4 Formally sign previously approved Change Orders 1 & 2 of the SCADA project. The changes were (1). Addition of ultrasonic level transducers in the chemical storage tanks at the Main Street, Cross Street and Witches Brook 1&2 totaling $13, 764.95. (2) Elimination of the labor required to install new level transducers at the Fitchburg Road Tank and highland Street Tank sites totaling $(1,109.49).The Board signed the previously voted on change order.

3.5 Discuss results of pantonite treatment and recent developments regarding the Cross St. well. Paul reported that the pantonite did reduce the manganese levels at the Cross Street well, but not enough. The manganese level is still too high and Paul recommends flushing. A long term plan may result in locating an alternate well site which may cost somewhere between $300K-$400K.

3.6 Discuss/Approve estimating the remaining residential accounts that do not have radio meter reading transmitters due to the excessive snow fall. Paul reported that there is approximately 200 accounts left to convert to radio read. Those accounts will be estimated.

3.7 Discuss the use of another contractor to perform Cross-Connection Surveying and Backflow Preventer testing. Paul reported that Gary is ill and unable to perform the Backflow testing until

further notice. Paul met with Joe Heitz, president of water safety services in Woburn Ma. He will be performing the testing at a lower cost to the customer.

3.8 Discuss/approve/vote on Superintendent signing Adjustment form in lieu of BOWC for daily work. RE: NSF, Quarterly U/C adjustments. Etc. **NM moved to allow the superintendent to sign the adjustments for daily work. NB seconded. Unanimous vote.**

3.9 Discuss the subject of Water Department vehicle use by employees at recent Board of Selectmen's meetings. Paul discussed his displeasure with the BOS meeting discussing the accusations made referring to the vehicle policy use by a selectman.

3.10 Approve adjustment to acct #60989, John Leahy, $79.50 RE: NSF. **NB made a motion to approve the adjustment to account # 60989, John Leahy in the amount of $79.50. NM seconded. Unanimous vote.**

3.11 Approve adjustment to Country Estates, Acct#'s 60476, 60477, 60478, $287.50. RE: Quarterly UC adjustment. **NM moved to approve adjustments to the following accounts #60476, 60477 and 60478 in the amount of $287.50. NB seconded. Unanimous vote.**

3.12 Approve adjustment/abatement to acct# 60343, Edward Smith, 1 Fox Run, $150.63 User and -$12.17 late charges totaling $162.80. RE payment of 150.63 posted to acct #60353 in error. **See vote 3.14**

3.13 Approve adjustment to acct# 60353, Enrico Leal, 4 Fox Run $150.63 User. RE payment of 150.63 should have been posted to acct #60343. **NB made a motion to adjust account #60343, E Smith increase $162.80 and decrease acct #60353, $153.63. Post to wrong acct in error. NM seconded. Unanimous vote.**

3.14 Approve adjustment to acct #60117, Paula Woodman, 453 Main Street $1.86. RE: Customer did not realize payment to Unibank did not go through. **NB made a motion to approve adjustment to acct # 60117, P. Woodman $1.86 in late charges due to customer error. NM seconded. Unanimous vote.**

IV. COMMISSIONERS UPDATES AND REPORTS.

4.1

V. WATER SUPERINTENDENTS UPDATES AND REPORTS.

5.1 Paul reported that to date there has been eleven freeze ups costing the TWD $1100.00.

5.2 Paul reported that he had spoken to Mr. Dow, 529 Main Street about the proposed pipeline. He has attended several meetings and informed me he proposed a relocation of the line that would go through the right side of our property.

5.3 Paul reported that we needed replace our Comcast modem. This will increase our band width and accommodate all of our new software and SCADA programming.

VI. OFFICE UPDATES AND REPORTS.

6.1 The Board reviewed payroll.

6.2 The Board reviewed and signed February 2015 Schedule of Bills Receivable report.

6.3 The Board reviewed February 2015 Accounts Receivable report.

6.4 The Board reviewed February 2015 Appropriation Balance report.

6.5 Brenda reported on the Century Bank lockbox operation and the EZ Bill program to upload payments to customer accts automatically was successful.

VII. ADJOURNMENT:

MM adjourned the meeting at 7:05pm.

TOWNSEND WATER DEPARTMENT

540 Main Street West Townsend, Massachusetts 01474

Michael MacEachern, *Chairman* Niles Busler, *Vice-Chairman* Nathan Mattila, *Clerk*

Paul L. Rafuse,
Water Superintendent

(978) 597-2212
Fax (978) 597-5561

WATER COMMISSIONERS MEETING AGENDA

March 9, 2015 - 5:30P.M.

Water Department 540 Main Street, Meeting Room

I. PRELIMINARIES:

1.1 Call the meeting to order and announce meeting address.

1.2 Roll call.

1.3 Announce that the meeting is being tape recorded

1.4 Chairman's additions or deletions.

1.5 Review/Approve meeting minutes of February 18, 2015**(SF)**

1.6 Review correspondence.

II. APPOINTMENTS:

III. MEETING BUSINESS:

3.1 Discuss amending rules and reg's re: requirement for asbuilt drawings

3.2 Modify Capital Plan to include cost to purchase and install new generators at the office and Main St station and upgrade the standby engine at Cross St station.

3.3 Review/Discuss/Sign Amendment to Personal Policies and Procedures Manual RE: Biweekly Payroll **(SF)**

3.4 Formally sign previously approved Change Orders 1 & 2 of the SCADA project

3.5 Discuss results of Pantonite treatment and recent developments regarding the Cross St. well.

3.6 Discuss/Approve estimating the remaining residential accounts that do not have radio meter reading transmitters due to the excessive snow fall.

3.7 Discuss the use of another contractor to perform Cross-Connection Surveying and Backflow Preventer testing.

3.8 Discuss/approve/vote on Superintendent signing Adjustment form in lieu of BOWC for daily work. RE: NSF, Quarterly U/C adjustments. Etc.

3.9 Discuss the subject of Water Department vehicle use by employees at recent Board of Selectmen's meetings.

3.10 Approve adjustment to acct #60989, John Leahy, $79.50 RE: NSF. **(SF)**

3.11 Approve adjustment to Country Estates, Acct#'s 60476, 60477, 60478, $287.50. RE: Quarterly UC adjustment. **(SF)**

3.12 Approve adjustment/abatement to acct# 60343, Edward Smith, 1 Fox Run, $150.63 User and -$12.17 late charges totaling $162.80. RE payment of 150.63 posted to acct #60353 in error. **(SF)**

3.13 Approve adjustment to acct# 60353, Enrico Leal, 4 Fox Run $150.63 User. RE payment of 150.63 should have been posted to acct #60343. **(SF)**

3.14 Approve adjustment to acct #60117, Paula Woodman, 453 Main Street $1.86. RE: Customer did not realize payment to Unibank did not go through. **(SF)**

IV. COMMISSIONERS UPDATES AND REPORTS.

4.1

V. **WATER SUPERINTENDENTS UPDATES AND REPORTS.**

5.1

VI. **OFFICE UPDATES AND REPORTS.**

6.1 Review and Sign Bills Payable Warrants.

6.2 Review payroll.

6.3 Review and sign February 2015 Schedule of Bills Receivable report **(SF)**

6.4 Review February 2015 Accounts Receivable report.

6.5 Review February 2015 Appropriation Balance report.

**** (SF) signature folder**

VII. **ADJOURNMENT:**

1,5

TOWNSEND WATER DEPARTMENT

540 Main Street West Townsend, Massachusetts 01474

Michael MacEachern, *Chairman* Niles Busler, *Vice-Chairman* Nathan Mattila, *Clerk*
Paul L. Rafuse, (978) 597-2212
Water Superintendent *Fax* (978) 597-5561

WATER COMMISSIONERS MEETING MINUTES
February 18, 2015 - 5:30P.M.
Water Department 540 Main Street, Meeting Room

I. **PRELIMINARIES:**

1.1 MM called the meeting to order at 5:38 PM, 540 Main Street.

1.2 Roll call showed members present Michael MacEachern, Niles Busler and Nathan Mattila. Guests present Paul Rafuse and Brenda Boudreau.

1.3 MM announced that the meeting is being tape recorded

1.4 Chairman's additions or deletions. None

1.5 **NM made a motion to accept the meeting minutes of January 12, 2015. NB seconded. Unanimous vote.**

1.6 The Board reviewed the correspondence.

II. **APPOINTMENTS:** None

III. **MEETING BUSINESS:**

3.1 The Board discussed amending rules and reg's re: requirement for asbuilt drawings. Paul submitted a draft for approval. Tabled. The Board will review for the March meeting.

3.2 Modify Capital Plan to include cost to purchase and install new generators at the office and Main St station and upgrade the standby engine at Cross St station. Tabled

3.3 Paul reported that the Highway Department has already started to maintain Kimplen Court.

3.4 The Board discussed amending specifications for meter pit size requirements. Tabled

3.5 **NM made a motion to approve the adjustment to acct #60524, Eugene Champagne $85.50 due to the payment made to Unibank twice. NB seconded. Unanimous vote.**

IV. **COMMISSIONERS UPDATES AND REPORTS.**

V. **WATER SUPERINTENDENTS UPDATES AND REPORTS.**

5.1 Paul reported the Highland St. Tank testing results for the month was clean.

VI. **OFFICE UPDATES AND REPORTS.**

5.4 The Board reviewed and signed bills payable warrants out of session.

5.5 The Board reviewed the payroll.

5.6 The Board reviewed and signed the January 2015 Schedule of Bills Receivable report

5.7 The Board reviewed the January 2015 Accounts Receivable report.

5.8 The Board did not review January 2015 Appropriation Balance report. It was unavailable.

VII. **ADJOURNMENT: NM made a motion to adjourn the meeting at 6:10 pm and sign the warrants out of session. NB seconded. Unanimous vote.**

1.6

To: Cheryl Meservey <cmes912@gmail.com>
Subject: Re: Please remove late charges from my account
Cc: prafuse@townsend.ma.us, brenda Boudreau <bboudreau@townsend.ma.us>

Hi Cheryl,

I will certainly put your request before the Commissioners to decide, however, I just wanted to let you know the due date for payment was February 15, 2015 and late charges were applied to the accounts on February 19, 2015.

Without trying to decide for the Water Commissioners, I am not sure they will agree that a check dated and mailed on February 14, 2015 would be here in time.

If you still want me to put this on the next agenda for them to decide, please let me know.

Thank you and I do apologize for the inconvenience.

Carolyn

At 10:47 AM 2/27/2015, you wrote:

> Hello-
>
> Please remove the late charge and demand charge from my account #4960 for Stephen Meservey, 3 Gemini Lane. We paid the bill on time. The date on the check was 2/14 and it was mailed within a day of that date. We understand that there may have been issues with mail delivery at that time due to the weather conditions.
>
> Thank you.
>
> --
> Cheryl Meservey
>
> Â

No response from Owners to Add it to the March Agenda.

1.6

To: Cheryl Meservey <cmes912@gmail.com>
Subject: Re: Please remove late charges from my account
Cc: prafuse@townsend.ma.us, brenda Boudreau <bboudreau@townsend.ma.us>

Hi Cheryl,

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Carolyn

At 10:47 AM 2/27/2015, you wrote:

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>
> Thank you.
>
> --
> Cheryl Meservey
>
> Â

Current Regulation

2.4 Installation and repairs between the curbstop and the inlet side of the water meter will be made by the Water Department. The customer will be charged for work done by the Water Department for materials used at cost, plus 10% and labor, and equipment charges plus 20%.

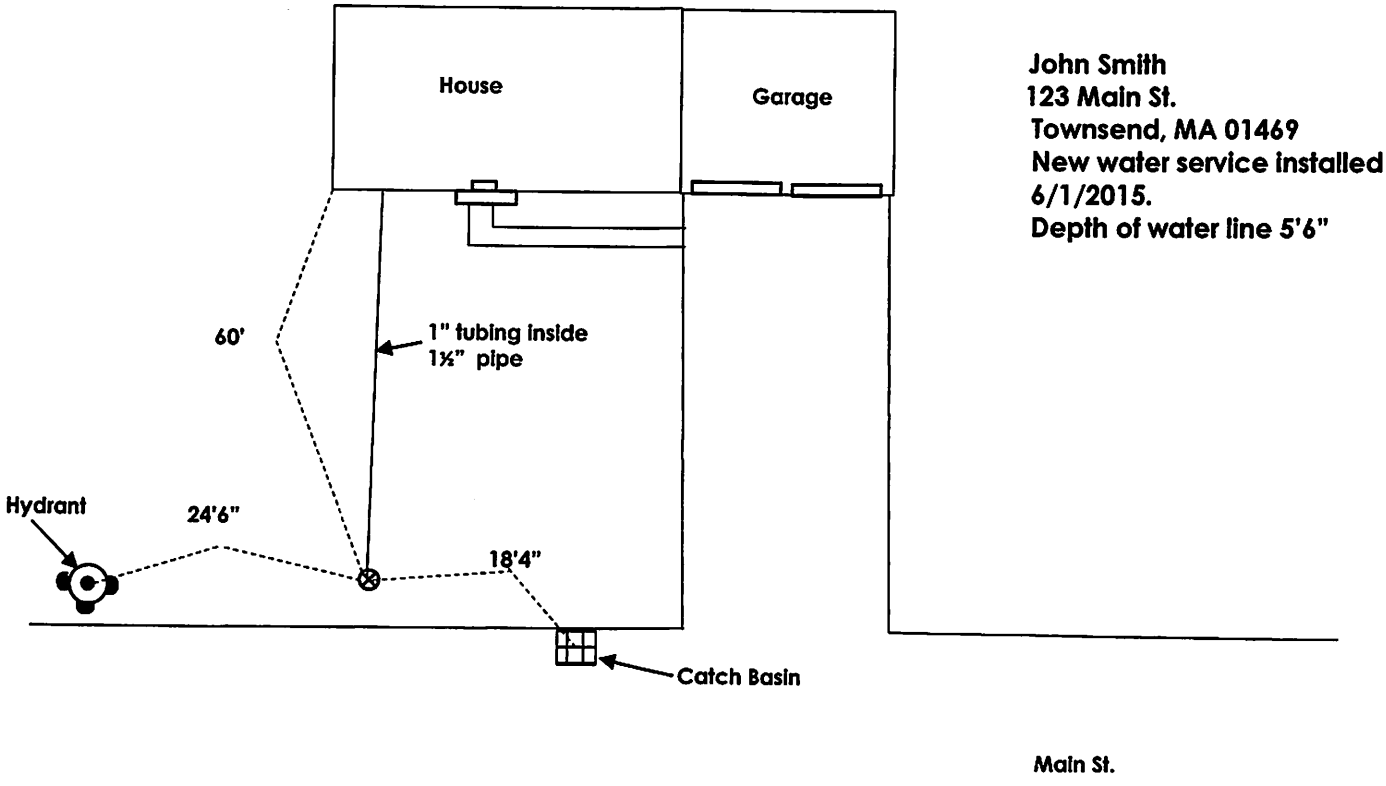
To Be Replaced By:

Amendment to Sec. 2, Subsection 2.4

Installation and repairs between the curbstop and the inlet side of the water meter can be made by the Water Department or an outside contractor. The customer will be charged by the Water Department for equipment, labor and materials used or provided to the contractor. Work performed and materials used by outside contractors shall strictly conform to the Townsend Water Department specifications. All service installations whether new, replaced or repaired shall be inspected by a Water Department Technician or Superintendent prior to backfilling. Outside contractors installing or replacing services shall provide a clear and, legible AS BUILT drawing illustrating the location of the following:

- Curbstop
- Connectors
- Meter Pits
- Size of service line and sleeve
- Obstruction/s causing an alternate route of the service
- Location where the service enters the building

All AS BUILT drawings shall have a minimum of two (2) ties from permanent structures (i.e. building corners, hydrants, gate covers, manhole covers, catch basins and, property bound posts.
AS BUILTS shall be provided to the Water Department prior to the water service being turned on.



3.3

Office of the
BOARD OF SELECTMEN
272 Main Street
Townsend, Massachusetts 01469

Sue Lisio, *Chairman* | Colin McNabb, *Vice-Chairman* | Carolyn Smart, *Clerk*
Andrew J. Sheehan, *Town Administrator*
Office (978) 597-1701
Fax (978) 597-1719

MEMORANDUM

TO: Board of Assessors
Board of Health
Board of Selectmen
Board of Water Commissioners
Cemetery & Parks Commission
Library Trustees
Planning Board
Recreation Commission
Trustees of Soldiers Memorials
Amanda Dwight Entertainment Fund Committee
Housing Authority

FROM: Andrew J. Sheehan, Town Administrator

DATE: March 2, 2015

SUBJ.: Amendment to Personnel Policies & Procedures Manual
Biweekly Payroll

The Treasurer-Collector has identified a cost savings if the Town converts from weekly payroll to biweekly payroll. The savings will be manifested in improved efficiency in the Treasurer-Collector's Office and will have no effect on any employee's pay. All of the Town's unions have agreed to the move.

The Town's Non-Contractual Personnel Policies & Procedures Manual states that payroll is processed weekly. Chapter 90 Personnel Policies of the Townsend Code states: "Any noncontractual personnel policy and/or procedure of the Town as affirmatively voted and signed off by the majority of elected boards and commissions shall be applicable to all noncontractual Town employees." Therefore, in order to make the change to biweekly payroll a majority of elected boards and commissions must vote to agree to the change.

In order to effect the change from weekly to biweekly payroll the following section of the Personnel Policies & Procedures Manual must be amended. Deleted language is indicated with strikethrough and proposed language is underlined:

GENERAL PROVISIONS

PAYDAY

Payday is ~~every Thursday~~ every other Thursday for the previous ~~week~~ two weeks worked. The workweek is the seven-day period commencing Sunday at 12:01 A.M. and extending through the following Saturday, midnight. The pay period is the fourteen day period commencing Sunday at 12:00AM and extending through Saturday at 11:59PM fourteen days following. If a payday falls on a holiday, employees will be paid the preceding business day.

Approved by majority vote of the UNANIMOUS (Elected board or commission) this 9TH

day of MARCH, 2015.

Chairman's signature: _____.

Please return this form to the Board of Selectmen's Office by March 25, 2015.

Five Centennial Drive
Peabody, MA 01960-7985
tel: 978-532-1900 fax: 978-977-0100
www.westonandsampson.com

Weston&Sampson
CMR, INC.
CONSTRUCTION / MAINTENANCE / REPAIR

January 6, 2015

Townsend, MA
Project No. M2140254

Louis A Soracco, P.E.
Project Manager
Stantec Consulting Services
5 LAN Drive, Suite 300
Westford, MA 01886

Water System SCADA System Upgrade
Project Change Order No. 1

Dear Mr. Soracco:

As requested, **Weston & Sampson CMR, Inc.** (W&S CMR) is pleased to submit this change order to furnish and install ultrasonic level transmitters in the chemical storage tanks at the Town's pump stations. The pump stations, transmitter model numbers and costs are listed in detail below:

A. Stations/Proposed Transmitters

Station	Proposed Transmitter
Main Street	Siemens 7ML 521-2BA11
Cross Street	Siemens 7ML 521-2BA11
Witch's Brook No. 1	Siemens 7ML 521-2BA11
Witch's Brook No. 2	Siemens 7ML 521-2BA11

B. Costs

- Materials
  - Ultrasonic Transmitters – Actual Cost $4,300 x 1.15 (M.U. and profit) = $ 4,945.00
  - Mounting Flanges – Actual Cost $750 x 1.15 = $ 862.50
  - Conduit – Actual Cost $1,000 x 1.15 = $ 1,150.00
  - Subtotal Materials = $ 6,957.50
- Additional SCADA programming (Subcontractor) $1,200 x 1.05 = $ 1,260.00
- Labor
  - 50 man hours x $59.65 x 1.55 (Direct Payroll Expense) x 1.20 (OH&P.) = $ 5,547.45
- **Total Change Order No. 1 = $13,764.95**

Attachment A contains the data sheets for the transmitters.

Please review this submittal and call me at (978) 532-1900 ext 2440 or e-mail me at richards@wseinc.com. with any questions.

Sincerely,

Weston & Sampson CMR, Inc.

Stephen J. Richard, P.E., C.P.O.
Vice President

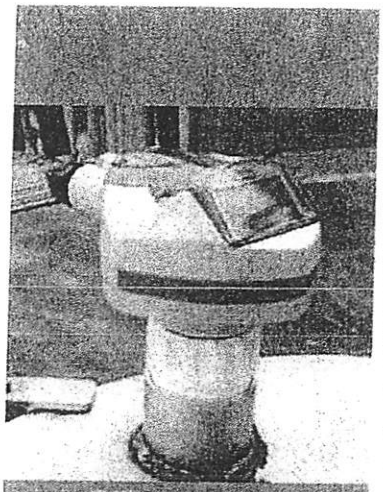
T:\CMR\Townsend Water Dept\SCADA System M2140254\Change Orders\Change Order No. 1 Revised- Level Transmitters.docx

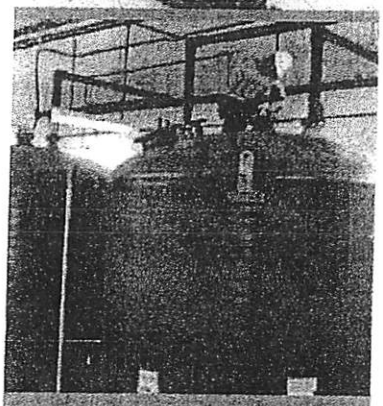
ATTACHMENT A

ULTRASONIC EQUIPMENT DATA SHEETS

APPENDIX A

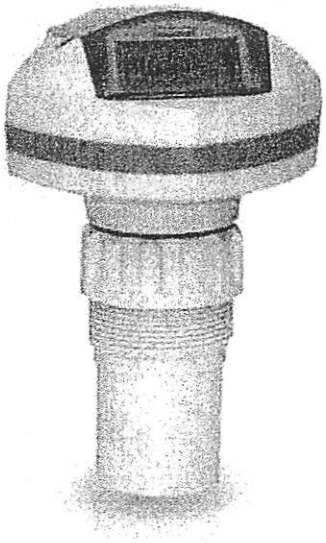
TECHNICAL INFORMATION





Unbeatable accuracy in ultrasonic level measurement

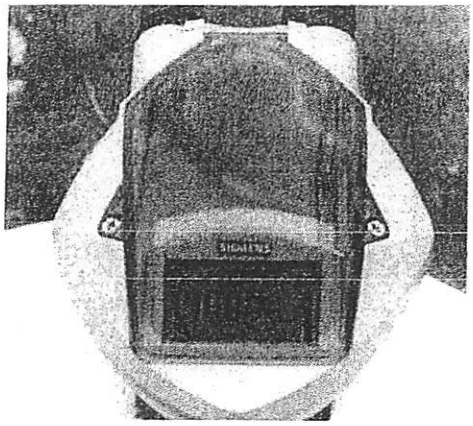
With the reliability of Sonic Intelligence echo processing

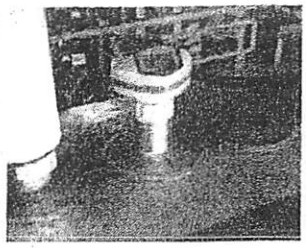


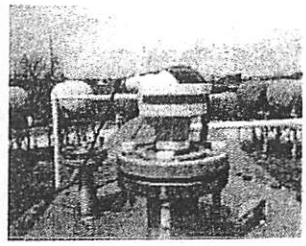
SITRANS Probe LU

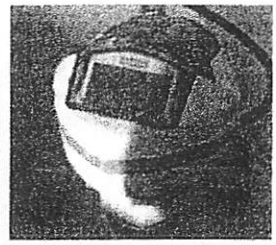
Answers for industry.

SIEMENS









Unbeatable accuracy

With an accuracy of 0.15%, SITRANS® Probe LU sets the standard for precision in ultrasonic level measurement transmitters. Its high signal-to-noise ratio results in a longer measurement range, and the patented Sonic Intelligence® echo processing engines reliability and accuracy.

The ultrasonic SITRANS Probe LU is ideal for measuring storage vessels, filter beds, and open channels in the water/wastewater, food, and chemical industries.

- Simple setup and programming with handheld infrared programmer or via PC software
- Sonic Intelligence – our field-proven echo processing algorithms guarantee the most reliable performance available
- Unmatched beam angle – stronger pulse and sensitivity in a compact beam make our ultrasonics transducers the most accurate in the industry
- Million in one – our products have the field experience of over a million points of level built into every device
- Global network – sales and support in your neighborhood. Our extensive global coverage means you get sales and support when and where you need it.

SITRANS Probe LU

Power	
HART® version	• Nominal 24 V DC with max. 550 Ω loop resistance • Maximum 30 V DC • 4 to 20 mA
PROFIBUS PA version	Bus powered, as per IEC 61158-2; 12, 13, 15, or 20 mA depending on programming (General Purpose or Intrinsically Safe version)
Performance	
Measurement range	• 6 m (20 ft) model: 0.25 to 6 m (10" to 20 ft), liquid applications • 12 m (40 ft) model: 0.25 to 12 m (10" to 40 ft), liquid applications
Accuracy	± the greater of 0.15% of range or 6 mm (0.24")
Repeatability	≤ 3 mm (0.12")
Frequency	54 kHz
Update time	HART version: ≤ 5 seconds at 4 mA PROFIBUS PA version: ≤ 4 seconds at 15 mA current loop
Interface	
Display	Built-in alpha-numeric display – visible through transparent lid
Communication	• HART • PROFIBUS PA
Programming	• Patented infrared handheld programmer • SIMATIC® PDM
Outputs	HART version: 4 to 20 mA range, ± 0.02 mA accuracy PROFIBUS PA version: Profile 3, Class B
Mechanical	
Enclosure	• PBT (polybutylene terephthalate) body • Type 4X/NEMA 4X, Type 6/NEMA 6/IP67/IP68 enclosure • Cable inlet: 2 x M20x1.5 cable gland or 2 x ½" NPT thread
Process connection	• Threaded connection: 2" NPT, BSP or G/PF • Flange connection: 3" (80 mm) universal flange • Other connection: FMS 200 mounting bracket
Sensor	Transducer options: ETFE (ethylene tetrafluouroethylene) or PVDF (Polyvinylidene Fluoride)
Process conditions	
Ambient temperature	-40 to 80 °C (-40 to 176 °F)
Process temperature	-40 to 85 °C (-40 to 185 °F)
Pressure (vessel)	0.5 bar g(7.25 psi g)
Approvals	
	CE, $CSA_{us/c}$, C-Tick, FM, ANZEx, IECEx, ATEX HART version: Lloyd's Register of Shipping, ABS Type approval

7ML1996-5KG03
Printed in Canada

SECTION 00820a

CHANGE ORDER

Project Number	**195111966**
Contract Number	**N/A**
Change Order Number	**2**

Contract Amount (As Bid)	**$156,249.00**
Net Change in Contract Price (this Change Order)	**$12,655.46**
Net Change in Contract Price (all other Change Orders)	**$22,225.00**
Total Adjusted Contract Price	**$191,129.46**

This Change Order extends the time to complete the Work by: ..... **20** calendar days

The extended completion date is: ..... **See Agreement**

This Change Order is recommended by: **Stantec**

Louis A. Soracco	**47126**	1/30/15
	P.E. #	Date

The undersigned agree to the terms of the Change Order and certifies that such Change Order is in conformance with M. G. L. C.30, Section 39I.

Contractor: **Weston & Sampson CMR, Inc.**

Date

Owner: **Townsend Water Commissioners**

3-9-15

3-9-15

3-9-15

Date

Owner: **Board of Selectmen**

Date

Certification of Appropriation under M. G. L. C.44, Section 31C: Adequate funding in an amount sufficient to cover the total cost of this Change Order is available.

By:

Theresa Walsh, Town Accountant — Date

Public Entity: ..... **Townsend Water Department**

Project Number: ..... **195111966** Contract Number: **N/A** Change Order Number: **2**

Contract Title: ..... **Water System SCADA System Upgrade**

Owner's Name: ..... Townsend Water Department

Owner's Address: ..... 540 Main Street, West Townsend, MA 01474

Contractor's Name: ... Weston & Sampson CMR, Inc.

Contractor's Address: Five Centennial Drive, Peabody, MA 01960-7985

Description of Change

This Change Order includes the costs for the following changes:

1. Addition of ultrasonic level transducers in the chemical storage tanks at Main Street, Cross Street, Witch's Brook No. 1 and Witch's Brook No. 2.
    a. Change in Contract = $13,764.95
2. Elimination of labor required to install new level transducers at the Fitchburg Road Tank and Highland Street Tank sites.
    a. Change in Contract = -$1,109.49

This increases the contract amount by **$12,655.46**

Reason for Change

These changes are being requested for the following reasons:

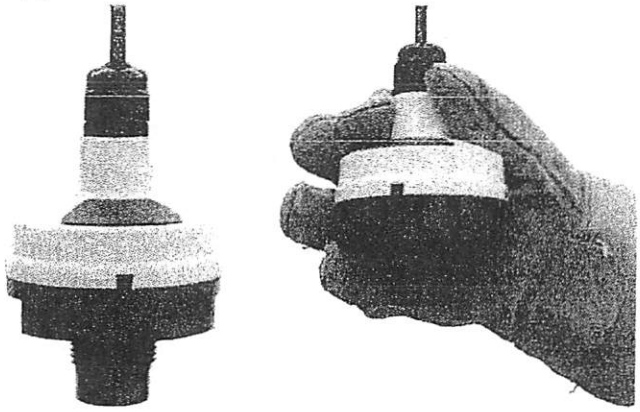
1. Ultrasonic level transducers will allow the Town to monitor and automatically record chemical volumes and usage.
2. New level transducers are being provided under this contract to replace the existing transducers at the two storage tanks. It has been determined that the existing transducers will integrate into the new SCADA system. The new transducers will be stored by the Town and kept as backups in the event the existing transducers stop working.

END OF SECTION

EchoPod® DL24 Ultrasonic Level Transmitter, Switch & Controller

FLOWLINE®

Application



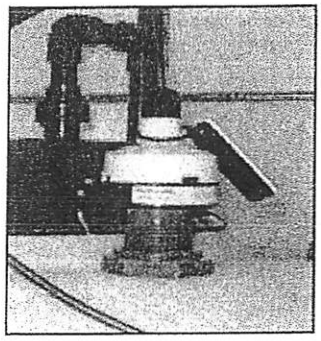
The general purpose ultrasonic level transmitter provides continuous level measurement up to 9.8' (3m) with a 4-20 mA signal output, and is configured via our free Webcal software. The level sensor has 4 programmable relays with selectable hysteresis and fail-safe logic. The embedded level controller can lower cost by replacing external control hardware. This non-contact liquid level sensor is ideally suited for corrosive, sticky or dirty liquids, and is widely selected for day tank, skid, IBC, sump and process tank level applications.

RoHS Compliant CE FM APPROVED

Features

- Level detection, switch and control functions up to 9.8' (3m)
- Configuration is fast and easy via WebCal software and USB adapter
- Narrow 2" beam width and short 4" dead band optimized for small tanks
- Four programmable relays for switch, pump or valve control and fail-safety
  - 1 pump or valve with 3 alarms
  - 2 pumps (lead-lag) with 2 alarms
  - 2 pumps (duplexing) with 2 alarms
  - 4 independent switch point alarms
- PVDF transducer and 6P polycarbonate enclosure for corrosive liquids
- Automatic temperature compensation for accurate measurement

Success



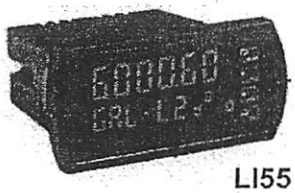
About 1.3M polyethylene tanks are sold in North America each year ranging in size from 1 to 15,000 gallons. Most of these are less than 6' in height with capacities under 500 gallons. The largest markets are industrial manufacturing, municipal, agriculture and residential in chemical, water & wastewater applications. Over the past 10 years, customers have moved toward the use of smaller storage tanks with increased automation to lower cost. Today, mini-bulk tanks are a major product category. Flowline has developed a new multi-function sensor to meets the needs of this growing market. The DL24 EchoPod puts non-contact level measurement, relay switch and advanced control functions in the palm of your hand.

Compatible Products

DataLoop™
Level Indicator

LI25

DataView™
Level Controller

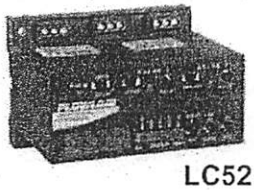


LI55

Commander™
Multi-Tank Level Controller

LI90

DataPoint™
Level Controller



LC52

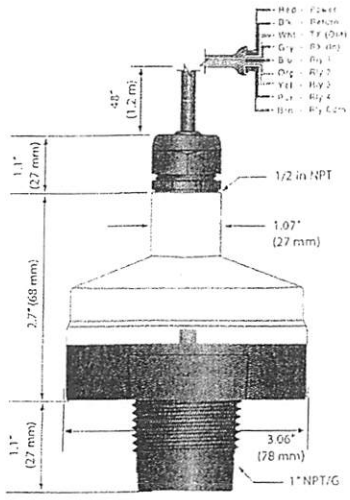
EchoPod® DL24 Ultrasonic Level Transmitter, Switch & Controller

FLOWLINE®

Specifications

Range:	9.8' (3m)
Accuracy:	± 0.2% of range
Resolution:	0.039" (1mm)
Dead band:	4" (10cm)
Beam width:	2" (5.08cm)
Configuration:	WebCal® PC Windows® USB 2.0
Memory:	Non-volatile
Supply voltage:	24 VDC (loop)
Consumption:	0.5W
Loop resist.:	400Ω max
Signal output:	4-20 mA, two-wire
Signal invert:	4-20 mA or 20-4 mA
Signal fail-safe:	4 mA, 20 mA, 21 mA, 22 mA or hold last
Contact type:	(4) SPST relays
Contact rating:	60 VA, 1A maximum
Contact fail-safe:	Power loss: Hold last Echo loss: Open, close or hold last
Hysteresis:	Selectable
Process temp.:	F: 20° to 140° C: -7° to 60°
Temp. comp.:	Automatic
Ambient temp.:	F: -31° to 140° C: -35° to 60°
Pressure:	MWP = 30 PSI (2 bar)
Enclosure rating:	Type 6P, encapsulated, corrosion resistant & submersible
Encl. material:	Polycarbonate
Trans. material:	PVDF
Cable jacket mat:	Polyurethane
Cable type:	9-conductor, shielded
Cable length:	48" (1.2m)
Process mount:	1" NPT (1" G)
Mount gasket:	Viton®
Classification:	General purpose
Compliance:	CE, RoHS
Approvals:	cFMus

Dimensions



Configuration

LI99-1001

The level sensor is configurable via our free WebCal PC software and Fob USB adapter. The sensors are offered with and without Fobs. Fobs are universal and can be used to configure any WebCal compatible product.

Download your free copy of WebCal in English or Chinese at www.flowline.com/webcal.php.

Fittings

For optimum performance, install the level sensor using the below recommended or direct equivalent fittings.

	P/N	Description
	LM52-1400	2" NPT x 1" NPT (Sch. 40)
	LM52-1800	2" NPT x 1" NPT (Sch. 80)
	LM52-1410	2" Socket x 1" NPT (Sch. 40)
	LM52-1810	2" Socket x 1" NPT (Sch. 80)
	LM52-1850	1" NPT Flange - 150# (Sch. 80)
	LM50-1001-1	1" NPT Bracket, Polypropylene

Ordering

DL24-□□

Process mount (1)
- *0 NPT (US)*
- *1 G (Metric)*

Fob USB adapter (2)
- *0 Without Fob*
- *1 With Fob*

Notes

1) Install the level sensor using Flowline installation fittings or equivalents.
2) The level sensor is configured via our WebCal software and one LI99-1001 Fob USB adapter. The level sensor is offered with and without a Fob. Fobs are universal and can be used to configure any WebCal compatible product. WebCal is a free download from our website at www.flowline.com/webcal.php.

Townsend Water

Proposal to install ultrasonic transmitters in chemical tanks

-West Meadow Booster	Siemens 7ML 521-2BA11
-Main Street	Siemens 7ML 521-2BA11
-Cross Street	Siemens 7ML 521-2BA11
-Witches Brook #1	Siemens 7ML 521-2BA11
-Witches Brook #2	Siemens 7ML 521-2BA11
-Harbor Trace	Flowline DL24 (day tank)

Material

Ultrasonics	$5,950.00
Mounting flanges	$700.00
Conduit	$1,200.00

Installation time and startup 90 MH

Additional SCADA programming $1,200.00

Five Centennial Drive
Peabody, MA 01960-7985
tel: 978-532-1900 fax: 978-977-0100
www.westonandsampson.com

Weston&Sampson
CMR, INC.
CONSTRUCTION / MAINTENANCE / REPAIR

January 6, 2015

Townsend, MA
Project No. M2140254

Louis A Soracco, P.E.
Project Manager
Stantec Consulting Services
5 LAN Drive, Suite 300
Westford, MA 01886

Water System SCADA System Upgrade
Project Change Order No. 2

Dear Mr. Soracco:

As requested, **Weston & Sampson CMR, Inc.** (W&S CMR) is pleased to submit this change order to deduct labor for installation of ultrasonic level transmitters at the Highland and Fitchburg Tanks. Both tanks have existing transmitters that are in good condition and compatible with the new units. The new units will be delivered as spares. The Cost for this change order is outlined below:

A. Costs

- Labor
  - 8 man hours x $59.65 x 1.55 (Direct Payroll Expense) x 1.20 (OH&P.) = $1,109.49
- **Total Change Order No. 2 Deduct = -$1,109.49**

Please review this submittal and call me at (978) 532-1900 ext 2440 or e-mail me at richards@wseinc.com. with any questions.

Sincerely,

Weston & Sampson CMR, Inc.

Stephen J. Richard, P.E., C.P.O.
Vice President

T:\CMR\Townsend Water Dept\SCADA System M2140254\Change Orders\Change Order No. 2 - Level Transmitter Deduct.docx

6.3

TOWNSEND WATER DEPARTMENT

540 Main Street West Townsend, Massachusetts 01474

Michael MacEachern, *Chairman* Niles Busler, *Vice Chairman* Nathan Mattila, *Clerk*
Paul L. Rafuse,
Water Superintendent
(978) 597-2212
Fax (978) 597-5611

NO. 15-8
2/28/2015

SCHEDULE OF BILLS RECEIVABLE

To the Accountant:
Treasurer:

The following bills, amounting in the aggregate to

TWO HUNDRED TWENTY-FIVE THOUSAND THREE HUNDRED FIFTY-ONE AND 14/100********** Dollars

are herewith committed for collection.

DATE	USER CHARGES	SERVICE CHARGES	CONN CHARGES	BACK FLOW
02/28/15	446.50	75.00	0.00	0.00

BOARD OF WATER COMMISSIONERS

Michael MacEachern, Chairman

Niles Busler, Vice-Chairman

Nathan Mattila, Clerk

[illegible]

3.5

MAHER services ™

71 Concord Street
North Reading, MA 01864
Tel: 978-664-WELL (9355) Fax: 978-664-9356
www.maherserv.com

3/3/2015

Paul Rafuse
Townsend Water Department
540 Main Street
P.O. Box 17
Townsend, MA 01469-0017
paulr@townsendwater.com

RE: Cross Street
Townsend, MA

Dear Paul,

Well Diameter – 24"
Well Depth – 43'
Screen Length – 5' 100 slot

On February 24, 2015 we conducted a flow test and the well showed a specific capacity of 25 GPM/ft @ 314 GPM. After the test 55 gallons of Pantonite PM was injected into the screened area. The pump was started 5 times at closed head to mix the Pantonite. The chemical was left in the well to react.

On February 26, 2015 the well was pumped to a settling tank where the discharge water was neutralized with soda ash. We conducted a flow test and the well showed a specific capacity of 25.4 GPM/ft @ 310 GPM.

Iron and manganese samples were taken before and after the injection of Pantonite. Certificates of analysis are attached.

	Iron	Manganese
Before Pantonite	1.8	0.12
After Pantonite	0.85	0.092

If you need further information please contact us.

Sincerely,
MAHER SERVICES, INC.

Peter Maher
pmaher@maherserv.com

Nashoba Analytical, LLC Tel: 978-391-4428 Fax: 978-391-4643
31A Willow Road, Ayer MA 01432 Website: http://www.NashobaAnalytical.com

LabNumber: **153354**

Use this number with all correspondence

Client:
Maher Services
71 Concord Street
North Reading, MA 01854

ReportDate: 2/25/2015

Certificate of Analysis

Cross Street Well, Townsend, MA

Parameter	Method		Result	MCL	MRL	Date of Analysis	Analyst
- Well Head							
Sampled: 2/24/2015 12:00:00 PM by Client							
Iron, MG/L	EPA 200.7	#	1.8	0.3	0.003	2/25/2015	M-MA1118
Manganese, MG/L	EPA 200.7	#	0.12	0.05	0.002	2/25/2015	M-MA1118

MCL=Maximum Contaminant Level (EPA Limit), MRL = Minimum Reporting Level
Sodium Guidelines- Mass 20, EPA 250, # = Result Exceeds Limit or Guideline
ND = None Detected (<MRL), * = Background Bacteria Noted

Massachusetts Certified
Laboratory #M-MA1118

David L. Knowlton
Laboratory Director

Nashoba Analytical, LLC Tel: 978-391-4428 Fax: 978-391-4643
31A Willow Road, Ayer MA 01432 Website: http://www.NashobaAnalytical.com

LabNumber: **153430**

Use this number with all correspondence

Client:

Maher Services
71 Concord Street
North Reading, MA 01854

ReportDate: 3/2/2015

Certificate of Analysis

Cross Street Well, Townsend, MA

Parameter	Method		Result	MCL	MRL	Date of Analysis	Analyst
- Well Head							
Sampled: 2/26/2015 1:30:00 PM by A. Proctor							
Iron, MG/L	EPA 200.7	#	0.85	0.3	0.003	3/2/2015	M-MA1118
Manganese, MG/L	EPA 200.7	#	0.092	0.05	0.002	3/2/2015	M-MA1118

MCL=Maximum Contaminant Level (EPA Limit), MRL = Minimum Reporting Level
Sodium Guidelines- Mass 20, EPA 250, # = Result Exceeds Limit or Guideline
ND = None Detected (<MRL), * = Background Bacteria Noted

Massachusetts Certified
Laboratory #M-MA1118

David L. Knowlton
Laboratory Director

[illegible]

3.10

TOWN OF TOWNSEND
BOARD OF WATER COMMISSIONERS
APPLICATION TO ABATE OR ADJUST CHARGES

Name: John Leahy Account # 60989

Address: 326 Warren Road

Phone # _____ Email Address _____

Billing date _____

AMOUNT: _____ ABATEMENT [ ] ADJUSTMENT [X] (check one)

REQUESTED BY: CUSTOMER [ ] OFFICE [ ] OTHER [X] - if other please explain below:

Reasons: (please attached supporting documentation if applicable) Treasurer

NSF 79.50 user

APPROVED [✓] DENIED [ ] (check one)

DATE: 3-9-15

TOWNSEND BOARD OF WATER COMMISSIONERS

3.11

TOWN OF TOWNSEND
BOARD OF WATER COMMISSIONERS
APPLICATION TO ABATE OR ADJUST CHARGES

Name: Country Estates

Account # 60476 - 60477 60478

Address: Turnpike Road -

Phone # _____ Email Address _____

Billing date _____

AMOUNT: (287.50) ABATEMENT [ ] ADJUSTMENT [ ] (check one)

REQUESTED BY: CUSTOMER [ ] OFFICE [ ] OTHER [ ] - if other please explain below:

Reasons: (please attached supporting documentation if applicable)

BOWC voted to Adjust the unit charge for empty units. This is a reoccurring Quarterly Charge -

APPROVED [✓] DENIED [ ] (check one)

DATE: 3-9-15

TOWNSEND BOARD OF WATER COMMISSIONERS

3.12

TOWN OF TOWNSEND
BOARD OF WATER COMMISSIONERS
APPLICATION TO ABATE OR ADJUST CHARGES

Name: ED Smith Account # 60343

Address: 1 Fox Run

Phone # 9/12/14 Email Address

Billing date

AMOUNT: 162 80 user ABATEMENT [ ] ADJUSTMENT [ ] (check one)

REQUESTED BY: CUSTOMER [ ] OFFICE [ ] OTHER [ ] - if other please explain below:

Reasons: (please attached supporting documentation if applicable)

150.63 } 162.80
(-12.17) } user

APPROVED [✓] DENIED [ ] (check one)

DATE: 3-9-15

TOWNSEND BOARD OF WATER COMMISSIONERS

Posted to wrong Acct - Should have been posted to 60343 - Abate 12.17 for 4c that were applied & pd 86 w/ last Payment - Total 162.86

3.13

TOWN OF TOWNSEND
BOARD OF WATER COMMISSIONERS
APPLICATION TO ABATE OR ADJUST CHARGES

Name: 60 Leal Enaco. Account # 60353

Address: 4 Fox Run

Phone # _____ Email Address _____

Billing date 9/12/14.

AMOUNT: 150.63 ABATEMENT [ ] ADJUSTMENT [X] (check one)

REQUESTED BY: CUSTOMER [ ] OFFICE [ ] OTHER [ ] - if other please explain below:

Reasons: (please attached supporting documentation if applicable)

(150.63) payment should have been posted to ACCT 60343

(See Adjustment to ACCT #60343)

APPROVED [✓] DENIED [ ] (check one)

DATE: 3-9-15

transfer 150.63 → ACCT # 60343

TOWNSEND BOARD OF WATER COMMISSIONERS

3.14

TOWN OF TOWNSEND
BOARD OF WATER COMMISSIONERS
APPLICATION TO ABATE OR ADJUST CHARGES

Name: Paula Woodman Account # 6047

Address: 453 Main St

Phone # 597-2061 Email Address

Billing date $1.86

AMOUNT: ABATEMENT [ ] ADJUSTMENT [ ] (check one)

REQUESTED BY: CUSTOMER [ ] OFFICE [ ] OTHER [ ] - if other please explain below:

Reasons: (please attached supporting documentation if applicable)

$1.86

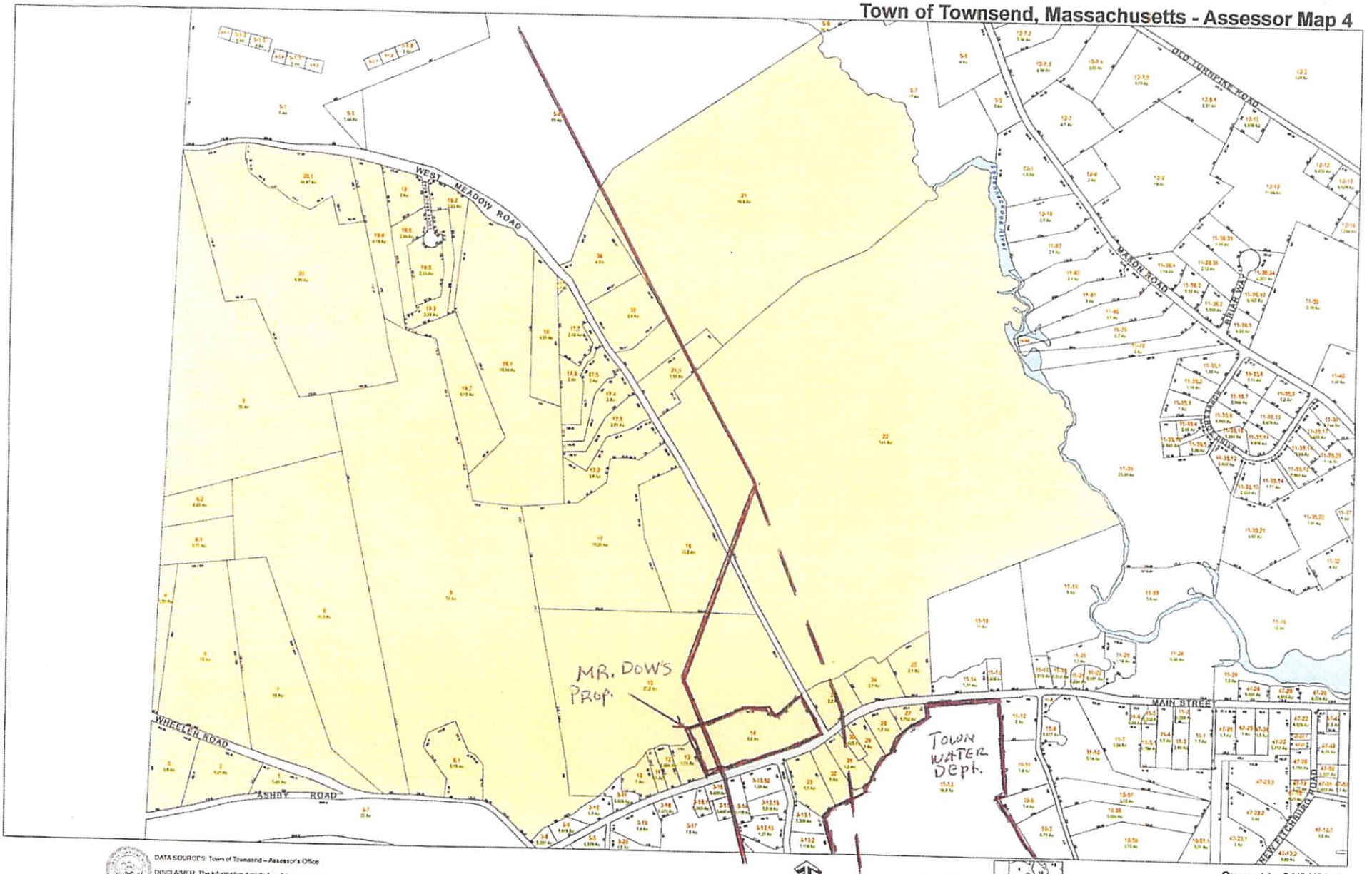
Customer thought she had made a payment to Unibank - see email

APPROVED [✓] DENIED [ ] (check one)

DATE: 3-9-15

TOWNSEND BOARD OF WATER COMMISSIONERS

Town of Townsend, Massachusetts - Assessor Map 4



DATA SOURCES: Town of Townsend – Assessor's Office

DISCLAIMER: The information depicted on this map is for planning purposes only.
All data are representational and are not adequate for boundary definition, regulatory interpretation, or parcel-based analysis

0 200 400 Feet

Current to 01/01/2011

TGP Route

ALTERNATE ROUTE PROPOSED BY MR. DOW

6.3

TOWNSEND WATER DEPARTMENT

540 Main Street West Townsend, Massachusetts 01474

Michael MacEachern, *Chairman* Niles Busler, *Vice Chairman* Nathan Mattila, *Clerk*

Paul L. Rafuse,
Water Superintendent

(978) 597-2212
Fax (978) 597-5611

NO. 15-8
2/28/2015

SCHEDULE OF BILLS RECEIVABLE

To the Accountant:
Treasurer:

The following bills, amounting in the aggregate to

TWO HUNDRED TWENTY-FIVE THOUSAND THREE HUNDRED FIFTY-ONE AND 14/100********** Dollars

are herewith committed for collection.

DATE	USER CHARGES	SERVICE CHARGES	CONN CHARGES	BACK FLOW
02/28/15	446.50	75.00	0.00	0.00

BOARD OF WATER COMMISSIONERS

Michael MacEachern, Chairman

Niles Busler, Vice-Chairman

Nathan Mattila, Clerk

6.4

FISCAL YEAR 15 SUMMARY

TOWNSEND WATER DEPARTMENT - ACCOUNTS RECEIVABLE

2/28/2015

UNCOLLECTED FROM JUNE 30, 2014				**83,934.69**
CHARGED 07/01/14- 02/28/15	**2/28/2015**	**Previous Balance**	**Total**	
USER CHARGES	446.50	784,995.95	785,442.45	
SERVICE CHARGES	75.00	23,681.45	23,756.45	
CONNECTION CHARGES	0.00	30,600.00	30,600.00	
LATE CHARGES	2,376.16	10,143.82	12,519.98	
BACKFLOW	0.00	3,500.00	3,500.00	
SUBTOTAL	**2,897.66**			
TOTAL CHARGES				**855,818.88**
				939,753.57
RECEIVED 07/01/14- 02/28/15	**2/28/2015**			
USER CHARGES	155,975.76	571,613.94	727,589.70	
SERVICE CHARGES	4,335.76	19,382.53	23,718.29	
CONNECTION CHARGES	0.00	30,600.00	30,600.00	
LATE CHARGES	1,775.95	7,823.27	9,599.22	
BACKFLOW	50.00	3,600.00	3,650.00	
SUBTOTAL	**162,137.47**			
TOTAL RECEIPTS				**795,157.21**
SENT TO LIEN				38,039.21
LIENS COLLECTED				0.00
ABATEMENTS				583.48
ADJUSTMENTS				411.71
UNCOLLECTED				**105,561.96**
				939,753.57

OUTSTANDING:

USER CHARGES	$	**98,379.79**
SERVICE CHARGES		1,719.67
CONNECTION CHARGES		0.00
LATE CHARGES		5,312.50
BACKFLOW		150.00
TOTAL OUTSTANDING	$	**105,561.96**

[illegible]

3:22 PM
03/09/15
Accrual Basis

Townsend Water Department
Budget vs. Actual
July 2014 through February 2015

	Jul '14 - Feb 15	Budget	$ Over Budget
Ordinary Income/Expense			
Expense			
061.000 · General Operations 000			
061.001 · Personal Services 1			
5100 · Salaries & Wages-Water Super	46,562.88	71,915.00	-25,352.12
5110 · Salary & Wages-Oper Staff	63,300.81	97,784.00	-34,483.19
5112 · Salary & Wages-Support Staff	35,554.57	55,312.00	-19,757.43
5130 · Additional Gross	3,062.32	8,300.00	-5,237.68
5134 · Additional Gross-Reg&SpecOncall	9,175.00	13,325.00	-4,150.00
5190 · Other Stipened-Longevity	3,900.00	3,900.00	0.00
5191 · Other - Stipend BOWC	0.00	3.00	-3.00
5192 · Other-Certification/Stipend	1,000.00	0.00	1,000.00
5193 · Retirement Benefit	0.00	2,000.00	-2,000.00
5195 · Other-Clothing Allowance	496.42	3,800.00	-3,303.58
Total 061.001 · Personal Services 1	163,052.00	256,339.00	-93,287.00
061.002 · Purchased Services 2			
5210 · Energy	53,855.66	82,000.00	-28,144.34
5240 · Repair & Maint Building	2,119.84	5,000.00	-2,880.16
5245 · Repair & Maint Equipment	21,371.44	20,000.00	1,371.44
5245100 · Repair & Maintain Equip SCADA	0.00	1.00	-1.00
5270 · Rentals	965.00	1,000.00	-35.00
Total 061.002 · Purchased Services 2	78,311.94	108,001.00	-29,689.06
061.003 · Purchased Services 3			
5300 · Professional Services	24,571.37	20,000.00	4,571.37
5300100 · Proff Service Backflow	3,500.00	6,000.00	-2,500.00
5340 · Communication	9,500.92	17,600.00	-8,099.08
5380 · Other Services	0.00	2,600.00	-2,600.00
Total 061.003 · Purchased Services 3	37,572.29	46,200.00	-8,627.71

Townsend Water Department
Budget vs. Actual
July 2014 through February 2015

	Jul '14 - Feb 15	Budget	$ Over Budget
061.004 · Purchased Supplies 4			
5420 · Office Supplies	1,863.73	5,000.00	-3,136.27
5430 · Building Supplies	595.14	1,500.00	-904.86
5435 · Equipment Maint Supplies	0.00	1,500.00	-1,500.00
5460 · Groundskeeping Supplies	0.00	500.00	-500.00
5480 · Vehicular Supplies	3,865.91	8,000.00	-4,134.09
Total 061.004 · Purchased Supplies 4	6,324.78	16,500.00	-10,175.22
061.005 · Purchased Supplies 5			
5530 · Public Works Supplies	22,168.68	35,000.00	-12,831.32
5531 · Chemicals	8,421.87	23,000.00	-14,578.13
5580 · Other Supplies	0.00	1,000.00	-1,000.00
Total 061.005 · Purchased Supplies 5	30,590.55	59,000.00	-28,409.45
061.007 · Other Charges & Exp 7			-
5710 · Travel/mileage-in state	45.00	1,100.00	-1,055.00
5720 · Out of State Travel	0.00	100.00	-100.00
5730 · Dues and Memberships	1,143.00	2,000.00	-857.00
5780 · Other Charges	0.00	500.00	-500.00
5782 · Other Charges-Bank	0.00	0.00	0.00
5785 · Water Assessment D.E.P.	1,718.56	2,000.00	-281.44
Total 061.007 · Other Charges & Exp 7	2,906.56	5,700.00	-2,793.44
061.008 · Articles 8			
5850 · New Equipment	477.51	10,000.00	-9,522.49
5870 · Replacement Equipment	0.00	1.00	-1.00
Total 061.008 · Articles 8	477.51	10,001.00	-9,523.49
061.400 · Special Projects 400			
5009 · Main St Station Upgrade	0.00	58,219.23	-58,219.23
5012 · System Enhancement	85,446.29	1,157,365.65	-1,071,919.36
5013 · Water Main Extensions	0.00	127,911.75	-127,911.75
5014 · Well Development & Exploration	0.00	6,276.29	-6,276.29
Total 061.400 · Special Projects 400	85,446.29	1,349,772.92	-1,264,326.63

Townsend Water Department
Budget vs. Actual
July 2014 through February 2015

	Jul '14 - Feb 15	Budget	$ Over Budget
061.500 · Special Articles 500			
5000 · Equipment Replacement Fund	0.00	1,426.07	-1,426.07
5020 · Storage Tank Maintenance	0.00	13,883.40	-13,883.40
5030 · Water Oper Emergency Res Fund	0.00	20,000.00	-20,000.00
5050 · Water-CIP-VFD&Elec SVS Pump	0.00	25,000.00	-25,000.00
5902-20 · Water-CIP-Tank Mixing System	0.00	50,000.00	-50,000.00
Total 061.500 · Special Articles 500	0.00	110,309.47	-110,309.47
Total 061.000 · General Operations 000	404,681.92	1,961,823.39	-1,557,141.47
061.009 · Debt Service 9			
5910 · Long Term Debt-East Side Phase1	33,669.00	33,002.00	667.00
5911 · Long Term Debt-East Side Ph 2	47,963.42	48,030.00	-66.58
5920 · Long term Interest-Phase1	8,704.97	9,378.00	-673.03
5921 · Long Term Int East Side Ph2	13,620.19	14,970.00	-1,349.81
Total 061.009 · Debt Service 9	145,971.06	105,380.00	40,591.06
Total Expense	550,652.98	2,067,203.39	-1,516,550.41
Net Ordinary Income	-548,809.93	-2,067,203.39	1,518,393.46
Net Income	**-548,809.93**	**-2,067,203.39**	**1,518,393.46**