

**BOARD OF WATER COMMISSIONER'S AGENDA\***  
*Conference Room, Harwich Water Department*  
*196 Chatham Road, Harwich, MA*  
*Tuesday, February 12, 2019, 8:00 a.m.*

- I. CALL TO ORDER
- II. PUBLIC COMMENTS/ANNOUNCEMENTS
- III. CONSENT AGENDA
  - A. Minutes-
    - a. January 24, 2019
- IV. ABATEMENTS
  - A. 584 Route 28, Unit 1- *Meter Test Results*
  - B. FY19 Q2 Water Department Usage- *Vote to Approve*
- V. OLD/UNFINISHED BUSINESS
  - A. Lothrop Ave Water Main Repair- *Update*
  - B. Route 28 @ Weatherdeck Water Main Repair- *Update*
  - C. Lower County Road Project- *Vote to Approve Final Pay Requisition/ Final Change Order*
  - D. WMA Permit- *Update*
- VI. NEW BUSINESS
- VII. SUPERINTENDENT'S REPORT
- VIII. COMMISSIONER'S REPORT
- IX. CORRESPONDENCE/ANY OTHER BUSINESS
- X. NEXT MEETING; TBD
- XI. ADJOURNMENT

*\*Per the Attorney General's Office: The Board of Water Commissioners may hold an open session for topics not reasonably anticipated by the Chair 48 hours in advance of the meeting following "New Business."*

*If you are deaf or hard of hearing or are a person with a disability who requires an accommodation, contact the Water Department Office at 508-432-0304 x.0 or by email at [customerservice@harwichwater.com](mailto:customerservice@harwichwater.com).*

Authorized Posting Officer:

Tracey Alves

Tracey Alves, Board Secretary

Posted By: \_\_\_\_\_

Town Clerk

Date: \_\_\_\_\_

**Form Submission**

**Form Name:** Abatement Application

**Date of Submission:** Thu, 06 Dec 2018 12:21:37 -0500

**Your server:** [www.harwichwater.com](http://www.harwichwater.com)

**IP address of person using form:** 73.17.106.229

**URL of page containing form:** <http://www.harwichwater.com/customer-service/billing-payments/abatement-application.html>

**Name of Applicant:**

**Mailing Address:**

**City/Town:**

**State:** Massachusetts

**Zip/Postal Code:**

**Phone Number:**

**Mobile Phone Number:**

**Email Address:**

**Date of Water Use Charge:** 1 July 2018

**Name of Person Assessed (Owner):**

**Location and Description of Property:** The property address is 584 Rt 28 Unit #1 HarwichPort Bill #299630

Wellesley Marsh has been made aware and kindly checked the meter on the unit.

**Total Amount Assessed:** 1615.50

**Total Amount Requested:** 1400

**If request is for Water Usage, what is the requested amount?:** 1400

**Reason For Abatement Request:** The unit did not consume 294,000 of water in two months. Unfortunately, the meter is unable to provide data for Jul-Aug hence I cannot explain the 294,000. Please allow me to pay an amount comparable to prior years (2015-2017).

**SUBSCRIBED THIS DAY UNDER PENALTIES OF PERJURY:** 6 December 2018

**AGREE?:** Checked

RECOMMENDATION: APPROVE  DENY

BOARD OF WATER COMMISSIONERS

DATE

SIGNATURE

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**REGAN SUPPLY  
& TESTING SERVICE**

P.O. Box 1392 South Dennis, MA 02660  
(508) 583-5018

ReganST@comcast.net

Location Harwich Water Dept.  
TAG: 584 RT 28 Unit # 1  
  
Name \_\_\_\_\_  
Phone \_\_\_\_\_

Date 1/24/2018  
Line Size \_\_\_\_\_  
Meter Size 5/8" x 3/4"  
Mfg. Neptune  
Type T-10  
Number 82897051  
Pressure 80±  
By Pass \_\_\_\_\_  
Test Valve portable test bench

**WATER METER TEST REPORT**

VOLUME	RATE G.P.M.	FIRE LINE	TURBINE	POS. DISPLACE	ACCURACY %	
10	1/2			9.93	99.30	
10	2			9.96	99.60	
100	15			99.45	99.45	

COMMENT: All tests within A.W.W.A. accuracy limits.

**REGISTRATION**

Fire Line \_\_\_\_\_  
Turbine \_\_\_\_\_  
Pos. Displace 0295937.42  
Registration 1 gallon

BY THIS HAND AND SEAL WE CERTIFY  
THIS TO BE A TRUE COPY OF THE  
TEST RESULTS.

X  
Joseph W. Bull

## Accounts

Account: 09743

584 ROUTE 28 #1 OCEANWALK CONDOS

### ALL METERS FOR THIS PROPERTY ARE ON A MANIFOLD IN THE BASEMENT OF THE BIG BUILDING. ACCESS IS VIA THE LOCKED BASEMENT DOOR. ONLY ONE CURB STOP FOR PROPERTY, AND WATER TO EACH CONDO IS CONTROLLED BY A VALVE ON THE MANIFOLD. GREG GILLMAN HAS KEY. 508-733-9127

2/6/19 RECEIVED AN EMAIL ASKING FOR MORE EXPLANATION FOR THE LEAK TRIGGER. / SENT A REPLY WITH FURTHER EXPLANATION OF THE STORED HISTORY AND THE IMPORTANCE OF HEARING FROM OWNERS IF THEY RECEIVE UNUSUAL BILLS. ATTACHED ECODER READ INSTRUCTIONS FOR MONITORING BETWEEN BILLING PERIODS. WM  
2/3/19 RECEIVED AN EMAIL CONFIRMING THE RECEIPT OF THE TEST RESULTS AND A QUESTION ABOUT THE THRESHOLD FOR LEAKS / SENT REPLY WITH 96-DAY ECODER HISTORY AND WHAT TRIGGERS THE LEAK INDICATOR.  
1/31/19 MAILED RESULTS WITH LETTER INCLUDING DATE OF NEXT BOWC MEETING. WM  
1/30/19 METER TEST RESULTS ARE IN. ABATEMENT TO BE REVIEWED AT BOWC MEETING OF 2/12/19 AT 8AM.

1/23/19 CHANGED FROZEN METER. 000000 WATER IS BACK ON AND ALL SERVICES ARE FINE PER SH.  
1/23/19 TENANT GREG 508-733-9127 HAS NO WATER IN UNIT 7 AND FOUND DOOR TO METER ROOM OPEN. (WE WERE AT PROPERTY ON 1/4). HE SUSPECTS THE METERS/SERVICES ARE FROZEN. DISPATCHED TECH. WM / WATER IS OFF AT STREET UNTIL EVERYTHING THAWS. FROZEN METER WILL BE CHANGED. TECH NOTES: Took pics at property, door was closed upon arrival. All 7 meters freeze plates are split out. All valves & lines are frozen, when it thaws there will be a flood. Customer said he found door open after loosing pressure. He closed door after finding problems.

1/10/19 ABATEMENT WILL REMAIN ON BOWC AGENDA UNTIL METER TEST RESULTS ARRIVE.  
1/4/19 PULLED METER FOR TESTING. READ 0295937.42  
12/31/18 RECEIVED TEST REQUEST FORM BACK. SET APPT FOR 1/4 TO REMOVE FOR TESTING. CARETAKER SAID HE IS THE ONLY ONE AROUND SO NO OTHER UNIT SHOULD NOTICE WATER SHUT DOWN. WM

12/27/18 PETE ELWELL CONFIRMED READINGS. WILL RELAY TO THE OWNER THEY HAVE THE OPTION OF METER TESTING. WM / GREG GILLMAN THE CARETAKER MENTIONED THAT THE IRRIGATION ZONE FOR THIS UNIT WAS TURNED OFF AND THE GRASS WAS TURNING BROWN SO HE TURNED THE VALVE ON IN THE BASEMENT SOMETIME IN EARLY SUMMER. DISCUSSED FINDINGS WITH MR. BOCCABELLA AND MS. GEARAN. A METER TEST WILL BE ORDERED. SENT HER USAGE HISTORY, DATA REPORTS, PICTURES AND TEST FORM.WM

12/26/18 MARIO BOCCABELLA CALLED, INQUIRED ABOUT ABATEMENT STATUS. TOLD HIM THAT IT WAS TABLED UNTIL NEXT MEETING 1/10/19. FOR ANY RELATED QUESTIONS, PLEASE CALL HIM AT 781-492-0679. SS

12/26/18 MAILED BOWC LETTER RE: ABATEMENT TABLED UNTIL MEETING OF 1/10/19.  
12/18/18 DATA LOGGED METER AGAIN. NO LEAK ON REPORT. PICTURES TAKEN AND SENT PETER ELWELL FOR FEEDBACK. READ 295937.4. WM  
12/17/18 BOARD PUT THE ABATEMENT REQUEST ON HOLD UNTIL MORE INFORMAITON CAN BE GATHERED. WE WILL DATA LOG AGAIN 12/18 AND TAKE A PHOTO OF THE METER PER PETE ELWELL. WM / NEXT BOARD MEETING IS SCHEDULED FOR 1/10/19 AT 8:30AM.  
12/6/18 ABATEMENT REQUEST RECEIVED. BOWC WILL REVIEW AT 12/17 MEETING.

12/6/8 ANSWERED QUESTIONS FROM HIS EMAIL (SAVED TO HIS FILE) AND LET HIM KNOW ABOUT METER TESTING AND ABATEMENT PROCESS. WM  
12/5/18 MR. BOCCABELLA VISITED METER AREA AND NOTED METER AND READ INFO FOR ALL OF METERS AND EMAILED THIS INFO TO US WITH QUESTIONS.WILL GATHER INFO AND LET HIM KNOW. WM

12/4/18 DATA LOGGED METER. HEAD CORRECT. READING 295937.4. REPORT SPANS FROM 8/30 TO 12/4. NO LEAK INDICATED ON REPORT. EMAILED COPY TO MR. BOCCABELLA

STATING THAT SOMETHING MAY HAVE HAPPENED BETWEEN 6/29 TO 8/29. WM

11/30/18 FATHER, MARIO BOCCABELLA CALLED ON BEHALF OF DAUGHTER TO INQUIRE ABOUT USAGE. OWNER RENTED A FEW TIMES OVER THE SUMMER, BUT DID NOT NOTICE ANY ISSUES. WE WILL DATALOG THE METER ON 12/4. HE WILL VISIT ON SUNDAY. ECODER READ AND LEAK DETECTION INSTRUCTIONS WERE EMAILED TO HIM. WM

6/27/18 RAW READ ON BILLING REPORT 1,224.0. ROUNDED TO 1,000

6/15/18 CHANGED HEAD. 0551030

6/14/18 146 RADIO. WILL CHANGE HEAD ON 6/15.

\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*

3/22/18 FINAL READ 054800

3/21/18 FINAL READ REQUEST. TA

12/27/17 OWNER SAID PAYMENT WILL BE SENT IN JANUARY. WM

12/20/17 SENT CERTIFIED DELINQUENT LETTER FOR ALL SEVEN OUTSTANDING ACCOUNTS IN HIS NAME. WM

09/04/08 SERVICE MARKED

02/08/2019 13:19  
talves

TOWN OF HARWICH - LIVE DATA  
UB Consumption History Report

P 1  
ubcnsing

Account Number Service	Customer # Name Mfr Meter Number	Cd Read Date Time	Parcel By	Bill # Curr Read	Location Usage Repl Usage Charge Amt	Status Billed Amt
09743	105500		14/W9		584 ROUTE 28 HP	Active
1WATER-	1 WTR USAGE	I 01/23/2019		0	0	.00
1WATER-	1 WTR USAGE	I 01/04/2019		0	0	.00
1WATER-	1 WTR USAGE EH 82897051	A 12/28/2018		310117 295,000	0	.00
1WATER-	1 WTR USAGE EH 82897051	A 09/28/2018		299630 295,000	0	35.00
1WATER-	1 WTR USAGE EH 82897051	A 06/27/2018		289243 1,000	294,000	1,615.50
1WATER-	1 WTR USAGE	I 06/15/2018		0 551,000	1,000 3,000	5.16
						.00

\*\* END OF REPORT - Generated by Tracey \*\*

MUST BE FILED WITH THE HARWICH BOARD OF WATER COMMISSIONERS NO LATER THAN THE DUE DATE OF FIRST ACTUAL (NOT PRELIMINARY) TAX PAYMENT FOR FISCAL YEAR OF WHICH THE WATER CHARGE BECAME A PART.

THE COMMONWEALTH OF MASSACHUSETTS  
**TOWN OF HARWICH**  
**APPLICATION FOR ABATEMENT**  
WATER CHARGE

BILL PD: FY19 Q2  
ACCOUNT # VARIOUS  
BILL # \_\_\_\_\_

To the Board of Water Commissioners:

NAME OF APPLICANT: Harwich Water Department

MAILING ADDRESS: ABATE WATER DEPT USAGE PHONE: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_ MOBILE: \_\_\_\_\_

The named person assessed by a water charge dated \_\_\_\_\_ hereby applies for abatement.

NAME OF PERSON ASSESSED (OWNER): \_\_\_\_\_

PROPERTY LOCATION: VARIOUS WATER DEPARTMENT PROPERTIES

TOTAL AMOUNT ASSESSED \$ \_\_\_\_\_ TOTAL AMOUNT REQUESTED \$ 1,323.10

CHECK IF REQUEST IS FOR WATER USAGE  AMOUNT REQUESTED \$ \_\_\_\_\_

CHECK IF REQUEST IS FOR LATE FEE  AMOUNT REQUESTED \$ \_\_\_\_\_

CHECK IF REQUEST IS FOR OTHER  AMOUNT REQUESTED \$ \_\_\_\_\_

REASON FOR ABATEMENT REQUEST (ATTACH ADDITIONAL SHEET IF NECESSARY)

SUBSCRIBED THIS DAY OF \_\_\_\_\_ UNDER PENALTIES OF PERJURY.

SIGNATURE OF APPLICANT \_\_\_\_\_  
NAME IN FULL

THE FILING OF THIS APPLICATION DOES NOT STAY THE COLLECTION OF THE CHARGE. CHARGE SHOULD BE PAID AS ASSESSED. REFUND WILL FOLLOW IF ABATEMENT IS ALLOWED. SUBMIT THIS FORM TO THE HARWICH WATER DEPT. 196 CHATHAM ROAD, HARWICH, MA 02645 ATTN: BOARD OF WATER COMMISSIONERS OR FAX TO (888) 774-3557.

RECOMMENDATION: APPROVE  DENY

BOARD OF WATER COMMISSIONERS

DATE

SIGNATURE

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

01/14/19	09733	310107	139 NORTH WESTGATE RD	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-219.82
01/14/19	00150	300553	196 CHATHAM RD BLDG A	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-38.87
01/14/19	00349	300751	196 CHATHAM RD BLDG B	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-50.62
01/14/19	02949	303344	85 DEPOT RD T2	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-37.58
01/14/19	08003	308383	196 CHATHAM RD OFFICE	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-40.16
01/14/19	09725	310099	196 CHATHAM RD RAW	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-35.00
01/14/19	09726	310100	196 CHATHAM RD TREATED	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-35.00
01/14/19	09727	310101	85 DEPOT RD STATION 5	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-158.67
01/14/19	09728	310102	85 DEPOT RD RAW	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-36.29
01/14/19	09729	310103	85 DEPOT RD TREATED	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-35.00
01/14/19	09730	310104	151 BAY RD TREATED	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-75.72
01/14/19	09731	310105	151 BAY RD RAW	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-35.00
01/14/19	09732	310106	151 BAY RD	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-271.30
01/14/19	09734	310108	205 PLEASANT BAY RD	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-322.78
01/14/19	09735	310109	205 PLEASANT BAY RD RAW	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	35.00
01/14/19	09740	310114	196 CHATHAM RD SINK	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	35.00
01/14/19	08337	308715	1046 ORLEANS RD	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	35.00
01/14/19	09981	310354	139 NORTH WESTGATE RD	QUARTERLY USAGE ABATEMENT FOR DEPARTMENT	-36.29



**CONSTRUCTION CHANGE AUTHORIZATION**

- Owner
- Engineer
- Consultant
- Contractor
- Field
- Other

AIA DOCUMENT G713

PROJECT: Lower County Road Water Main Harwich, MA      CONSTRUCTION CHANGE AUTHORIZATION NO: **CO-3**

OWNER: Town of Harwich Water Department 196 Chatham Road Harwich, MA 02645      DATE OF ISSUANCE: January 21, 2019

TO: Robert B. Our Co. 24 Great Western Road Harwich, MA 02645      ENGINEER: Design Consultants Inc. 1495 Hancock Street, Suite 205 Quincy, MA 02169

CONTRACT FOR: Lower County Road Water Main      ENGINEER'S PROJECT NO: 2017-096.01

In order to expedite the Work and avoid or minimize delays in the Work, which may affect Contract Sum or Contract Time, the Contract Documents are hereby amended as described below.

**Description:** This change order includes a net decrease to the contract price by **(\$22,493.05)**. The work covered under this change order includes the final adjustments for Items 5A (-\$1,576.00), 5B (\$2,462.00), 6A (-\$5,948.00), 6B (\$33,420.00), 6C (-\$14,000.00), 10 (-\$0.18), 11A (-\$8,792.70), 12 (-\$6,745.00), 13 (\$13,687.43), 14 (-\$11,000.00) and Change Order No. 1 Adjustment to Item 11A (-\$24,000.60).

The approved connection modifications noted above will result in decreases to other pay items. These decreases will be adjusted under a future change order.

Attachments: *(Here insert listing of documents that support description.)* RBO's Final Quantities in Requisition No. 5.

The following is based on information provided by the Contractor:

Method Determining Change in the Contract Sum: RBO's Final Quantities in Requisition No. 5

(lump sum, unit prices, cost plus fee or other)

- Fixed Change in Contract Sum of (\$22,493.05)
- Estimated
- Maximum
- Fixed Change in Contract Time of 0 days
- Estimated Change in Contract Time of     days
- Maximum Change in Contract Time of     days

ISSUED: Paul Costello 1/22/19      AUTHORIZED: \_\_\_\_\_      CONFIRMED: Abigail [Signature]

BY: \_\_\_\_\_      BY: \_\_\_\_\_      BY: Robert B. Our Co.      Date: 1/22/19

Design Consultants Inc.      Date      Town of Harwich      Date      Robert B. Our Co.      Date

# Contractor's Application for Payment No. 5

	Application Period: 12/15/18-1/4/19	Application Date: 1/21/2019
To (Owner): Town of Harwich	From (Contractor): Robert B. Our Co. Inc.	Via (Engineer): Design Consultants Inc.
Project: Lower County Road Water Main Improvements	Contract:	
Owner's Contract No.:	Contractor's Project No.: LCR 2018	Engineer's Project No.:

### Application For Payment Change Order Summary

Approved Change Orders		
Number	Additions	Deductions
CO #1	\$105,648.38	-\$87,500.00
CO #2	\$42,115.87	
CO #3		-\$22,493.05
TOTALS	\$147,764.25	-\$109,993.05
NET CHANGE BY CHANGE ORDERS	\$37,771.20	

1. ORIGINAL CONTRACT PRICE.....	\$ 1,027,820.30 ✓
2. Net change by Change Orders.....	\$ 37,771.20 ✓
3. Current Contract Price (Line 1 ± 2).....	\$ 1,065,591.50
4. TOTAL COMPLETED AND STORED TO DATE (Column F on Progress Estimate).....	\$ 1,065,591.50 ✓
5. RETAINAGE:	
a. X \$1,065,591.50 Work Completed.....	\$
b. 5% X _____ Stored Material.....	\$
c. Total Retainage (Line 5a + Line 5b).....	\$
6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5c).....	\$ 1,065,591.50
7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application).....	\$ 1,054,935.59
8. AMOUNT DUE THIS APPLICATION.....	\$ 10,655.91 ✓
9. BALANCE TO FINISH, PLUS RETAINAGE (Column G on Progress Estimate + Line 5 above).....	\$

**Contractor's Certification**

The undersigned Contractor certifies that to the best of its knowledge: (1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Liens, security interest or encumbrances); (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective; and (4) all materials incorporated in compliance with AIS (PL 113-76).

**Notary Public, Commonwealth of Massachusetts**  
My Commission Expires March 29, 2024

By: Date: 1-22-19

Payment of:	\$ 10,655.91	
		(Line 8 or other - attach explanation of the other amount)
is recommended by:		1/26/19
	(Engineer)	(Date)
Payment of:	\$ 10,655.91	
		(Line 8 or other - attach explanation of the other amount)
is approved by:	_____	_____
	(Owner)	(Date)
Approved by:	_____	_____
	Funding Agency (if applicable)	(Date)

Endorsed by the Construction Specifications Institute.  
EJCDC C-620 Contractor's Application for Payment  
© 2007 National Society of Professional Engineers for EJCDC. All rights reserved.  
This document has been modified from its original form as an EJCDC document.

# Progress Estimate

# Contractor's Application

For (contract):				Lower County Road Water Main Improvements			Application Nu			
Application Per				12/15/18-1/4/19			Application Da			
A				B	C	D	E	F		
Bid Item No.	Item Description	Bid Quantity	Unit Price	Bid Value	Estimated Quantity Installed	Value	Materials Presently Stored (not in C)	Total Completed and Stored to Date (D + E)	% (F) B	Balance to Finish (B - F)
1	Mobilization & Demobilization	1	\$51,000.00	\$51,000.00			1.00	\$51,000.00	100.0%	
3	Field Engineering	1	\$1,500.00	\$1,500.00			1.00	\$1,500.00	100.0%	
4	Bridge Crossing	1	\$69,000.00	\$69,000.00			1.00	\$69,000.00	100.0%	
5A	1" water service change overs	72	\$1,576.00	\$113,472.00	1	\$1,576.00	71.00	\$113,472.00	100.0%	
5B	2" water service change overs	4	\$2,462.00	\$9,848.00	-1	-\$2,462.00	5.00	\$9,848.00	100.0%	
6A	6&8" gates and connections to existing	5	\$5,948.00	\$29,740.00	1	\$5,948.00	4.00	\$29,740.00	100.0%	
6B	6&8" Taps and gates - connections to existing	27	\$8,355.00	\$225,585.00	-4	-\$33,420.00	31.00	\$225,585.00	100.0%	
6C	16" Tap and Gate Connection	1	\$14,000.00	\$14,000.00	1	\$14,000.00		\$14,000.00	100.0%	
7	16" Insertion Valve	5	\$36,215.00	\$181,075.00			5.00	\$181,075.00	100.0%	
8	Fire Hydrant	9	\$4,400.00	\$39,600.00			9.00	\$39,600.00	100.0%	
9	Cut & Cap existing main	1	\$29,000.00	\$29,000.00			1.00	\$29,000.00	100.0%	
10	Exploratory Excavation	30	\$0.01	\$0.30	17.7	\$0.18	12.30	\$0.30	100.0%	
11A	Temp. Trench Pavement	2500	\$21.00	\$52,500.00	418.7	\$8,792.70	2,081.30	\$52,500.00	100.0%	
11B	Permanent Trench Patch	2500	\$35.00	\$87,500.00			2,500.00	\$87,500.00	100.0%	
12	Landscaping Material	2000	\$5.00	\$10,000.00	1349	\$6,745.00	651.00	\$10,000.00	100.0%	
13	Traffic Control - Allowance	1	\$88,000.00	\$88,000.00		-\$13,687.43	101,687.43	\$88,000.00	100.0%	
14	Asbestos Abatement , Per location	10	\$1,100.00	\$11,000.00	10	\$11,000.00		\$11,000.00	100.0%	
15	Remaining Lump Sum	1	\$15,000.00	\$15,000.00			1.00	\$15,000.00	100.0%	
CO #1	Pleasant Road Connection Modification	1	\$20,406.28	\$20,406.28			1.00	\$20,406.28	100.0%	
	Grey Neck Road Connection Modification	1	\$11,987.00	\$11,987.00			1.00	\$11,987.00	100.0%	
	R&D Existing Gate Valve Box's	1	\$4,261.00	\$4,261.00			1.00	\$4,261.00	100.0%	
	Adjustement 11 A Temp Pavement	2500	\$19.50	\$48,750.00	1230.8	\$24,000.60	1,269.20	\$48,750.00	100.0%	
	Credit 11 B Final Pavement	2500	-\$35.00	-\$87,500.00			2,500.00	-\$87,500.00	100.0%	
	Earle Road Connection Modification	1	\$20,244.10	\$20,244.10			1.00	\$20,244.10	100.0%	
CO #2	Additional Cut & Caps	1	\$7,728.00	\$7,728.00			1.00	\$7,728.00	100.0%	
	Brooks Road	1	\$6,312.38	\$6,312.38			1.00	\$6,312.38	100.0%	
	Hydrant Relocation	1	\$2,807.81	\$2,807.81			1.00	\$2,807.81	100.0%	
	Water Repair	1	\$25,267.68	\$25,267.68			1.00	\$25,267.68	100.0%	
CO #3	Balance change order	1	-\$22,493.05	-\$22,493.05	1	-\$22,493.05		-\$22,493.05	100.0%	
<b>Totals</b>				<b>\$1,065,591.50</b>		<b>\$0.00</b>		<b>\$1,065,591.50</b>	<b>100.0%</b>	

Town of Harwich  
WATER DEPARTMENT  
2019 ATM ARTICLE

Vehicle Replacement

TO: Board of Selectmen

DATE: 11/30/18

ATM ARTICLE TO BE INCLUDED IN THE WARRANT

CONT#

AUTHOR: Board of Water Commissioners and Superintendent

CONTACT: Dan Pelletier, Superintendent, 508-432-0304 x110, dpelletier@harwichwater.com

ARTICLE:

To see if the Town will vote to raise and appropriate, or transfer from available funds, a sufficient sum of money to purchase/replace a John Deere 35D Mini Excavator.

TOTAL DOLLARS: \$50,000.00

JUSTIFICATION: (Background Information/Justification)

The existing John Deere 35D was purchased in 2005 and has over 5000 hours of use. It has been determined the Pins/Turntable need to be replaced which will cost more than \$11,000. The current trade in value for the machine is \$15,000.

Town of Harwich  
WATER DEPARTMENT  
2019 ATM ARTICLE

**Pleasant Lake Tank Fill Pipe Replacement**

TO: Board of Selectmen

DATE: 11/30/18

ATM ARTICLE TO BE INCLUDED IN THE WARRANT

CONT#

AUTHOR: Board of Water Commissioners and Superintendent

CONTACT: Dan Pelletier, Superintendent, 508-432-0304 x110, dpelletier@harwichwater.com

ARTICLE:

To see if the Town will vote to raise and appropriate, or transfer from available funds, a sufficient sum of money to replace approximately 200 feet of water main entering the tank, 130 feet of vertical pipe in the base of the tank, and minor structural modifications to accommodate the larger diameter pipe.

TOTAL DOLLARS: \$300,000.00

JUSTIFICATION: (Background Information/Justification)

The existing 12" pipe fill pipe is undersized. When attempting to fill the tank pressure in the distribution system can exceed 120 PSI. As a result, the tank cannot be filled to its 1.5 million gallon capacity and limits the ability to utilize the tank to control pumping operations.

Town of Harwich  
WATER DEPARTMENT  
2019 ATM ARTICLE

**T1 Main Facility Generator Replacement**

TO: Board of Selectmen

DATE: 11/30/18

**ATM ARTICLE TO BE INCLUDED IN THE WARRANT**

CONT#

AUTHOR: Board of Water Commissioners and Superintendent

CONTACT: Dan Pelletier, Superintendent, 508-432-0304 x110, dpelletier@harwichwater.com

ARTICLE:

To see if the Town will vote to raise and appropriate, or transfer from available funds, a sufficient sum of money to replace the T1 Main Facility Generator.

TOTAL DOLLARS: \$65,000.00

JUSTIFICATION: (Background Information/Justification)

The existing generator was installed in 2005 and has failed to operate in critical times of need multiple times in the past year. This generator is responsible for providing backup power to the SCADA System (controls, monitors, & alarms for the water system) and 3 water production wells.

Town of Harwich  
WATER DEPARTMENT  
2019 ATM ARTICLE

Vehicle Replacement

TO: Board of Selectmen

DATE: 11/30/18

ATM ARTICLE TO BE INCLUDED IN THE WARRANT

CONT#

AUTHOR: Board of Water Commissioners and Superintendent

CONTACT: Dan Pelletier, Superintendent, 508-432-0304 x110, dpelletier@harwichwater.com

ARTICLE:

To see if the Town will vote to raise and appropriate, or transfer from available funds, a sufficient sum of money to purchase a 2019 Ford F-550. This vehicle will replace a 2005 F-350 Dump Truck.

TOTAL DOLLARS: \$70,000.00

JUSTIFICATION: (Background Information/Justification)

The Vehicle to be replaced has considerable rot to the frame & dump body. In the past year the oil pan and PTO that controls the dump body had to be replaced. It has been determined by the DPW's vehicle maintenance division the F-350 should be replaced due to the following:

- Frame and body rust/rot is progressing rapidly.
- Seat and seat belt attaching points are rotting.
- The dump body has holes in the floor that will get larger with use.
- The tailgate on the dump body does not fit correctly.
- The subframe for the dump body is rotting.
- The oil pan is rusty/flaking, will need replacement. Cab off procedure.

Date January 2019  
 PWS No. 4126000

Monthly Weather Report  
 Harwich Water Department

Day	Snow Fall (in.) (Gallons)	Rain Fall (in.)	Temperature High (°F)	Temperature Low (°F)	Temperature AVG (°F)	Weather Comments	Operator
1		0.86	55	38	46		
2		0.00	39	29	34		
3		0.00	47	34	41		
4		0.00	45	31	38		
5		0.87	46	40	43		
6		0.00	46	31	39		
7		0.00	32	26	29		
8		0.00	45	29	37		
9		0.00	47	35	41		
10		0.00	37	30	34		
11		0.00	36	23	29		
12		0.00	31	20	25		
13		0.00	33	22	27		
14		0.00	35	27	31		
15		0.00	36	23	30		
16		0.00	40	21	31		
17		0.00	32	24	28		
18		0.00	39	26	32		
19		0.00	36	30	33		
20		2.60	52	23	37		
21		0.00	23	9	16		
22		0.00	26	10	18		
23		0.00	42	14	28		
24		0.43	52	41	46		
25		0.00	42	30	36		
26		0.00	34	24	29		
27		0.00	44	28	36		
28		0.00	40	31	36		
29		0.00	40	30	35		
30		0.00	41	19	30		
31		0.00	21	10	15		
Total		4.76					
Average		0.15	39.1	26.1			
Max		2.60	54.8	41.0			
Min		0.0	20.9	9.1			



Date January 2018  
 PWS No. 4126000

Monthly Weather Report  
 Harwich Water Department

Day	Snow Fall (in.) (Gallons)	Rain Fall (in.)	Temperature High (°F)	Temperature Low (°F)	Temperature AVG (°F)	Weather Comments	Operator
1		0.03	16	10	13		
2		0.00	20	5	13		
3		0.00	30	11	21		
4		2.01	41	25	33		
5		0.00	27	11	19		
6		0.00	18	9	14		
7		0.00	24	8	16		
8		0.00	38	24	31		
9		0.00	43	32	38		
10		0.00	38	27	33		
11		0.00	45	34	39		
12		0.35	51	43	47		
13		0.25	53	31	42		
14		0.00	31	26	29		
15		0.00	35	28	32		
16		0.00	38	30	34		
17		0.53	38	32	35		
18		0.00	36	31	33		
19		0.00	36	27	31		
20		0.00	46	30	38		
21		0.00	48	31	39		
22		0.00	42	31	37		
23		1.53	52	42	47		
24		0.00	45	31	38		
25		0.00	33	26	30		
26		0.00	33	22	28		
27		0.00	45	28	37		
28		0.51	47		44		
29		0.05	43	37	40		
30		0.46	38	25	31		
31		0.00	33	20	26		
Total		5.72					
Average		0.18	37.5	26.1			
Max		2.01	52.9	42.7			
Min		0.0	16.2	5.1			

Month/Year January 2019

PWS No. 4126000

## Monthly Pumpage Report Harwich Water Department

Date	T1							T2			T3		T10	T11
	Main 1	Main 2	Main 3	Well 1	Well 2	Well 3	Well 4	Well 5	Well 6	Well 7	Well 8	Well 9	Pump 10	Pump 11
1	42,687	42,826	31,042	64,451	44,156	53,528	93,302	86,767	87,740	86,870	90,731	89,009	104,057	95,246
2	61,532	65,832	47,626	99,649	68,134	82,459	142,932	132,643	133,965	132,959	139,153	136,746	146,802	146,057
3	24,574	20,839	14,956	30,997	21,374	25,793	45,159	42,010	42,103	42,169	44,024	43,193	63,310	46,246
4	27,091	27,232	19,543	43,243	28,859	35,561	59,027	54,602	57,550	54,738	57,320	57,229	65,673	60,223
5	41,948	42,059	30,392	62,456	43,168	51,657	91,621	85,099	85,237	85,267	89,256	87,495	102,313	93,673
6	44,324	44,426	32,242	67,016	45,883	55,695	96,948	90,060	92,722	90,278	94,193	92,964	108,094	99,016
7	22,128	22,254	16,093	33,213	22,821	27,622	48,401	148,361	154,312	148,591	47,119	46,327	53,941	49,428
8	24,143	24,274	17,612	47,079	25,113	39,516	52,852	93,955	98,043	94,128	98,619	98,990	58,792	56,154
9	16,025	20,833	15,107	30,482	21,194	25,375	45,452	62,579	63,230	63,143	44,221	43,307	68,513	58,571
10	52,675	48,142	34,723	73,498	49,981	60,785	104,801	96,703	99,911	96,991	101,772	100,639	131,567	106,861
11	21,689	21,710	15,744	32,143	22,223	26,756	47,346	43,987	44,546	44,103	46,077	45,306	52,829	48,437
12	42,570	42,812	31,015	62,692	43,463	52,267	93,158	86,322	84,920	86,522	90,600	88,930	103,793	95,200
13	44,080	44,169	32,092	65,324	45,177	54,470	96,425	89,421	88,682	89,633	93,820	92,306	107,466	98,537
14	21,584	21,645	15,639	31,593	21,959	26,382	47,250	43,730	42,692	43,846	45,835	45,056	52,480	48,170
15	47,799	47,944	34,563	72,734	49,599	60,209	104,614	96,971	98,858	97,219	101,536	100,626	116,425	106,744
16	22,110	22,305	16,068	32,644	22,630	27,071	48,368	44,922	44,442	45,083	47,056	46,516	54,083	49,479
17	35,555	42,306	30,481	61,140	42,628	51,034	91,846	85,389	82,953	85,526	89,545	87,877	82,856	93,996
18	53,258	47,320	34,078	70,671	48,445	58,751	103,131	95,362	95,949	95,449	100,072	98,990	128,805	105,088
19	22,041	21,511	15,547	31,137	21,670	25,972	46,895	43,408	42,655	43,575	45,586	44,872	57,503	47,930
20	22,497	22,466	16,343	33,190	22,894	27,444	48,961	115,562	119,929	115,829	120,862	121,034	118,107	127,136
21	36,972	37,116	26,780	58,488	39,051	48,120	80,453	44,627	44,456	44,742	46,707	46,001	74,166	49,140
22	21,839	21,825	15,783	31,488	21,973	26,362	47,695	51,037	50,568	51,057	46,214	45,472	53,006	69,337
23	47,950	48,053	34,652	71,339	49,145	59,315	104,628	96,956	98,618	97,255	103,671	102,830	116,424	106,663
24	34,878	35,317	25,388	59,580	37,901	48,165	74,141	0	0	0	0	0	31,141	0
25	108,826	108,862	78,550	187,443	122,860	155,743	238,596	45,850	46,675	45,952	48,035	47,418	55,021	50,436
26	85,037	84,977	61,345	152,644	99,870	128,797	186,510	0	0	0	0	0	0	0
27	137,678	137,758	99,240	246,575	160,184	205,949	301,753	0	0	0	0	0	0	0
28	0	0	1	0	0	0	0	39,066	40,973	39,261	108,450	110,453	114,649	118,119
29	62,783	62,710	45,328	98,967	72,822	82,087	137,245	7,500	7,806	7,573	38,627	39,424	58,095	0
30	0	0	1	0	0	0	0	125,623	132,406	125,402	130,606	133,625	128,171	140,612
31	27,606	41,864	30,038	74,199	48,285	61,614	91,301	47,626	50,269	48,169	50,371	50,156	79,979	50,080
Pumps :	1,253,878	1,271,386	918,012	2,026,076	1,363,462	1,684,495	2,770,810	2,096,137	2,132,209	2,101,330	2,160,078	2,142,791	2,488,061	2,216,579
MIN :	0	0	1	0	0	0	0	0	0	0	0	0	0	0
MAX :	137,678	137,758	99,240	246,575	160,184	205,949	301,753	148,361	154,312	148,591	139,153	136,746	146,802	146,057
STATIONS :	11,288,119							6,329,676			4,302,869		2,488,061	2,216,579
TOTAL :								26,625,305						

Month/Year JANUARY 2018

PWS No. 4126000

## Monthly Pumpage Report Harwich Water Department

Date	T1							T2			T3		T10	T11
	Main 1	Main 2	Main 3	Well 1	Well 2	Well 3	Well 4	Well 5	Well 6	Well 7	Well 8	Well 9	Pump 10	Pump 11
1	47,090	32,465	32,342	54,415	34,371	42,632	70,998	73,589	0	72,084	68,393	64,787	0	71,194
2	36,064	38,295	38,148	64,981	40,809	50,657	82,853	87,265	0	83,239	79,300	75,474	0	83,423
3	48,118	46,526	46,144	76,692	48,592	60,832	100,352	156,786	2,347	150,168	99,443	136,182	0	132,271
4	56,065	70,828	70,782	120,364	75,989	93,904	154,626	161,772	0	154,971	147,578	140,370	0	155,184
5	82,679	68,465	68,320	108,422	69,649	85,161	150,613	303,636	0	285,923	272,364	262,799	0	285,423
6	34,967	35,182	35,147	59,363	37,446	46,390	76,582	79,758	0	77,072	73,292	69,874	0	76,943
7	55,564	55,795	55,565	89,863	58,040	70,657	121,621	124,771	0	122,667	116,599	109,584	0	121,540
8	64,431	66,769	66,551	110,893	70,398	86,586	145,310	150,673	0	146,328	139,094	132,020	0	145,877
9	41,581	39,809	39,810	65,997	41,314	52,088	86,665	74,682	0	72,307	68,990	65,412	0	72,252
10	38,099	38,117	38,128	64,739	40,670	50,409	83,215	87,264	16,084	83,900	79,697	76,175	0	83,544
11	46,730	61,743	61,456	98,380	63,830	77,630	134,099	138,420	0	134,909	128,477	120,733	0	134,495
12	56,064	41,270	41,194	66,640	42,919	52,561	90,133	92,789	0	91,247	86,644	81,845	0	90,086
13	38,107	46,429	46,359	76,589	48,890	60,039	100,964	105,499	0	101,217	96,608	72,476	0	101,554
14	56,380	48,269	40,275	77,522	49,955	61,003	105,456	108,166	0	106,733	101,489	94,886	0	105,282
15	37,331	37,419	37,541	62,197	39,499	48,582	81,540	85,066	0	82,020	78,258	74,170	0	81,871
16	55,134	54,999	54,977	88,150	57,162	69,473	120,019	122,952	0	121,205	115,397	107,472	0	119,739
17	35,459	35,487	35,581	62,011	38,584	48,166	77,417	80,870	0	78,014	74,195	70,463	0	77,875
18	61,876	62,492	62,324	105,915	66,617	82,576	135,730	139,908	0	136,561	130,102	122,469	0	136,130
19	29,192	29,218	29,229	48,938	30,982	38,249	63,542	65,569	0	64,094	61,150	57,365	61,341	63,490
20	33,623	33,696	234	60,164	37,681	47,582	73,460	76,696	0	73,890	70,443	66,841	81,656	73,871
21	48,025	48,169	236	80,786	51,088	63,090	104,821	106,211	0	105,812	100,646	93,208	115,542	103,395
22	33,481	33,450	449	59,527	37,128	46,886	72,800	76,031	0	73,319	69,770	66,180	80,060	73,193
23	52,145	52,230	22,451	86,927	55,040	68,006	113,709	115,955	0	114,631	109,173	101,550	125,218	113,300
24	36,817	36,896	29,421	26,167	41,655	20,213	80,312	34,710	0	33,670	76,903	74,181	88,279	33,659
25	32,166	38,906	31,175	65,202	41,154	50,740	84,091	87,296	0	84,470	81,005	75,778	92,248	84,620
26	55,858	49,489	39,567	81,473	52,032	63,931	108,449	110,072	0	109,270	35,881	33,133	119,270	107,450
27	32,436	32,403	25,934	55,234	34,699	43,072	70,563	73,368	0	71,079	67,606	64,016	77,491	70,917
28	47,574	47,420	38,116	73,763	48,358	58,228	103,460	104,106	0	104,423	99,455	91,705	114,150	101,378
29	36,417	51,286	41,033	84,125	53,704	65,672	111,460	114,595	0	111,846	106,444	99,618	122,270	111,338
30	42,753	28,139	22,535	45,371	29,033	35,514	61,319	62,257	0	62,268	59,260	55,220	67,927	60,487
31	31,097	31,309	24,987	52,894	33,314	41,039	67,940	70,596	0	68,434	65,237	61,584	74,678	68,387
Pumps :	1,356,234	1,360,507	1,143,670	2,219,289	1,436,231	1,738,937	2,963,121	3,197,736	18,431	3,105,687	2,890,500	2,752,783	1,220,130	3,068,974
MIN :	29,192	28,139	234	26,167	29,033	20,213	61,319	34,710	0	33,670	35,881	33,133	0	33,659
MAX :	82,679	70,828	70,782	120,364	75,989	93,904	154,626	303,636	16,084	285,923	272,364	262,799	125,218	285,423
STATIONS :	12,217,990							6,321,854			5,643,283		1,220,130	3,068,974
TOTAL :	12,217,990							6,321,854			5,643,283		1,220,130	3,068,974