

**BOSTON GROUNDWATER TRUST (BGwT)**  
**BOARD MEETING**  
**September 13<sup>th</sup>, 2018**

The Board of Trustees of the Boston Groundwater Trust met at 1 City Hall Square (Boston City Hall) in the Environment Department, room #709. The Executive Director electronically distributed the meeting notice and agenda to the City Clerk at Boston City Hall in accordance with the provisions of the Commonwealth of Massachusetts' Open Meeting Law. Mr. Saunders, co-chair, called the meeting to order at 4:09 pm. The following trustees were present:

Mr. Gary Saunders, Back Bay Association  
Mr. Tim Mitchell, Neighborhood Association of the Back Bay  
Mr. John Hemenway, Beacon Hill Civic Association  
Mr. Greg Galer, the Boston Preservation Alliance  
Ms. Janine Commerford, Greater Boston Real Estate Board  
Mr. Peter Shilland, Ellis Neighborhood Association  
Mr. Andre Jones, Fenway Community Development Corporation

Also present:

Mr. Christian Simonelli, Executive Director; Mr. Rory Cuddyer, Chief of Staff, City of Boston, Office of Environment, Energy, & Open Space; Mr. Patrick Lyons, Legislative Aide for Massachusetts State Representative Aaron Michlewitz; Mr. Chase White, Student at Northeastern University

**1. Adoption of the minutes of the May 17<sup>th</sup>, 2018 Meeting**

Minutes were previously emailed to Board members for review. Discussion followed. Mr. Galer, Trustee, moved to adopt the minutes. Mr. Shilland, Trustee, seconded the motion.

**Voted:** To accept the minutes of the May 17<sup>th</sup>, 2018 meeting.

Mr. Mitchell was not present for the vote.

**2. Financial Report**

Mr. Hemenway reviewed the Trust's financial reports. He noted that the Trust received and deposited their annual operating funds from the City. Discussion followed.

### 3. **Review of Video Project**

Mr. Simonelli reviewed the release of the Trust's series of informational videos. He issued a press release and posted the videos to the Trust website via a YouTube channel he created for the organization. Mr. Saunders, co-chair, noted that he thought the videos came out well and were very professional in appearance. Discussion followed. Mr. Simonelli noted that the initial budget for the videos was \$25k. However, additional edits and splitting the original longer video into three separate shorter videos cost an additional \$2,850. Discussion followed. Mr. Simonelli stated that he thought it would be useful to create one or two additional videos on topics that were not covered in the three initial three. These topics include highlighting the work of the City-State Groundwater Working Group and illustrating the positive results of repairing underground infrastructure. Discussion followed. The Board advised Mr. Simonelli to follow up with Board members and their respective organizations for additional opportunities to publicize the videos. Discussion followed.

### 4. **Review of Well Installations and Invoice Analysis**

Mr. Simonelli noted that New England Boring Contractors had presented a \$21,712.50 invoice for the installation of eight observation wells in East Boston; he described his analysis and subsequent approval of the invoice and noted that the invoiced amount was less than the projected budget of \$27,910. Discussion followed. Refer to the attached invoice analysis for additional details.

### 5. **Update on BluCloud Technologies Proposal**

Mr. Simonelli reviewed the proposal for a remote monitoring solution from Blu Cloud Technologies. He noted that Blu Cloud presented their initial proposal to Board in March. Discussion followed. Mr. Simonelli highlighted the following:

- The hardware cost for each device for a well is \$600.
- An optional \$99/device/year coverage is available to cover everything from battery replacements to periodic sensor calibration.
- The data cost for having the device make a reading every hour for one month is \$2.50/well/month.
- A prototype of the device was installed in a Trust observation well from December 2017- March 2018; the device consistently recorded accurate readings.

Discussion followed. Mr. Mitchell, co-chair, moved to authorize Mr. Simonelli to proceed with the purchase of the devices, care plan, and other related costs not to exceed \$5k. Ms. Commerford, Trustee, seconded the motion.

**Voted:** To authorize Mr. Simonelli to proceed with the purchase of the devices, care plan, and other related costs not to exceed \$5k.

6. **Executive Director's Report**

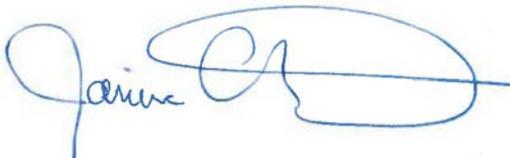
BGwT Executive Director Mr. Christian Simonelli distributed his report. Discussion followed. Refer to the attached *Executive Director's Report September 13<sup>th</sup>, 2018* for a complete list of activities.

**The meeting adjourned at 5:07 p.m.**

**NEXT MEETING: November 8<sup>th</sup>, 2018 @ 4:00 pm at the Lenox Hotel.**

Notes submitted by Christian Simonelli, BGwT Executive Director, on 9/18/2018.

Approved 25 September 2018

A handwritten signature in blue ink, appearing to read "J Commerford", with a large, stylized flourish extending to the right.

J Commerford, Secretary

**EXECUTIVE DIRECTOR'S REPORT**  
**September 13<sup>th</sup>, 2018**

1. **Readings** – We have completed our fourth set of readings of 2018 and are in the process of hiring a well reader for this autumn.
  
2. **Meetings/Presentations** –
  - Visited 181 West Brookline Street to review potential recharge solutions for the adjacent alley. (5/21)
  - I attended the scoping session and wrote a comment letter for the Kenmore Square Redevelopment Project. (5/23)
  - I met with resident Etta Rosen to discuss recharge requirements within the GCOD. (5/30)
  - I met with Rick McCullough of DOT to discuss the Parcel 15 project and the departments plans for subsurface infrastructure investigation. (6/7)
  - I met with members of the Charles River Media Group and Mike Atwood to finalize the three videos for the website. (6/13)
  - I presented to Sarah Leung and Patricia Mendez of the disability commission. (6/20)
  - Hosted a meeting of the Trust Technical Advisory Committee. (6/28)
  - I attended the scoping session and wrote a comment letter for the 150 Kneeland Street Project. (7/9)
  - I attended the Mayors Coffee Hours in the Back Bay (5/24) and North End (7/17).
  - Along with ISD Commissioner Christopher I met with new Chief of Environment, Energy, & Open Space Christopher Cook. (7/26)
  - I met with Danchen Xu, the new ONS coordinator for Chinatown & Leather District. (8/2)
  - I met John Schmid of Nitsch Engineering to review our presentation for Architecture Boston Expo (ABX) in November. (8/3)
  - Spoke with Catherine Jones, Executive Director, National Academy of Building Inspector Engineers (NABIE), to discuss presenting at their annual conference in March, 2019 in Boston. (8/7)
  - I met with Vandana Rao, Assistant Director for Water Policy, Executive Office of Energy and Environmental Affairs, to review the efforts of the Trust. (8/9)
  - I had a conference call with Mike Weaver of Haley & Aldrich to discuss the 60 Kil-marnock Street project in the Fenway. (8/15)
  - I met with the proponents of 41-43 North Margin Street project to discuss the GCOD requirements for the project. (9/5/18)
  - I secured permits for and supervised the installation of 8 observation wells in East Boston. (7/23-7/27)
  - I spoke & met with residents & developers throughout the GCOD to discuss ZBA procedures and advised them on what they need to provide us to satisfy the zoning.
  
3. **MBTA** - Approximately 45 gpm is being injected into recharge wells in the South End Ellis Neighborhood area along Appleton, Berkeley, Saint Charles, Cazenove, and Clarendon Street. In addition to our manual monitoring we have 4 wells in the area with dataloggers recording a water level every 60 min. I continue to work with the MBTA, members of the City-State, residents, and the appropriate elected officials to obtain funds set aside for the ongoing recharge efforts in the South End will be made available to them through the Mass DOT FY2018-2022 Capital Investment Plan and to find a permanent solution for the South End Ellis Neighborhood.

4. **DCR** – Dataloggers are installed in 3 wells to monitor the levels along the Storrow Drive tunnel pump station groundwater recharge system and levels are within their usual range. Due to a blocked line and a malfunctioning controller flood control pump #2 not operational. The line was cleared and the controller was repaired. The system is now working as designed. The DCR and their consultants are working with the DOT on traffic studies in support of a redesign effort for the underpass. Recharge will be part of that plan and is targeted for upgrade.
5. **BWSC** – An update on the following:
  - a. Observed damp points along a sewer line in Montgomery Street in the South End. Currently in design to be repaired.
  - b. BWSC continues their investigations in the North End and Stuart Street areas of the Back Bay between Berkeley and Dartmouth Streets.
6. **MWRA** – In the spring, the MWRA re-inspected approximately 4,000-ft. of the Boston Marginal Conduit (BMC), which runs along the Storrow Drive embankment. Minor signs of weeping at four locations that were previously discovered during the inspection are still present but have not worsened. No new leaks were observed.
7. **MassDOT** - Repairs to 60' of the 30" reinforced concrete pipe, which runs parallel along the Turnpike and terminates at the prudential garage, will again be made this fall during dry weather.
8. **Website** – Traffic on the website remains steady. Due the release of our videos traffic doubled for about a week. We continue to have around 120 visits/day and just under 300 page views/day.

# Boston Groundwater Trust

229 Berkeley St, Fourth Floor, Boston, MA 02116  
617.859.8439  
www.bostongroundwater.org

## Board of Trustees

Gary L. Saunders  
Tim Ian Mitchell  
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John Hemenway  
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Christopher Cook  
Daniel Manning  
Ed Flynn  
Amelia Croteau  
Andre Jones  
Aaron Michlewitz  
Angie Liou

## Executive Director

Christian Simonelli

August 15, 2018

Subject: Invoice Analysis of New England Boring Contractors  
Invoice # 26369 (8/9/2018)  
Boston Groundwater Trust (BGwT)  
229 Berkeley Street, Suite 410  
Boston, MA 02116

BGwT Trustees:

The following sheets are attached:

### **Table I: Schedule of Estimated Quantities and Contract Unit Prices for Observation Well Installations**

New England Boring Contractors estimated project cost and agreed to unit prices for work performed from July 23<sup>rd</sup> – 27<sup>th</sup>, 2018.

### **Table II: New England Boring Contractors #26369 (8/9/2018)**

Invoice from New England Boring Contractors for the installation of 8 observation wells installed from July 23<sup>rd</sup> – 27<sup>th</sup>, 2018.

## **SUMMARY OF WORK COMPLETED**

A total of 8 observation wells were cleared of utilities and installed by New England Boring Contractors from July 23<sup>rd</sup> – 27<sup>th</sup>, 2018. New England Boring Contractors worked 5 days from the hours of 9:30am – 3:30pm to install 8 observation wells.

## **CONCLUSION**

I have reviewed the executed observation well installation agreement with New England Boring Contractors dated June 13<sup>th</sup>, 2018 and the following invoice:

**Table II: #26369 (8/9/2018)**, in the amount of \$21,712.50

The overall project cost for the installation of 8 wells was estimated to be \$27,910.00, with project funding capped at \$27,910.00. However, the average well depth was 19' instead of the estimated 24', so this led to a lower final project cost. In addition, a Police Detail was only filled on 3 of the 5 working days. The list below is a breakdown from 2003-present of the Trust's cost per well.

2003 = \$2,160/well (NHB)

2004 = \$1,859/well (NHB)

2005 = \$2,226/well (NHB)

2006 = \$2,349/well (NHB)

2007 = \$1,965/well (NHB)

2010 = \$2,508/well (NHB)

2011 = \$2,224/well (Geo-Logic)

2013 = \$1,800/well (NHB)

2014 = \$1,828/well (NHB)

2017 = \$2,349/well (NEBC, formerly NHB)

2018 = \$2,714/well (NEBC, formerly NHB)

*NOTE: No wells installed in 2008, 2009, 2012, 2015, and 2016.*

The total payment requested of \$21,712.50 is in conformance with provisions of the observation well installation agreement. A payment of \$21,712.50 was made to New England Boring Contractors on 8/13/2018.

Sincerely Yours,



Christian S. Simonelli  
Executive Director

Attachments:

Table I – Schedule of Estimated Quantities and Contract Unit  
Prices for Observation Well Installations

Table II –New England Boring Contractors Invoice #26329 (8/9/2018)

**TABLE I**  
**SCHEDULE OF ESTIMATED QUANTITIES AND CONTRACT UNIT PRICES**  
**FOR OBSERVATION WELL INSTALLATIONS**

Name of Drilling Contractor: New England Boring Contractors

(Based on 8 New Wells to 15-25 ft. averaging 24' per Well)

<b>Project</b>	Summer 2018: 8 Observation Well Installation	<b>Date</b>	June, 2018
<b>Location</b>	East Boston area of Boston	<b>Client Contact</b>	Mr. Christian Simonelli, BCwT Executive Director
<b>Client</b>	Boston Groundwater Trust (BCwT)		

No.	Description	Unit	Quantity	Unit Price	Total
<b>I MOBILIZATION/DEMOBILIZATION</b>					
1	Mob/Demob of 1 Truck/Mobile Rig and (1) Vac Truck w/ OSHA-trained crews	LS	1	\$ 3,500.00	\$ 3,500.00
<b>II DRILLING - FOOTAGE RATE</b>					
2	Water flush cleaning of plugged existing observation wells (2-in. dia. PVC pipe)	ea	0	\$ 450.00	
3	4-in. dia. cased overburden drilling (0-25 ft.) w/ specified 3 split-spoon sampling depths	lf	192	\$ 85.00	\$ 16,320.00
4	Standby Time for rig and crew (only for delays caused by BCwT)	hr	0	\$ 22.00	
<b>III OBSERVATION WELL INSTALLATION</b>					
5	2-in. dia. well (Sch 40 PVC) installed	lf	192	\$ 12.50	\$ 2,400.00
6	6-in. dia. Buffalo roadway box (cast iron with mechanical locking cover) and installation	ea	8	\$ 165.00	\$ 1,320.00
<b>IV SITE CLEARANCE AND SAFETY</b>					
7	Utility Clearance	LS	1	\$ 850.00	\$ 850.00
8	Premium for Weekend or Night Work (If required by BTM)	LS	1	\$ 1,500.00	
9	Police Detail	hr	64	\$ 55.00	\$ 3,520.00
				<b>Total</b>	<b>\$ 27,910.00</b>

**ASSUMPTIONS AND CONDITIONS**

- A. Work day hours allowed by City of Boston on public ways are 9:30am-3:30pm in most areas. However, on main arterial roads work hours may have to be from 7pm-7am.
- B. No Rock Coring required, but access through sidewalks will require coring that is incidental to the work.
- C. Driller's will leave each drilling site clean of soil, mud, and concrete spillage; and with the Roadway Box set level to sidewalk.
- D. This quantity estimate assumes that well installation will require 8 hours per day per drill rig for Police Detail, but contractor is responsible for actual rate of installations.
- E. No standby time allowed due to restricted work hours, media coverage/political events, blocked areas, or utility clearance issues.
- F. PIC authorizations and building permit to be arranged for by the Boston Groundwater Trust (BCwT).
- G. No separate reimbursement for vacuum truck use in probing through a depth of 8-ft. to clear utilities.
- H. Backfill and cold patch the vacuum holes until the drill rig reaches those borings, to commence installation.  
Do not vacuum more locations ahead of drilling work than will be worked on in the following three days.
- I. Street opening permits are required but, City of Boston has agreed to waive Street Opening Permit Fee.
- J. Separate Utility Clearance and no parking signs needed, and are to be obtained by the drilling contractor.
- K. No measurement or separate payment will be made for the split-spoon sample taken during drilling or at bottom of drillhole.  
Depth measured for 4-in diameter hole shall not include depth of final split-spoon sample.

TABLE II



P.O. Box 165, Derry, NH 03038

**Invoice**

Date	Invoice No.
8/9/2018	26329

**Client:**

Boston Groundwater Trust  
 Attn: Accounts Payable  
 229 Berkeley St., Suite 410  
 Boston, MA 02116

**Job Site:**

Proj: Summer 2018:8 Observation Well Insta  
 East Boston Area of Boston  
 Christian Simonelli

NEBC Job No.	Terms	Start Date	End Date
154431	2% 10 days/Net 30	0723/2018	07/27/2018

Qty	Description	Rate	Unit	Amount
1	#1 - Mobilization and Demobilization	3,500.00	LS	3,500.00
151	#3 - 4" Dia. cased overburden drilling with s/s	85.00	Ft	12,835.00
151	#5 - 2" Dia. well (sched. 40 PVC) installed	12.50	Ft	1,887.50
8	#6 - 6" Dia. Buffalo roadway boxes	165.00	Ea	1,320.00
1	#7 - Utility Clearance	850.00	LS	850.00
24	#9 - Police Detail	55.00	Hr	1,320.00

Please Remit all Payments to: New England Boring Contractors P.O. Box 165 Derry, NH 03038 EID No. - 02-0427589	<b>Total</b>	\$21,712.50
	<b>Payments/Credits</b>	\$0.00
	<b>Balance Due</b>	\$21,712.50

Phone: (603) 437-1610

Fax: (603) 437-0034

Website: www.NEBoring.com