

II. Suggested Notice of Intent (NOI) Form

1. General facility information. Please provide the following information about the facility.

a) Name of facility: Longfellow National Historic House		Mailing Address for the Facility: 105 Brattle Street, Cambridge, MA 02138	
b) Location Address of the Facility (if different from mailing address):		Facility Location longitude: 42° 22' 37" N latitude: 070° 07' 37" W	Type of Business: National Park / Historic Site Facility SIC codes: 712120
c) Name of facility owner: National Park Service		Owner's email: blaise_davi@nps.gov	
Owner's Tel #: 508-451-7816		Owner's Fax #:	
Address of owner (if different from facility address)			
Owner is (check one): 1. Federal ☒ 2. State ☐ 3. Tribal ☐ 4. Private ☐ 4. Other ☐ (Describe)			
Legal name of Operator, if not owner:			
Operator Contact Name: Blaise Davi, NPS			
Operator Tel Number: (508) 451-7816 Fax Number:			
Operator's email:			
Operator Address (if different from owner)			
d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? ☒			
e) Check Yes or No for the following:			
1. Has a prior NPDES permit been granted for the discharge? Yes ☐ No ☒ If Yes, Permit Number: _____			
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes ☒ No ☐			
3. Is the facility covered by an individual NPDES permit? Yes ☒ No ☐ If Yes, Permit Number _____			
4. Is there a pending application on file with EPA for this discharge? Yes ☐ No ☒ If Yes, date of submittal: _____			

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)

- a) Name of receiving water into which discharge will occur: Charles River via municipal storm drain
State Water Quality Classification: B Freshwater: X Marine Water: _____
- b) Describe the discharge activities for which the owner/applicant is seeking coverage:
1. Construction dewatering of groundwater intrusion and/or storm water accumulation.
2. Short-term or long-term dewatering of foundation sumps.
3. Other.
- c) Number of outfalls 1
- For each outfall:
- d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow 15,000 GPD
Average Monthly Flow 8,000 GPD
- e) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 8 Min pH 6
- f) Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit.
- g) What treatment does the wastewater receive prior to discharge? Solids settling in a weir tank
- h) Is the discharge continuous? Yes _____ No ✓ If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B) I
If (P), number of days or months per year of the discharge _____ and the specific months of discharge _____;
If (I), number of days/year there is a discharge 10
Is the discharge temporary? Yes ✓ No _____
If yes, approximate start date of dewatering 12/16/2010 approximate end date of dewatering 3/1/2011
- i) Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long. 42-22' 37" N lat. 071-07' 37" W;
Outfall 2: long. _____ lat. _____; Outfall 3: long. _____ lat. _____.
- j) If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations _____ cfs
(See Appendix VII for equations and additional information)

MASSACHUSETTS FACILITIES: See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC):

- k) Does the discharge occur in an ACEC? Yes ☒ No ☐
If yes, provide the name of the ACEC:

3. Contaminant Information

- a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC₅₀ in percent for aquatic organism(s)).
- b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge.

4. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendices III and IV. In addition, respond to the following questions.

- a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes ☐ No ☒
- b) Has any consultation with the federal services been completed? Yes ☐ No ☒
- c) Is consultation underway? Yes ☐ No ☒
- d) What were the results of the consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service (check one): a "no jeopardy" opinion ☐ or written concurrence ☐ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat.
- e) Which of the five eligibility criteria listed in Appendix 2, Section B (A,B,C,D, or E) have you met? _____
- f) Please attach a copy of the most current federal listing of endangered and threatened species, found at USF&W website.

5. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:

- a) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes ☒ No ☐
- b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes ☒ or No ☐ If yes, attach the results of the consultation(s).
- c) Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section C (1,2 or 3) have you met? 2 _____

6. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

7. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or

dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: Longfellow National Historic House

Operator signature:

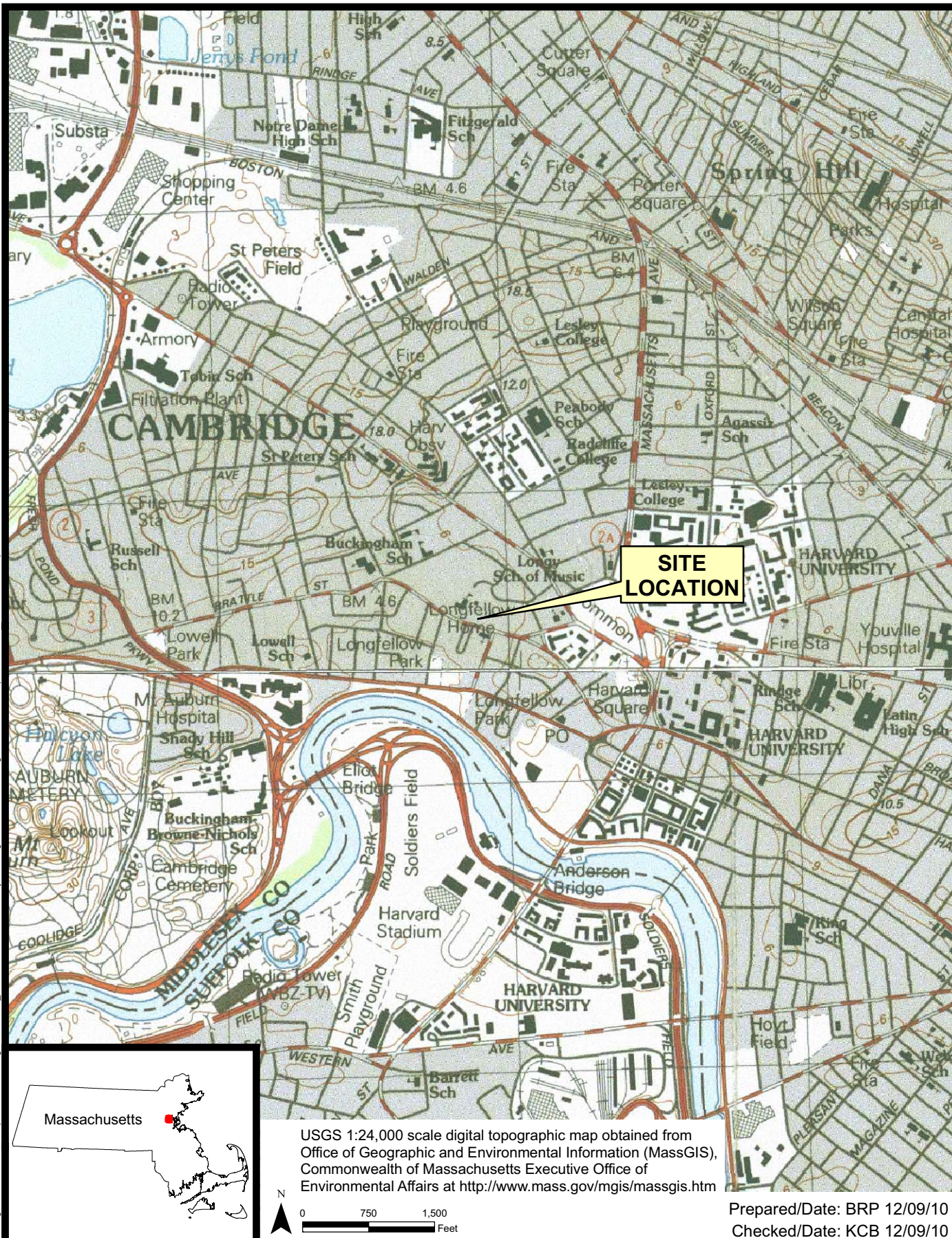
Dale Dan
Title: *Construction Manager*

Date:

12/10/10

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.



Longfellow National Historic House
105 Brattle Street
Cambridge, MA 02138



Site Location
Project 3650-10-0163
Figure 1

List of Attachments

Supplemental Information

Historic Sampling Analysis

MA Fee Transmittal Form and Copy of check

Locus Map



engineering and constructing a better tomorrow

**National Park Service – Longfellow House
105 Brattle St, Cambridge, Massachusetts**

Supplemental Information

- 2.b.) This Notice of Intent is for the discharge of groundwater as a result of drilling a geothermal well field. This is a short term dewatering project.
- 2.d.) The actual discharge volume to the storm drain will be based upon the water production of the geothermal well. The storm drain will be used as a contingency for water quantity above groundwater infiltration rates of the property.
- 2.f.) The source of the discharge is groundwater produced during drilling of geothermal wells.
- 2.h.) The number of days is an anticipated maximum for the project completion.
2. i.) The proposed receiving point is connected to the City of Cambridge, Massachusetts municipal storm drain system. The discharge point (outfall) is presumed to be a combined discharge outfall to the Charles River.
- 2.j.) Not applicable.
- 3.a.) No chemicals added to discharge.
- 3.b.) No known remediation or water quality issues in the vicinity of the discharge.
- 4) There are no known threatened or endangered species on the subject site, or near the discharge location (Charles River).
- 5) The subject site is listed on the National Register of Historic Places, and is part of the National Park system. The National Park Service (NPS) is not required to notify a state historical office when working on federal property. However, NPS Project Manager, Balise Davi, provided verbal notification to the Massachusetts Historical Commission of the overall project (installation of a geothermal well field) prior to project commencement. Project Proponents have determined that the discharge of groundwater to the storm drain will not affect the subject site.

Thorstensen Laboratory, Inc.

66 LITTLETON ROAD, WESTFORD, MA 01886

(978) 692-8395 FAX (978) 692-0023 1-800-649-TEST

Report Number: W-105171
Client:Report Date: January 31, 2007
Sample taken at:Blaise Davi
National Park Service
115 John St
Lowell, MA 01852

Well Water

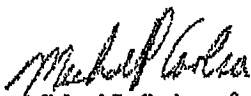
Sample taken by: Client

Received on: 1/25/07

Certificate of Analysis

TEST PARAMETER	EPA MAX	RESULTS	UNITS
Calcium	Not Spec.	370	mg/L
Copper (S)	1.3	1.0	mg/L
Iron (S)	0.3	# 76.3	mg/L
Magnesium	Not Spec.	86.6	mg/L
Manganese (S)	0.05	# 3.2	mg/L
Sodium	See Note	167.0	mg/L
Hardness	Not Spec.	1281	mg/L
pH (S)	6.5-8.5	# 5.9	SU

Legends:

(S)-Secondary EPA Standard, # Exceeds EPA Limit, -Exceeds Advisory Limit
Sodium Advisory Limits, MA=20, NH=250.Massachusetts State Certified
Testing Laboratory #MA048Michael P. Carlson, for
Thorstensen Laboratory Inc.

Thorstensen Laboratory, Inc.

66 LITTLETON ROAD, WESTFORD, MA 01886

(978) 692-8395 FAX (978) 692-0023 1-800-649-TEST

Report Number: W-105171

Report Date: January 31, 2007

Client:

Sample taken at:

Blaise Davi
National Park Service
115 John St
Lowell, MA 01852

Heat Pump Flush

Sample taken by: Client

Received on: 1/25/07

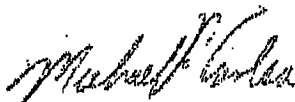
Certificate of Analysis

TEST PARAMETER	EPA MAX	RESULTS	UNIT'S
Calcium	Not Spec.	465	mg/L
Copper (S)	1.3	131	mg/L
Iron (S)	0.3	# 3032	mg/L
Magnesium	Not Spec.	167	mg/L
Manganese (S)	0.05	# 21.7	mg/L
Sodium	See Note	231	mg/L
Hardness	Not Spec.	1849	mg/L
pH (S)	6.5-8.5	# 6.0	SU

Legends:

(S) Secondary EPA Standard, # Exceeds EPA Limit, # Exceeds Advisory Limit.
Sodium Advisory Limits, MA=20, NH=250.

Massachusetts State Certified
Testing Laboratory #MA048


Michael P. Carlson, for
Thorstensen Laboratory Inc.

Thorstensen Laboratory, Inc.

66 LITTLETON ROAD, WESTFORD, MA 01886

(978) 692-8395 FAX (978) 692-0023 1-800-649-TEST

Michael Carlson

Todd Melanson

IRON
+
Manganese

* Stain Package

\$50.00

Copper	Manganese
Calcium	Sodium
Iron	Hardness
Magnesium	pH

Basic Water Test

\$65.00

Total Coliform	Chloride	pH
Iron	Hardness	
Manganese	Nitrates	
Sodium	Nitrites	

General Water Quality Test

\$90.00

Total Coliform	Manganese	Chloride	Nitrates	Turbidity
Calcium	Potassium	Chlorine	Nitrites	Sediment
Copper	Sodium	Color	pH	
Iron	Alkalinity	Conductivity	Odor	
Magnesium	Ammonia	Hardness	Sulfates	

FHA/VA Water Quality Test

\$100.00

Total Coliform	Manganese	Chloride	Nitrates	Turbidity
Calcium	Potassium	Chlorine	Nitrites	Sediment
Copper	Sodium	Color	pH	Lead
Iron	Alkalinity	Conductivity	Odor	
Magnesium	Ammonia	Hardness	Sulfates	

Comprehensive Water Quality Test

\$125.00

Total Coliform	Manganese	Chloride	Nitrates	Turbidity
Calcium	Potassium	Chlorine	Nitrites	Sediment
Copper	Sodium	Color	pH	Lead
Iron	Alkalinity	Conductivity	Odor	Arsenic
Magnesium	Ammonia	Hardness	Sulfates	Fluoride

Extensive Water Quality Test

\$250.00

Total Coliform	Manganese	Chloride	Nitrates	Turbidity
Calcium	Potassium	Chlorine	Nitrites	Sediment
Copper	Sodium	Color	pH	Lead
Iron	Alkalinity	Conductivity	Odor	Arsenic
Magnesium	Ammonia	Hardness	Sulfates	Fluoride
Volatile organic scan (Includes)	Benzene	Carbon Tetrachloride	1,1-Dichloroethylene	1,2-dichloroethane
p-dichlorobenzene	Trichloroethylene	1,1,1-Trichloroethane	Vinyl Chloride	Monochlorobenzene
o-Dichlorobenzene	trans-1,2-Dichloroethylene	cis-1,2 Dichloroethylene	1,2-Dichloropropane	Ethylbenzene
Styrene	Tetrachloroethylene	Toluene	Xylenes	

Total Coliform

\$20.00

Total Coliform & Plate Count

\$30.00

Radon in Water

\$37.00

Radon in Air

\$40.00

Follow the sampling instructions and return the sample (s) to the laboratory.

How to Take A Water Sample

- 1: Obtain a sterile bottle from Thorstensen Laboratory or a drugstore. Each Bacteria Sample requires 1 sterile container. Chemical tests require a clean plastic or glass container also available from Thorstensen Laboratory. (There is no charge for these sample containers).
- 2: If possible, remove aeration screen from tap. Turn on hot water for about two minutes. Turn off hot water and switch over to cold water. Run cold water for 5-10 minutes. This ensures that we will be testing water from the source.
- 3: Open the bottle(s) and fill with cold water. Cap the bottle(s) securely as soon as it is full.
- 4: Return the bottle(s) to the Laboratory within two hours after taking the sample. If you need more time, refrigerate the bottle until you can deliver the samples.

PLEASE CALL US IF YOU NEED HELP OR HAVE ANY QUESTIONS

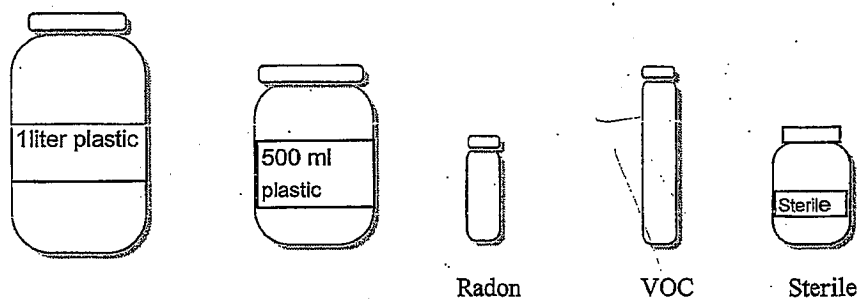
VOC/RADON Sampling Instructions

VOC's and radon must be sampled in a glass container and filled without air bubbles present.

Run the cold water from the kitchen tap, removing the aeration screen on the faucet, overflow the bottle with water and place the cap on the bottle. Invert the bottle and look for air bubbles. If air bubbles are present add a small amount to the vial cap and reseal.

Label the bottle with the date and the time the sample was taken.

Results typically take 3-5 working days.



WELL COMPLETION REPORT

WELL LOCATION Address <u>105 BRATTLE ST</u> <u>LONGFELLOW HOUSE</u> City/Town <u>CAMBRIDGE</u> Well owner <u>NATIONAL PARK SERVICE</u> Address <u>SAME</u>		GEOGRAPHIC DESCRIPTION <u>100 N S E W of</u> <u>BRATTLE</u> <u>36 N S E W of</u> <u>CRASSIE</u> Intersect. w/ <u>CRASSIE</u> (road)																			
Board of Health permit obtained: yes ☐ no ☒		WELL DATA Domestic ☐ Public ☐ Industrial ☐ Monitoring ☐ Other ☒ <u>SEOTERMAL</u> Total well depth <u>1100</u> ft. Depth to bedrock <u>90</u> ft. Water-bearing rock/unconsolidated material: <u>SOFT GREY</u>																			
Method drilled <u>ROTARY</u> Date drilled <u>9-22-00</u>		Description <u>SOFT GREY</u> Water-bearing zones: 1) From <u>250</u> To <u>260</u> 2) From <u>345</u> To <u>350</u> 3) From <u>520</u> To <u>525</u>																			
Casing <u>STEEL #26</u> Type <u>120</u> ft. Dia(I.D.) <u>8</u> in. Length into bedrock <u>30</u> ft.		Gravel pack well: <u>NO</u> Protective well seal: <u>SHOE</u> Grout ☐ Other ☒																			
Static water level (all wells) Static water level below land surface <u>30</u> ft. Date <u>9-26-00</u>		WELL TEST (production wells) Drawdown <u>1100</u> ft. after pumping <u>1</u> hr. at <u>150</u> gpm How measured <u>AIR</u> Recovery <u>100%</u> ft. after <u>2</u> hr. <u>30</u> min.																			
LOG of FORMATIONS <table border="1"> <thead> <tr> <th>Materials</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>GRAVEL</td> <td>0</td> <td>30</td> </tr> <tr> <td>CLAY</td> <td>30</td> <td>90</td> </tr> <tr> <td>SOFT GREY</td> <td>90</td> <td>250</td> </tr> <tr> <td>MECH BLACK</td> <td>260</td> <td>350</td> </tr> <tr> <td>MECH GREY</td> <td>360</td> <td>1100</td> </tr> </tbody> </table>		Materials	From	To	GRAVEL	0	30	CLAY	30	90	SOFT GREY	90	250	MECH BLACK	260	350	MECH GREY	360	1100	COMMENTS Driller <u>JF VIERA</u> Firm <u>VIERA WELL CO</u> Address <u>253 ANDOVER ST</u> City/Town <u>SPORSETOWN</u> Supervising Driller Reg.# <u>6</u>	
Materials	From	To																			
GRAVEL	0	30																			
CLAY	30	90																			
SOFT GREY	90	250																			
MECH BLACK	260	350																			
MECH GREY	360	1100																			

Please print firmly

BOARD OF HEALTH COPY

WELL COMPLETION REPORT

WELL LOCATION Address <u>105 BRATTLE ST</u> <u>LONGFELLOW HOUSE</u> City/Town <u>CAMBRIDGE</u> Well owner <u>NATIONAL PARK SERVICE</u> Address <u>SAME</u>		GEOGRAPHIC DESCRIPTION <u>200 N S E W of</u> <u>BRATTLE</u> <u>36 N S E W of</u> <u>CRASSIE</u> Intersect. w/ <u>CRASSIE</u> (road)																			
Board of Health permit obtained: yes ☐ no ☒		WELL DATA Domestic ☐ Public ☐ Industrial ☐ Monitoring ☐ Other ☒ <u>SEOTERMAL</u> Total well depth <u>1300</u> ft. Depth to bedrock <u>90</u> ft. Water-bearing rock/unconsolidated material: <u>SOFT GREEN</u>																			
Method drilled <u>ROTARY</u> Date drilled <u>9-18-00</u>		Description <u>SOFT GREEN</u> Water-bearing zones: 1) From <u>185</u> To <u>200</u> 2) From <u> </u> To <u> </u> 3) From <u> </u> To <u> </u>																			
Casing <u>STEEL #26</u> Type <u>110</u> ft. Dia(I.D.) <u>8</u> in. Length into bedrock <u>20</u> ft.		Gravel pack well: <u>NO</u> Protective well seal: <u>SHOE</u> Grout ☐ Other ☒																			
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Materials	From	To																			
GRAVEL	0	30																			
CLAY	30	90																			
SOFT GREEN	90	600																			
MECH BLACK	600	800																			
MECH GREY	800	1300																			

Please print firmly

BOARD OF HEALTH COPY

Michael Carlson

Joan McCanson

Thorstensen Laboratory, Inc.

66 LITTLETON ROAD, WESTFORD, MA 01886

(978) 692-8395 FAX (978) 692-0023 1-800-649-TEST

Report Number: C-wps-51287.1
Client:

Report Date: October 25, 2000
Sample taken at:

Wilmington Pump Supply, Inc.
P.O.Box 517
Wilmington MA 01887

Longfellow Museum
Cambridge, MA
Well #1

Sample taken by: Client

On: 10/19/00

Need in
PPM

Certificate of Analysis

TEST PARAMETER	RESULTS	UNITS
Total Coliform	1	per 100ml
Calcium	12.3	mg/L
Copper	<0.02	mg/L
Iron	2.2	mg/L
Magnesium	3.9	mg/L
Manganese	0.26	mg/L
Potassium	1.1	mg/L
Sodium	75.0	mg/L
Alkalinity	121	mg/L
Ammonia	<0.03	mg/L
Chloride	51.9	mg/L
Chlorine	<0.02	mg/L
Color	75	CPU
Conductivity	424	umhos/cm
Hardness	47	mg/L
Nitrates	<0.01	mg/L
Nitrites	<0.01	mg/L
pH	7.1	SU
Odor	2	TON
Sulphates	16.7	mg/L
Turbidity	4.6	NTU
Sediment	neg	

RECEIVED
NOV - 2 2000

Massachusetts State Certified
Testing Laboratory #MA048

Michael P. Carlson
Michael P. Carlson, for
Thorstensen Laboratory Inc.

Thorstensen Laboratory, Inc.

66 LITTLETON ROAD, WESTFORD, MA 01886

(978) 692-8395 FAX (978) 692-0023 1-800-649-TEST

Report Number: C-wps-51287.2

Report Date: October 25, 2000

Client:

Sample taken at:

Wilmington Pump Supply Inc.

Longfellow Museum

P.O.Box 517

Cambridge, MA

Wilmington MA 01887

Well #2

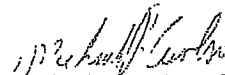
Sample taken by: Client

On: 10/19/00

Certificate of Analysis

TEST PARAMETER	RESULTS	UNITS
Total Coliform	10	per 100ml
Calcium	230	mg/L
Copper	<0.02	mg/L
Iron	4.4	mg/L
Magnesium	56.6	mg/L
Manganese	2.3	mg/L
Potassium	2.9	mg/L
Sodium	148.0	mg/L
Alkalinity	65	mg/L
Ammonia	0.06	mg/L
Chloride	832	mg/L
Chlorine	<0.02	mg/L
Color	150	CPU
Conductivity	1860	umhos/cm
Hardness	807	mg/L
Nitrates	<0.01	mg/L
Nitrites	<0.01	mg/L
pH	6.5	SU
Odor	4	TON
Sulphates	49.8	mg/L
Turbidity	35.1	NTU
Sediment	neg	

Massachusetts State Certified
Testing Laboratory #MA048


Michael P. Carlson, for
Thorstensen Laboratory Inc.

TITLE III - Longfellow Project Water Sample Evaluations* - UIC Class V for Geothermal Heat Pumps

cheer/aw4

10/29/2000

Item	EPA Parameter	Well #1 Near Carriage	Status	Amount	Well #2 Near Street	Status	Amount
1 Alkalinity(S)	Ns	17.1 mg/L	ok		65 mg/L	ok	
2 Ammonia	Ns	<0.03 mg/L	ok		0.06 mg/L	ok	
3 Arsenic (P)	0.05 mg/L						
4 Calcium	no limit	12.3	ok		230 mg/L	ok	
5 Chloride(S)	250 mg/L	51.9 mg/L	ok		832 mg/L	over	582
6 Chlorine	Ns	<0.02 mg/L	ok		<0.02 mg/L	ok	
7 Coliform(P)	0	1 / 100 ml	over	1	10 / 100 ml	over	10
8 Color(S)	15	75 CPU	over	60	150 CPU	over	135
9 Conductivity	Ns	424 umhos/cm	ok		1860 umhos/cm	ok	
10 Copper (S)	1.3 mg/L	<0.02 mg/L	ok		<0.02 mg/L	ok	
11 Hardness	no limit	47 mg/L	ok		807 mg/L	ok	
12 Iron(S)	0.03 mg/L	2.2 mg/L	over	2.17	4.4 mg/L	over	4.37
13 Lead(P)	0.015 mg/L						
14 Magnesium	no limit	3.9 mg/L	ok		56.6 mg/L	ok	
15 Manganese(S)	0.06 mg/L	0.26 mg/L	over	0.21	2.3 mg/L	over	2.25
16 Nitrate (P)	10.0 mg/L	<0.01 mg/L	ok		<0.01 mg/L	ok	
17 Nitrite	1.0 mg/L	<0.01 mg/L	ok		<0.01 mg/L	ok	
18 Odor(S)	3	2	ok		4	over	1
19 pH (S)	8.6-8.5	7.1	ok		6.5	ok	
20 Potassium	Ns	1.1 mg/L	ok		2.9 mg/L	ok	
21 Sediment	pos./neg.	neg.	ok		neg.	ok	
22 Sodium	28 mg/L advisory	75 mg/L	ok		148 mg/L	ok	
23 Sulfate(S)	250 mg/L	16.7 mg/L	ok		49.0	ok	
24 Turbidity(P)	5 NTU	4.6 NTU	ok		35.1 NTU	over	30.1

* - Thorntensen Laboratory Inc. #1 51287.1 and #2 51287.2 both Oct 25, 2000
(P) Primary EPA Parameter - health standard - items are highlighted
(S) Secondary EPA Parameter - may affect the aesthetics of the water
Parameter Definitions from Standard Methods for the Examination of Water and Wastewater, 1118th Edition, 1992.

Water & Energy Systems Corp - Atkinson NH



Enter your transmittal number

X236049

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml>

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

* Note:
For BWSC Permits,
enter the LSP.

A. Permit Information

MRP WM 10

Construction Site Dewatering

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Dewatering discharge from geothermal well drilling

3. Type of Project or Activity

B. Applicant Information - Firm or Individual

National Park Service

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

105 Brattle Street

5. Street Address

Cambridge

MA

02138

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Blaise Davi

Blaise_Davi@NPS.gov

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

National Park Service

1. Name of Facility, Site Or Individual

105 Brattle Street

2. Street Address

Cambridge

MA

02138

3. City/Town

4. State

5. Zip Code

508-451-7816

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

MACTEC, Engineering and Consulting, Inc

1. Name of Firm Or Individual

511 Congress Street

2. Address

Portland

ME

04101

3. City/Town

4. State

5. Zip Code

207-838-3617

6. Telephone #

7. Ext. #

Alicia Robinson

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☒ no
If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

1. ☐ Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

\$385.00

Check Number

Dollar Amount

Date



Enter your transmittal number

X236049

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml>

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

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3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

* Note:
For BWSC Permits,
enter the LSP.

A. Permit Information

MRP WM 10

Construction Site Dewatering

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Dewatering discharge from geothermal well drilling

3. Type of Project or Activity

B. Applicant Information - Firm or Individual

National Park Service

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

501 Brattle Street

5. Street Address

Cambridge

MA

02138

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Blaise Davi

Blaise_Davi@NPS.gov

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

National Park Service

1. Name of Facility, Site Or Individual

105 Brattle Street

2. Street Address

Cambridge

MA

02138

508-

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

MACTEC, Inc

1. Name of Firm Or Individual

511 Congress Street

2. Address

Portland

ME

04101

207-838-3617

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

Alicia Robinson

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☒ no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

1. ☐ Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

\$385.00

Dollar Amount

12/10/10

Date

DATE December 10, 2010

VENDOR NAME COMMONWEALTH OF MASSACHUSETTS

VENDOR NO

6111

INVOICE NO.	INVOICE DATE	DESCRIPTION	VO #	NET AMOUNT
CKREQ12101	10-DEC-10	POR	1100417	385.00
PLEASE DETACH AND RETAIN THIS STATEMENT AS YOUR RECORD OF PAYMENT.				\$ 385.00

THIS CHECK IS VOID WITHOUT A BLUE & RED BACKGROUND AND A WATERMARK - HOLD TO THE LIGHT TO VIEW



1105 Lakewood Parkway, Suite 300
 Alpharetta, GA 30004
 Accounts Payable

Bank of America
 Atlanta, Dekalb County, GA

64-1278/611

637039

December 10, 2010

\$ *****385.00

PAY: Three Hundred Eighty-Five Dollars And 00

Cents *****

TO THE
 ORDER OF: COMMONWEALTH OF MASSACHUSETTS
 DEPT OF ENVIRONMENTAL PROTECTION
 P O BOX 4062
 BOSTON, MA 02211

(VOID AFTER 90 DAYS)

SIGNATURE HAS A COLORED BACKGROUND • BORDER CONTAINS MICROPRINTING

⑈637039⑈ ⑆061112788⑆ 003299832149⑈