NOTICE OF INTENT FOR DISCHARGE PURSUANT TO MASSACHUSETTS REMEDIATION GENERAL PERMIT MAG9100000

WATERSIDE PLACE 2

BOSTON, MASSACHUSETTS

NOVEMBER 21, 2017

Prepared For:

U.S. Environmental Protection Agency
Office of Ecosystem Protection
5 Post Office Square – Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

On Behalf Of:

The Drew Company
&
Suffolk Construction Co.

PROJECT NO. 5996.9.00

2269 Massachusetts Avenue
Cambridge, MA 02140
www.mcphailgeo.com
(617) 868-1420

November 21, 2017

U.S. Environmental Protection Agency
Dewatering GP Processing
Industrial Permit Unit (OEP 06-4)
5 Post Office Square – Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

Attention: To Whom It May Concern

Reference: Waterside Place 2, 505 Congress Street - Boston, Massachusetts
Notice of Intent for Construction Dewatering Discharge Under
Massachusetts Remediation General Permit MAG910000

Ladies and Gentlemen:

On behalf of Suffolk Construction Company, McPhail Associates, LLC (McPhail) has prepared the attached Notice of Intent (NOI) for coverage under the Remediation General Permit (RGP) MAG910000 for the discharge of construction dewatering effluent into Boston Inner Harbor via the City of Boston storm drainage system. The temporary construction dewatering discharge will occur during construction of the proposed mixed-use development, known as Waterside Place 2, to be located at the approximate address of 505 Congress Street in Boston, Massachusetts (subject site). Refer to **Figure 1** entitled: "Project Location Plan" for the general site locus.

These services were performed and this permit application was prepared in accordance with our proposal dated August 11, 2015 and the subsequent authorization of Core Development Group, LLC. These services are subject to the limitations contained in **Appendix A**.

The required Notice of Intent Form contained in the RGP permit and Boston Water & Sewer Dewatering Discharge Permit Application are included in **Appendix B** and supporting information is included in **Appendix C**. This project is considered Activity Category III-G as defined in the RGP. Category III-G is defined as Contaminated Site Dewatering from Sites with Know Contamination. Based on historical and current soil and groundwater analysis completed at the site and constituents of concern (COCs) detected under subcategory A (Inorganics), thus, Technology Based Effluent Limitations (TBELs) for Type A contamination apply.

GEOTECHNICAL AND GEOENVIRONMENTAL ENGINEERS
2269 Massachusetts Avenue
Cambridge, Massachusetts 02140
(617) 868-1420

Applicant/Operator

The applicant for the Notice of Intent-Dewatering General Permit is:

Suffolk Construction Company
65 Allerton Street
Boston, MA 02219

Attention: Nicholas Morel

Office: 617-517-5228
Email: NMorel@suffolk.com

Site Location and Existing Conditions

The subject site is located in the Seaport District of Boston and the proposed development is immediately west of the existing Waterside Place building. The site is bounded to the north by Congress Street, to the south by the existing Massachusetts Bay Transportation Authority (MBTA) Silver Line and its easement, and to the west by the World Trade Center Road viaduct. The existing ground surface across the site is relatively level at about Elevation +11 and currently is occupied by paved parking. The limits of the subject site are depicted on **Figure 2**.

Proposed Scope of Site Development

The proposed building will have a footprint of about 27,500 square feet and will consist of a 21-story tower. The building will not contain basement space and the floor slab will be approximately coincident with the surrounding finished grade. The proposed building core will be situated towards the western portion of the building and will be supported on a rectangular core mat occupying a footprint of about 3,000 square feet. The excavation required to construct the core mat is anticipated to extend to a depth about 12 feet below the existing site grades.

Site History

In summary, historical information of the surrounding area indicates a gradual filling of the tidal flats in South Boston along the Boston Harbor waterfront. During the late 1800s and the early 1900s the area surrounding the subject site reached its current configuration and the majority of the surrounding properties were gradually occupied by commercial establishments, light industrial facilities, warehouses, railway yards, freight terminals and motor vehicle service facilities. The majority of the subject site area was occupied by a railway yard and a freight terminal that contained multiple rail lines for approximately fifty (50) years. A 1988 Sanborn Map indicates that the majority of the rail lines were removed

from the subject site and ceased to serve as a freight terminal. During the early 2000's, the subject site was used as a staging area by contractors during the construction of the Central Artery Tunnel (CAT) Project and the Interstate 1-90 tunnel located to the south of the subject site. Following the completion of the CAT Project the current silver line station to the northwest and southwest was constructed as well as the current asphalt paved parking lot occupying the subject site.

MCP Regulatory Status and Site Environmental Setting

Based on our review of the Massachusetts Department of Environmental Protection (DEP) on-line waste-site database, the subject site is not a MassDEP listed release site.

According to an on-line edition of the Massachusetts Geographic Information Systems DEP which was viewed on September 20, 2017, the subject site is not located within the boundaries of a Sole Source Aquifer, Potentially Productive Aquifer or within a Zone II, Interim Wellhead Protection Area as defined by the Massachusetts Department of Environmental Protection. Further, there are no public drinking water supply wells, no Areas of Critical Environmental Concern, no fish habitats, no habitats of Species of Special Concern or Threatened or Endangered Species within specified distances of the subject site.

The GIS Map indicates that there are no wetland areas on or within 500 feet of the subject site. The closest water body is Boston Inner Harbor, which is located approximately 550 feet to the northeast of the subject site. The map indicates that the closest Protected Open Space to the subject site is located approximately 3,600 feet to the south-southwest. There are no areas designated as solid waste sites (landfill) noted as being located within 3,000 feet of the subject site. A copy of the Massachusetts GIS Priority Resources Map is included in **Appendix C**. In addition, a report prepared by Environmental Database Resource, Inc. (EDR) was reviewed for this study. Based on EDR's search of FEMA Flood Plain Maps, the subject site is not located within a 100 year or 500 year flood plain.

A review of information provided by the U.S. Fish and Wildlife Service in an Information for Planning and Conservation (IPaC) Trust Resource Report for the subject site did not identify the presence of endangered species at or in the vicinity of the discharge location and/or discharge outfall. Further, the Trust Resource Report did not identify the presence of a critical habitat in the vicinity of the discharge outfall and/or discharge location. However, the report indicated that the Red Knot bird, which is classified as a "threatened" species, should be considered with regard to this project. Based on correspondence with the New England Field Office for the U.S. Fish and Wildlife Service, groundwater discharge from the subject site to Boston Inner Harbor is not considered likely to adversely affect the Red Knot bird. Based upon the above, the site is considered a criterion B pursuant to Appendix IV of the DGP. A copy of the IPaC Trust Resource Report and correspondence are included in **Appendix C**.

A review of the online Massachusetts Cultural Resource Information System and the National Register of Historical Places for Suffolk County in Boston, Massachusetts did not

identify records or addresses of historic places that exist in the immediate vicinity of the subject site and/or outfall location.

Temporary Construction Dewatering

To facilitate the construction of the proposed core mat, general site excavation is anticipated to extend approximately 12 feet below the existing site grades, which is approximately 8 feet below the observed groundwater level. To reduce the required size of the excavation, backfilling, and dewatering, excavation for the core mat will be performed within an enclosure formed by continuously interlocking steel sheet piling coffer dam. The steel sheet piling coffer dam be installed into the surface of the marine clay deposit in order to provide a temporary groundwater cutoff. The core mat may vary from Elevation -30 to Elevation -50.

Based on the subsurface conditions at the site, the recharge of construction dewatering effluent on-site is not considered to be feasible. As a result, in order to perform the excavation for the core mat and also to provide for management of water which may become trapped within the excavation areas following periods of precipitation, the construction dewatering discharge into the city's storm drain is necessary.

With a groundwater cutoff provided by the steel sheet piles, it is anticipated that dewatering can be achieved by conventional sump pumping. It is also anticipated that dewatering of localized excavations for pile caps can be achieved by sump pumping. It is estimated that continuous groundwater discharge during the construction will be on the order of 25 to 50 gallons per minute (gpm). The maximum daily flow is estimated to be 72,000 GPD and the average monthly flow is estimated to be 54,000 GPD.

A review of available subgrade utility plans provided by the Boston Water and Sewer Commission indicates the presence of dedicated 30-inch storm drain located at the subject site which connect to dedicated storm drains beneath Congress Street. Stormwater is collected within each of the storm drains and flows southeast into a storm drain located beneath D Street. The stormwater drain located beneath D Street flows northeast into a storm drain located beneath Seaport Boulevard which runs northwest where it eventually discharges into Boston Inner Harbor. The location of the relevant stormwater drains in relation to the subject site are indicated on **Figure 2**. The flow path of the discharge is shown in a plan provided by the Boston Water and Sewer Commission which is included in **Figure 3**.

Summary of Groundwater Analysis

On April 13, 2017, one representative groundwater sample identified as M 108 (OW) was submitted to a laboratory for chemical analysis for the presence of total metals, total suspended solids (TSS), chloride, total residual chlorine, and pH. A summary of the analytical data is provided on **Table 1.** A copy of the laboratory report is included in

Appendix D. In summary, previous collection and laboratory analysis of soil and groundwater from the subject site did not indicate the presence of total metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH), and/or polychlorinated biphenyls (PCBs) above MCP Method 1 Risk Standards. More recent laboratory analysis of groundwater obtained from M 108 (OW) indicates detectable levels of RGP Section A (Inorganics) including antimony, arsenic, chromium, copper, iron, and nickel. Concentration of detected compounds did not exceed Method 1 Risk Standards nor limitations established by the EPA for discharge into a marine water body.

Per the EPA, a receiving water body sample was obtained from the Boston Inner Harbor as indicated on **Figure 2** and analyzed for Recoverable Metals, pH, Ammonia, and Salinity. The results of the sample we tabulated and assessed using Appendix V of the 2017 NPDES RGP included in **Appendix C** and summarized in **Table 2** and verified by laboratory data analysis located in **Appendix E.** Based upon the Appendix V calculations, TBELs apply to this specific discharge.

Groundwater Treatment

Based on the results of the above referenced groundwater analyses, it is our opinion that a 5,000-gallon capacity settling tank and bag filter in series will be required to settle and filter out TSS in the discharge during construction dewatering to meet applicable effluent limits established by the US EPA prior to off-site discharge. A schematic of the treatment system is shown on **Figure 4**.

Summary and Conclusions

The purpose of this report is to assess site environmental conditions and groundwater data at proposed Waterside Place 2 development site located at 505 Congress Street in the Seaport District of Boston, Massachusetts to support the attached Notice of Intent (NOI) for coverage under the Remediation General Permit (RGP) MAG910000 for the discharge of construction dewatering effluent into Boston Inner Harbor via the City of Boston storm drainage system.

We trust that the above satisfies your present requirements. Should you have any questions or comments concerning the above, please do not hesitate to contact us.

Sincerely,

McPHAIL ASSOCIATES, LLC

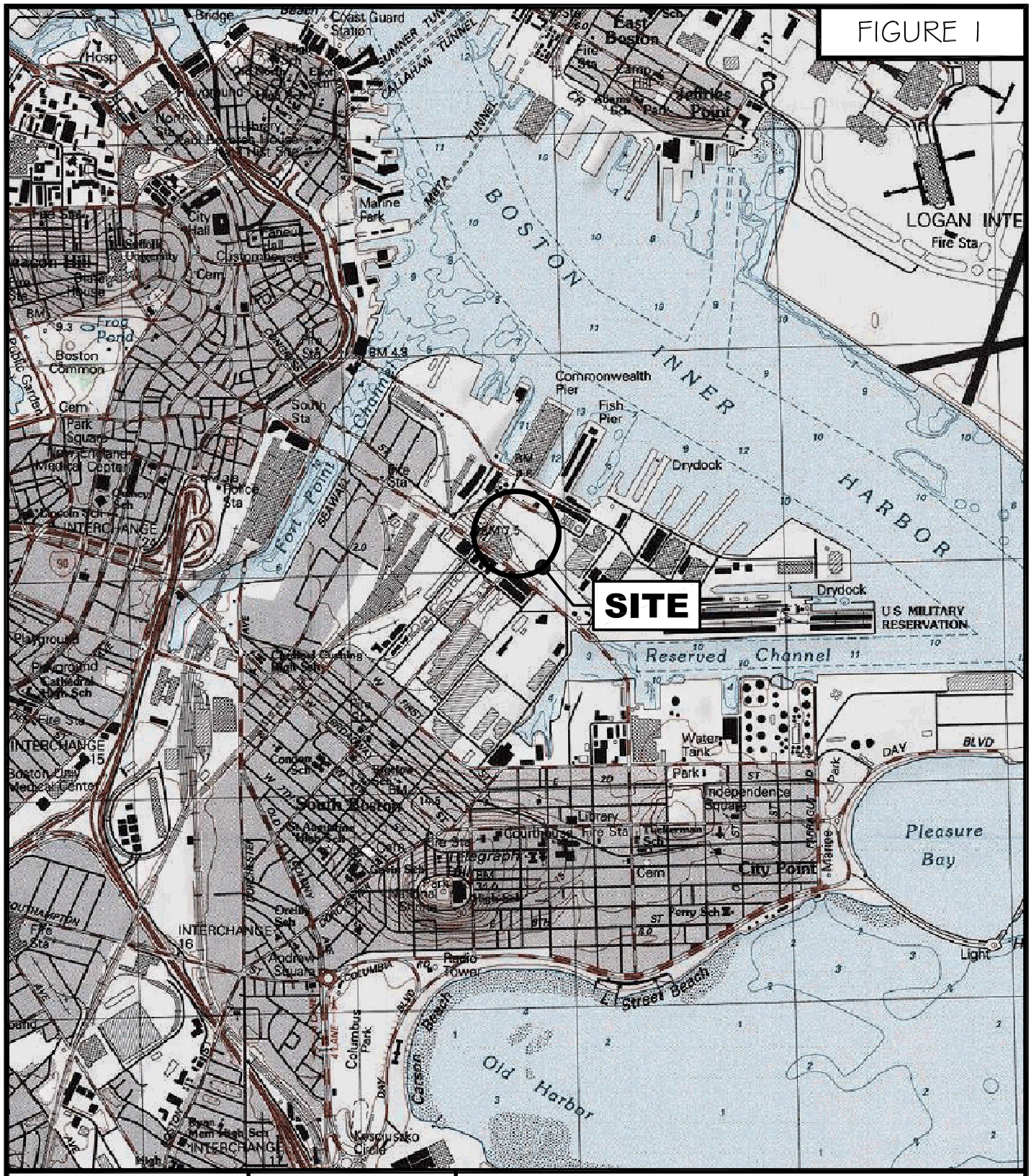
Kirk W. Seaman

William J. Burns, L.S.P.

N:\Working Documents\Reports\5996_RGP_110317.docx

KWS/bfm/wjb

FIGURE 1



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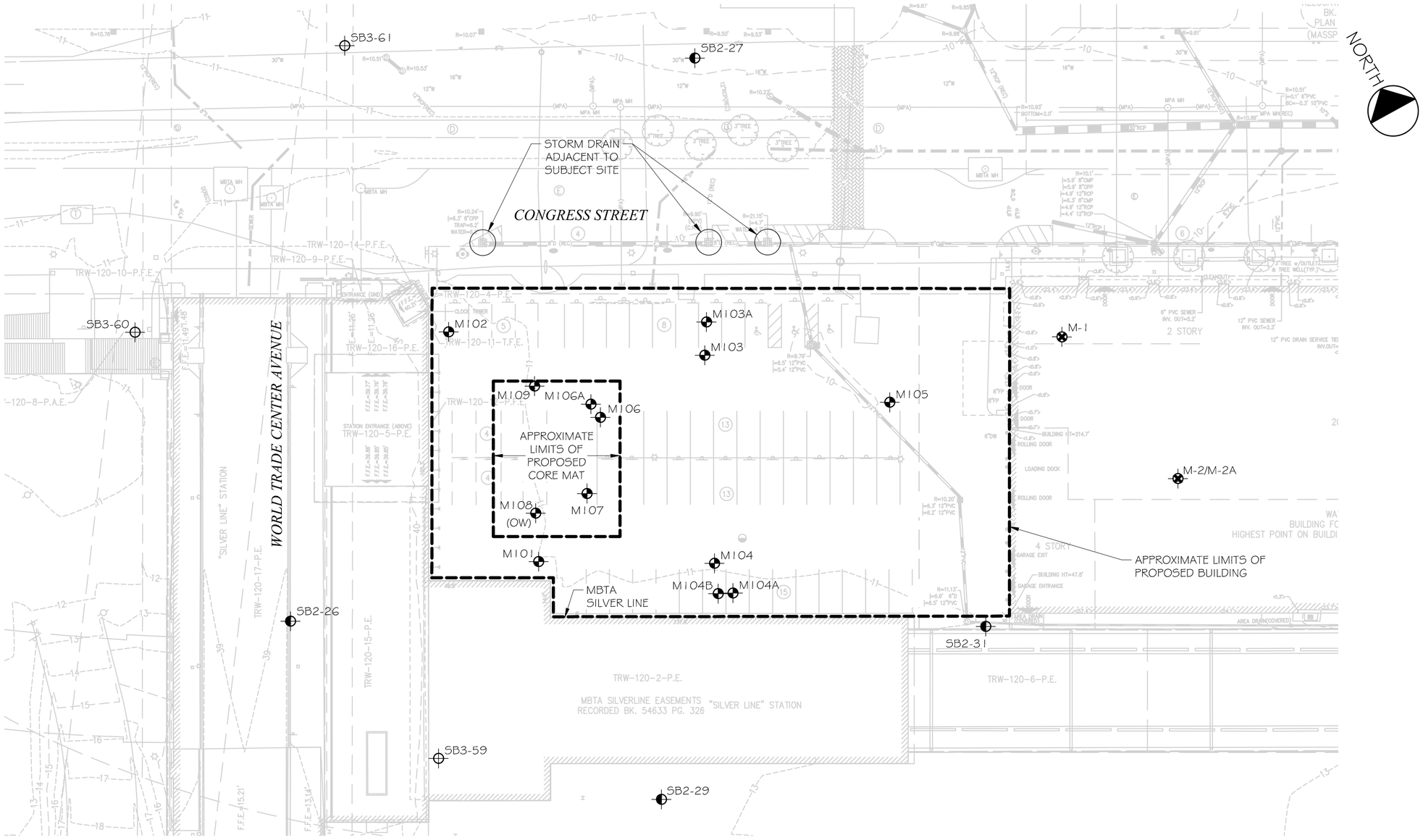
N

SCALE 1:25,000

PROJECT LOCATION PLAN

WATERSIDE PLACE 2

BOSTON MASSACHUSETTS



GRAPHIC SCALE

30 0 30 60 120

LEGEND

- ⊕ — APPROXIMATE LOCATION OF BOREHOLE PERFORMED BY CARR-DEE CORP. DURING THE PERIOD OF SEPTEMBER 26 THROUGH OCTOBER 19, 2016 FOR McPHAIL ASSOCIATES, LLC
- ⊛ — APPROXIMATE LOCATION OF BOREHOLE PERFORMED BY GEOLOGIC EARTH EXPLORATIONS, INC. DURING THE PERIOD OF JUNE 30 THROUGH AUGUST 1, 2011 FOR McPHAIL ASSOCIATES, LLC
- ◐ — APPROXIMATE LOCATION OF BOREHOLE PERFORMED BY GZA DRILLING, INC. DURING THE PERIOD OF DECEMBER 1989 THROUGH MARCH 1990 FOR HALEY & ALDRICH, INC.
- ⊕ — APPROXIMATE LOCATION OF BOREHOLE PERFORMED BY GUILD DRILLING CO., INC. DURING THE PERIOD OF MAY 1991 THROUGH SEPTEMBER 1991 FOR HALEY & ALDRICH, INC.

(OW) — INDICATES OBSERVATION WELL INSTALLED IN COMPLETED BOREHOLE

REFERENCE: THIS PLAN WAS PREPARED FROM A 30-SCALE DRAWING ENTITLED "EXISTING CONDITIONS PLAN" DATED AUGUST 5, 2015 PREPARED BY VHB

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WATERSIDE PLACE 2

BOSTON — MASSACHUSETTS

SUBSURFACE EXPLORATION PLAN

FOR

THE DREW COMPANY & SUFFOLK CONSTRUCTION CO.

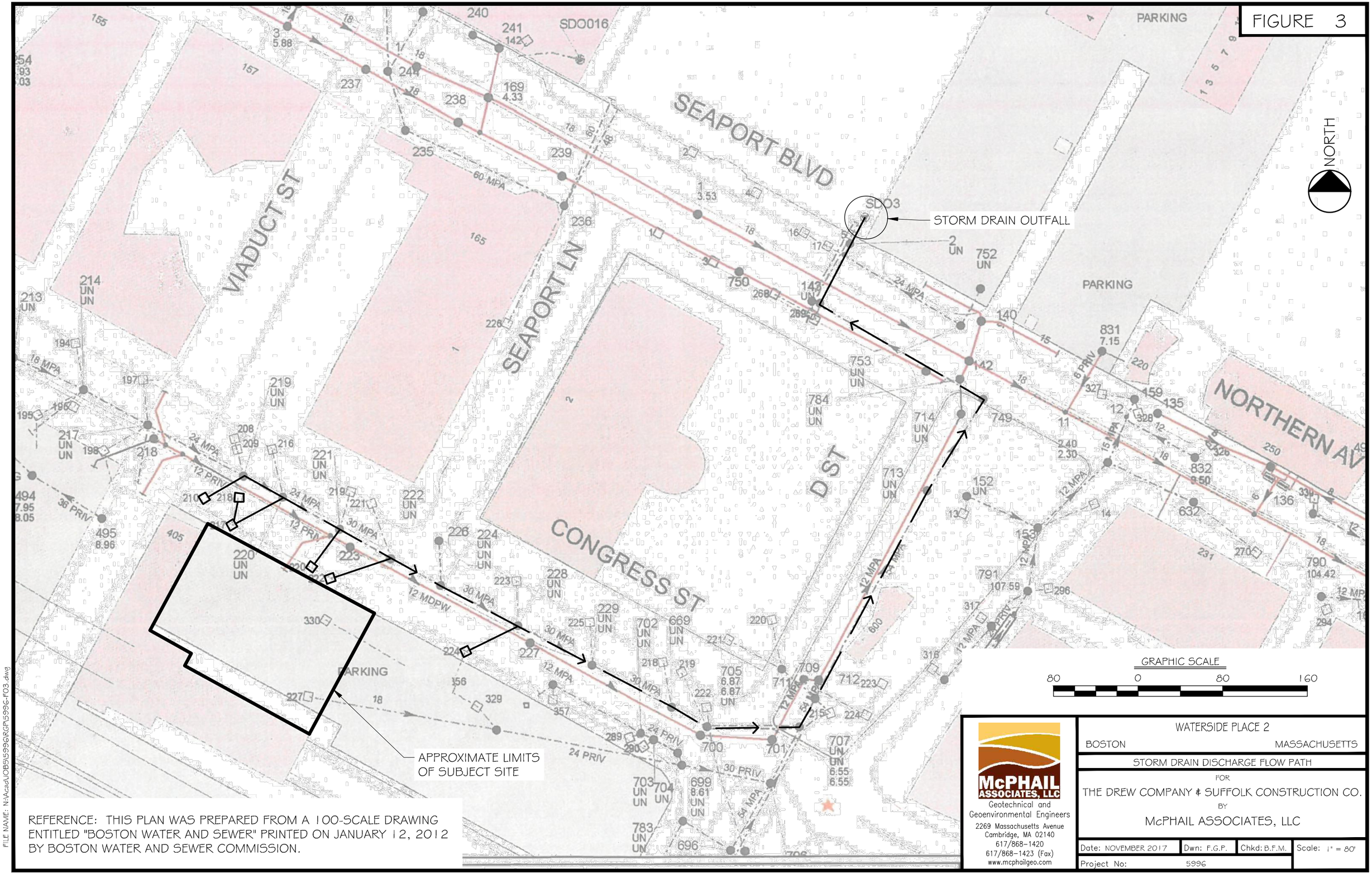
BY

McPHAIL ASSOCIATES, LLC

Date: NOVEMBER 2017	Dwn: F.G.P.	Chkd: B.F.M.	Scale: 1" = 30'
Project No: 5996			FIGURE 2

FILE NAME: N:\Acad\JOBS\5996\IGP\5996-F02.dwg

FIGURE 3



GRAPHIC SCALE

80 0 80 160

REFERENCE: THIS PLAN WAS PREPARED FROM A 100-SCALE DRAWING ENTITLED "BOSTON WATER AND SEWER" PRINTED ON JANUARY 12, 2012 BY BOSTON WATER AND SEWER COMMISSION.

McPHAIL ASSOCIATES, LLC
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WATERSIDE PLACE 2

BOSTON MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PATH

FOR

THE DREW COMPANY & SUFFOLK CONSTRUCTION CO.

BY

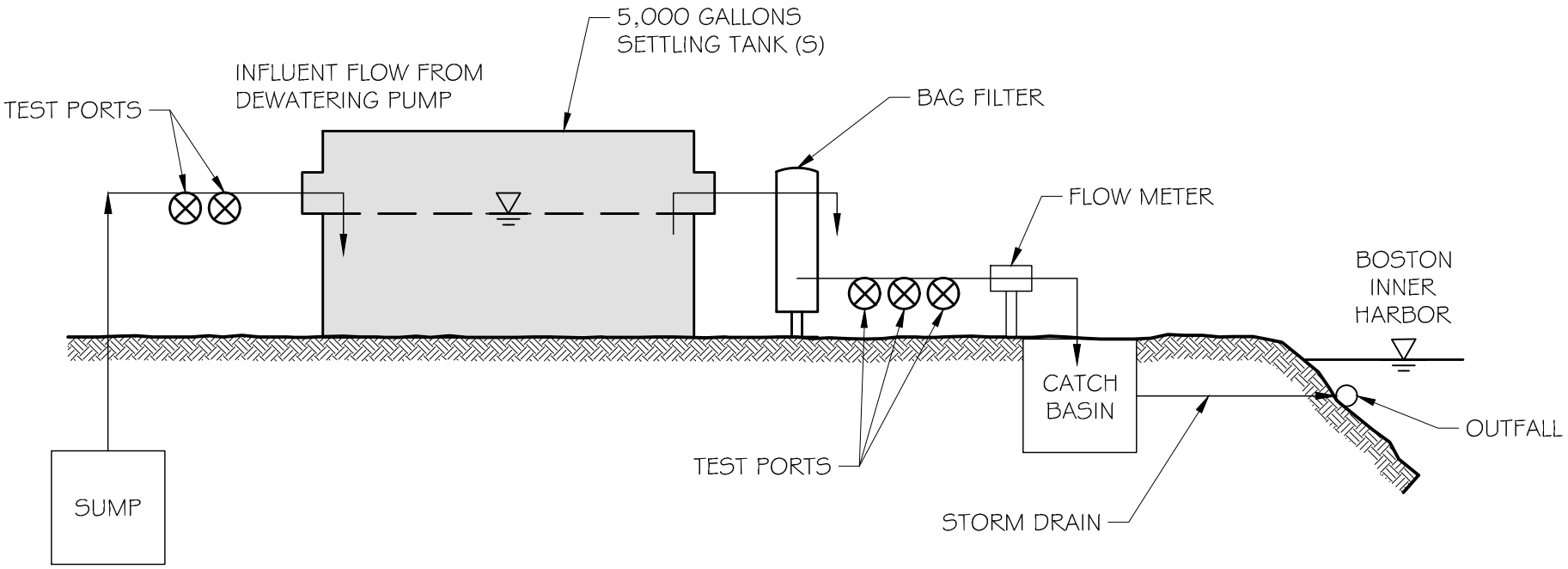
McPHAIL ASSOCIATES, LLC

Date: NOVEMBER 2017	Dwn: F.G.P.	Chkd: B.F.M.	Scale: 1" = 80'
Project No: 5996			

FILE NAME: N:\Acad\OBS\5996\GIS\5996-F03.dwg

FILE NAME: N:\Acad\JOBS\5996\RGP\5996-F04.dwg

FIGURE 4



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WATERSIDE PLACE 2

BOSTON MASSACHUSETTS

SCHEMATIC OF WATER FLOW

FOR

THE DREW COMPANY & SUFFOLK CONSTRUCTION CO.

BY

McPHAIL ASSOCIATES, LLC

CONSULTING GEOTECHNICAL ENGINEERS

Date: NOVEMBER 2017	Dwn: F.G.P.	Chkd: B.F.M.	Scale: N.T.S.
Project No: 5980			

TABLE 1
Analytical Results - Groundwater

Waterside Place 2
Boston, Massachusetts
Project No. 5996

LOCATION	TBEL Limits (mg/L)	M 108 (OW)
SAMPLING DATE		4/13/2017
LAB SAMPLE ID		L1711749-01
SAMPLE TYPE		GW
Anions by Ion Chromatography		
Chloride	---	2520
General Chemistry		
Solids, Total Suspended	30	14
Chlorine, Total Residual	0.2	ND(0.02)
pH (H)		8.4
Chromium, Hexavalent	0.0001	0.004
Total Metals	0	
Antimony, Total	0.206	0.00333
Arsenic, Total	0.104	0.00635
Cadmium, Total	0.0102	ND(0.001)
Chromium, Total	0.323	0.00182
Copper, Total	0.242	0.00823
Iron, Total	5	0.063
Lead, Total	0.16	ND(0.001)
Mercury, Total	0.000739	ND(0.0002)
Nickel, Total	1.45	0.00192
Zinc, Total	0.42	ND(0.01)

ND - not detected laboratory method detection limits
(#) - detetion limit
Blank - not tested

TABLE 2
Analytical Results - Surface water

Waterside Place 2
Boston, Massachusetts
Project No. 5996

	LOCATION	**BOSTON INNER HARBOR**
	SAMPLING DAT	**5/11/2017**
	LAB SAMPLE ID	**L1715446-01**
		Results
General Chemistry (SU & ug/l)		
	SALINITY	20
	Nitrogen, Ammon	95
Total Metals (ug/l)		
	Arsenic, Total	ND
	Copper, Total	ND
	Iron, Total	136
	Lead, Total	ND
	Zinc, Total	ND

ND - not detected laboratory method detection limits
(#) - detetion limit
Blank - not tested

APPENDIX A:

LIMITATIONS

LIMITATIONS

The purpose of this report is to present a summary of environmental conditions, including the results of testing of groundwater samples obtained from a groundwater monitoring well on the property located at 505 Congress Street in Boston, Massachusetts in support of an application for approval of temporary construction dewatering discharge of groundwater into surface waters of the Commonwealth of Massachusetts under EPA's Massachusetts Remediation General Permit MAG910000.

The observations were made under the conditions stated in this report. The conclusions presented above were based on these observations. If variations in the nature and extent of subsurface conditions between the spaced subsurface explorations become evident in the future, it will be necessary to re-evaluate the conclusions presented herein after performing on-site observations and noting the characteristics of any variations.

The conclusions submitted in this report are based in part upon analytical data obtained from analysis of groundwater samples, and are contingent upon their validity. The data have been reviewed, and interpretations have been made in the text. It should also be noted that fluctuations in the types and levels of contaminants and variations in their flow paths may occur due to changes in seasonal water table, past practices used in disposal and other factors.

Laboratory analyses have been performed for specific constituents during the course of this assessment, as described in the text. However, it should be noted that additional constituents not searched for during the current study may be present in soil and/or groundwater at the site.

This report and application have been prepared on behalf of and for the exclusive use of The Drew Company and Suffolk Construction Co. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, other than the submission to relevant governmental agencies, nor used in whole or in part by any other party without prior written consent of McPhail Associates, LLC.

APPENDIX B:

NOTICE OF INTENT - NPDES REMEDIATION GENERAL PERMIT BOSTON WATER & SEWER DEWATERING DISCHARGE PERMIT APPLICATION

II. Suggested Format for the Remediation General Permit Notice of Intent (NOI)

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site:
Waterside Place 2</td><td colspan="3">Site address: 505 Congress Street
Street:</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02210</td></tr>
<tr><td rowspan="4">2. Site owner
The Drew Company

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: Theonie Alicandro</td></tr>
<tr><td colspan="2">Telephone: 617 312 6800</td><td>Email: theonie.alicandro@drewcompany</td></tr>
<tr><td colspan="3">Mailing address:
Street: 2 Seaport Lane, 9th Floor</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02210</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
Suffolk Construction Company</td><td colspan="3">Contact Person: Nicholas Morel</td></tr>
<tr><td colspan="2">Telephone: 617 517 5228</td><td>Email: nmorel@suffolk.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 65 Allerton Street</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02219</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:

NPDES permit is (check all that apply: ☐ RGP ☐ DGP ☐ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
☐ MA Chapter 21e; list RTN(s):
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Boston Inner Harbor	Marine	SB

Receiving water is (check any that apply): ☐ Outstanding Resource Water ☐ Ocean Sanctuary ☐ territorial sea ☐ Wild and Scenic River

2. Has the operator attached a location map in accordance with the instructions in B, above? (check one): ■ Yes ☐ No

Are sensitive receptors present near the site? (check one): ☐ Yes ■ No
If yes, specify:

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. No TMDL for Boston Harbor

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	N/A
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	0

6. Has the operator received confirmation from the appropriate State for the 7Q10and dilution factor indicated? (check one): ☐ Yes ■ No
If yes, indicate date confirmation received: n/a

7. Has the operator attached a summary of receiving water sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No

C. Source water information:

1. Source water(s) is (check any that apply):

■ Contaminated groundwater Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No	☐ Contaminated surface water Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☐ Yes ☐ No	☐ The receiving water ☐ A surface water other than the receiving water; if so, indicate waterbody:	☐ Potable water; if so, indicate municipality or origin: ☐ Other; if so, specify:

2. Source water contaminants: TSS, Copper	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ☐ Yes ■ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ■ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ☐ Existing discharge ■ New discharge ☐ New source	
Outfall(s): SDO3	Outfall location(s): (Latitude, Longitude) 42.349456, -71.039930
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: Discharge outfall indirectly into Boston Inner Harbor ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ☐ Yes ■ No, if so, explain, with an estimated timeframe for obtaining permission: Submission of documentation to and approval from BWSC in tandem with this NOI Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ■ Yes ☐ No	
Provide the expected start and end dates of discharge(s) (month/year): December 2017 - October 2018 Indicate if the discharge is expected to occur over a duration of: ■ less than 12 months ☐ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="4">☐ I – Petroleum-Related Site Remediation
☐ II – Non-Petroleum-Related Site Remediation
■ III – Contaminated Site Dewatering
☐ IV – Dewatering of Pipelines and Tanks
☐ V – Aquifer Pump Testing
☐ VI – Well Development/Rehabilitation
☐ VII – Collection Structure Dewatering/Remediation
☐ VIII – Dredge-Related Dewatering</td><td colspan="2">a. If Activity Category I or II: (check all that apply)

☐ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td></tr>
<tr><td colspan="2">b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)</td></tr>
<tr><td>■ G. Sites with Known Contamination</td><td>☐ H. Sites with Unknown Contamination</td></tr>
<tr><td>c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply)

■ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td><td>d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply</td></tr>
</table>

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia	✔		0					Report mg/L	---
Chloride	✔		1	443000	50000	2520000	2520000	Report µg/l	---
Total Residual Chlorine	✔		1	121,4500C	20	<DL	<DL	0.2 mg/L	
Total Suspended Solids		✔	1	1212540D	5000	14000	14000	30 mg/L	
Antimony	✔		1	1,6020A	4	3.33	3.33	206 µg/L	
Arsenic		✔	1	1,6020A	0.5	6.35	6.35	104 µg/L	
Cadmium	✔		1	1,6020A	2	<DL	<DL	10.2 µg/L	
Chromium III	✔		1	1,6020A	1	1.82	1.82	323 µg/L	
Chromium VI	✔		1	1,6020A	1	4	4	323 µg/L	
Copper		✔	1	1,6020A	1	8.23	8.23	242 µg/L	
Iron		✔	1	19200.7	50	63	63	5,000 µg/L	
Lead		✔	1	1,6020A	0.5	<DL	<DL	160 µg/L	
Mercury	✔		1	3,245.1	0.2	ND	ND	0.739 µg/L	
Nickel	✔		1	1,6020A	0.5	1.92	1.92	1,450 µg/L	
Selenium			0					235.8 µg/L	
Silver			0					35.1 µg/L	
Zinc		✔	1	1,6020A	10	69.8	39.9	420 µg/L	
Cyanide			0					178 mg/L	
B. Non-Halogenated VOCs									
Total BTEX			0					100 µg/L	---
Benzene			0					5.0 µg/L	---
1,4 Dioxane			0					200 µg/L	---
Acetone			0					7.97 mg/L	---
Phenol			0					1,080 µg/L	

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride			0					4.4 µg/L	
1,2 Dichlorobenzene			0					600 µg/L	---
1,3 Dichlorobenzene			0					320 µg/L	---
1,4 Dichlorobenzene			0					5.0 µg/L	---
Total dichlorobenzene			0					763 µg/L in NH	---
1,1 Dichloroethane			0					70 µg/L	---
1,2 Dichloroethane			0					5.0 µg/L	---
1,1 Dichloroethylene			0					3.2 µg/L	---
Ethylene Dibromide			0					0.05 µg/L	---
Methylene Chloride			0					4.6 µg/L	---
1,1,1 Trichloroethane			0					200 µg/L	---
1,1,2 Trichloroethane			0					5.0 µg/L	---
Trichloroethylene			0					5.0 µg/L	---
Tetrachloroethylene			0					5.0 µg/L	
cis-1,2 Dichloroethylene			0					70 µg/L	---
Vinyl Chloride			0					2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates			0					190 µg/L	
Diethylhexyl phthalate			0					101 µg/L	
Total Group I PAHs			0					1.0 µg/L	---
Benzo(a)anthracene			0					As Total PAHs	
Benzo(a)pyrene			0						
Benzo(b)fluoranthene			0						
Benzo(k)fluoranthene			0						
Chrysene			0						
Dibenzo(a,h)anthracene			0						
Indeno(1,2,3-cd)pyrene			0						

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs			0					100 µg/L	---
Naphthalene			0					20 µg/L	---
E. Halogenated SVOCs									
Total PCBs			0					0.000064 µg/L	---
Pentachlorophenol			0					1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons			0					5.0 mg/L	---
Ethanol			0					Report mg/L	---
Methyl-tert-Butyl Ether			0					70 µg/L	
tert-Butyl Alcohol			0					120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether			0					90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
Ph		✔	1			8.4			
Salinity		✔	1			20 SU	20 SU		
Temp		✔	1	YSI		11.8 C			

E. Treatment system information

1. Indicate the type(s) of treatment that will be applied to effluent prior to discharge: (check all that apply)

☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ☐ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption
☐ Ion Exchange ☐ Precipitation/Coagulation/Flocculation ■ Separation/Filtration ☐ Other; if so, specify:

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.
Settling tank and bag filters, if necessary, Ion exchange resin filter

Identify each major treatment component (check any that apply):
■ Fractionation tanks☐ Equalization tank ☐ Oil/water separator ☐ Mechanical filter ☐ Media filter
☐ Chemical feed tank ☐ Air stripping unit ■ Bag filter ☐ Other; if so, specify:

Indicate if either of the following will occur (check any that apply):
☐ Chlorination ☐ De-chlorination

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: Frac Tank Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	50
Provide the proposed maximum effluent flow in gpm.	50
Provide the average effluent flow in gpm.	25
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	

4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): ■ Yes ☐ No

F. Chemical and additive information

1. Indicate the type(s) of chemical or additive that will be applied to effluent prior to discharge or that may otherwise be present in the discharge(s): (check all that apply)

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ☐ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ☐ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ☐ Other; if so, specify:
n/a

2. Provide the following information for each chemical/additive, using attachments, if necessary:

a. Product name, chemical formula, and manufacturer of the chemical/additive;
b. Purpose or use of the chemical/additive or remedial agent;
c. Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;
d. The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;
e. Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and
f. If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

3. Has the operator attached an explanation which demonstrates that the addition of such chemicals/additives may be authorized under this general permit in accordance with the instructions in F, above? (check one): ☐ Yes ☐ No; if no, has the operator attached data that demonstrates each of the 126 priority pollutants in CWA Section 307(a) and 40 CFR Part 423.15(j)(1) are non-detect in discharges with the addition of the proposed chemical/additive?
(check one): ☐ Yes ☐ No

G. Endangered Species Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

☐ **FWS Criterion A**: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".

☐ **FWS Criterion B**: Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation). Has the operator completed consultation with FWS? (check one): ☐ Yes ☐ No; if no, is consultation underway? (check one): ☐ Yes ☐ No

☐ **FWS Criterion C**: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS. This determination was made by: (check one) ☐ the operator ☐ EPA ☐ Other; if so, specify:

■ **NMFS Criterion**: A determination made by EPA is affirmed by the operator that the discharges and related activities will have "no effect" or are "not likely to adversely affect" any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of listed species. Has the operator previously completed consultation with NMFS? (check one): ■ Yes ☐ No

2. Has the operator attached supporting documentation of ESA eligibility in accordance with the instructions in Appendix I, and G, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written concurrence or finding provided by the Services? (check one): ☐ Yes ■ No; if yes, attach.

H. National Historic Preservation Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **Criterion A**: No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.

☐ **Criterion B**: Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.

☐ **Criterion C**: Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.

2. Has the operator attached supporting documentation of NHPA eligibility in accordance with the instructions in H, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the operator will carry out to mitigate or prevent any adverse effects on historic properties? (check one): ☐ Yes ■ No

I. Supplemental information

Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.

n/a

Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one): ■ Yes ☐ No

Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ■ Yes ☐ No

J. Certification requirement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BMPP certification statement:	A BMPP meeting the requirements of this general permit will be developed and implemented prior to the initiation of discharge.
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes ■ No ☐
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested. Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes ■ No ☐ NA ☐ Submission of documentation to and approval from BWSC in tandem with this NOI Check one: Yes ☐ No ■ NA ☐
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ■ No ☐ NA ☐
Signature: 	Date: 11/27/17
Print Name and Title:	Nicholas S. Morel - Sr. Project Manager

Boston Water and Sewer Commission
980 Harrison Avenue
Boston, MA 02119-2540

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: Suffolk Construction Co. Address: 65 Allerton Street - Boston, MA 02219

Phone Number: (617) 517 -5228 Fax number: _____

Contact person name: Nicholas Morel Title: Project Manager

Cell number: _____ Email address: nmorel@suffolk.com

Permit Request (check one): ☒ New Application ☐ Permit Extension ☐ Other (Specify):_____

Owner's Information (if different from above):

Owner of property being dewatered: The Drew Company

Owner's mailing address: 2 Seaport Lane - Boston, MA 02210 Phone number: (617) 312 - 6800

Location of Discharge & Proposed Treatment System(s):

Street number and name: 505 Congress Street Neighborhood Seaport

Discharge is to a: ☐ Sanitary Sewer ☐ Combined Sewer ☒ Storm Drain ☐ Other (specify):_____

Describe Proposed Pre-Treatment System(s): Sediment Settling Tank and Bag Filters

BWSC Outfall No. SDO 03 Receiving Waters Boston Inner Harbor

Temporary Discharges (Provide Anticipated Dates of Discharge): From December, 2017 To October, 2018

☐ Groundwater Remediation	☐ Tank Removal/Installation	☒ Foundation Excavation
☐ Utility/Manhole Pumping	☐ Test Pipe	☐ Trench Excavation
☐ Accumulated Surface Water	☐ Hydrogeologic Testing	☐ Other _____

Permanent Discharges

☐ Foundation Drainage	☐ Crawl Space/Footing Drain
☐ Accumulated Surface Water	☐ Non-contact/Uncontaminated Cooling
☐ Non-contact/Uncontaminated Process	☐ Other; _____

---

1. Attach a Site Plan showing the source of the discharge and the location of the point of discharge (i.e. the sewer pipe or catch basin). Include meter type, meter number, size, make and start reading. Note. All discharges to the Commission's sewer system will be assessed current sewer charges.
2. If discharging to a sanitary or combined sewer, attach a copy of MWRA's Sewer Use Discharge permit or application.
3. If discharging to a separate storm drain, attach a copy of EPA's NPDES Permit or NOI application, or NPDES Permit exclusion letter for the discharge, as well as other relevant information.
4. Dewatering Drainage Permit will be denied or revoked if applicant fails to obtain the necessary permits from MWRA or EPA.

Submit Completed Application to: Boston Water and Sewer Commission
Engineering Customer Services
980 Harrison Avenue, Boston, MA 02119
Attn: Matthew Tuttle, Engineering Customer Service
E-mail: tuttlemp@bwsc.org
Phone: 617-989-7204 Fax: 617-989-7716

Signature of Authorized Representative for Property Owner: _____ Date: 11/27/17

APPENDIX C:

DEP PRIORITY RESOURCES MAP

DILUTION FACTOR AND WQBEL CALCULATIONS

ADDITIONAL NOI SUPPORT INFORMATION

MassDEP - Bureau of Waste Site Cleanup

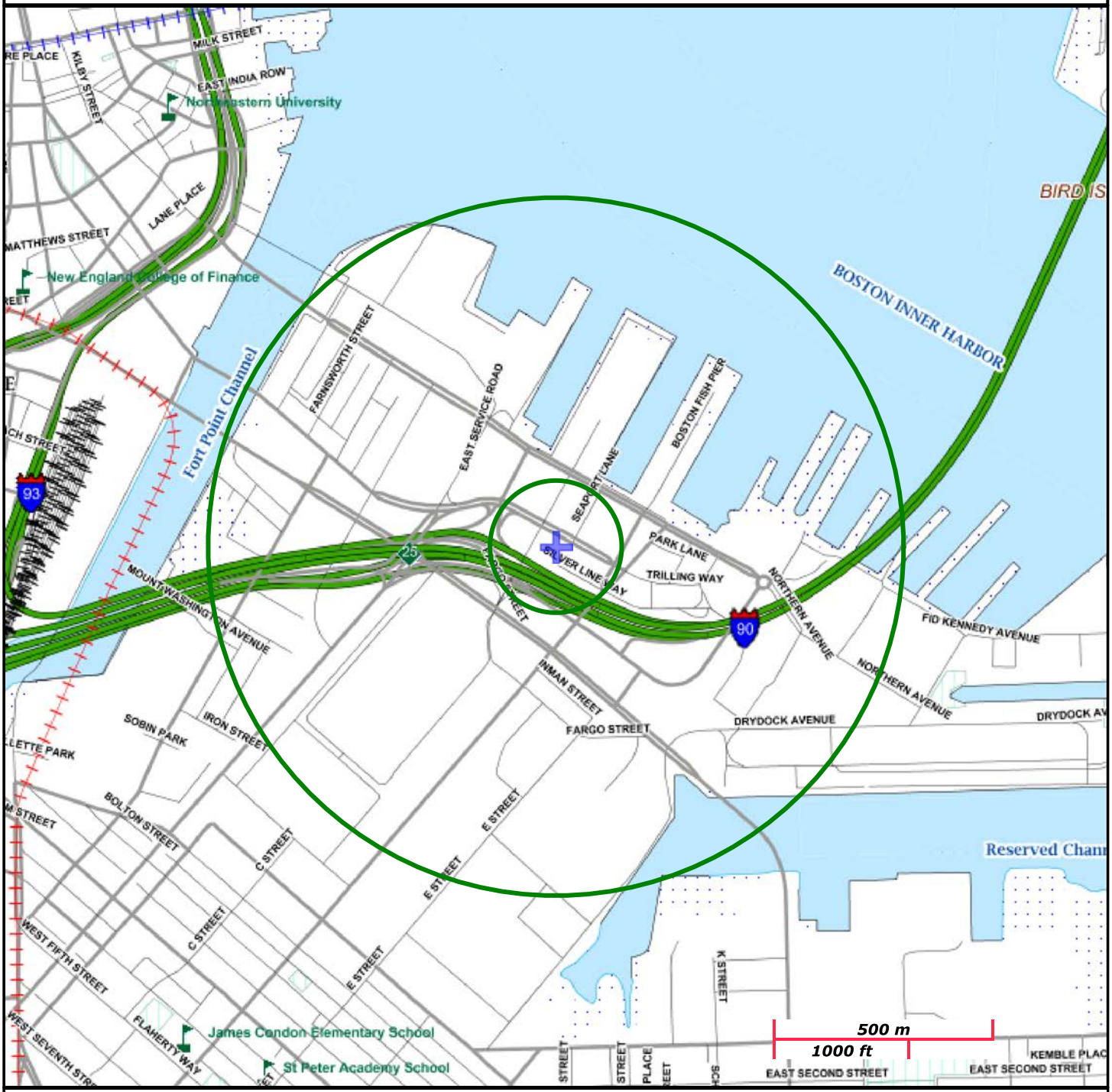
Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
WATERSIDE PLACE II
505 CONGRESS STREET BOSTON, MA

NAD83 UTM Meters:
4690481mN , 331805mE (Zone: 19)
September 20, 2017

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: http://www.mass.gov/mgis/.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential

Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To: April 20, 2017
Consultation Code: 05E1NE00-2017-SLI-1377
Event Code: 05E1NE00-2017-E-02705
Project Name: Waterside Place 2

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2017-SLI-1377

Event Code: 05E1NE00-2017-E-02705

Project Name: Waterside Place 2

Project Type: DREDGE / EXCAVATION

Project Description: Dewatering for new construction

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.34838336508322N71.0419985991008W

Counties: Suffolk, MA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area. Please contact the designated FWS office if you have questions.

Birds

NAME	STATUS
Red Knot *(Calidris canutus rufa)*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/1864

Critical habitats

There are no critical habitats within your project area.

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Boston; Street No: 505; Street Name: Congress St; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN
June 2009

Total Approximate Acreage: 268,000 acres
Approximate acreage and designation date follow ACEC names below.

Bourne Back River
(1,850 acres, 1989) Bourne

Canoe River Aquifer and Associated Areas (17,200 acres, 1991) Easton, Foxborough, Mansfield, Norton, Sharon, and Taunton

Cedar Swamp
(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley
(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed
(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor
(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog
(8,350 acres, 1992) Boston, Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood

Golden Hills
(500 acres, 1987) Melrose, Saugus, and Wakefield

Great Marsh (originally designated as Parker River/Essex Bay)
(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Herring River Watershed
(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed
(14,500 acres, 1992) Dalton, Hinsdale, Peru, and Washington

Hockomock Swamp
(16,950 acres, 1990) Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater

Inner Cape Cod Bay
(2,600 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin
(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed
(7,000 acres, 1992) Egremont and Mount Washington

Miscoe, Warren, and Whitehall Watersheds
(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary
(1,300 acres, 1995) Boston, Milton, and Quincy

Petapawag
(25,680 acres, 2002) Ayer, Dunstable, Groton, Pepperell, and Tyngsborough

Pleasant Bay
(9,240 acres, 1987) Brewster, Chatham, Harwich, and Orleans

Pocasset River
(160 acres, 1980) Bourne

Rumney Marshes
(2,800 acres, 1988) Boston, Lynn, Revere, Saugus, and Winthrop

Sandy Neck Barrier Beach System
(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin
(13,750 acres, 1990) Mount Washington and Sheffield

Squannassit
(37,420 acres, 2002) Ashby, Ayer, Groton, Harvard, Lancaster, Lunenburg, Pepperell, Shirley, and Townsend

Three Mile River Watershed
(14,280 acres, 2008) Dighton, Norton, Taunton

Upper Housatonic River
(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

Waquoit Bay
(2,580 acres, 1979) Falmouth and Mashpee

Weir River
(950 acres, 1986) Cohasset, Hingham, and Hull

Wellfleet Harbor
(12,480 acres, 1989) Eastham, Truro, and Wellfleet

Weymouth Back River
(800 acres, 1982) Hingham and Weymouth

ACEC acreages above are based on MassGIS calculations and may differ from numbers originally presented in designation documents and other ACEC publications due to improvements in accuracy of GIS data and boundary clarifications. Listed acreages have been rounded to the nearest 50 or 10 depending on whether boundary clarification has occurred. For more information please see, http://www.mass.gov/dcr/stewardship/acec/aboutMaps.htm.

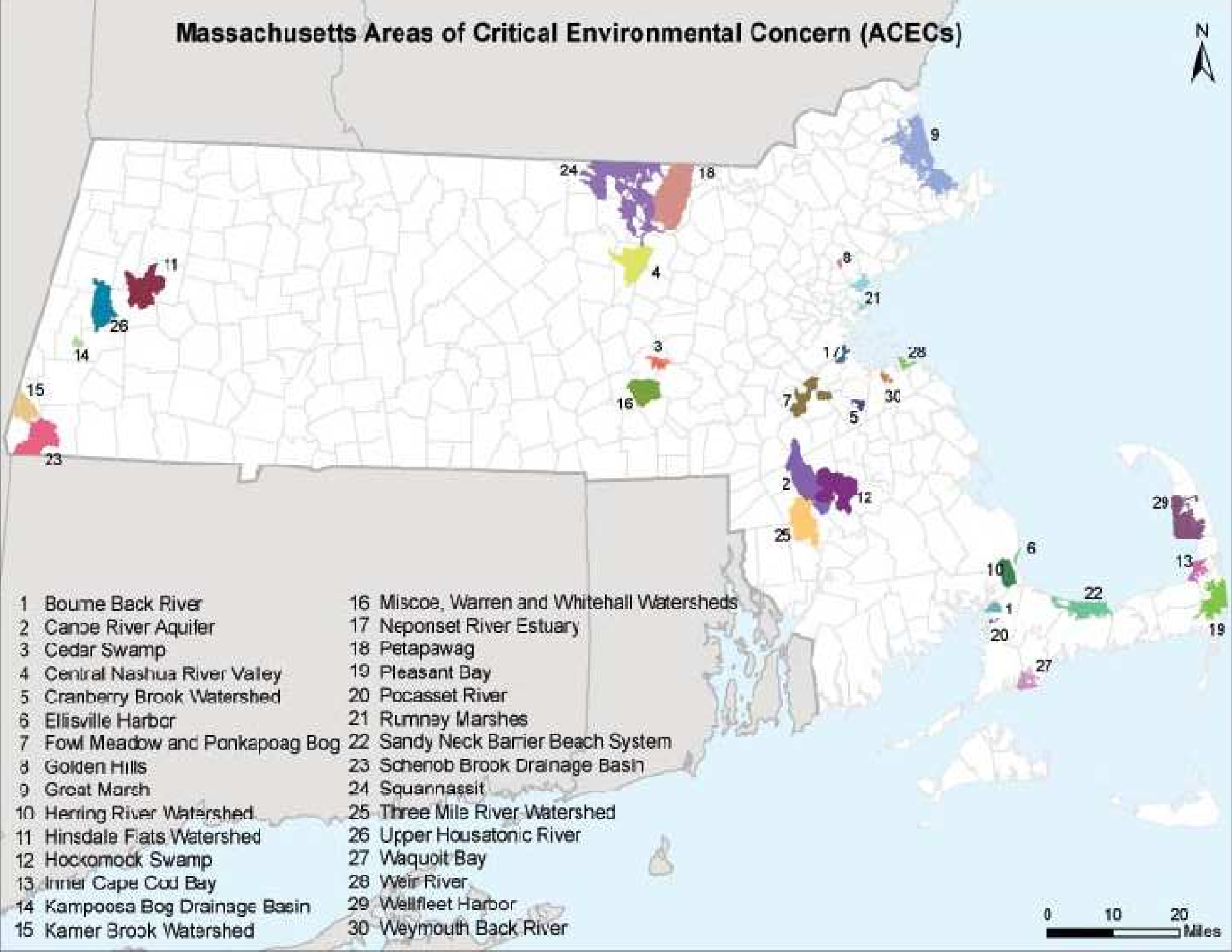
Towns with ACECs within their Boundaries June 2009

TOWN	ACEC
Ashby	Squannassit
Ayer	Petapawag
	Squannassit
Barnstable	Sandy Neck Barrier Beach System
Bolton	Central Nashua River Valley
Boston	Rumney Marshes
	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary
Bourne	Pocasset River
	Bourne Back River
	Herring River Watershed
Braintree	Cranberry Brook Watershed
Brewster	Pleasant Bay
	Inner Cape Cod Bay
Bridgewater	Hockomock Swamp
Canton	Fowl Meadow and Ponkapoag Bog
Chatham	Pleasant Bay
Cohasset	Weir River
Dalton	Hinsdale Flats Watershed
Dedham	Fowl Meadow and Ponkapoag Bog
Dighton	Three Mile River Watershed
Dunstable	Petapawag
Eastham	Inner Cape Cod Bay
	Wellfleet Harbor
Easton	Canoe River Aquifer
	Hockomock Swamp
Egremont	Karner Brook Watershed
Essex	Great Marsh
Falmouth	Waquoit Bay
Foxborough	Canoe River Aquifer
Gloucester	Great Marsh
Grafton	Miscoe-Warren-Whitehall Watersheds
Groton	Petapawag
	Squannassit
Harvard	Central Nashua River Valley
	Squannassit
Harwich	Pleasant Bay
Hingham	Weir River
	Weymouth Back River
Hinsdale	Hinsdale Flats Watershed
Holbrook	Cranberry Brook Watershed
Hopkinton	Miscoe-Warren-Whitehall Watersheds
	Cedar Swamp
Hull	Weir River
Ipswich	Great Marsh
Lancaster	Central Nashua River Valley
	Squannassit
Lee	Kampoosa Bog Drainage Basin
	Upper Housatonic River
Lenox	Upper Housatonic River
Leominster	Central Nashua River Valley
Lunenburg	Squannassit
Lynn	Rumney Marshes
Mansfield	Canoe River Aquifer
Mashpee	Waquoit Bay
Melrose	Golden Hills
Milton	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary

TOWN	ACEC
Mt. Washington	Karner Brook Watershed
	Schenob Brook
Newbury	Great Marsh
Norton	Hockomock Swamp
	Canoe River Aquifer
	Three Mile River Watershed
Norwood	Fowl Meadow and Ponkapoag Bog
Orleans	Inner Cape Cod Bay
	Pleasant Bay
Pepperell	Petapawag
	Squannassit
Peru	Hinsdale Flats Watershed
Pittsfield	Upper Housatonic River
Plymouth	Herring River Watershed
	Ellisville Harbor
Quincy	Neponset River Estuary
Randolph	Fowl Meadow and Ponkapoag Bog
Raynham	Hockomock Swamp
Revere	Rumney Marshes
Rowley	Great Marsh
Sandwich	Sandy Neck Barrier Beach System
Saugus	Rumney Marshes
	Golden Hills
Sharon	Canoe River Aquifer
	Fowl Meadow and Ponkapoag Bog
Sheffield	Schenob Brook
Shirley	Squannassit
Stockbridge	Kampoosa Bog Drainage Basin
Taunton	Hockomock Swamp
	Canoe River Aquifer
	Three Mile River Watershed
Truro	Wellfleet Harbor
Townsend	Squannassit
Tyngsborough	Petapawag
Upton	Miscoe-Warren-Whitehall Watersheds
Wakefield	Golden Hills
Washington	Hinsdale Flats Watershed
	Upper Housatonic River
Wellfleet	Wellfleet Harbor
W Bridgewater	Hockomock Swamp
Westborough	Cedar Swamp
Westwood	Fowl Meadow and Ponkapoag Bog
Weymouth	Weymouth Back River
Winthrop	Rumney Marshes

.

Massachusetts Areas of Critical Environmental Concern (ACECs)



1 Bourne Back River
2 Cape River Aquifer
3 Cedar Swamp
4 Central Nashua River Valley
5 Cranberry Brook Watershed
6 Ellisville Harbor
7 Fowl Meadow and Ponkapoag Bog
8 Golden Hills
9 Great Marsh
10 Herring River Watershed
11 Hinsdale Flats Watershed
12 Hockomock Swamp
13 Inner Cape Cod Bay
14 Kampoosa Bog Drainage Basin
15 Kamer Brook Watershed
16 Miscoe, Warren and Whitehall Watersheds
17 Neponset River Estuary
18 Petapawag
19 Pleasant Bay
20 Pocasset River
21 Rumney Marshes
22 Sandy Neck Barrier Beach System
23 Schenob Brook Drainage Basin
24 Squannassit
25 Three Mile River Watershed
26 Upper Housatonic River
27 Waquoit Bay
28 Weir River
29 Wellfleet Harbor
30 Weymouth Back River

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Raynham and Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Glocester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hadley, Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, and Wareham
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

-Eastern cougar and gray wolf are considered extirpated in Massachusetts.
-Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
-Critical habitat for the Northern Red-bellied cooter is present in Plymouth County.

7/31/2008

APPENDIX D:

LABORATORY ANALYTIC DATA - GROUNDWATER

ANALYTICAL REPORT

Lab Number:	L1711749
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	WATERSIDE PLACE 2
Project Number:	5996.9.00
Report Date:	04/19/17

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: WATERSIDE PLACE 2
Project Number: 5996.9.00

Lab Number: L1711749
Report Date: 04/19/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1711749-01	M 108 (OW)	GROUNDWATER	SEAPORT	04/13/17 13:00	04/13/17

Project Name: WATERSIDE PLACE 2 **Lab Number:** L1711749
Project Number: 5996.9.00 **Report Date:** 04/19/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	WATERSIDE PLACE 2	**Lab Number:**	L1711749
Project Number:	5996.9.00	**Report Date:**	04/19/17

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Chlorine, Total Residual

WG994111: A laboratory duplicate and matrix spike could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Amita Naik

Title: Technical Director/Representative Date: 04/19/17

METALS

Project Name: WATERSIDE PLACE 2 **Lab Number:** L1711749

Project Number: 5996.9.00 **Report Date:** 04/19/17

SAMPLE RESULTS

Lab ID: L1711749-01 Date Collected: 04/13/17 13:00

Client ID: M 108 (OW) Date Received: 04/13/17

Sample Location: SEAPORT Field Prep: Not Specified

Matrix: Groundwater

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00333	J	mg/l	0.00400	0.00042	1	04/17/17 10:10	04/18/17 13:39	EPA 3005A	3,200.8	BV
Arsenic, Total	0.00635		mg/l	0.00100	0.00016	1	04/17/17 10:10	04/18/17 13:39	EPA 3005A	3,200.8	BV
Cadmium, Total	ND		mg/l	0.00100	0.00005	1	04/17/17 10:10	04/18/17 13:39	EPA 3005A	3,200.8	BV
Chromium, Total	0.00182		mg/l	0.00100	0.00017	1	04/17/17 10:10	04/18/17 13:39	EPA 3005A	3,200.8	BV
Copper, Total	0.00823		mg/l	0.00100	0.00038	1	04/17/17 10:10	04/18/17 13:39	EPA 3005A	3,200.8	BV
Iron, Total	0.063		mg/l	0.050	0.009	1	04/17/17 10:10	04/18/17 20:37	EPA 3005A	19,200.7	AB
Lead, Total	ND		mg/l	0.00100	0.00034	1	04/17/17 10:10	04/18/17 13:39	EPA 3005A	3,200.8	BV
Mercury, Total	ND		mg/l	0.00020	0.00006	1	04/18/17 16:35	04/18/17 23:24	EPA 245.1	3,245.1	EA
Nickel, Total	0.00192	J	mg/l	0.00200	0.00055	1	04/17/17 10:10	04/18/17 13:39	EPA 3005A	3,200.8	BV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	04/17/17 10:10	04/18/17 13:39	EPA 3005A	3,200.8	BV

Project Name: WATERSIDE PLACE 2 **Lab Number:** L1711749

Project Number: 5996.9.00 **Report Date:** 04/19/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG994826-1										
Antimony, Total	ND		mg/l	0.00400	0.00042	1	04/17/17 10:10	04/18/17 13:33	3,200.8	BV
Arsenic, Total	ND		mg/l	0.00100	0.00016	1	04/17/17 10:10	04/18/17 13:33	3,200.8	BV
Cadmium, Total	ND		mg/l	0.00100	0.00005	1	04/17/17 10:10	04/18/17 13:33	3,200.8	BV
Chromium, Total	0.00020	J	mg/l	0.00100	0.00017	1	04/17/17 10:10	04/18/17 13:33	3,200.8	BV
Copper, Total	ND		mg/l	0.00100	0.00038	1	04/17/17 10:10	04/18/17 13:33	3,200.8	BV
Lead, Total	ND		mg/l	0.00050	0.00034	1	04/17/17 10:10	04/18/17 13:33	3,200.8	BV
Nickel, Total	ND		mg/l	0.00200	0.00055	1	04/17/17 10:10	04/18/17 13:33	3,200.8	BV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	04/17/17 10:10	04/18/17 13:33	3,200.8	BV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG994828-1										
Iron, Total	ND		mg/l	0.050	0.009	1	04/17/17 10:10	04/18/17 20:28	19,200.7	AB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG995270-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	04/18/17 16:35	04/18/17 22:35	3,245.1	EA

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: WATERSIDE PLACE 2

Project Number: 5996.9.00

Lab Number: L1711749

Report Date: 04/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG994826-2								
Antimony, Total	94		-		85-115	-		
Arsenic, Total	101		-		85-115	-		
Cadmium, Total	105		-		85-115	-		
Chromium, Total	103		-		85-115	-		
Copper, Total	104		-		85-115	-		
Lead, Total	100		-		85-115	-		
Nickel, Total	96		-		85-115	-		
Zinc, Total	98		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG994828-2								
Iron, Total	99		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG995270-2								
Mercury, Total	102		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: WATERSIDE PLACE 2
Project Number: 5996.9.00

Lab Number: L1711749
Report Date: 04/19/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG994826-3 QC Sample: L1711749-01 Client ID: M 108 (OW)												
Antimony, Total	0.00333J	0.5	0.5567	111		-	-		70-130	-		20
Arsenic, Total	0.00635	0.12	0.1407	112		-	-		70-130	-		20
Cadmium, Total	ND	0.051	0.05667	111		-	-		70-130	-		20
Chromium, Total	0.00182	0.2	0.2160	107		-	-		70-130	-		20
Copper, Total	0.00823	0.25	0.2859	111		-	-		70-130	-		20
Lead, Total	ND	0.51	0.5350	105		-	-		70-130	-		20
Nickel, Total	0.00192J	0.5	0.5057	101		-	-		70-130	-		20
Zinc, Total	ND	0.5	0.5280	106		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG994828-3 QC Sample: L1711749-01 Client ID: M 108 (OW)												
Iron, Total	0.063	1	1.04	98		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG995270-3 QC Sample: L1711545-01 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00492	98		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG995270-5 QC Sample: L1711863-01 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00496	99		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: WATERSIDE PLACE 2
Project Number: 5996.9.00

Lab Number: L1711749
Report Date: 04/19/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG994826-4 QC Sample: L1711749-01 Client ID: M 108 (OW)						
Antimony, Total	0.00333J	0.00241J	mg/l	NC		20
Arsenic, Total	0.00635	0.00686	mg/l	8		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.00182	0.00189	mg/l	4		20
Copper, Total	0.00823	0.00845	mg/l	3		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	0.00192J	0.00192J	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG994828-4 QC Sample: L1711749-01 Client ID: M 108 (OW)						
Iron, Total	0.063	0.066	mg/l	5		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG995270-4 QC Sample: L1711545-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG995270-6 QC Sample: L1711863-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: WATERSIDE PLACE 2
Project Number: 5996.9.00

Lab Number: L1711749
Report Date: 04/19/17

SAMPLE RESULTS

Lab ID: L1711749-01
Client ID: M 108 (OW)
Sample Location: SEAPORT
Matrix: Groundwater

Date Collected: 04/13/17 13:00
Date Received: 04/13/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	14.		mg/l	5.0	NA	1	-	04/14/17 13:40	121,2540D	DW
Chlorine, Total Residual	ND		mg/l	0.02	0.01	1	-	04/13/17 22:25	121,4500CL-D	AS
pH (H)	8.4		SU	-	NA	1	-	04/13/17 21:55	1,9040C	AS
Chromium, Hexavalent	0.004	J	mg/l	0.010	0.003	1	04/14/17 02:44	04/14/17 03:05	1,7196A	KA
Anions by Ion Chromatography - Westborough Lab										
Chloride	2520		mg/l	50.0	5.41	100	-	04/15/17 00:06	44,300.0	AU

Project Name: WATERSIDE PLACE 2 **Lab Number:** L1711749

Project Number: 5996.9.00 **Report Date:** 04/19/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG994111-1										
Chlorine, Total Residual	ND		mg/l	0.02	0.01	1	-	04/13/17 22:25	121,4500CL-D	AS
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG994149-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	04/14/17 02:44	04/14/17 03:03	1,7196A	KA
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG994194-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	04/14/17 13:40	121,2540D	DW
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG994509-1										
Chloride	ND		mg/l	0.500	0.054	1	-	04/14/17 20:30	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: WATERSIDE PLACE 2

Project Number: 5996.9.00

Lab Number: L1711749

Report Date: 04/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG994111-2								
Chlorine, Total Residual	93		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG994112-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG994149-2								
Chromium, Hexavalent	102		-		85-115	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG994509-2								
Chloride	105		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: WATERSIDE PLACE 2
Project Number: 5996.9.00

Lab Number: L1711749
Report Date: 04/19/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG994149-4 QC Sample: L1711749-01 Client ID: M 108 (OW)												
Chromium, Hexavalent	0.004J	0.1	0.109	109		-	-		85-115	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG994509-3 QC Sample: L1711537-01 Client ID: MS Sample												
Chloride	7.42	4	11.4	100		-	-		90-110	-		18

Lab Duplicate Analysis
Batch Quality Control

Project Name: WATERSIDE PLACE 2
Project Number: 5996.9.00

Lab Number: L1711749
Report Date: 04/19/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG994112-2 QC Sample: L1711749-01 Client ID: M 108 (OW)						
pH (H)	8.4	8.3	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG994149-3 QC Sample: L1711749-01 Client ID: M 108 (OW)						
Chromium, Hexavalent	0.004J	0.003J	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG994194-2 QC Sample: L1711424-01 Client ID: DUP Sample						
Solids, Total Suspended	62.	68	mg/l	9		29
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG994509-4 QC Sample: L1711537-01 Client ID: DUP Sample						
Chloride	7.42	7.42	mg/l	0		18

Project Name: WATERSIDE PLACE 2
Project Number: 5996.9.00

Lab Number: L1711749
Report Date: 04/19/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1711749-01A	Plastic 950ml unpreserved	A	7	4.1	Y	Absent	TSS-2540(7)
L1711749-01B	Plastic 500ml unpreserved	A	7	4.1	Y	Absent	HEXCR-7196(1),PH-9040(1),TRC-4500(1)
L1711749-01C	Plastic 250ml unpreserved	A	7	4.1	Y	Absent	CL-300(28)
L1711749-01D	Plastic 250ml HNO3 preserved	A	<2	4.1	Y	Absent	CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),FE-UI(180),AS-2008T(180),HG-U(28),CR-2008T(180),PB-2008T(180),SB-2008T(180)
L1711749-01E	Plastic 250ml HNO3 preserved	A	<2	4.1	Y	Absent	CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),FE-UI(180),AS-2008T(180),HG-U(28),CR-2008T(180),PB-2008T(180),SB-2008T(180)

*Values in parentheses indicate holding time in days

Project Name:	WATERSIDE PLACE 2	**Lab Number:**	L1711749
Project Number:	5996.9.00	**Report Date:**	04/19/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: DU Report with 'J' Qualifiers

Project Name:	WATERSIDE PLACE 2	**Lab Number:**	L1711749
Project Number:	5996.9.00	**Report Date:**	04/19/17

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	WATERSIDE PLACE 2	**Lab Number:**	L1711749
Project Number:	5996.9.00	**Report Date:**	04/19/17

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE ______ OF ______

ALPHA ANALYTICAL
World Class Chemistry
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Date Rec'd in Lab: 4/13/17

ALPHA Job #: L1711749

Project Information

Project Name: Waterside Place 2
Project Location: Seaport
Project #: 5996.9.00
Project Manager: Brian Fong-Murdock
ALPHA Quote #:

Report Information - Data Deliverables

☐ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Client Information

Client: McPhail Assoc.
Address: 2269 Mass Ave
Phone: 617 349 7351
Email: bfm@mcphailgeo.com

Additional Project Information:

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☒ Yes ☐ No NPDES RGP
☐ Other State /Fed Program ______ Criteria ______

Turn-Around Time

☒ Standard ☐ RUSH *(only confirmed if pre-approved!)*

Date Due:

ANALYSIS

VOC: ☐ 8260 ☐ 624 ☐ 524.2
SVOC: ☐ ABN ☐ PAH
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
METALS: ☐ RCRA5 ☐ RCRA8 ☒ PP13 ?
EPH: ☐ Ranges & Targets ☐ Ranges Only
VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
TPH: ☐ Quant Only ☐ Fingerprint
pH
TRC
TSS

SAMPLE INFO
Filtration
☐ Field
☐ Lab to do
Preservation
☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC	SVOC	METALS (MCP)	METALS (RCRA/PP13)	EPH	VPH	PCB/PEST	TPH	pH	TRC	TSS				Sample Comments	TOTAL # BOTTLES
11749-01	M 108 (OW)	4/13/17	13:00	GW	NH				X					X	X	X				Sb, As, Cd, Tot Cr, Cr(VI), Cu, Cr, Pb, Fe, Hg, Ni, Zn	5

Container Type				P					P	P	P				
Preservative				C					A	A	A				

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/13/17 16:25	MGM	4/13/17 1625
MGM	4/13/17 1815	[signature]	4/13/17 1815

All samples submitted are subject to Alpha's Terms and Conditions. (See reverse side.)

FORM NO: 01-01 (rev. 12-Mar-2012)

APPENDIX E:

LABORATORY ANALYTICAL DATA – SURFACE WATER

ANALYTICAL REPORT

Lab Number:	L1715446
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	399 CONGRESS ST
Project Number:	4540.2.D7
Report Date:	05/16/17

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 399 CONGRESS ST
Project Number: 4540.2.D7

Lab Number: L1715446
Report Date: 05/16/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1715446-01	BOSTON INNER HARBOR	WATER	399 CONGRESS	05/11/17 13:30	05/11/17

Project Name: 399 CONGRESS ST
Project Number: 4540.2.D7

Lab Number: L1715446
Report Date: 05/16/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	399 CONGRESS ST	**Lab Number:**	L1715446
Project Number:	4540.2.D7	**Report Date:**	05/16/17

Case Narrative (continued)

Metals

L1715446-01, WG1002864-4: The internal standard (IS) response(s) for Arsenic, Copper, Lead, and Zinc were outside the acceptance criteria due to sample matrix interference; however, the criteria were achieved upon re-analysis on dilution. The results of the re-analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Lisa Westerlind

Title: Technical Director/Representative Date: 05/16/17

METALS

Project Name: 399 CONGRESS ST
Lab Number: L1715446
Project Number: 4540.2.D7
Report Date: 05/16/17

SAMPLE RESULTS

Lab ID: L1715446-01
Client ID: BOSTON INNER HARBOR
Sample Location: 399 CONGRESS
Matrix: Water
Date Collected: 05/11/17 13:30
Date Received: 05/11/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.01000	--	10	05/12/17 11:15	05/13/17 12:44	EPA 3005A	3,200.8	BV
Copper, Total	ND		mg/l	0.01000	--	10	05/12/17 11:15	05/13/17 12:44	EPA 3005A	3,200.8	BV
Iron, Total	0.136		mg/l	0.050	--	1	05/12/17 11:15	05/12/17 17:57	EPA 3005A	19,200.7	AB
Lead, Total	ND		mg/l	0.01000	--	10	05/12/17 11:15	05/13/17 12:44	EPA 3005A	3,200.8	BV
Zinc, Total	ND		mg/l	0.1000	--	10	05/12/17 11:15	05/13/17 12:44	EPA 3005A	3,200.8	BV

Project Name: 399 CONGRESS ST
Project Number: 4540.2.D7
Lab Number: L1715446
Report Date: 05/16/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1002863-1										
Iron, Total	ND		mg/l	0.050	--	1	05/12/17 11:15	05/12/17 17:33	19,200.7	AB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1002864-1										
Arsenic, Total	ND		mg/l	0.00100	--	1	05/12/17 11:15	05/13/17 10:13	3,200.8	BV
Copper, Total	ND		mg/l	0.00100	--	1	05/12/17 11:15	05/13/17 10:13	3,200.8	BV
Lead, Total	ND		mg/l	0.00100	--	1	05/12/17 11:15	05/13/17 10:13	3,200.8	BV
Zinc, Total	ND		mg/l	0.01000	--	1	05/12/17 11:15	05/13/17 10:13	3,200.8	BV

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 399 CONGRESS ST

Project Number: 4540.2.D7

Lab Number: L1715446

Report Date: 05/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1002863-2								
Iron, Total	105		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1002864-2								
Arsenic, Total	95		-		85-115	-		
Copper, Total	101		-		85-115	-		
Lead, Total	107		-		85-115	-		
Zinc, Total	99		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 399 CONGRESS ST
Project Number: 4540.2.D7

Lab Number: L1715446
Report Date: 05/16/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1002863-3 QC Sample: L1715446-01 Client ID: BOSTON INNER HARBOR												
Iron, Total	0.136	1	1.08	94		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1002863-7 QC Sample: L1715328-01 Client ID: MS Sample												
Iron, Total	17.0	1	17.0	**0**	Q	-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1002864-3 QC Sample: L1715446-01 Client ID: BOSTON INNER HARBOR												
Arsenic, Total	ND	0.12	0.1326	110		-	-		70-130	-		20
Copper, Total	ND	0.25	0.2733	109		-	-		70-130	-		20
Lead, Total	ND	0.51	0.5631	110		-	-		70-130	-		20
Zinc, Total	ND	0.5	0.5660	113		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 399 CONGRESS ST
Project Number: 4540.2.D7

Lab Number: L1715446
Report Date: 05/16/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1002863-4 QC Sample: L1715446-01 Client ID: BOSTON INNER HARBOR						
Iron, Total	0.136	0.124	mg/l	9		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1002863-8 QC Sample: L1715328-01 Client ID: DUP Sample						
Iron, Total	17.0	17.4	mg/l	2		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1002864-4 QC Sample: L1715446-01 Client ID: BOSTON INNER HARBOR						
Arsenic, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	ND	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: 399 CONGRESS ST
Project Number: 4540.2.D7

Lab Number: L1715446
Report Date: 05/16/17

SAMPLE RESULTS

Lab ID: L1715446-01
Client ID: BOSTON INNER HARBOR
Sample Location: 399 CONGRESS
Matrix: Water

Date Collected: 05/11/17 13:30
Date Received: 05/11/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
SALINITY	20		SU	2.0	--	1	-	05/15/17 16:30	121,2520B	AS
Nitrogen, Ammonia	0.095		mg/l	0.075	--	1	05/12/17 14:38	05/12/17 21:45	121,4500NH3-BH	AT

Project Name: 399 CONGRESS ST
Project Number: 4540.2.D7
Lab Number: L1715446
Report Date: 05/16/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1002792-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	05/12/17 14:38	05/12/17 21:23	121,4500NH3-BH	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: 399 CONGRESS ST

Project Number: 4540.2.D7

Lab Number: L1715446

Report Date: 05/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1002792-2								
Nitrogen, Ammonia	98		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1003620-1								
SALINITY	96		-			-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 399 CONGRESS ST
Project Number: 4540.2.D7

Lab Number: L1715446
Report Date: 05/16/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1002792-4 QC Sample: L1715071-01 Client ID: MS Sample												
Nitrogen, Ammonia	0.076	4	3.92	96		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 399 CONGRESS ST
Project Number: 4540.2.D7

Lab Number: L1715446
Report Date: 05/16/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1002792-3 QC Sample: L1715071-01 Client ID: DUP Sample						
Nitrogen, Ammonia	0.076	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1003620-2 QC Sample: L1715446-01 Client ID: BOSTON INNER HARBOR						
SALINITY	20	22	SU	10		

Project Name: 399 CONGRESS ST
Project Number: 4540.2.D7

Lab Number: L1715446
Report Date: 05/16/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1715446-01A	Plastic 250ml HNO3 preserved	A	<2	5.3	Y	Absent	ZN-2008T(180),CU-2008T(180),FE-UI(180),AS-2008T(180),PB-2008T(180)
L1715446-01B	Plastic 250ml H2SO4 preserved	A	<2	5.3	Y	Absent	NH3-4500(28)
L1715446-01C	Amber 500ml unpreserved	A	7	5.3	Y	Absent	SALINITY(28)
L1715446-01D	Vial MeOH preserved	A	N/A	5.3	Y	Absent	ARCHIVE(0)
L1715446-01E	Vial water preserved	A	N/A	5.3	Y	Absent	ARCHIVE(0)
L1715446-01F	Vial water preserved	A	N/A	5.3	Y	Absent	ARCHIVE(0)

*Values in parentheses indicate holding time in days

Project Name:	399 CONGRESS ST	**Lab Number:**	L1715446
Project Number:	4540.2.D7	**Report Date:**	05/16/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: Data Usability Report

Project Name:	399 CONGRESS ST	**Lab Number:**	L1715446
Project Number:	4540.2.D7	**Report Date:**	05/16/17

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	399 CONGRESS ST	**Lab Number:**	L1715446
Project Number:	4540.2.D7	**Report Date:**	05/16/17

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE_____ OF _____

Date Rec'd in Lab: 5/11/17

ALPHA Job #: L1715946

ALPHA ANALYTICAL
World Class Chemistry

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Client Information

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Avenue,
Cambridge, MA 02140

Phone: 617-868-1420

Email:

Project Information

Project Name: 399 Congress St

Project Location: 399 Congress

Project #: 4540.07

Project Manager: WJB

ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)

Date Due: 3 day

Report Information - Data Deliverables

☒ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☒ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods

☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)

☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)

☒ Yes ☐ No NPDES RGP

☐ Other State /Fed Program _____ Criteria _____

Additional Project Information:

** Metals List: As, CU, FE,PB and Zn Only

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2	SVOC: ☐ ABN ☐ PAH	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13	EPH: ☐ Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☐ Ranges Only	☐ PCB ☐ PEST	TPH: ☐ Quant Only ☐ Fingerprint	Total Metals - RCP 13	Ammonia **	Salinity	PAH	TPH	SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do	Sample Comments	TOTAL # BOTTLES
L1715946-01	Boston Inner Harbor	5/11/17	1:30	GW	JRS									X	X	X	X	X			5

Container Type															
Container Type												P	P	A	
Preservative												C	D	A	

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	5/11/17 2:45		
	5/11/17 8:1		5/11/17

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

CHAIN OF CUSTODY

PAGE ____ OF ____

ALPHA ANALYTICAL
World Class Chemistry
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Date Rec'd in Lab: 5/11/17

ALPHA Job #: L1715446

Client Information

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Avenue, Cambridge, MA 02140

Phone: 617-868-1420

Email:

Additional Project Information:

Project Information

Project Name: 399 Congress St

Project Location: 399 Congress

Project #: 4540.2.D7

Project Manager: WJB

ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH *(only confirmed if pre-approved!)*

Date Due: 3 day

Report Information - Data Deliverables

☒ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☒ No MA MCP Analytical Methods

☐ Yes ☒ No CT RCP Analytical Methods

☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)

☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)

☒ Yes ☐ No NPDES RGP

☐ Other State /Fed Program ____ Criteria ____

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13; EPH: ☐ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint; Total Metals - RGP 13; Ammonia; Salinity

SAMPLE INFO — Filtration: ☐ Field ☐ Lab to do; Preservation: ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	Total Metals - RGP 13	Ammonia	Salinity	Sample Comments	TOTAL # BOTTLES
15446-01	Boston Inner Harbor	5/11/17	1:30	SW	JRS	X	X	X		5
Container Type						P	P	A		
Preservative						C	D	A		

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	5/11/17 2:45	[signature]	5/11/17 16:[illegible]
[signature]	5/11/17 8:[illegible]	[signature]	5/11/17 [illegible]

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)