



89 Crawford Street
Leominster, Massachusetts 01453
Tel: 774.450.7177
Fax: 888.835.0617
www.lrt-llc.net

January 20, 2016

U.S. Environmental Protection Agency-Region 1
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, Massachusetts 02109-3912
Attn.: Dewatering General Permit NOI Processing

Reference: Notice of Intent (NOI)
Dewatering General Permit (DGP)
East Pier – Buildings 5 & 6
East Boston, Massachusetts

To Whom It May Concern:

On behalf of W.L. French Excavation Corporation (French), Lockwood Remediation Technologies, LLC (LRT) has prepared this Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) Dewatering General Permit (DGP) (MAG070000). This NOI was prepared in accordance with the general requirements of the NPDES and related guidance documentation provided by the US Environmental Protection Agency (EPA). The completed NOI form is provided in Appendix A.

Site Information

This NOI has been prepared for the management of water generated from an excavation during the building construction at East Pier – Buildings 5 & 6 in East Boston, Massachusetts (the Site); please refer to Figure 1 for a locus map and an overview of the immediate area surrounding the Site. The work area, located at the former Portside Pier 1 site on Marginal Street, is depicted in Figure 2 along with the proposed treated water discharge location.

Work Summary

Previous construction efforts in 2006 and 2007 completed the installation of precast concrete piles at the Site. The new work scope at the site includes the construction of a multi-story apartment building with below grade parking. In order to complete portions of this work, dewatering is required. All water generated from the dewatering of the excavation will be pumped to the water treatment system, depicted in Figure 3, prior to discharge to the Boston Harbor. To characterize water from the excavation, LRT collected a representative groundwater sample on January 11, 2016. This sample was analyzed for the parameters in accordance with the NPDES DGP, Appendix VIII. Laboratory data reports for this sample are provided in Appendix B.

Discharge and Receiving Surface Water Information

A groundwater sample collected by LRT was submitted for the following analyses: Total Suspended Solids (TSS), selected metals, hardness, pH and chloride. The results of this sampling indicated detectable concentrations of TSS and zinc, however, concentrations are below applicable Remediation General Permit (RGP) standards. Refer to Figure 3 for the water treatment system layout.

Consultation with Federal Services

LRT reviewed online electronic data viewers and databases from the Massachusetts Geographical Information System (MassGIS) and the Massachusetts Division of Fisheries and Wildlife (MassWildlife; Natural Heritage and Endangered Species Program), and the U.S. National Parks Service Natural Historic Places (NPS). Based on this review, neither the Site nor the point where the proposed discharge reaches the receiving surface water body are Areas of Critical Environmental Concern (ACEC), Habitats of Rare Wetland Wildlife, Habitats of Rare Species, Estimated Habitats of Rare Wildlife, or listed as a National Historic Place.

Coverage under NPDES DGP

It is our opinion that the proposed discharge is eligible for coverage under the NPDES DGP. On behalf of French, we are requesting coverage under the NPDES DGP for the discharge of wastewater during construction activities to the Inner Boston Harbor.

The enclosed NOI form provides required information on the general site conditions, discharge, treatment system, receiving water, and consultation with federal services. For this project, French is the operator that has operational control over the construction plans and specifications, including the ability to make modifications to those plans and specifications.

Please feel free to contact us at 774-450-7177 or at plockwood@lrt-llc.net if you have any questions or if you require additional information.

Sincerely,
Lockwood Remediation Technologies, LLC

Paul Lockwood

Paul Lockwood
President

Attachments:

- Figure 1 Locus Plan
- Figure 2 Discharge Location
- Figure 3 Water Treatment System Layout
- Appendix A – NOI Form
- Appendix B – Laboratory Data
- Appendix C – Supplemental Information

Figures



Site Location:

Latitude: 42.366140

Longitude: -71.039721



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Figure 1 – Locus Map
East Pier - Building 5 & 6
Marginal Street
East Boston, Massachusetts





Source: Google Maps

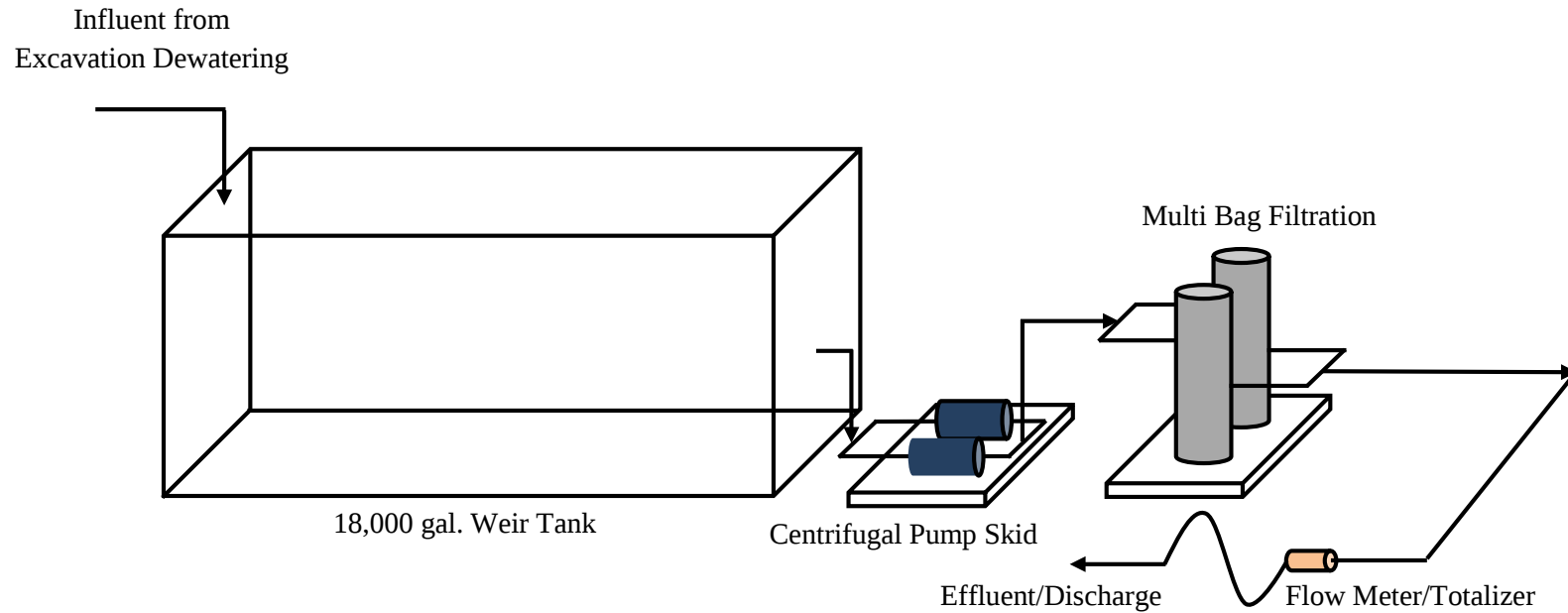
Approximate Site Boundary - - - - -
 Discharge Location 



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Figure 2 - Discharge Location
 East Pier - Building 5 & 6
 Marginal Street
 East Boston, Massachusetts





Notes:

- 1.) Figure is not to scale.
- 2.) The water treatment system is rated for 500 gallons per minute.
- 3.) All discharge water shall be routed to the treatment system.



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Figure 3 - Water Treatment System Layout
East Pier - Building 5 & 6
Marginal Street
East Boston, Massachusetts

Appendix A – NOI Form

II. Suggested Notice of Intent (NOI) Format

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

a) Name of facility:		Mailing Address for the Facility:	
b) Location Address of the Facility (if different from mailing address):	Facility Location	Type of Business:	
	longitude: _____ latitude: _____	Facility SIC codes:	
c) Name of facility owner: _____ Owner's email: _____ Owner's Tel #: _____ Owner's Fax #: _____ Address of owner (if different from facility address) 25 Overlook Ridge Drive Malden, MA 02148 Owner is (check one): 1. Federal _____ 2. State _____ 3. Private _____ 4. Other _____ (Describe) _____			
Legal name of Operator, if not owner: _____ Operator Contact Name: _____ Operator Tel Number: _____ Fax Number: _____ Operator's email: _____ Operator Address (if different from owner) _____			
d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? _____			
e) Check Yes or No for the following: 1. Has a prior NPDES permit been granted for the discharge? Yes _____ No _____ If Yes, Permit Number: _____ 2. Is the discharge a "new discharger" as defined by 40 CFR Section 122.2? Yes _____ No _____ 3. Is the facility covered by an individual NPDES permit? Yes _____ No _____ If Yes, Permit Number _____ 4. Is there a pending application on file with EPA for this discharge? Yes _____ No _____ If Yes, date of submittal: _____			

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

a) Name of receiving water into which discharge will occur: _____

State Water Quality Classification: _____ Freshwater: _____ Marine Water: _____

b) Describe the discharge activities for which the owner/applicant is seeking coverage:

1. Construction dewatering of groundwater intrusion and/or storm water accumulation.
2. Short-term or long-term dewatering of foundation sumps.
3. Other.

c) Number of outfalls _____

For each outfall:

d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow _____ GPD
Average Monthly Flow _____ GPD

e.) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH _____ Min pH _____

f.) Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit. groundwater

g.) What treatment does the wastewater receive prior to discharge? Weir tank settlement & bag filtration

h.) Is the discharge continuous? Yes _____ No _____ If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B) _____

If (P), number of days or months per year of the discharge _____ and the specific months of discharge _____;

If (I), number of days/year there is a discharge _____

Is the discharge temporary? Yes _____ No _____

If yes, approximate start date of dewatering _____ approximate end date of dewatering _____

i.) Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long. _____ lat. _____; Outfall 2: long. _____ lat. _____; Outfall 3: long. _____ lat. _____.

j.) If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations _____ cfs

(See Appendix VII for equations and additional information)

MASSACHUSETTS FACILITIES: See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC): k.) Does the discharge occur in an ACEC? Yes _____ No _____ If yes, provide the name of the ACEC: _____

3. Contaminant Information

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

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

a) Which of the three eligibility criteria listed in Appendix IV, Criterion (A, B, or C) have you met? _____ b) Please attach documentation with your NOI supporting your response. Please see Appendix IV for acceptable documentation

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

a) See Screening Process in Appendix III and respond to questions regarding your site and any historic properties listed or eligible for listing on the National Register of Historic Places. Question 1: Yes _____ No _____ ; Question 2: No _____ Yes _____ b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No _____ If yes, attach the results of the consultation(s). c) Which of the three National Historic Preservation Act eligibility criterion listed in Appendix III, Criterion (A, B, or C) have you met? _____ d) Is the project located on property of religious or cultural significance to an Indian Tribe? Yes _____ or No _____ If yes, provide that name of the Indian Tribe associated with the property. _____

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

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

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

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

Facility Name: East Pier - Building 5 & 6

Operator signature:



Print Full Name and Title: Mario Marchese - Project Manager

Date:

1-19-2016

Federal regulations require this application to be signed as follows:

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

Appendix B – Laboratory Data

- ☒ Final Report
☐ Re-Issued Report
☐ Revised Report

Report Date:
15-Jan-16 14:11

Laboratory Report

Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453
Attn: Paul Lockwood

Project: East Pier Blocks 5 & 6 - East Boston, MA
Project #: 2-1330

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SC17065-01	GW-1	Ground Water	11-Jan-16 13:30	12-Jan-16 12:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00098
USDA # S-51435



Authorized by:



June O'Connor
Laboratory Director

Eurofins Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 10 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

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Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

The samples were received -1.7 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Analyses for Total Hardness, pH, and Total Residual Chlorine fall under the state of Pennsylvania code Chapter 252.6 accreditation by rule.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 200.7

Spikes:

1600597-PS1 *Source: SC17065-01*

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Magnesium

The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

Calcium

Duplicates:

1600597-DUP1 *Source: SC17065-01*

MRL raised to correlate to batch QC reporting limits.

Lead

Nickel

Samples:

SC17065-01 *GW-1*

MRL raised to correlate to batch QC reporting limits.

Lead

Nickel

EPA 300.0

Duplicates:

1600594-DUP2 *Source: SC17065-01*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

Samples:

SC17065-01 *GW-1*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

Sample Acceptance Check Form

Client: Lockwood Remediation Technologies, LLC - MA
Project: East Pier Blocks 5 & 6 - East Boston, MA / 2-1330
Work Order: SC17065
Sample(s) received on: 1/12/2016

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?	☐	☒	☐
Were custody seals intact?	☐	☐	☒
Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	☒	☐	☐
Were samples refrigerated upon transfer to laboratory representative?	☒	☐	☐
Were sample containers received intact?	☒	☐	☐
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☒	☐	☐
Were samples accompanied by a Chain of Custody document?	☒	☐	☐
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☒	☐	☐
Did sample container labels agree with Chain of Custody document?	☒	☐	☐
Were samples received within method-specific holding times?	☒	☐	☐

Summary of Hits

Lab ID: SC17065-01

Client ID: GW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Calcium	61.4		0.100	mg/l	EPA 200.7
Magnesium	33.8		0.0100	mg/l	EPA 200.7
Zinc	0.0319		0.0050	mg/l	EPA 200.7
Chloride	223	D, GS	19.00	mg/l	EPA 300.0
Hardness	292		0.291	mg/l CaCO ₃	SM 2340B
Total Suspended Solids	11.0		5.0	mg/l	SM2540D

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order

Sample Identification

GW-1

SC17065-01

Client Project #

2-1330

Matrix

Ground Water

Collection Date/Time

11-Jan-16 13:30

Received

12-Jan-16

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
Total Metals by EPA 200/6000 Series Methods													
	Preservation	Field Preserved		N/A			1	EPA 200/6000 methods			LNB	1600608	
Total Metals by EPA 200 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0024	1	EPA 200.7	13-Jan-16	15-Jan-16	TBC	1600597	X
7440-70-2	Calcium	61.4		mg/l	0.100	0.0642	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0006	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0014	1	"	"	"	"	"	X
7439-89-6	Iron	< 0.0150		mg/l	0.0150	0.0090	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00009	1	EPA 245.1/7470A	12-Jan-16	14-Jan-16	TBC	1600598	X
7439-95-4	Magnesium	33.8		mg/l	0.0100	0.0038	1	EPA 200.7	13-Jan-16	15-Jan-16	TBC	1600597	X
7440-02-0	Nickel	< 0.0100	R06	mg/l	0.0100	0.0016	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0150	R06	mg/l	0.0150	0.0020	1	"	"	"	"	"	X
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0030	1	"	"	"	"	"	X
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0106	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0319		mg/l	0.0050	0.0033	1	"	"	"	"	"	X
General Chemistry Parameters													
	Hardness	292	HD	mg/l CaCO3	0.291	0.176	1	SM 2340B	13-Jan-16	15-Jan-16	TBC	[CALC]	
16887-00-6	Chloride	223	D, GS1	mg/l	9.00	0.706	9	EPA 300.0	12-Jan-16	12-Jan-16	MJL	1600594	X
18540-29-9	Hexavalent Chromium	< 0.005		mg/l	0.005	0.002	1	SM3500-Cr-B/71 96A	12-Jan-16 13:00	12-Jan-16 13:27	TDD	1600588	
	Total Suspended Solids	11.0		mg/l	5.0	2.8	1	SM2540D	13-Jan-16	15-Jan-16	CMB	1600671	X

This laboratory report is not valid without an authorized signature on the cover page

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1600597 - EPA 200 Series										
<u>Blank (1600597-BLK1)</u>					<u>Prepared: 13-Jan-16 Analyzed: 15-Jan-16</u>					
Selenium	< 0.0150		mg/l	0.0150						
Zinc	< 0.0050		mg/l	0.0050						
Antimony	< 0.0060		mg/l	0.0060						
Lead	< 0.0150		mg/l	0.0150						
Nickel	< 0.0100		mg/l	0.0100						
Magnesium	< 0.0100		mg/l	0.0100						
Iron	< 0.0150		mg/l	0.0150						
Chromium	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Calcium	< 0.100		mg/l	0.100						
Arsenic	< 0.0040		mg/l	0.0040						
<u>LCS (1600597-BS1)</u>					<u>Prepared: 13-Jan-16 Analyzed: 15-Jan-16</u>					
Antimony	1.27		mg/l	0.0060	1.25		102	85-115		
Iron	1.31		mg/l	0.0150	1.25		105	85-115		
Nickel	1.30		mg/l	0.0100	1.25		104	85-115		
Magnesium	1.32		mg/l	0.0100	1.25		105	85-115		
Lead	1.33		mg/l	0.0150	1.25		106	85-115		
Selenium	1.34		mg/l	0.0150	1.25		107	85-115		
Zinc	1.33		mg/l	0.0050	1.25		106	85-115		
Calcium	6.52		mg/l	0.100	6.25		104	85-115		
Chromium	1.30		mg/l	0.0050	1.25		104	85-115		
Cadmium	1.26		mg/l	0.0025	1.25		101	85-115		
Arsenic	1.30		mg/l	0.0040	1.25		104	85-115		
<u>Duplicate (1600597-DUP1)</u>					<u>Source: SC17065-01</u>	<u>Prepared: 13-Jan-16 Analyzed: 15-Jan-16</u>				
Magnesium	34.8		mg/l	0.0100		33.8			3	20
Zinc	0.0270		mg/l	0.0050		0.0319			16	20
Selenium	< 0.0150		mg/l	0.0150		BRL				20
Antimony	< 0.0060		mg/l	0.0060		0.0032				20
Nickel	< 0.0100	R06	mg/l	0.0100		BRL				20
Iron	0.0160		mg/l	0.0150		0.0146			9	20
Lead	< 0.0150	R06	mg/l	0.0150		BRL				20
Chromium	< 0.0050		mg/l	0.0050		BRL				20
Calcium	62.7		mg/l	0.100		61.4			2	20
Arsenic	0.0032	J	mg/l	0.0040		0.0034			5	20
Cadmium	< 0.0025		mg/l	0.0025		BRL				20
<u>Matrix Spike (1600597-MS1)</u>					<u>Source: SC17065-01</u>	<u>Prepared: 13-Jan-16 Analyzed: 15-Jan-16</u>				
Lead	1.23		mg/l	0.0150	1.25	BRL	98.1	70-130		
Zinc	1.24		mg/l	0.0050	1.25	0.0319	97	70-130		
Antimony	1.26		mg/l	0.0060	1.25	0.0032	100	70-130		
Nickel	1.18		mg/l	0.0100	1.25	BRL	95	70-130		
Magnesium	34.8		mg/l	0.0100	1.25	33.8	82	70-130		
Iron	1.23		mg/l	0.0150	1.25	0.0146	97	70-130		
Selenium	1.31		mg/l	0.0150	1.25	BRL	105	70-130		
Chromium	1.20		mg/l	0.0050	1.25	BRL	96	70-130		
Cadmium	1.16		mg/l	0.0025	1.25	BRL	93	70-130		
Calcium	66.8		mg/l	0.100	6.25	61.4	86	70-130		
Arsenic	1.29		mg/l	0.0040	1.25	0.0034	103	70-130		
<u>Post Spike (1600597-PS1)</u>					<u>Source: SC17065-01</u>	<u>Prepared: 13-Jan-16 Analyzed: 15-Jan-16</u>				
Magnesium	37.1	QM2	mg/l	0.0100	1.25	33.8	268	85-115		
Nickel	1.25		mg/l	0.0100	1.25	BRL	100	85-115		
Zinc	1.30		mg/l	0.0050	1.25	0.0319	101	85-115		

This laboratory report is not valid without an authorized signature on the cover page

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1600597 - EPA 200 Series										
<u>Post Spike (1600597-PS1)</u>				<u>Source: SC17065-01</u>		<u>Prepared: 13-Jan-16 Analyzed: 15-Jan-16</u>				
Selenium	1.39		mg/l	0.0150	1.25	BRL	111	85-115		
Antimony	1.32		mg/l	0.0060	1.25	0.0032	106	85-115		
Lead	1.28		mg/l	0.0150	1.25	BRL	103	85-115		
Iron	1.29		mg/l	0.0150	1.25	0.0146	102	85-115		
Arsenic	1.37		mg/l	0.0040	1.25	0.0034	110	85-115		
Chromium	1.25		mg/l	0.0050	1.25	BRL	100	85-115		
Cadmium	1.25		mg/l	0.0025	1.25	BRL	100	85-115		
Calcium	70.6	QM4X	mg/l	0.100	6.25	61.4	148	85-115		
Batch 1600598 - EPA200/SW7000 Series										
<u>Blank (1600598-BLK1)</u>						<u>Prepared: 12-Jan-16 Analyzed: 14-Jan-16</u>				
Mercury	< 0.00020		mg/l	0.00020						
<u>LCS (1600598-BS1)</u>						<u>Prepared: 12-Jan-16 Analyzed: 14-Jan-16</u>				
Mercury	0.00455		mg/l	0.00020	0.00500		91	85-115		
<u>Duplicate (1600598-DUP1)</u>				<u>Source: SC17065-01</u>		<u>Prepared: 12-Jan-16 Analyzed: 14-Jan-16</u>				
Mercury	< 0.00020		mg/l	0.00020		BRL				20
<u>Matrix Spike (1600598-MS1)</u>				<u>Source: SC17065-01</u>		<u>Prepared: 12-Jan-16 Analyzed: 14-Jan-16</u>				
Mercury	0.00452		mg/l	0.00020	0.00500	BRL	90	80-120		
<u>Post Spike (1600598-PS1)</u>				<u>Source: SC17065-01</u>		<u>Prepared: 12-Jan-16 Analyzed: 14-Jan-16</u>				
Mercury	0.00449		mg/l	0.00020	0.00500	BRL	90	85-115		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1600588 - General Preparation										
<u>Blank (1600588-BLK1)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	< 0.005		mg/l	0.005						
<u>LCS (1600588-BS1)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		100	90-111		
<u>Calibration Blank (1600588-CCB1)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.001		mg/l							
<u>Calibration Blank (1600588-CCB2)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.001		mg/l							
<u>Calibration Blank (1600588-CCB3)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.002		mg/l							
<u>Calibration Check (1600588-CCV1)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.049		mg/l	0.005	0.0500		99	90-110		
<u>Calibration Check (1600588-CCV2)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		99	90-110		
<u>Calibration Check (1600588-CCV3)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		100	90-110		
<u>Duplicate (1600588-DUP1)</u>				<u>Source: SC17065-01</u>				<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.002	J	mg/l	0.005		0.002			0	20
<u>Matrix Spike (1600588-MS1)</u>				<u>Source: SC17065-01</u>				<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.050		mg/l	0.005	0.0500	0.002	97	85-115		
<u>Matrix Spike Dup (1600588-MSD1)</u>				<u>Source: SC17065-01</u>				<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.051		mg/l	0.005	0.0500	0.002	98	85-115	1	20
<u>Reference (1600588-SRM1)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Hexavalent Chromium	0.026		mg/l	0.005	0.0250		103	85-115		
Batch 1600594 - General Preparation										
<u>Blank (1600594-BLK1)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	< 1.00		mg/l	1.00						
<u>LCS (1600594-BS1)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	21.3		mg/l	1.00	20.0		107	90-110		
<u>Calibration Blank (1600594-CCB1)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	0.418		mg/l							
<u>Calibration Blank (1600594-CCB2)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	0.416		mg/l							
<u>Calibration Blank (1600594-CCB3)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	0.419		mg/l							
<u>Calibration Blank (1600594-CCB4)</u>								<u>Prepared: 12-Jan-16 Analyzed: 13-Jan-16</u>		
Chloride	0.415		mg/l							
<u>Calibration Blank (1600594-CCB5)</u>								<u>Prepared: 12-Jan-16 Analyzed: 13-Jan-16</u>		
Chloride	0.414		mg/l							
<u>Calibration Check (1600594-CCV1)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	20.7		mg/l	1.00	20.0		103	90-110		
<u>Calibration Check (1600594-CCV2)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	20.5		mg/l	1.00	20.0		102	90-110		
<u>Calibration Check (1600594-CCV3)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	20.6		mg/l	1.00	20.0		103	90-110		
<u>Calibration Check (1600594-CCV4)</u>								<u>Prepared: 12-Jan-16 Analyzed: 13-Jan-16</u>		
Chloride	20.6		mg/l	1.00	20.0		103	90-110		
<u>Calibration Check (1600594-CCV5)</u>								<u>Prepared: 12-Jan-16 Analyzed: 13-Jan-16</u>		
Chloride	20.6		mg/l	1.00	20.0		103	90-110		
<u>Duplicate (1600594-DUP2)</u>				<u>Source: SC17065-01</u>				<u>Prepared: 12-Jan-16 Analyzed: 13-Jan-16</u>		

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1600594 - General Preparation										
<u>Duplicate (1600594-DUP2)</u>				<u>Source: SC17065-01</u>				<u>Prepared: 12-Jan-16 Analyzed: 13-Jan-16</u>		
Chloride	226	GS1, D	mg/l	9.00		223			1	20
<u>Matrix Spike (1600594-MS2)</u>				<u>Source: SC17065-01</u>				<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	307		mg/l	10.0	80.0	223	105	90-110		
<u>Matrix Spike Dup (1600594-MSD2)</u>				<u>Source: SC17065-01</u>				<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	306		mg/l	10.0	80.0	223	103	90-110	0.5	20
<u>Reference (1600594-SRM1)</u>								<u>Prepared & Analyzed: 12-Jan-16</u>		
Chloride	26.7		mg/l	1.00	25.0		107	90-110		
Batch 1600671 - General Preparation										
<u>Blank (1600671-BLK1)</u>								<u>Prepared: 13-Jan-16 Analyzed: 15-Jan-16</u>		
Total Suspended Solids	< 5.0		mg/l	5.0						
<u>LCS (1600671-BS1)</u>								<u>Prepared: 13-Jan-16 Analyzed: 15-Jan-16</u>		
Total Suspended Solids	94.0		mg/l	10.0	100		94	90-110		
<u>Duplicate (1600671-DUP1)</u>				<u>Source: SC17065-01</u>				<u>Prepared: 13-Jan-16 Analyzed: 15-Jan-16</u>		
Total Suspended Solids	11.0		mg/l	5.0		11.0			0	5

Notes and Definitions

D	Data reported from a dilution
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QM2	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM4X	The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R06	MRL raised to correlate to batch QC reporting limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
HD	Total Hardness is a calculation based on the reported values of Ca and Mg.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

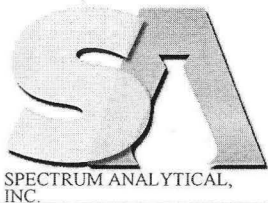
Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
Rebecca Merz



CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 15-Jan-16
- All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 60 days unless otherwise instructed.

Report To: Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453

Invoice To: Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453

Project No: 2-1330

Site Name: East Pier Blocks 5 & 6

Location: East Boston

State: MA

Sampler(s): Aaron Boudreau

Telephone #: 774-450-7177

Project Mgr: Paul Lockwood

P.O. No.: 2-1330 Quote/RQN:

F=Field Filtered 1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid
7=CH₃OH 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= 12=

List Preservative Code below:

4 NA/4 4 4 4 NA NA

QA/QC Reporting Notes:

* additional charges may apply

- MA DEP MCP CAM Report? ☐ Yes ☒ No
CT DPH RCP Report? ☐ Yes ☒ No
☒ Standard ☐ No QC
☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☒ Other: See attached
State-specific reporting standards:

DW=Dinking Water GW=Groundwater SW=Surface Water WW=Waste Water

O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas

X1= X2= X3=

G= Grab

C=Compsite

Type

Matrix

Containers

Analysis

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

Antimony, Arsenic,
Cadmium

Total Chromium,
Chromium VI,

Lead, Mercury,
Nickel, Selenium,

Zinc, Iron

Hardness

Chloride

TSS

Check if chlorinated

Lab ID:

Sample ID:

Date:

Time:

Type

Matrix

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

Antimony, Arsenic,
Cadmium

Total Chromium,
Chromium VI,

Lead, Mercury,
Nickel, Selenium,

Zinc, Iron

Hardness

Chloride

TSS

Check if chlorinated

Relinquished by:

Received by:

Date:

Time:

Temp °C

☐ EDD format:

☒ E-mail to: Plockwood@lrl-llc.net

Thagie@lrl-llc.net

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken

☐ Ambient ☐ Iced ☒ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

APPENDIX VIII

TEST METHODS AND MINIMUM LEVELS¹ FOR GROUNDWATER SOURCES

Parameters	Minimum Levels (ug/l) and Test Methods				
	CAS Numbers	ICP/AES ² Methods 200.7,3010A/6010C	ICP/MS ³ ,200.8, 310A/6020A	GFAA ⁴ Method 200.9, 7010	Notes Digestion Methods No.
1. Antimony	7440360	10 ug/L	0.5 ug/L	3 ug/l	200
2. Arsenic	7440382	20 ug/l	1.0 ug/L	3 ug/l	206.5
3. Cadmium	7440439	10 ug/l	0.2 ug/L	0.5 ug/l	200
4. Chromium Total	7440473	15ug/l	1.0 ug/L	1 ug/l	200
5. Chromium VI	18540299				
6. Copper	7440508	15 ug/l	0.5 ug/L	3 ug/l	200
7. Lead	7439921	20 ug/l	0.2 ug/L	3 ug/l	200
8. Mercury	7439976				
9. Nickel	7440020	20 ug/l	0.2 ug/L	5 ug/l	200
10. Selenium	7782492	20 ug/l	2 ug/L	5 ug/l	200
11. Silver	7740224	10 ug/l	0.2 ug/L	1 ug/l	200
12. Zinc	7440666	15 ug/l	5 ug/L		200
13. Iron	7439896	20 ug/L	50 ug/L		200
14. Hardness					Approved Part 136 Methods ²
15. Chloride	16887006				Approved Part 136 Methods ²
16. pH					Approved Part 136 Methods ²

1. Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence.
2. Inductively Couple Plasmas/ Atomic (optical) emissions Spectrometry
3. Inductively Couple Plasma/Mass Spectrometry
4. Graphite Furnace Atomic Absorption
5. Standard Method

Appendix C – Supplemental Information

East Pier

IPaC Trust Resource Report

Generated January 19, 2016 07:18 AM MST, IPaC v2.3.2

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



US Fish & Wildlife Service

IPaC Trust Resource Report



NAME

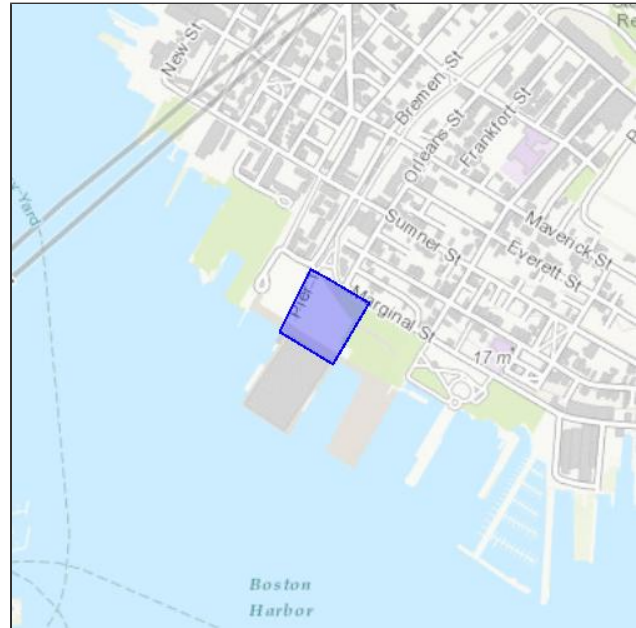
East Pier

LOCATION

Suffolk County, Massachusetts

IPAC LINK

<http://ecos.fws.gov/ipac/project/V7XAY-KAME5-H53AI-AI6JD-YEHAIQ>



U.S. Fish & Wildlife Contact Information

Trust resources in this location are managed by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the [Endangered Species Program](#) of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require FWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

[Section 7](#) of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from the Regulatory Documents section in IPaC.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Birds

Red Knot *Calidris canutus rufa* Threatened
 CRITICAL HABITAT
No critical habitat has been designated for this species.
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DM

Roseate Tern *Sterna dougallii dougallii* Endangered
 CRITICAL HABITAT
No critical habitat has been designated for this species.
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B07O

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the [Bald and Golden Eagle Protection Act](#).

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service ([1](#)). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

Additional information can be found using the following links:

- Birds of Conservation Concern
<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php>

The following species of migratory birds could potentially be affected by activities in this location:

American Oystercatcher <i>Haematopus palliatus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0G8	
American Bittern <i>Botaurus lentiginosus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0F3	
Bald Eagle <i>Haliaeetus leucocephalus</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B008	
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0HI	
Blue-winged Warbler <i>Vermivora pinus</i>	Bird of conservation concern
Season: Breeding	
Canada Warbler <i>Wilsonia canadensis</i>	Bird of conservation concern
Season: Breeding	
Hudsonian Godwit <i>Limosa haemastica</i>	Bird of conservation concern
Season: Migrating	

Least Bittern *Ixobrychus exilis*

Season: Breeding

Bird of conservation concern

Olive-sided Flycatcher *Contopus cooperi*

Season: Breeding

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN

Bird of conservation concern

Peregrine Falcon *Falco peregrinus*

Season: Breeding

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU

Bird of conservation concern

Pied-billed Grebe *Podilymbus podiceps*

Season: Breeding

Bird of conservation concern

Prairie Warbler *Dendroica discolor*

Season: Breeding

Bird of conservation concern

Purple Sandpiper *Calidris maritima*

Season: Wintering

Bird of conservation concern

Saltmarsh Sparrow *Ammodramus caudacutus*

Season: Breeding

Bird of conservation concern

Seaside Sparrow *Ammodramus maritimus*

Season: Breeding

Bird of conservation concern

Short-eared Owl *Asio flammeus*

Season: Wintering

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD

Bird of conservation concern

Snowy Egret *Egretta thula*

Season: Breeding

Bird of conservation concern

Upland Sandpiper *Bartramia longicauda*

Season: Breeding

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HC

Bird of conservation concern

Willow Flycatcher *Empidonax traillii*

Season: Breeding

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F6

Bird of conservation concern

Wood Thrush *Hylocichla mustelina*

Season: Breeding

Bird of conservation concern

Worm Eating Warbler *Helmitheros vermivorum*

Season: Breeding

Bird of conservation concern

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuges in this location

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

This location overlaps all or part of the following wetlands:

Estuarine And Marine Deepwater

[E1UBLx](#)

23400.0 acres

A full description for each wetland code can be found at the National Wetlands Inventory website: <http://107.20.228.18/decoders/wetlands.aspx>

MassDEP - Bureau of Waste Site Cleanup

Site Information:

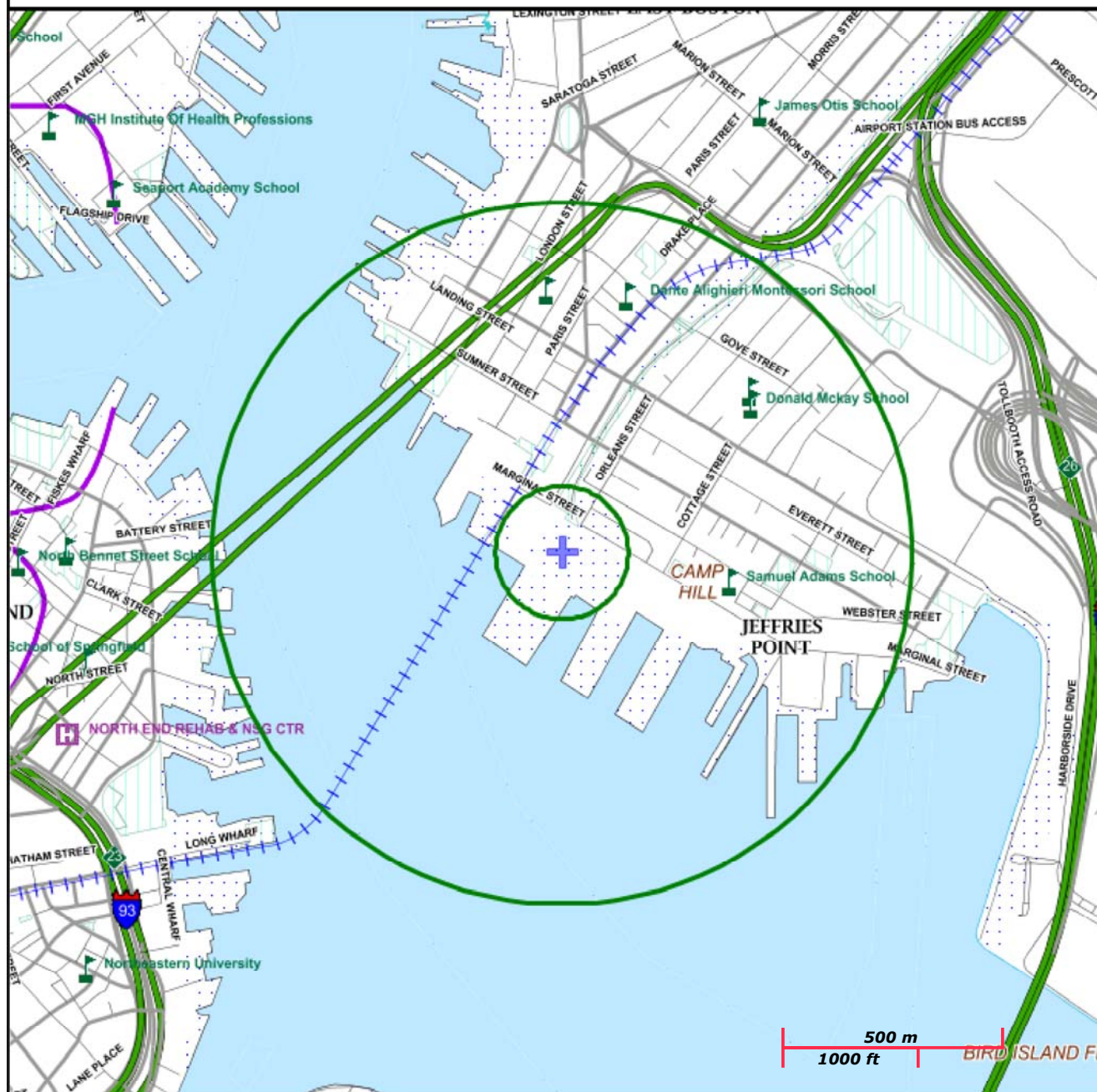
EAST PIER BLOCKS 5 & 6
40 EAST PIER DRIVE BOSTON, MA
NAD83 UTM Meters:
4692444mN, 332053mE (Zone: 19)
January 19, 2016

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

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.

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Boston; Street Name: Marginal; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
BOS.68	Immigrants Home Corporation Building	72-74 Marginal St	Boston	1911
BOS.69	Cooper, James W. House	132 Marginal St	Boston	c 1870
BOS.903	Golden Stairs	Ruth St	Boston	
BOS.215	Adams, Samuel Elementary School	165 Webster St	Boston	1910