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

May 23, 2016

Re: Notice of Intent for the Dewatering General Permit
Temporary Construction Dewatering
Atlantic Plaza
265 Main Street, North Reading, Massachusetts

Dear Sir/Madam:

FLV ATLANTIC PLAZA LIMITED PARTNERSHIP, a Delaware limited partnership, by its sole General Partner, FLV ATLANTIC PLAZA GP, LLC, a Delaware limited liability company, by its sole Member, FEDERAL/LION VENTURE LP, a Delaware limited partnership, by its Managing General Partner, FEDERAL/LPF GP, INC., a Delaware corporation (FLV Atlantic Plaza) is submitting this Notice of Intent (NOI) to the USEPA for coverage under the National Pollutant Discharge Elimination System (NPDES) Dewatering General Permit (DGP) MAG070000. This letter and supporting documentation were prepared in accordance with the U.S. EPA guidance for construction dewatering under the DGP program. FLV Atlantic Plaza is the owner of the subject property and will have direct responsibility for the subcontractors performing the dewatering activities at the Site. Subcontractors working for FLV Atlantic Plaza on the project will be required to meet the requirements of this NOI and the DGP.

This NOI will cover construction activities associated with the relocation of leach fields and the installation of private sewage treatment tanks on the Atlantic Plaza site. The site is located in the northern portion of North Reading, Massachusetts (see Figure 1). The site consists of an active shopping plaza.

A portion of Atlantic Plaza is the location of a Massachusetts Contingency Plan (MCP) site associated with Release Tracking Number (RTN) 3-22225, as shown on Figure 2. A brief description of this release and the regulatory status is provided below.

- RTN 3-22225 is related to historical tetrachloroethylene (PCE) releases from a former dry cleaning business. Remediation was performed, and a Class A-3 Response Action Outcome (RAO) (Permanent Solution) was achieved in 2010. The Permanent Solution relied upon an Activity and Use Limitation (AUL), which was required due to the presence of residual volatile constituents in soil and indoor air.

As shown on Figure 2, the area of proposed dewatering is located to the south and outside of the MCP site. Based on environmental reports prepared by Woodard & Curran, groundwater generally flows to northwest/west away from the proposed dewatering area.

The temporary construction dewatering will discharge via a storm drain which was previously installed as part of the Atlantic Plaza development. The storm drain runs offsite to a catch basin which is part of a municipal drainage system in Main Street (Figure 2). The storm drain will ultimately discharge into Martins Pond/Martins Brook which is a tributary of the Ipswich River (Figure 1).

According to the Massachusetts Department of Environmental Protection (DEP) Areas of Critical Environmental Concern (ACEC) Map and the DEP Phase I Site Assessment Map, the dewatering activities will not impact ACECs or Habitats of Rare Wetland Wildlife. These maps are included in Appendix A. A Summary of Essential Fish Habitat (EFH) Designation List was obtained from the National Oceanic and Atmospheric Administration website on May 4, 2016. The list of the EFH species and applicable life states for the Ipswich River area is included in Appendix B. Based on the effluent water quality of the discharge to the storm drain, in our opinion, the specifications of the DGP have been fulfilled and EFHs will not be negatively impacted by construction dewatering activities at the Site.

The U.S. Fish and Wildlife Service Information for Planning and Conservation (IPaC) online system process was completed on May 13, 2016. A review of the information from the IPaC online system indicated that while there may be species in the area, the project will not impact federally-listed threatened or endangered species and there are no critical habitats within the project area. A copy of the IPaC generated preliminary determination letter is included in Appendix C. There has not been a previous consultation with National Marine Fisheries Service (NMFS) for this discharge.

The site was not identified on the National Register of Historic Places listings for North Reading, MA. The Massachusetts Cultural Resource Information System (MACRIS) was accessed on May 5, 2016. According to MACRIS, there is one historic property abutting the Site – Congregation Ahabat Sholom Cemetery which is located to the south/southwest of the Site. Since water will be discharged into existing storm drains, dewatering activities at the Site will not negatively impact this historic property. Documents obtained from the MACRIS website are included in Appendix D.

The construction activities will require the excavation of soil to a depth of approximately 16 feet below ground surface (bgs). Groundwater is anticipated to be encountered between 6 and 8 feet bgs. Groundwater that flows into excavations during construction activities will be treated prior to being discharged to a storm drain such that the discharged effluent meets the effluent limitations established by Appendix VII of the DGP Application. Figure 3 includes a schematic of the proposed dewatering treatment system. As shown on Figure 3, a pH adjustment will be used, if needed, and we anticipate the chemical used will be sulfuric acid. A copy of the Material Safety Data Sheet (MSDS) for sulfuric acid is included in Appendix E.

Groundwater samples were collected from well GHC-3 (see Figure 2) on May 3, 2016 and were submitted for laboratory analysis of the parameters included in Appendix VIII of the DGP. Two groundwater samples were collected from the well: GHC-3 (unfiltered) and

GHC-3FF (field filtered). The data, which was used to complete the NOI, is summarized in Table 1 and the laboratory analytical report is included in Appendix F. The final discharge point for the treatment system will be the Ipswich River.

The completed Notice of Intent for the Dewatering General Permit form is included as Appendix G. Discharge of treated water is scheduled to begin as early as May 23, 2016, pending authorization from the EPA and other agencies.

Thank you for your consideration of this NOI/Permit. Please feel free to contact us if you wish to discuss the information contained in this application, or if any additional information is needed.

Very truly yours,

FLV ATLANTIC PLAZA LIMITED PARTNERSHIP, a Delaware limited partnership, by its sole General Partner, FLV ATLANTIC PLAZA GP, LLC, a Delaware limited liability company, by its sole Member, FEDERAL/LION VENTURE LP, a Delaware limited partnership, by its Managing General Partner, FEDERAL/LPF GP, INC., a Delaware corporation

By: Deborah A. Colson
Vice President- Legal Operations

encl. Table 1 – Summary of Groundwater Analytical Data
Figure 1 – Locus Plan
Figure 2 – Site Plan with Target Discharge Point
Figure 3 – Proposed Groundwater Treatment Schematic
Appendix A – Areas of Critical Environmental Concern Maps
Appendix B – Essential Fish Habitat Designation
Appendix C – Federal Correspondence
Appendix D – National Register of Historic Places, North Reading, Massachusetts
Appendix E – Material Safety Data Sheet
Appendix F – Analytical Laboratory Reports
Appendix G – Notice of Intent

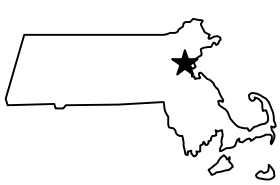
TABLE

Table 1
Summary of Groundwater Analytical Data
NPDES Dewatering General Permit
Atlantic Plaza

Location Sampling Date	Analytical Method	NPDES DGP Effluent Limit	Units	GHC-3 5/3/2016	GHC-3(FF) 5/3/2016
Anions by Ion Chromatography					
Chloride	CL-300	Varies	mg/l	113	112
MCP General Chemistry					
pH (H)	9040C	6.5-8.3	SU	5.6	5.6
Solids, Total Suspended	TSS-2540	100	mg/l	<15	<15
Chromium, Hexavalent	7196A	ND	µg/l	<10	<10
MCP Total Metals					
Antimony, Total	6010C	5.6	µg/l	<50	<50
Arsenic, Total	6010C	36	µg/l	<5	<5
Cadmium, Total	6010C	8.9	µg/l	<4	<4
Chromium, Total	6010C	100*	µg/l	<10	<10
Copper, Total	6010C	3.7	µg/l	<10	<10
Iron, Total	6010C	1,000	µg/l	60	<50
Lead, Total	6010C	8.5	µg/l	<10	<10
Mercury, Total	6010C	1.1	µg/l	<0.2	<0.2
Nickel, Total	6010C	8.2	µg/l	<25	<25
Silver, Total	6010C	2.2	µg/l	<7	<7
Zinc, Total	6010C	85.6	µg/l	<50	<50
Total Hardness by SM 2340B					
Hardness	6010C	NS	µg/l	74,000	74,000

Notes:
1. The samples were collected by Sanborn, Head & Associates, Inc. personnel on the dates indicated and were submitted to Alpha Analytical, Inc. of Westborough, MA (Alpha) for analysis.
2. Abbreviations:
   '<' = analytes not detected above laboratory reporting limits
   '*' = NPDES DGP Effluent Limit for Trivalent Chromium shown
   'mg/l' = milligrams per liter
   'ND' = non detect
   'µg/l' = micrograms per liter

FIGURES



NOTES:
Base map taken from "Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs"
7.5 minute USGS Quadrangle Maps: North Reading, MA,Revised 1985

Drawn By: D.Dombrowsky
Designed By: K.Walker
Reviewed By: P.Pinto
Project No: 4053.00
Date: May 2016

SCALE: 1:25,000

SANBORN HEAD

FIGURE 1

Locus Plan

Notice of Intent for Dewatering General Permit

Atlantic Plaza Shopping Center
North Reading, Massachusetts

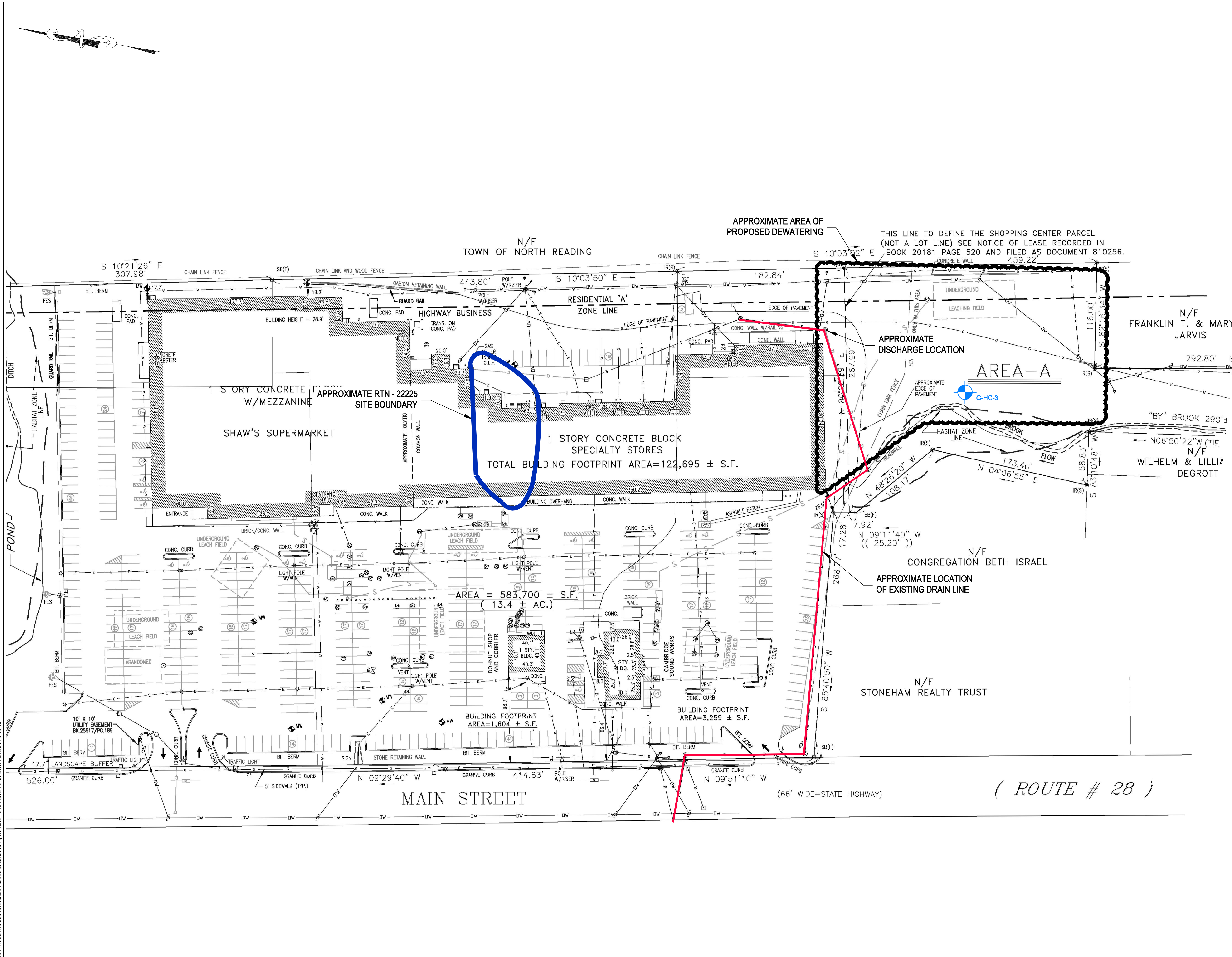


Figure No. 2

Site Plan with Target Discharge Point

Notice of Intent for Dewatering General Permit

Atlantic Plaza Shopping Center
North Reading, Massachusetts

Drawn By: D.Dombrowsky
Designed By: K.Walker
Reviewed By: P.Pinto
Project No: 4053.00
Date: May 2016

Figure Narrative

The base map was drawn from a plan entitled, "ALTA/ACSM Land Survey 265-277 Main Street, North Reading, MA", prepared by Dana F. Perkins, Inc., Consulting Engineers & Land Surveyors of Tewksbury, Massachusetts, dated October 1, 2004, with an original scale of 1" = 50'.

The location of the monitoring well is interpolated from a figure entitled "Revised Hydrogeologid Evaluation and Groundwater Mounding Report" prepared by Merrimack Engineering Services and dated April 28, 2014.

Legend

G-HC-3 Approximate location of monitoring well installed by others

SANBORN HEAD

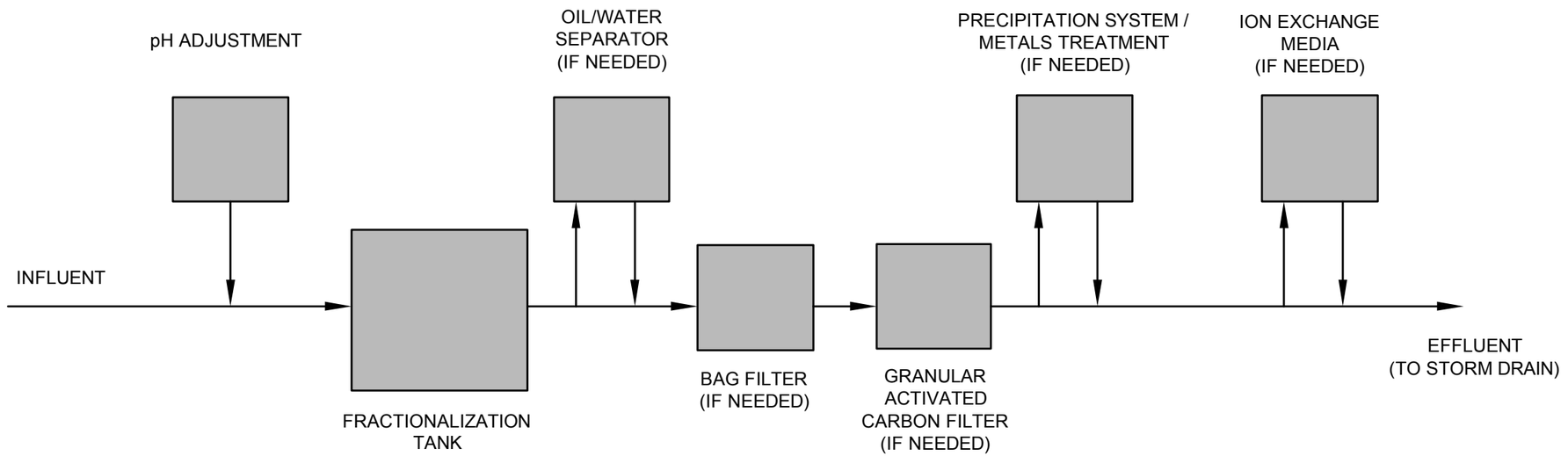


Figure No. 3

Proposed Groundwater Treatment Schematic

Notice of Intent for Dewatering General Permit

Atlantic Plaza Shopping Center
North Reading, Massachusetts

Drawn By: D.Dombrowsky
Designed By: K.Walker
Reviewed By: P.Pinto
Project No: 4053.00
Date: May 2016

Figure Narrative

Details of Treatment System may vary from the system indicated on left. Specific means and methods of treatment are to be selected by the subcontractor. Water discharged at the effluent point shall meet required effluent standards as specified in the Dewatering General Permit.

NOT TO SCALE

SANBORN HEAD

APPENDIX A

AREAS OF CRITICAL ENVIRONMENTAL CONCERN MAPS

MassDEP - Bureau of Waste Site Cleanup

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

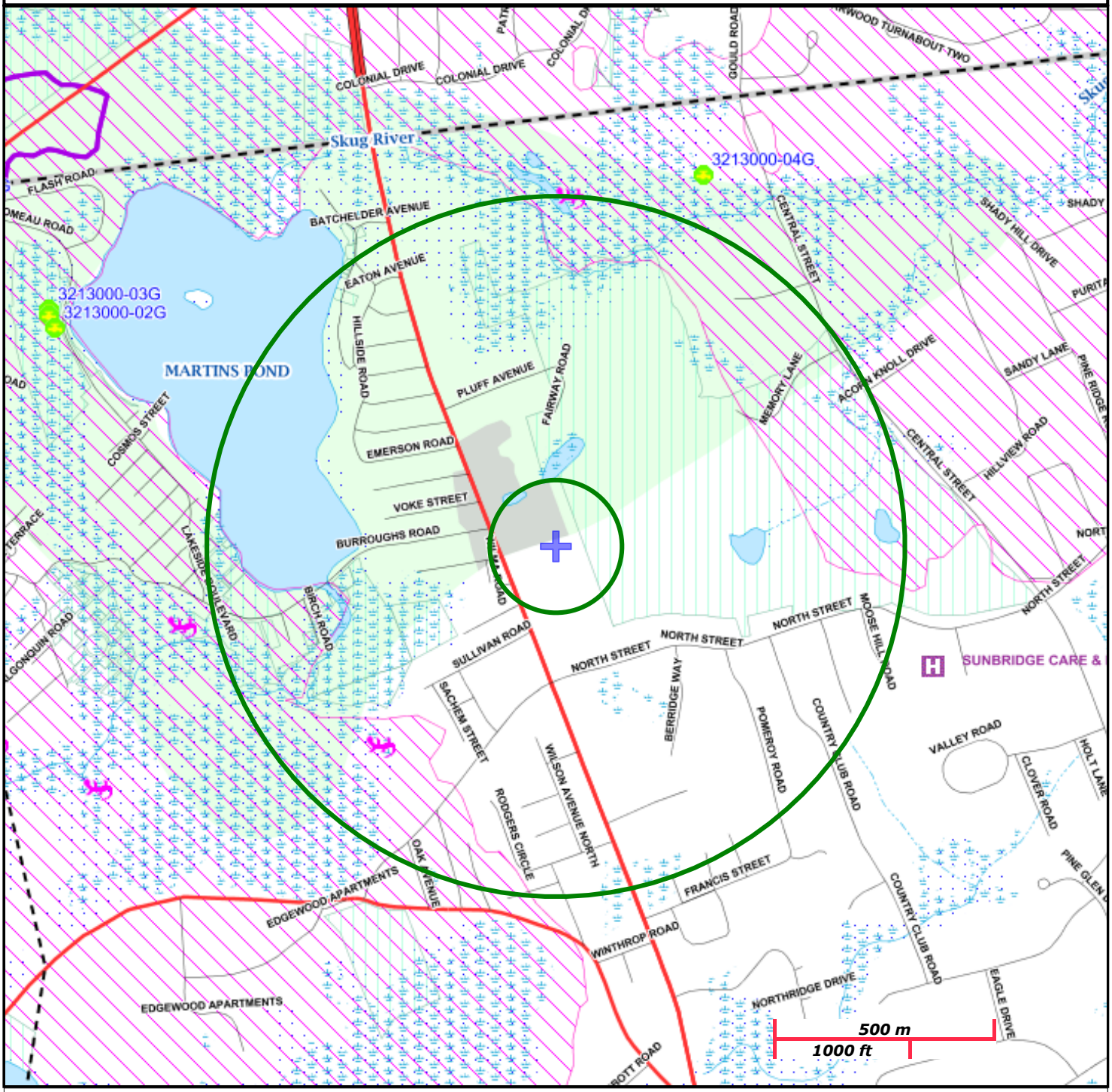
Site Information:

265 MAIN STREET NORTH READING, MA

NAD83 UTM Meters:
4717666mN , 326373mE (Zone: 19)
May 4, 2016

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

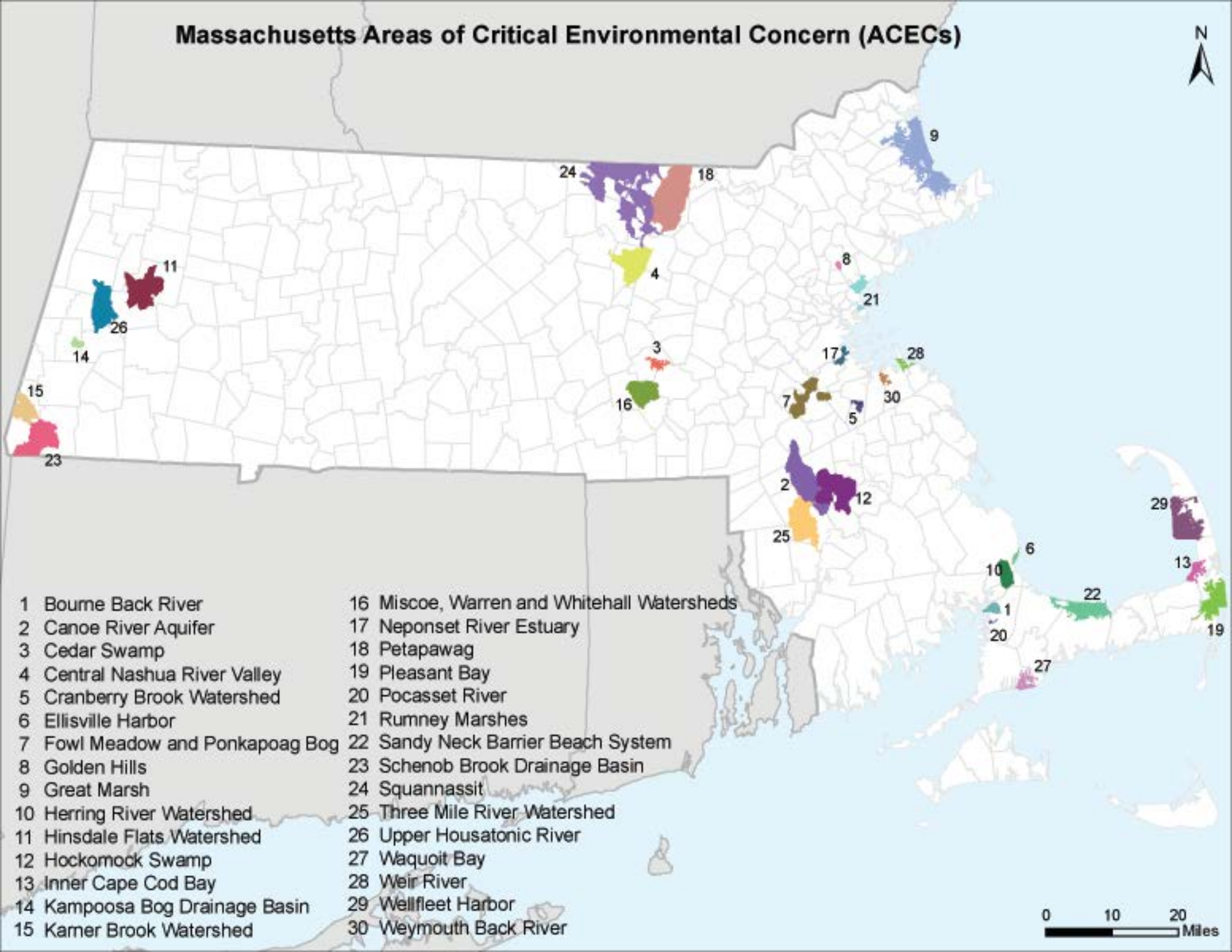
Wetlands: Freshwater, Saltwater, Cranberry Bog

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 Areas of Critical Environmental Concern (ACECs)



1 Bourne Back River
2 Canoe 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 Karner 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

APPENDIX B

ESSENTIAL FISH HABITAT DESIGNATION

Summary of Essential Fish Habitat (EFH) Designation

10' x 10' Square Coordinates:

Boundary	North	East	South	West
Coordinate	42° 50.0' N	70° 40.0' W	42° 40.0' N	70° 50.0' W

Square Description (i.e. habitat, landmarks, coastline markers) Waters within the Atlantic Ocean within the square affecting the following: from Ipswich Bay, past most of Castle Neck, northern Hog Island, Plum Island, Plum Island Sound, Ipswich, MA., Rowley, MA., Newburyport, MA., Newbury, MA., past Joppa Flats at the entrance to the Merrimack River up to Salisbury, MA. Features also affected include: a discontinued dumping ground just east of the opening to the Merrimack River, Woodbridge I., Plum I., Parker River Inlet, Rowley River Inlet, Eagle Hill River Inlet, Great Neck, and Ipswich River, and Ipswich Bay.

Species	Eggs	Larvae	Juveniles	Adults
Atlantic cod *(Gadus morhua)*	X	X	X	X
haddock *(Melanogrammus aeglefinus)*			X	
pollock *(Pollachius virens)*			X	
whiting *(Merluccius bilinearis)*	X	X	X	X
offshore hake *(Merluccius albidus)*				
red hake *(Urophycis chuss)*	X	X	X	X
white hake *(Urophycis tenuis)*				
redfish *(Sebastes fasciatus)*	n/a	X	X	X
witch flounder *(Glyptocephalus cynoglossus)*				
winter flounder *(Pseudopleuronectes americanus)*	X	X	X	X
yellowtail flounder *(Limanda ferruginea)*			X	X
windowpane flounder *(Scophthalmus aquosus)*	X		X	X
American plaice *(Hippoglossoides platessoides)*	X			X
ocean pout *(Macrozoarces americanus)*	X	X	X	X
Atlantic halibut *(Hippoglossus hippoglossus)*	X	X	X	X
Atlantic sea scallop *(Placopecten magellanicus)*	X	X	X	X
Atlantic sea herring *(Clupea harengus)*		X	X	X
monkfish *(Lophius americanus)*	X	X		

bluefish *(Pomatomus saltatrix)*				
long finned squid *(Loligo pealeii)*	n/a	n/a	X	X
short finned squid *(Illex illecebrosus)*	n/a	n/a	X	X
Atlantic butterfish *(Peprilus triacanthus)*	X	X	X	X
Atlantic mackerel *(Scomber scombrus)*	X	X	X	X
summer flounder *(Paralichthys dentatus)*				X
scup *(Stenotomus chrysops)*	n/a	n/a	X	X
black sea bass *(Centropristis striata)*	n/a		X	
surf clam *(Spisula solidissima)*	n/a	n/a	X	X
ocean quahog *(Artica islandica)*	n/a	n/a		
spiny dogfish *(Squalus acanthias)*	n/a	n/a		
tilefish *(Lopholatilus chamaeleonticeps)*				
bluefin tuna *(Thunnus thynnus)*			X	X

APPENDIX C

FEDERAL CORRESPONDENCE

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
PHONE: (603)223-2541 FAX: (603)223-0104
URL: www.fws.gov/newengland

Consultation Code: 05E1NE00-2016-SLI-1434 May 17, 2016
Event Code: 05E1NE00-2016-E-02075
Project Name: Atlantic Ave

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

United States Department of Interior
Fish and Wildlife Service

Project name: Atlantic Ave

Official Species List

Provided by:

New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
(603) 223-2541
http://www.fws.gov/newengland

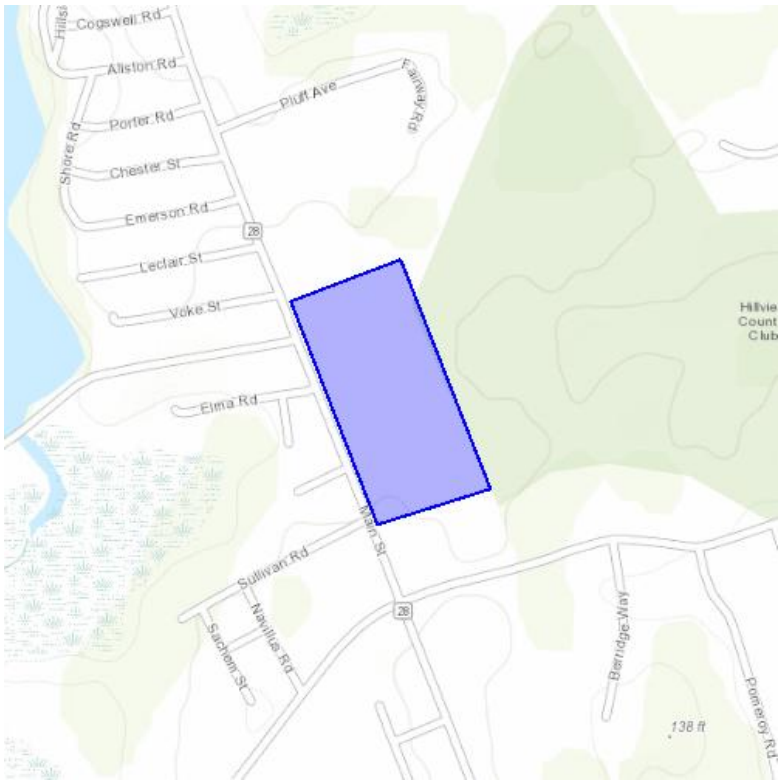
Consultation Code: 05E1NE00-2016-SLI-1434
Event Code: 05E1NE00-2016-E-02075

Project Type: DEVELOPMENT

Project Name: Atlantic Ave
Project Description: Dewatering activities for construction

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-71.11483991146088 42.59044826917796, -71.11669600009917 42.59001778987563, -71.11811757087708 42.59273094460245, -71.11633121967316 42.59322854094931, -71.11483991146088 42.59044826917796)))

Project Counties: Middlesex, MA

Endangered Species Act Species List

There are a total of 1 threatened or endangered 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. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	**Status**	**Has Critical Habitat**	**Condition(s)**
Northern long-eared Bat *(Myotis septentrionalis)*	Threatened		

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX D

NATIONAL REGISTER OF HISTORIC PLACES
NORTH READING, MASSACHUSETTS

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): North Reading; Street Name: Main St; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
NRE.E	Main Street Streetscape		North Reading	
NRE.803	Congregation Ahabat Sholum Cemetery	Main St	North Reading	c 1905
NRE.901	Martins Brook Bridge	Main St	North Reading	1903
NRE.142	Carpenter, Edward A. - McLane, Jared Brown House	25 Main St	North Reading	c 1900
NRE.143	Carpenter, Edward A. - McLane, Jared Brown House	27 Main St	North Reading	c 1900
NRE.144	Carpenter, Edward A. - McLane, Jared Brown House	29 Main St	North Reading	c 1900
NRE.106	Pleasure Lanes	160 Main St	North Reading	c 1960

APPENDIX E

MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET

Sodium Hydroxide 50% Solution

MSDS Ref. No.: 1310-73-2-3
Date Approved: 05/13/2009
Revision No.: 5

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Sodium Hydroxide 50% Solution

SYNONYMS: Caustic Soda Solution; Lye Solution; Sodium Hydrate Solution, White Caustic Solution

GENERAL USE: pH Control

This chemical is certified to ANSI/NSF Standard 60, Drinking Water Chemicals-Health Effects (as packaged in the original, unopened container). The maximum dosage level for this chemical is 200 mg/L

MANUFACTURER

FMC Wyoming Corporation
Alkali Chemicals Division
1735 Market Street
Philadelphia, PA 19103
(215) 299-6000 (General Information)
msdsinfo@fmc.com (Email - General Information)

EMERGENCY TELEPHONE NUMBERS

(307) 872-2452 (Plant - Green River, WY)

(303) 595-9048 (Medical - Call Collect)

For leak, fire, spill, or accident emergencies, call:
(800) 424-9300 (CHEMTREC - U.S.A. & Canada)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- Water white liquid with no appreciable odor.
- Solution is corrosive to body tissues and metallic materials.
- Product may react violently with acids.

POTENTIAL HEALTH EFFECTS: Solution is corrosive and severely irritating to the eyes and skin.

MEDICAL CONDITIONS AGGRAVATED: Skin and lung disorders may be affected adversely by this material; an individual's specific medical condition and circumstances of exposure determine the likelihood of an adverse effect.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt.%	EC No.	EC Class
Sodium Hydroxide	1310-73-2	50	215-185-5	C; R35
Water	7732-18-5	50	231-791-2	Not classified

4. FIRST AID MEASURES

EYES: Immediately flush with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. See a medical doctor or ophthalmologist immediately.

SKIN: Immediately flush with plenty of water while removing contaminated clothing and/or shoes, and thoroughly wash with soap and water. See a medical doctor immediately.

INGESTION: Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. See a medical doctor immediately.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

NOTES TO MEDICAL DOCTOR: Sodium hydroxide at this concentration is corrosive. Major burns to all surfaces may result. Prolonged dilution with water is required. Neutralization of eye burns is absolutely contraindicated; for skin, 2% acetic acid has been recommended, but washing with water is effective. Ingestion requires milk or water dilution, consideration of esphagoscopy and management for possible esophageal stricture.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Not applicable

FIRE / EXPLOSION HAZARDS: Non-combustible

FIRE FIGHTING PROCEDURES: Not applicable

FLAMMABLE LIMITS: Not applicable

HAZARDOUS COMBUSTION PRODUCTS: None

SENSITIVITY TO IMPACT: Not Sensitive

SENSITIVITY TO STATIC DISCHARGE: Not Sensitive

6. ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Wear personal protective equipment as recommended in Section 8, "Exposure Controls/Personal Protection" below.

Contain spill using absorbent material and place in an approved container.

Dispose of according to the method outlined in Section 13, "Disposal Considerations" below.

7. HANDLING AND STORAGE

HANDLING: During handling of liquid, prevent contact with skin and eyes by using adequate personal protective equipment (see Section 8, "Exposure Controls/Personal Protection" below). If the release of airborne material is likely, exhaust ventilation and/or respiratory protection may also be necessary.

STORAGE: Store in closed containers away from sources of heat.

COMMENTS: Use only in systems, processes and procedures in which effective ventilation has been provided to meet established exposure limits.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Chemical Name	ACGIH	OSHA	Supplier
Sodium Hydroxide	2 mg/m^3 (ceiling)	2 mg/m^3 (PEL)	

ENGINEERING CONTROLS: Adequate engineering controls and/or personal protective equipment must be used to prevent contact with skin and eyes. Engineering controls and/or respirators may be necessary when the generation of airborne mists or fogs are possible.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical goggles (and face shield if necessary) should be worn to prevent contact.

RESPIRATORY: When exposure above the established standard is likely, a respiratory protection program that complies with OSHA General Industry Standard 1910.134 should be implemented. Wear full face-piece respirators approved by MSHA / NIOSH if mists are expected.

PROTECTIVE CLOTHING: Rubber or vinyl apron. Rubber boots or rubber overshoes.

GLOVES: Impervious rubber or vinyl gloves with gauntlets. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

COMMENTS:

The information noted above provides general guidance for handling this product. Specific work environments and material handling practices will dictate the selection and use of personal protection equipment (PPE).

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9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR:	No appreciable odor
APPEARANCE:	Water white liquid
AUTOIGNITION TEMPERATURE:	Not applicable
BOILING POINT:	145 °C (293 °F)
COEFFICIENT OF OIL / WATER:	Not applicable
EVAPORATION RATE:	(butyl acetate = 1) Not available
FLASH POINT:	Non-combustible
FREEZING POINT:	4.4°C (40°F)
ODOR THRESHOLD:	Not applicable
OXIDIZING PROPERTIES:	Not available
PERCENT VOLATILE:	Not applicable
pH:	(as is) 13.7
SOLUBILITY IN WATER:	Infinite
SPECIFIC GRAVITY:	1.53 @ 15.5°C (60°F) (water = 1)
VAPOR DENSITY:	Not applicable
VAPOR PRESSURE:	6.33 mm Hg @ 40 °C (104 °F)

COMMENTS:

pH (1% solution): 13.0

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	Contact with acids, flammable liquids, organic halogen compounds, nitro compounds, and amphoteric metals, such as aluminum, magnesium and zinc.
STABILITY:	Slightly reactive
POLYMERIZATION:	Will not occur
INCOMPATIBLE MATERIALS:	Acids, flammable liquids, organic halogen compounds, nitro compounds, and amphoteric metals, such as aluminum, magnesium and zinc.
HAZARDOUS DECOMPOSITION PRODUCTS:	None

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: Severely irritating, corrosive (rabbit) [RTECS 1986, NIOSH 1975]

SKIN EFFECTS: Severely irritating, corrosive (rabbit) [RTECS 1986, PB 234-899 1974]

DERMAL LD_{50}: Corrosive

ORAL LD_{50}: 400 mg/kg (rabbit) LDLo [PB 234-899 1974]

INHALATION LC_{50}: Corrosive

TARGET ORGANS: Skin, eyes, mucous membranes

ACUTE EFFECTS FROM OVEREXPOSURE: Sodium hydroxide is corrosive and may produce severe eye, skin and respiratory tract irritation and upper gastrointestinal tract damage. Ingestion of concentrated solutions has caused death in animals and humans. [Gosselin, Smith & Hodge, 1984; PB 234-899 1974]

CHRONIC EFFECTS FROM OVEREXPOSURE: Sodium hydroxide may produce inflammation of the eyes, skin, and mucous membranes. Esophageal carcinoma at the site of a chronic lye stricture has been reported. [Gosselin , Smith & Hodge 1984]

CARCINOGENICITY:

NTP:	Not listed
IARC:	Not listed
OSHA:	Not listed
OTHER:	Not Listed (ACGIH)

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Bluegill sunfish: 48-hour LC_{50} = 99 mg/L
Mosquito fish: 96-hour LC_{50} = 125 mg/L
Brown shrimp (Crangon crangon): 48-hour LC_{50} = 30 - 100 mg/L

The damaging effects are mostly a consequence of the increase in pH. The upper pH limit tolerated by most freshwater fish is 8.4; the pH must generally be greater than 9 before the aqueous environment becomes lethal for fully developed fish. Freshwater algae are destroyed above pH 8.5. Concentrations of 20 to 100 mg/L have been reported to kill salmon, trout, carp and crayfish. [Ref. , Environment Canada, Environmental Protection Service, Sodium Hydroxide Environmental and Technical Information for Problem Spills. June 1984]

CHEMICAL FATE INFORMATION: The pH effect of sodium hydroxide in water is naturally reduced by the absorption of atmospheric carbon dioxide. This reduction is also effected by dilution with water and by the natural acidity of a given water body. There is no degradation of sodium hydroxide in waters, only loss by absorption or through chemical neutralization.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with all local, state and federal environmental rules and regulations. Check the pH of the waste to be disposed, if it is greater than 12.5 it must be handled as a RCRA hazardous waste.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

PROPER SHIPPING NAME:	Sodium Hydroxide Solution
PRIMARY HAZARD CLASS / DIVISION:	8
UN/NA NUMBER:	UN 1824
PACKING GROUP:	II

LABEL(S):	Corrosive
PLACARD(S):	Corrosive
ADDITIONAL INFORMATION:	Sodium hydroxide is in an "RQ" quantity when this material meets or exceeds 2500 pounds per bulk package. 49 STCC Number: 4935240

INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

PROPER SHIPPING NAME:	Sodium Hydroxide Solution

INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) / INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

PROPER SHIPPING NAME:	Sodium Hydroxide Solution

OTHER INFORMATION:

Cool containers with water if exposed to fire or excessive heat conditions.

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15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355, APPENDIX A):
Not listed

SECTION 311 HAZARD CATEGORIES (40 CFR 370):
Immediate (Acute) Health Hazard

SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370):
The Threshold Planning Quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs; however, this product contains the following ingredients with a TPQ of less than 10,000 lbs.: None

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):
This product does not contain any toxic chemicals subject to the reporting requirements of Section 313, Title III of the SARA (Superfund Amendments and Reauthorization Act) of 1986.

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)

CERCLA DESIGNATION & REPORTABLE QUANTITIES (RQ) (40 CFR 302.4):
Listed

Chemical Name	RQ	
Sodium Hydroxide	1,000 lb	Category C

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA INVENTORY STATUS (40 CFR 710):
All components are listed or exempt.

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Hazard Classification / Division:	E
Ingredient Disclosure List:	Listed
Domestic Substance List:	All components are listed or exempt.

EU EINECS NUMBERS:

215-185-5 (sodium hydroxide)

HAZARD AND RISK PHRASE DESCRIPTIONS:

EC Symbols:	C	(Corrosive)
EC Risk Phrases:	R35	(Causes severe burns.)

16. OTHER INFORMATION

HMIS

Health	3
Flammability	0
Physical Hazard	1
Personal Protection (PPE)	J

Protection = J (Safety goggles, gloves, apron & combination dust & vapor respirator)

HMIS = Hazardous Materials Identification System

Degree of Hazard Code:
4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal

NFPA

Health	3
Flammability	0
Reactivity	1
Special	None

No special requirements

NFPA (National Fire Protection Association)

Degree of Hazard Code:
4 = Extreme
3 = High
2 = Moderate
1 = Slight
0 = Insignificant

REVISION SUMMARY:
This MSDS replaces Revision #4, dated January 26, 2004.
Changes in information are as follows:
Section 1 (Product and Company Identification)
Section 8 (Exposure Controls / Personal Protection)
Section 14 (Transport Information)
Section 15 (Regulatory Information)
Section 16 (Other Information)

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APPENDIX F

ANALYTICAL LABORATORY REPORT

ANALYTICAL REPORT

Lab Number:	L1613233
Client:	Sanborn, Head & Associates, Inc. 1 Technology Park Drive Westford, MA 01886
ATTN:	Kent Walker
Phone:	(978) 577-1003
Project Name:	ATLANTIC PLAZA
Project Number:	4053.00
Report Date:	05/13/16

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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

Project Name: ATLANTIC PLAZA
Project Number: 4053.00

Lab Number: L1613233
Report Date: 05/13/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1613233-01	GHC-3	WATER	NORTH READING, MA	05/03/16 14:12	05/03/16
L1613233-02	GHC-3(FF)	WATER	NORTH READING, MA	05/03/16 14:14	05/03/16

Project Name: ATLANTIC PLAZA **Lab Number:** L1613233

Project Number: 4053.00 **Report Date:** 05/13/16

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: ATLANTIC PLAZA
Project Number: 4053.00

Lab Number: L1613233
Report Date: 05/13/16

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: ATLANTIC PLAZA
Project Number: 4053.00
Lab Number: L1613233
Report Date: 05/13/16

Case Narrative (continued)

Report Submission

This report replaces the report issued May 9, 2016, and includes the results of the Total Suspended Solids analysis performed on L1613233-01 and -02.

MCP Related Narratives

Metals

In reference to question H:

The WG890237-1 Method Blank, associated with L1613233-01 and -02, has concentrations above the reporting limits for copper. Since the sample(s) were non-detect for these target analytes, no further actions were taken. The results of the original analysis are reported.

In reference to question I:

All samples were analyzed for a subset of MCP analytes per the Chain of Custody.

Non-MCP Related Narratives

Solids, Total Suspended

L1613233-01 and -02: The sample has elevated detection limits due to limited 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: Lura L Troy

Title: Technical Director/Representative Date: 05/13/16

METALS

Project Name: ATLANTIC PLAZA
Lab Number: L1613233
Project Number: 4053.00
Report Date: 05/13/16

SAMPLE RESULTS

Lab ID: L1613233-01
Client ID: GHC-3
Sample Location: NORTH READING, MA
Matrix: Water

Date Collected: 05/03/16 14:12
Date Received: 05/03/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Hardness by SM 2340B - Westborough Lab											
Hardness	74.		mg/l	0.66	NA	1	05/04/16 08:30	05/05/16 02:56	EPA 3005A	1,6010C	FB
MCP Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.050	--	1	05/04/16 08:30	05/05/16 04:27	EPA 3005A	97,6010C	PS
Arsenic, Total	ND		mg/l	0.005	--	1	05/04/16 08:30	05/05/16 04:27	EPA 3005A	97,6010C	PS
Cadmium, Total	ND		mg/l	0.004	--	1	05/04/16 08:30	05/05/16 04:27	EPA 3005A	97,6010C	PS
Chromium, Total	ND		mg/l	0.01	--	1	05/04/16 08:30	05/05/16 04:27	EPA 3005A	97,6010C	PS
Copper, Total	ND		mg/l	0.010	--	1	05/04/16 08:30	05/05/16 04:27	EPA 3005A	97,6010C	PS
Iron, Total	0.06		mg/l	0.05	--	1	05/04/16 08:30	05/05/16 04:27	EPA 3005A	97,6010C	PS
Lead, Total	ND		mg/l	0.010	--	1	05/04/16 08:30	05/05/16 04:27	EPA 3005A	97,6010C	PS
Mercury, Total	ND		mg/l	0.0002	--	1	05/05/16 11:38	05/05/16 21:21	EPA 7470A	97,7470A	EA
Nickel, Total	ND		mg/l	0.025	--	1	05/04/16 08:30	05/05/16 04:27	EPA 3005A	97,6010C	PS
Silver, Total	ND		mg/l	0.007	--	1	05/04/16 08:30	05/05/16 04:27	EPA 3005A	97,6010C	PS
Zinc, Total	ND		mg/l	0.050	--	1	05/04/16 08:30	05/05/16 04:27	EPA 3005A	97,6010C	PS

Project Name: ATLANTIC PLAZA
Lab Number: L1613233
Project Number: 4053.00
Report Date: 05/13/16

SAMPLE RESULTS

Lab ID: L1613233-02
Client ID: GHC-3(FF)
Sample Location: NORTH READING, MA
Matrix: Water

Date Collected: 05/03/16 14:14
Date Received: 05/03/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Hardness by SM 2340B - Westborough Lab											
Hardness	74.		mg/l	0.66	NA	1	05/04/16 08:30	05/05/16 03:00	EPA 3005A	1,6010C	FB
MCP Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.050	--	1	05/04/16 08:30	05/05/16 04:32	EPA 3005A	97,6010C	PS
Arsenic, Total	ND		mg/l	0.005	--	1	05/04/16 08:30	05/05/16 04:32	EPA 3005A	97,6010C	PS
Cadmium, Total	ND		mg/l	0.004	--	1	05/04/16 08:30	05/05/16 04:32	EPA 3005A	97,6010C	PS
Chromium, Total	ND		mg/l	0.01	--	1	05/04/16 08:30	05/05/16 04:32	EPA 3005A	97,6010C	PS
Copper, Total	ND		mg/l	0.010	--	1	05/04/16 08:30	05/05/16 04:32	EPA 3005A	97,6010C	PS
Iron, Total	ND		mg/l	0.05	--	1	05/04/16 08:30	05/05/16 04:32	EPA 3005A	97,6010C	PS
Lead, Total	ND		mg/l	0.010	--	1	05/04/16 08:30	05/05/16 04:32	EPA 3005A	97,6010C	PS
Mercury, Total	ND		mg/l	0.0002	--	1	05/05/16 11:38	05/05/16 21:23	EPA 7470A	97,7470A	EA
Nickel, Total	ND		mg/l	0.025	--	1	05/04/16 08:30	05/05/16 04:32	EPA 3005A	97,6010C	PS
Silver, Total	ND		mg/l	0.007	--	1	05/04/16 08:30	05/05/16 04:32	EPA 3005A	97,6010C	PS
Zinc, Total	ND		mg/l	0.050	--	1	05/04/16 08:30	05/05/16 04:32	EPA 3005A	97,6010C	PS

Project Name: ATLANTIC PLAZA
Project Number: 4053.00
Lab Number: L1613233
Report Date: 05/13/16

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Westborough Lab for sample(s): 01-02 Batch: WG890233-1										
Hardness	ND		mg/l	0.66	NA	1	05/04/16 08:30	05/04/16 23:14	1,6010C	FB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG890237-1										
Antimony, Total	ND		mg/l	0.050	--	1	05/04/16 08:30	05/05/16 04:14	97,6010C	PS
Arsenic, Total	ND		mg/l	0.005	--	1	05/04/16 08:30	05/05/16 04:14	97,6010C	PS
Cadmium, Total	ND		mg/l	0.004	--	1	05/04/16 08:30	05/05/16 04:14	97,6010C	PS
Chromium, Total	ND		mg/l	0.01	--	1	05/04/16 08:30	05/05/16 04:14	97,6010C	PS
Copper, Total	0.012		mg/l	0.010	--	1	05/04/16 08:30	05/05/16 04:14	97,6010C	PS
Iron, Total	ND		mg/l	0.05	--	1	05/04/16 08:30	05/05/16 04:14	97,6010C	PS
Lead, Total	ND		mg/l	0.010	--	1	05/04/16 08:30	05/05/16 04:14	97,6010C	PS
Nickel, Total	ND		mg/l	0.025	--	1	05/04/16 08:30	05/05/16 04:14	97,6010C	PS
Silver, Total	ND		mg/l	0.007	--	1	05/04/16 08:30	05/05/16 04:14	97,6010C	PS
Zinc, Total	ND		mg/l	0.050	--	1	05/04/16 08:30	05/05/16 04:14	97,6010C	PS

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG890826-1										
Mercury, Total	ND		mg/l	0.0002	--	1	05/05/16 11:38	05/05/16 21:12	97,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: ATLANTIC PLAZA

Project Number: 4053.00

Lab Number: L1613233

Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01-02 Batch: WG890233-2								
Hardness	103		-		80-120	-		
MCP Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG890237-2 WG890237-3								
Antimony, Total	89		94		80-120	5		20
Arsenic, Total	107		107		80-120	0		20
Cadmium, Total	107		106		80-120	1		20
Chromium, Total	95		100		80-120	5		20
Copper, Total	100		100		80-120	0		20
Iron, Total	91		92		80-120	1		20
Lead, Total	100		100		80-120	0		20
Nickel, Total	100		100		80-120	0		20
Silver, Total	100		103		80-120	3		20
Zinc, Total	99		99		80-120	0		20
MCP Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG890826-2 WG890826-3								
Mercury, Total	109		113		80-120	4		20

INORGANICS
&
MISCELLANEOUS

Project Name: ATLANTIC PLAZA
Project Number: 4053.00
Lab Number: L1613233
Report Date: 05/13/16

SAMPLE RESULTS

Lab ID: L1613233-01
Client ID: GHC-3
Sample Location: NORTH READING, MA
Matrix: Water
Date Collected: 05/03/16 14:12
Date Received: 05/03/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	05/04/16 00:30	05/04/16 01:18	97,7196A	VM
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	15	NA	3	-	05/10/16 14:50	121,2540D	DW
pH (H)	5.6		SU	-	NA	1	-	05/03/16 22:25	1,9040C	AS
Anions by Ion Chromatography - Westborough Lab										
Chloride	113.		mg/l	12.5	--	25	-	05/05/16 20:38	44,300.0	AU

Project Name: ATLANTIC PLAZA
Project Number: 4053.00

Lab Number: L1613233
Report Date: 05/13/16

SAMPLE RESULTS

Lab ID: L1613233-02
Client ID: GHC-3(FF)
Sample Location: NORTH READING, MA
Matrix: Water

Date Collected: 05/03/16 14:14
Date Received: 05/03/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	05/04/16 00:30	05/04/16 01:23	97,7196A	VM
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	15	NA	3	-	05/10/16 14:50	121,2540D	DW
pH (H)	5.6		SU	-	NA	1	-	05/03/16 22:25	1,9040C	AS
Anions by Ion Chromatography - Westborough Lab										
Chloride	112.		mg/l	12.5	--	25	-	05/05/16 20:50	44,300.0	AU

Project Name: ATLANTIC PLAZA
Project Number: 4053.00
Lab Number: L1613233
Report Date: 05/13/16

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG890130-2										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	05/04/16 00:30	05/04/16 01:16	97,7196A	VM
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-02 Batch: WG891440-1										
Chloride	ND		mg/l	0.500	--	1	-	05/05/16 18:14	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG892252-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	05/10/16 14:50	121,2540D	DW

Lab Control Sample Analysis

Batch Quality Control

Project Name: ATLANTIC PLAZA

Project Number: 4053.00

Lab Number: L1613233

Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG890107-1								
pH	100		-		99-101	-		5
MCP General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG890130-1 WG890130-5								
Chromium, Hexavalent	99		98		49-151	1		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 Batch: WG891440-2								
Chloride	100		-		90-110	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: ATLANTIC PLAZA
Project Number: 4053.00

Lab Number: L1613233
Report Date: 05/13/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG890107-2 QC Sample: L1613233-01 Client ID: GHC-3						
pH (H)	5.6	5.5	SU	2		5

Project Name: ATLANTIC PLAZA
Project Number: 4053.00

Lab Number: L1613233
Report Date: 05/13/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1613233-01A	Plastic 250ml HNO3 preserved	B	<2	6.0	Y	Absent	MCP-CR-6010T-10(180),MCP-FE-6010T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-CU-6010T-10(180),MCP-SB-6010T-10(180),MCP-ZN-6010T-10(180),HARDT(180),MCP-NI-6010T-10(180),MCP-PB-6010T-10(180)
L1613233-01B	Plastic 250ml unpreserved	B	7	6.0	Y	Absent	CL-300(28),PH-9040(1),MCP-HEXCR7196-10(1),TSS-2540(7)
L1613233-02A	Plastic 250ml HNO3 preserved	B	<2	6.0	Y	Absent	MCP-CR-6010T-10(180),MCP-FE-6010T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-CU-6010T-10(180),MCP-SB-6010T-10(180),MCP-ZN-6010T-10(180),HARDT(180),MCP-NI-6010T-10(180),MCP-PB-6010T-10(180)
L1613233-02B	Plastic 250ml unpreserved	B	7	6.0	Y	Absent	CL-300(28),PH-9040(1),MCP-HEXCR7196-10(1),TSS-2540(7)

*Values in parentheses indicate holding time in days

Project Name:	ATLANTIC PLAZA	**Lab Number:**	L1613233
Project Number:	4053.00	**Report Date:**	05/13/16

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.

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

Report Format: Data Usability Report

Project Name:	ATLANTIC PLAZA	**Lab Number:**	L1613233
Project Number:	4053.00	**Report Date:**	05/13/16

Data Qualifiers

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:	ATLANTIC PLAZA	**Lab Number:**	L1613233
Project Number:	4053.00	**Report Date:**	05/13/16

REFERENCES

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

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

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

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 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: Biphenyl, Caprolactam
EPA 8270D-SIM Isotope Dilution: SCM: 1,4-Dioxane
SM 2540D: TSS
SM2540G: SCM: Percent Solids
EPA 1631E: SCM: Mercury
EPA 7474: SCM: Mercury
EPA 8081B: NPW and SCM: Mirex, Hexachlorobenzene.
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA 8270-SIM: NPW and SCM: Alkylated PAHs.
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, n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene.
Biological Tissue Matrix: ***8270D-SIM; 3050B; 3051A; 7471B; 8081B; 8082A; 6020A:*** Lead***; 8270D:*** bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, Di-n-octyl phthalate, Fluoranthene, Pentachlorophenol.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
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.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, 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, SM9222D-MF**.

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

Serial_No:05131613:27

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 5/3/16

ALPHA Job #: L1613233

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

Project Information

Project Name: Atlantic Plaza
Project Location: North Reading, MA
Project #: 4053.00
Project Manager: Kent Walker
ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #:

Client Information

Client: Sanborn Head
Address: 1 Technology park drive, Westford, MA
Phone: 978 392 0900
Email: KWalker@Sanbornhead.com

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: Standard TAT

Additional Project Information:

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; HexCr, pH, Cl; Plating Metals + SbAsFeHg; Hardness; 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	HexCr, pH, Cl	Plating Metals + SbAsFeHg	Hardness	TSS	Sample Comments	Total # Bottles
13233-01	GHC-3	5/3/16	1412	GW	DJN	X	X	X	X	5/10/16	2
02	GHC-3(FF)	5/3/16	1414	GW	DJN	X	X	X	X		2
	Container Type					P	P	P			4
	Preservative					A	C				

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]	5/3/16 1640	[signature]	5/3/16 1640
[signature]	5/3/16 1720	[signature]	5/3/16 1720

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 5/3/16

ALPHA Job #: L1613233

ALPHA ANALYTICAL

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

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

Project Information

Project Name: Atlantic Plaza

Project Location: North Reading, MA

Project #:

Project Manager: Kent Walker

ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #:

Client Information

Client: Sanborn Head

Address: 1 Technology park drive Westford, MA

Phone: 978 392 0900

Email: KWalker@Sanbornhead.com

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: Standard TAT

Additional Project Information:

ANALYSIS

VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15 ☐ PP13; METALS: ☐ RCRA5 ☐ RCRA8; EPH: ☐ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint; HexCr, pH, Cl; Plating Metals + Sb As Fe Hg; Hardness

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	HexCr, pH, Cl	Plating Metals + Sb As Fe Hg	Hardness	Sample Comments	TOTAL # BOTTLES
13233-01	GHC-3	5/3/16	1412	GW	DJN	X	X	X		2
02	GHC-3(FF)	5/3/16	1414	GW	DJN	X	X	X		2
Container Type						P	P	P		4
Preservative						A	C			

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]	5/3/16 1640	[signature]	5/3/16 1640
[signature]	5/3/16 1720	[signature]	5/3/16 1720

APPENDIX G

NOTICE OF INTENT

II. Suggested Notice of Intent (NOI) Format

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

a) Name of facility: Atlantic Plaza	**Mailing Address for the Facility:** FRIT 450 Artisan Way, Suite 320 Somerville, MA 02145	
b) Location Address of the Facility (if different from mailing address): Atlantic Plaza 265 Main Street North Reading, MA 01864	**Facility Location** **longitude:** 71.1161 **latitude:** 42.5917	**Type of Business:** Shopping Plaza **Facility SIC codes:**

c) Name of facility owner: Federal Realty Investment Trust **Owner's email:** mwagner@federalrealty.com

Owner's Tel #: (617) 684-1524 **Owner's Fax #:** (617) 623-3601

Address of owner (if different from facility address) FRIT
450 Artisan Way, Suite 320
Somerville, MA 02145

Owner is (check one): 1. Federal____2. State _____ 3. Private__✔___ 4. Other _____(Describe)_____

Legal name of Operator, if not owner: _____

Operator Contact Name: Mark Wagner

Operator Tel Number: (617) 684-1524 **Fax Number:** (617) 623-3601

Operator's email: mwagner@federalrealty.com

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: Martins Brook

State Water Quality Classification: B **Freshwater:** Yes **Marine Water:** No

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

✔ **1. Construction dewatering of groundwater intrusion and/or storm water accumulation.**

2. Short-term or long-term dewatering of foundation sumps.

3. Other.

c) Number of outfalls 1

For each outfall:

d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow 240,000 **GPD**

Average Monthly Flow 60,000 **GPD**

e.) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 8.3 **Min pH** 6.5

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? The first element to the treatment system will be a fractionalization tank where solids will settle out and a pH adjustment will be made. The effluent will then be passed through the following as necessary: an oil/water separator, a bag filter, a granular activated carbon filter, and/or a precipitation system/metals treatment unit.

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

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 200

Is the discharge temporary? Yes ✔ **No** _____

If yes, approximate start date of dewatering 5/23/2016 **approximate end date of dewatering** 5/23//2017

i.) Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long. -71.117826 **lat.** 42.590929**; 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 LC_{50} 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? A_____
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? A_____

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: Atlantic Plaza, a Delaware limited partnership, by its sole General Partner, FLV Atlantic Plaza GP, LLC, a DE limited liability company, by its sole Member, Federal/Lion Ventures, LP, a DE limited partnership, by its Managing General Partner, Federal/LPF GP, Inc., a DE Corp.

Operator signature: 

Print Full Name and Title: Deborah A. Colson, Vice President-Legal Operations

Date: 05/23/2016

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.