



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

FEB 03 2012

Mr. Jay Bisognano
Project Manager
60-66 Brainerd Road LLC
29 Commonwealth Avenue, 6th Floor
Boston, MA 02116

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Construction site located at 60 Brainerd Road, Brighton MA, Suffolk
County; Authorization # MAG910518

Dear Mr. Bisognano:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Mount Vernon Company by the firm M^c PHAIL Associates, LLC, for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Owner and Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants which you are required to monitor. Also indicated on the checklist are the effluent limits, test methods and minimum levels (MLs) for each pollutant. Please note that the checklist does not represent the complete requirements of the RGP. Operators must comply with all of the applicable requirements of this permit, including influent and effluent monitoring, narrative water quality standards, record keeping, and reporting requirements, found in Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete RGP and other information at: <http://www.epa.gov/region1/npdes/mass.html#dgp>.

Please note the enclosed checklist includes parameters that exceeded Appendix III limits.

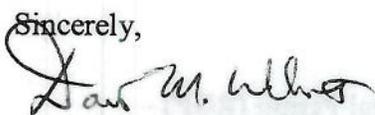
Also, please note that the metal included on the checklist is dilution dependent pollutant and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. For this parameter the dilution factor 147.0 for this site is within a dilution range greater than one hundred (>100), established in the RGP. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limit zinc of 1,480 ug/L is required to achieve permit compliance at your site.

Finally, please note the checklist of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on June 1, 2013. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or Alvarez.Victor@epa.gov, if you have any questions.

Sincerely,



David M. Webster, Chief
Industrial Permits Branch

Enclosure

cc: Kathleen Keohane, MassDEP
Franciss M. M^c Laughlin BWSC
William J. Burns, M^c PHAIL Associates, LLC

**2010 Remediation General Permit
Summary of Monitoring Parameters^[1]**

NPDES Authorization Number:		MAG910518
Authorization Issued:	January 30, 2012	
Facility/Site Name:	Construction Site	
Facility/Site Address:	60 Brainerd Road, Brighton, MA 02134, Suffolk County	
	Email address of owner: jayb@mvernon.com	
Legal Name of Operator:	60-66-Brainerd Road LLC	
Operator contact name, title, and Address:	Jay Bosignano, General Manager	
	Email: Same as the Owner	
Estimated Date of Completion:	June 1, 2013	
Category and Sub-Category:	Category I. Petroleum Related Site Remediation. Sub-category B. Fuel Oils and Other Oils Sites.	
RGP Termination Date:	September 9, 2015	
Receiving Water:	Charles River	

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	<u>Parameter</u>	<u>Effluent Limit/Method# /ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
✓	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing **, Me#60.2/ML5ug/L
	2. Total Residual Chlorine (TRC) ¹	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
✓	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) ^{2, 3}	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
✓	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
✓	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
✓	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
✓	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
✓	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴	100 ug/L/ Me#8260C/ ML 2ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	14. Naphthalene ⁵	20 ug/L /Me#8260C/ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
✓	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) ⁶	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L
✓	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
✓	a. Benzo(a) Anthracene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
✓	b. Benzo(a) Pyrene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	c. Benzo(b)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	e. Chrysene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	f. Dibenzo(a,h)anthracene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	g. Indeno(1,2,3-cd) Pyrene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/L
✓	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
✓	h. Acenaphthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	i. Acenaphthylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	j. Anthracene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	l. Fluoranthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	m. Fluorene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	n. Naphthalene ⁵	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	o. Phenanthrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) ^{8,9}	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
✓	38. Chloride	Monitor only/Me# 300.0/ ML 0.1ug/L

	<u>Metal parameter</u>	<u>Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) _{11/12}</u>		<u>Minimum level=ML</u>
		<u>Freshwater</u>		
	39. Antimony	5.6/ML	10	
	40. Arsenic **	10/ML	20	

	Metal parameter	Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l) 11/12		Minimum level=ML
		Freshwater		
	41. Cadmium **	0.2/ML10		
	42. Chromium III (trivalent) **	48.8/ML15		
	43. Chromium VI (hexavalent) **	11.4/ML10		
	44. Copper **	5.2/ML15		
	45. Lead **	1.3/ML20		
	46. Mercury **	0.9/ML0.2		
	47. Nickel **	29/ML20		
	48. Selenium **	5/ML20		
	49. Silver	1.2/ML10		
✓	50. Zinc **	1,480/ML15		
	51. Iron	1,000/ML 20		

	Other Parameters	Limit
✓	52. Instantaneous Flow	Site specific in CFS
✓	53. Total Flow	Site specific in CFS
✓	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab ¹³
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab ¹⁴
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab ¹⁴
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab ¹⁴
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab ¹⁴
	61. Maximum Change in Temperature in MA - Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab ¹⁴
	62. Maximum Change in Temperature in MA - Any Class SA water body - Coastal	1.5°F; 1/Month/Grab ¹⁴
	63. Maximum Change in Temperature in MA - Any Class SB water body - July to September	1.5°F; 1/Month/Grab ¹⁴
	64. Maximum Change in Temperature in MA -Any Class SB water body - October to June	4°F; 1/Month/Grab ¹⁴

Footnotes:

¹ Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).

² Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.

³ Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).

⁴ BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.

⁵ Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.

⁶ The sum of individual phthalate compounds (not including the #34, Bis (2-Ethylhexyl) Phthalate). The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁷ Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

⁸ In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Orochlor analyses." Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁹ Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).

¹⁰ Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.

¹¹ For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using $DF \times 1,000 \text{ ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ ug/L}$, etc. not to exceed the DF=5.

¹² 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. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).

¹³ pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.

¹⁴ Temperature sampling per Method 170.1



**NOTICE OF INTENT FOR DISCHARGE
UNDER MASSACHUSETTS REMEDIAL
GENERAL PERMIT MAG910000**

60 BRAINERD ROAD

ALLSTON MASSACHUSETTS

to

**U.S. Environmental Protection Agency
and
Massachusetts Department of
Environmental Protection**

January 26, 2012

Project No. 5265



January 26, 2012

U.S Environmental Protection Agency
RGP-NOC Processing Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Attention: RGP-NOC Processing

Reference: 60 Brainerd Road; Allston, Massachusetts
Notice of Intent for Construction Dewatering Discharge Under Massachusetts
Remedial General Discharge MAG910000

Ladies and Gentlemen:

The purpose of this letter report is to provide a summary of the site and groundwater quality information in support of an application for permission from the U.S. Environmental Protection Agency (EPA) for the temporary discharge of groundwater into the Charles River via the City of Boston storm drain system during construction at the above referenced site. Refer to **Figure 1** Project Location Plan for the general site locus.

These services were performed and this permit application was prepared with the authorization of the Mount Vernon Company. These services are subject to the limitations contained in **Attachment A**.

Existing Conditions

Fronting onto Brainerd Road to the northwest and occupying a plan area of about 35,600 square feet, the subject property is bounded by residential property on the remaining sides. Currently, the subject property is occupied by an approximate 35,400 square-foot (plan area) one-story commercial building. Asphalt paved driveways and a parking lot cover the ground surface adjacent to the south, west and east of the building. Landscape margins and a concrete sidewalk are situated along northwestern side of the building. The building is currently utilized for the temporary storage of automobiles and by a general contractor for offices.

A basement level is located beneath the western portion of the building. An active sump is located near the southwestern corner of the basement which currently pumps groundwater from beneath the floor slab into a catch basin located within the driveway at the western end of the site. The catch basins flow into the dedicated storm drain beneath Brainerd Road. Existing conditions of the subject site are shown on **Figure 2**, Subsurface Investigation Plan.

Site and Regulatory History

Historical information indicates that the southeastern portion of the existing building was constructed during the 1920's. In 1945, the Beacon Morris Company, a radiator service and supply business, began operations at the subject site. By 1964, Beacon Morris expanded its operations at which time the basement and one-story addition was constructed at the western portion of the subject property. Beacon Morris ceased operations at the subject property in 1983. From 1983 to approximately 2000, the subject property was utilized by a textile company for the cutting and storage of clothing fabric.

According to reports prepared by others for the subject property, in 1984 a subsurface investigation identified petroleum impacted soil in the immediate vicinity of a drainage pipe located near the southeastern end of the existing building. The DEP was notified of the release and in response required



US EPA
January 26, 2012
Page 2

the excavation and off-site removal of the petroleum impacted soil. As a result, approximately 50 cubic yards of impacted soil was removed and disposed off-site in 1984. Subsequently, in 1990 the subject property was listed by the DEP as a Location To Be Investigated to which Release Tracking Number (RTN) 3-1435 was assigned. In 1997, a subsurface investigation was completed at the subject site to assess residual levels of contamination at the area of the release. As part of the subsurface investigation, soil and groundwater samples were submitted for laboratory analysis for the presence of total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), metals, organochlorine pesticides, and PCBs. The results of the analysis did not detect the presence of these compounds in excess of the applicable Method 1 cleanup standards existing at that time. Based upon the response actions completed at the release site and the results of soil and groundwater testing conducted at the subject property, a Class A-2 Response Action Outcome (RAO) was filed with the DEP in 1997.

In addition, the western portion of the subject property has been impacted by a release of No. 2 fuel oil from the abutting upgradient property located at 74 Brainerd Road. The 74 Brainerd Road property has been assigned RTN 3-14106 and is currently being managed under a Phase IV Remedial Implementation Plan which was prepared pursuant to the provisions of the Massachusetts Contingency Plan (MCP). Recently, in October 2011 a subsurface investigation was performed at the western portion of the subject property consisting of borings, groundwater monitoring wells, and the laboratory analysis of soil and groundwater samples. The results of the subsurface investigation detected elevated concentrations of petroleum hydrocarbons in soil and the presence of non-aqueous phase liquid (NAPL) on the surface of groundwater.

According to MCP reports prepared for RTN 3-14106, in 1996 a release of No. 2 fuel oil was encountered in soil during the removal of a 5,000-gallon underground storage tank (UST) that was located at the southeastern portion of the 74 Brainerd Road property. Subsequent subsurface investigations performed at the site also identified a NAPL plume which had migrated from the UST into the basement sumps located within the 60 Brainerd Road building. A NAPL recovery system was implemented at both the 60 and 74 Brainerd Road properties from October 1996 through December 2000, after which petroleum contamination was no longer detected within the sumps at the 60 Brainerd Road building. Additionally, further assessment of groundwater at the 74 Brainerd Road property indicated that NAPL had been reduced to below ½-inch in thickness. Based upon the results of the post remedial assessment, a Class C RAO statement was filed for the release site. Post-Class C RAO monitoring performed in 2007 indicated that NAPL thicknesses had increased to greater than ½-inch in some of the monitoring wells located at the 74 Brainerd Road property. As a result, the RAO Statement was retracted and a NAPL recovery system was implemented at the site.

As indicated above, NAPL recovery is currently ongoing at the 74 Brainerd Road property under a Phase IV Remedial Implementation Plan. Groundwater within the active sump located beneath the basement slab at 60 Brainerd Road has not exhibited visual evidence of petroleum contamination. However, groundwater within the sump has not yet been chemically analyzed. In anticipation of site redevelopment, further assessment of soil and groundwater is planned beneath the basement slab of the 60 Brainerd Road property.

Proposed Development

It is understood that proposed redevelopment of the subject property includes demolition of the existing building followed by construction of a new 4-story wood-framed building. Additionally, it is understood that the existing building's basement will be converted into a parking garage that will occupy the western portion of the proposed building footprint.



US EPA
January 26, 2012
Page 3

Construction Dewatering

As indicated above, dewatering of groundwater beneath the basement slab is currently ongoing through a sump located near the southwestern corner of the building. It is understood that the sump was installed during construction of the basement in 1964 to control groundwater, the surface of which is located approximately 2 feet above the top of basement slab. Currently, the active sump discharges groundwater at a rate of approximately 4 to 5 gallons per minute (GPM). However, it is anticipated that the sump will be shutdown during the demolition of the building.

In addition, dewatering is anticipated to facilitate removal of the existing building foundations and to prepare new foundation bearing surfaces. It is estimated that intermittent groundwater discharge required during the excavation phase of construction will be on the order of 45 to 75 gallons per minute. This rate of groundwater discharge during construction is based on the relatively pervious nature of the existing fill material and underlying natural soils, and the depth of excavation below the surface of groundwater. These estimates of discharge do not include surface runoff which will be removed from the excavation during a limited duration of a rain storm and shortly thereafter.

Based upon the results of a dye test performed by the City of Boston Water and Sewer Commission in December 2011, catch basins at the 60 Brainerd Road property flow to the dedicated storm drain beneath Brainerd Road. A review of the Boston Water & Sewer GIS database of existing sewer and storm drain systems indicates that a 15-inch diameter dedicated storm drain is located beneath Brainerd Road which flows northeast to a 48-inch storm drain beneath Harvard Street. The 48-inch storm drain connects to a 60x72-inch box culvert storm drain that pitches to the northeast beneath Commonwealth Avenue. The 60x72-inch box culvert storm drain eventually connects to a 72x72-inch box culvert that runs north and parallel to Acorn Street. The storm drain culvert discharges into the Charles River through an outfall identified as SDO035. The Charles River is considered a Class B water body. The location of the relevant catch basin with relation to the site is indicated on **Figure 2**. The storm drain flow pattern and location of discharge into the Charles River is shown on plans provided by the Boston Water & Sewer Commission which are included as **Figures 3A through 3E**.

Groundwater Treatment

Prior to development, further assessment of soil and groundwater will be performed to define the extent of the No. 2 fuel oil release that has migrated onto the subject property from 74 Brainerd Road. Based upon the results of this assessment, it may be necessary to treat groundwater within the sump prior to off-site discharge. Although recent groundwater testing has not detected petroleum constituents in excess of the EPA effluent limits, residual petroleum contamination may be encountered during temporary construction dewatering at the western portion of the subject property. The discharge of groundwater will enter the Charles River via the City of Boston storm water system under the requested U.S. EPA Remediation General Permit (RGP).

Based upon the detected presence of petroleum contamination in soil and NAPL on groundwater at the western portion of the subject site, dewatered groundwater may be affected by elevated levels of petroleum hydrocarbons, BTEX and polynuclear aromatic hydrocarbons (PAHs). Therefore, the proposed dewatering system will include a oil/water separator, settling tank, organo clay media vessel and a granular activated carbon filter in series will to reduce potential levels of petroleum constituents in the water to meet allowable BTEX, total petroleum hydrocarbon and PAH discharge limits established by the US EPA prior to discharge. A schematic of the treatment system is shown on **Figure 4**.



US EPA
January 26, 2012
Page 4

To document the effectiveness of the treatment system, samples of the effluent will be obtained and tested for the presence of BTEX, total petroleum hydrocarbons and PAHs prior to the start of discharge into the storm drain system. Should the pre-start up testing indicate that the levels of BTEX, petroleum hydrocarbon and/or PAHs in the effluent from the treatment system exceed the limits established under the RGP, additional treatment of the effluent will be implemented prior to initial discharge. In addition, should other contaminants be detected within the discharge water during the construction dewatering phase of the project at levels that exceed the effluent limitations, mitigative measures will be implemented to meet the allowable discharge limits.

In conclusion, it is our opinion that groundwater at the site is acceptable for discharge into the Charles River via the City of Boston storm drain system under a Remedial General Permit. Sampling and analysis of the effluent will be carried out in accordance with the terms of the Remedial General Permit.

Supplemental information appended to this letter in support of the RGP includes the following;

- Notice of Intent Transmittal Form for Permit Application (**Appendix B**)
- A summary of groundwater analysis (**Appendix C, Table 1 and Groundwater Monitoring Reports**);
- A review of Areas of Critical Concern and Endangered and Threatened Species (**Appendix D**);
- A review of National Historic Places (**Attachment E**); and
- Best Management Practice Plan (**Appendix F**)

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

Very truly yours,

McPHAIL ASSOCIATES, LLC



William J. Burns

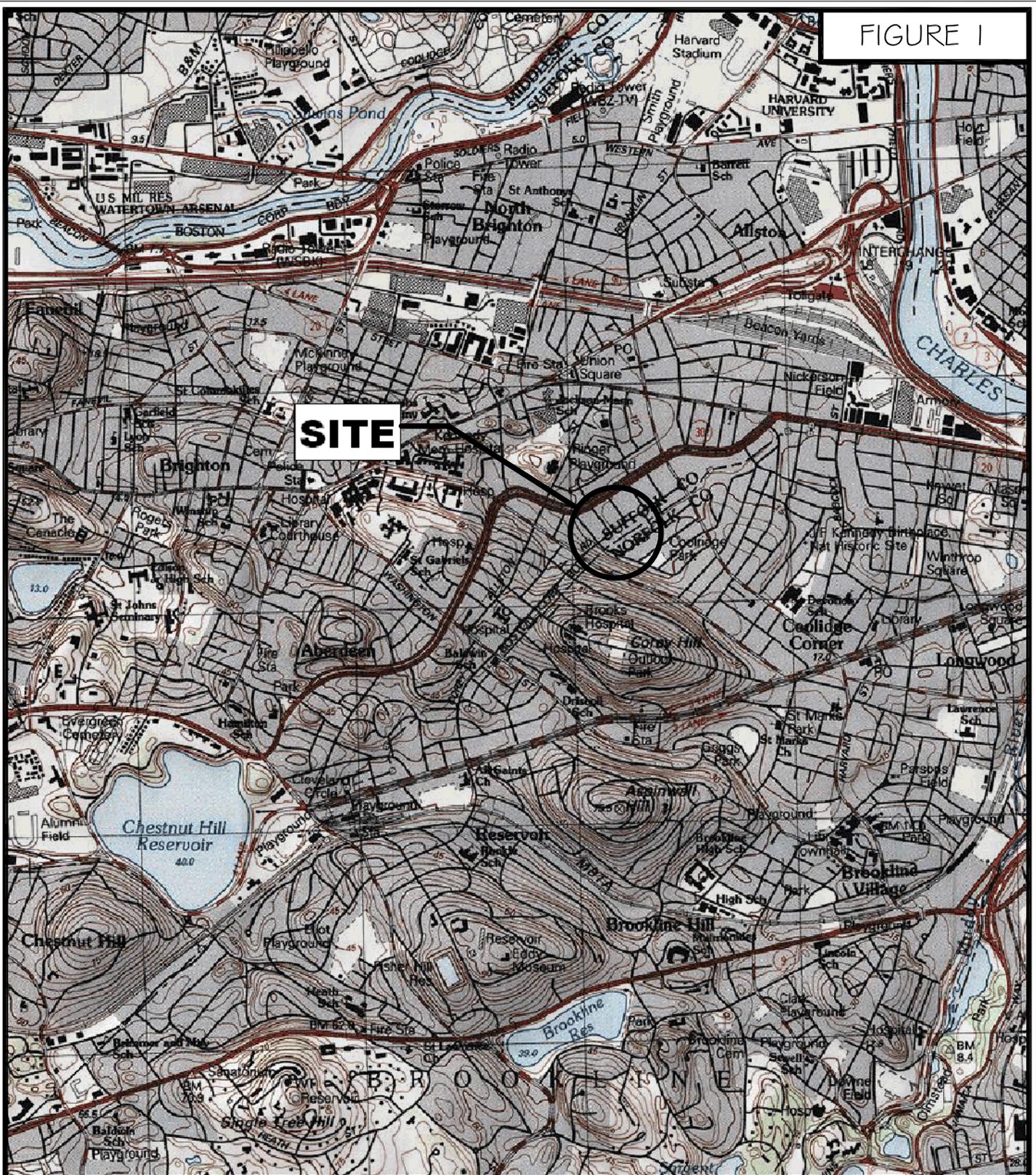


Ambrose J. Donovan, P.E., L.S.P.

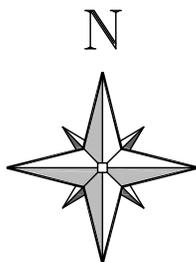
Enclosures

F:\WP5\REPORTS\5265 RGP.wpd
WJB/ajd

FIGURE 1



Geotechnical and
Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)



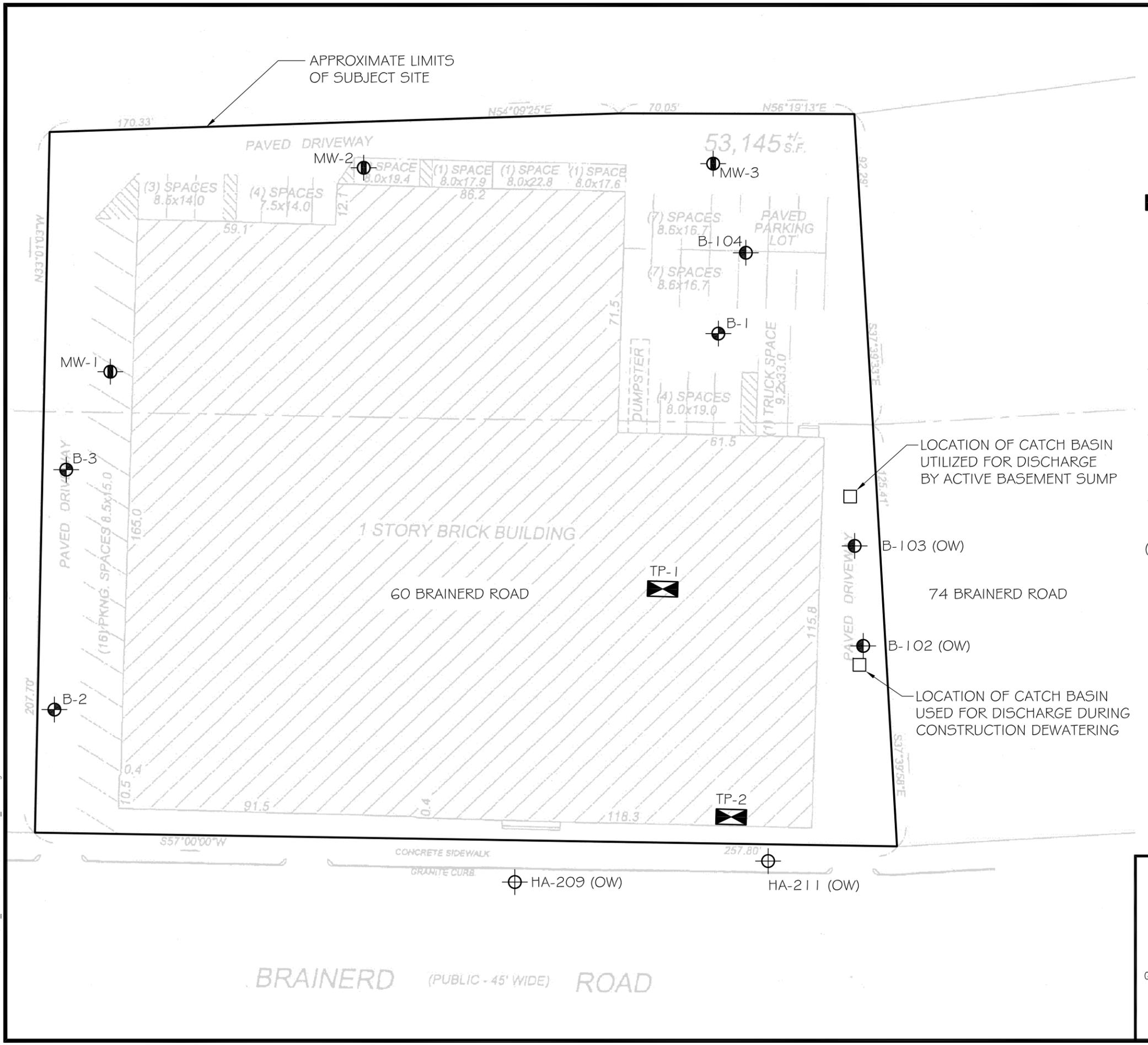
SCALE 1:25,000

PROJECT LOCATION PLAN

60-66 BRAINERD ROAD

ALLSTON

MASSACHUSETTS



LEGEND

- APPROXIMATE LOCATION OF TEST PIT PERFORMED BY CUSTOM CRAFT BUILDERS ON JUNE 27 AND 28, 2011 FOR McPHAIL ASSOCIATES, INC. TEST PIT LOCATIONS ARE ALSO INDICATED ON THE FOUNDATION PLANS PROVIDED IN APPENDIX D
- APPROXIMATE LOCATION OF BORINGS PERFORMED BY CARR-DEE CORP. ON MAY 20, 2011 FOR McPHAIL ASSOCIATES, INC.
- APPROXIMATE LOCATION OF BORINGS PERFORMED BY GEOLOGIC-EARTH EXPLORATION, INC. IN NOVEMBER 2008 FOR HALEY & ALDRICH, INC.
- APPROXIMATE LOCATION OF BORINGS PERFORMED BY CARR-DEE CORP. ON SEPTEMBER 19, 2011 FOR McPHAIL ASSOCIATES, INC.
- APPROXIMATE LOCATION OF MONITORING WELL INSTALLED BY WEB ENGINEERING ON FEBRUARY 7, 1997
- (OW) — DENOTES OBSERVATION WELL INSTALLED WITHIN COMPLETED BOREHOLE

REFERENCE: THIS PLAN WAS PREPARED FROM AN EXISTING CONDITIONS PLAN PROVIDED BY THE MT. VERNON COMPANY AND A 3/64-SCALE PLAN ENTITLED "GROUND FLOOR PLAN" DATED APRIL 22, 2011 PREPARED BY PRELLWITZ CHILINSKI ASSOCIATES, INC.

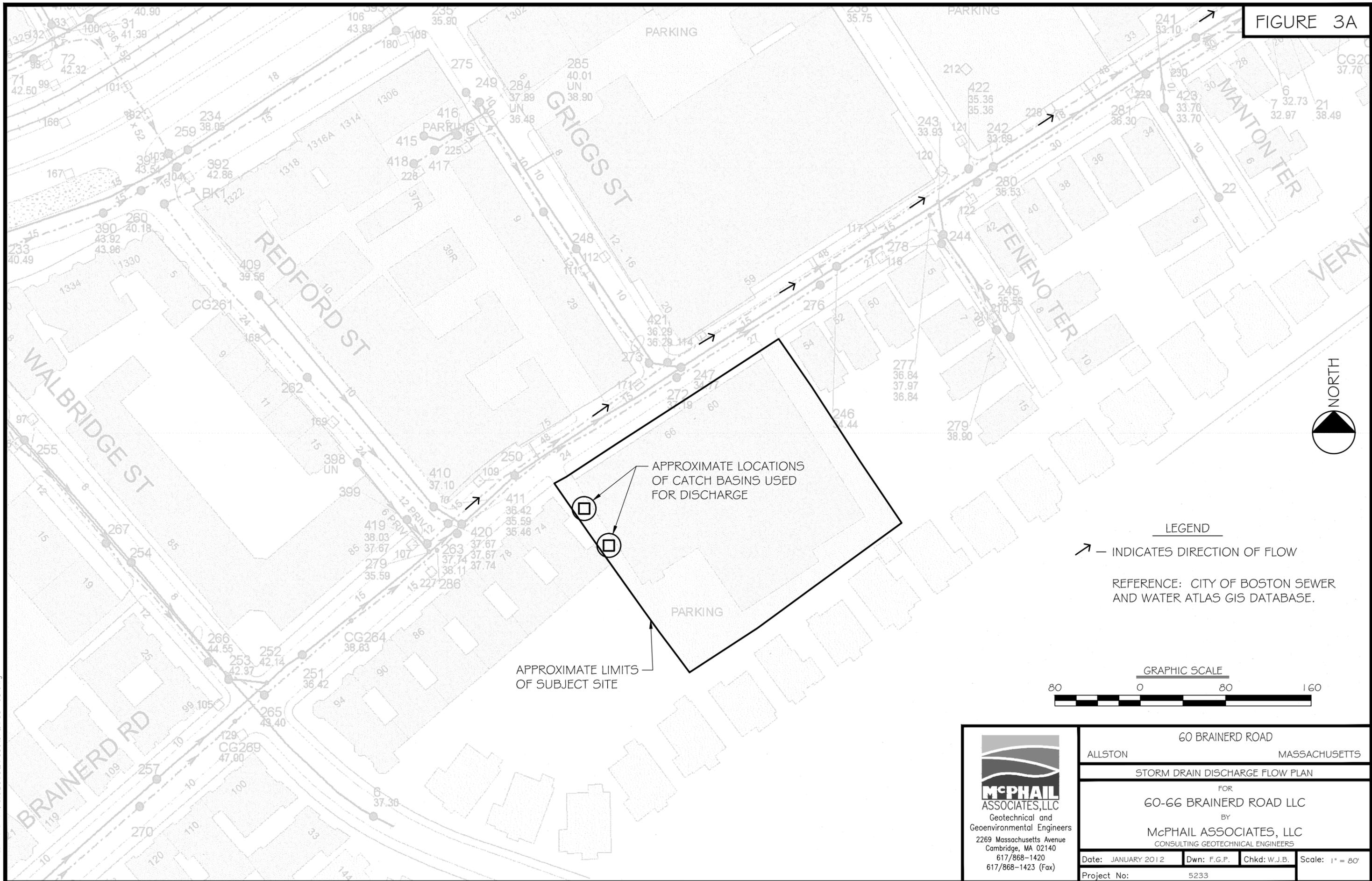


McPHAIL ASSOCIATES, LLC
 Geotechnical and Geoenvironmental Engineers
 2269 Massachusetts Avenue
 Cambridge, MA 02140
 617/868-1420
 617/868-1423 (Fax)

60-66 BRAINERD ROAD			
ALLSTON		MASSACHUSETTS	
SUBSURFACE EXPLORATION PLAN			
FOR			
60-66 BRAINERD ROAD LLC			
BY			
McPHAIL ASSOCIATES, LLC			
CONSULTING GEOTECHNICAL ENGINEERS			
Date: SEPTEMBER 2011	Dwn: F.G.P.	Chkd: W.J.B.	Scale: 1" = 30'
Project No: 5265			

FILE NAME: I:\2011\265\265\265\265-F02_RGF.dwg

FIGURE 3A

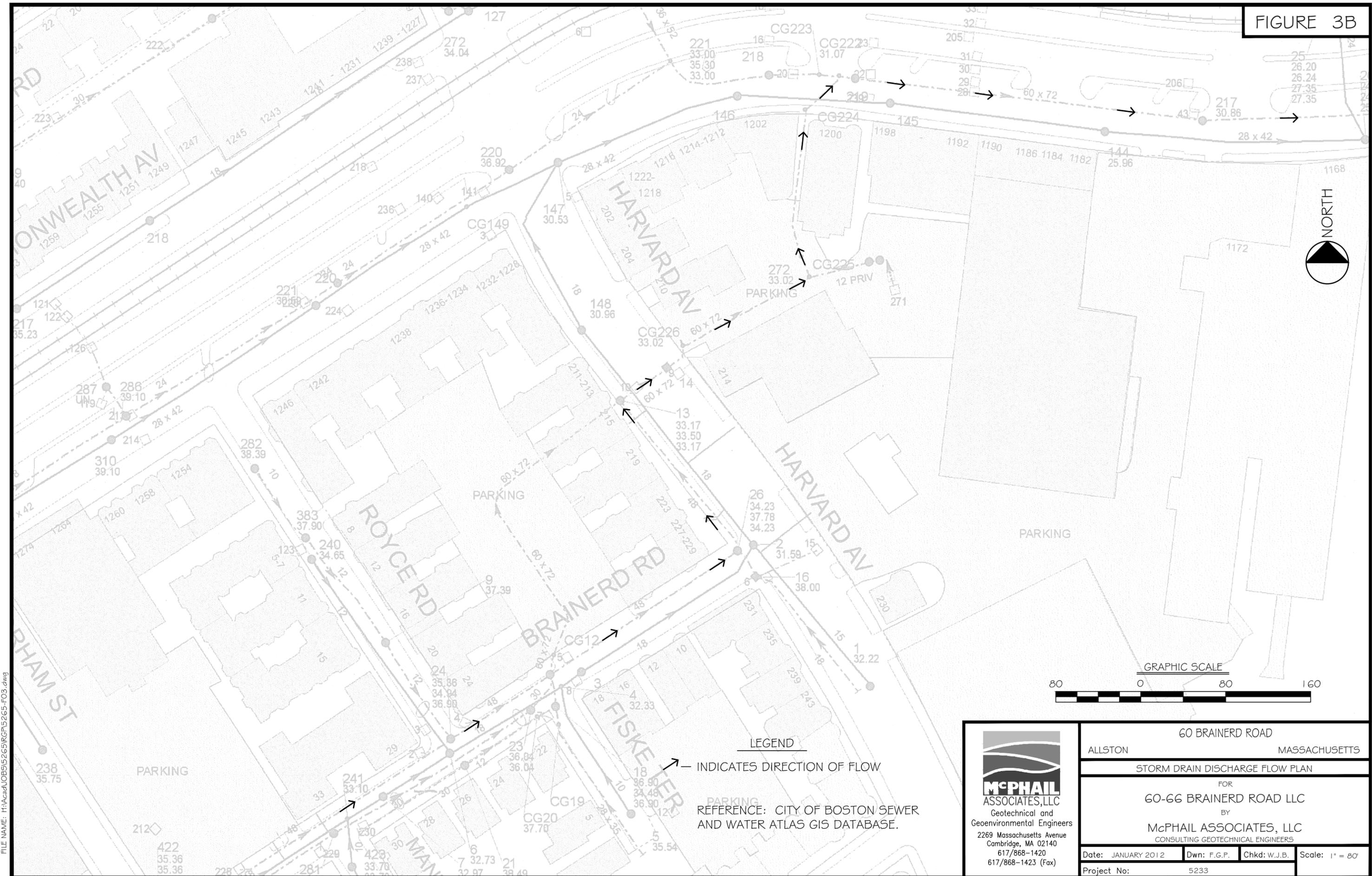


FILE NAME: H:\Acad\JOBS\9265\RGFG\265-F03.dwg

McPHAIL ASSOCIATES, LLC
 Geotechnical and
 Geoenvironmental Engineers
 2269 Massachusetts Avenue
 Cambridge, MA 02140
 617/868-1420
 617/868-1423 (Fax)

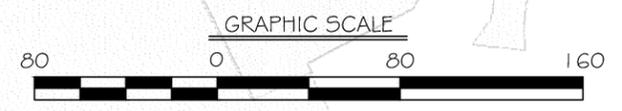
60 BRAINERD ROAD			MASSACHUSETTS
ALLSTON			
STORM DRAIN DISCHARGE FLOW PLAN			
FOR			
60-G6 BRAINERD ROAD LLC			
BY			
McPHAIL ASSOCIATES, LLC			
CONSULTING GEOTECHNICAL ENGINEERS			
Date: JANUARY 2012	Dwn: F.G.P.	Chkd: W.J.B.	Scale: 1" = 80'
Project No:	5233		

FIGURE 3B



FILE NAME: H:\Acad\JOB95265\RGPS\5265-F03.dwg

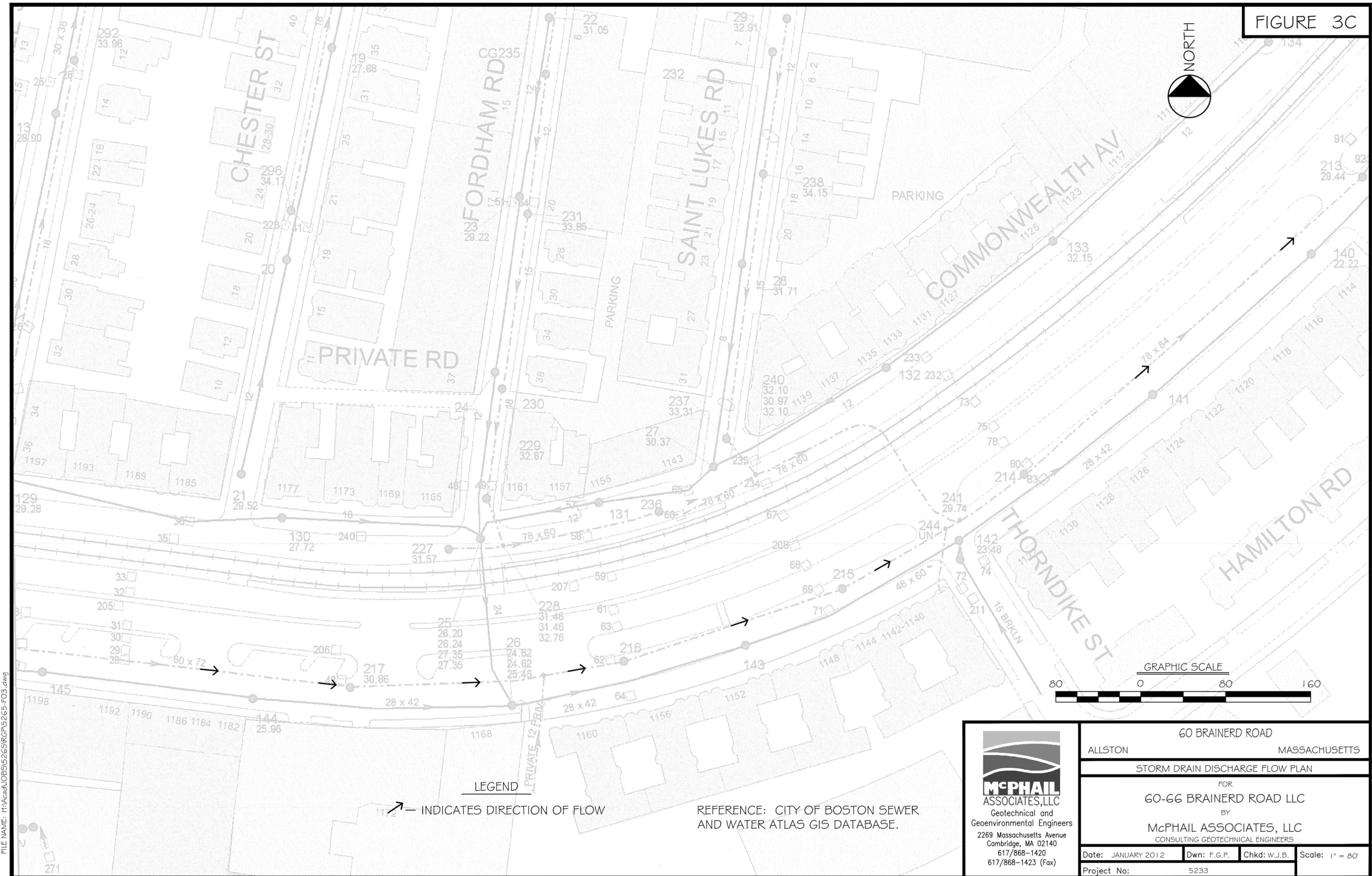
LEGEND
 — INDICATES DIRECTION OF FLOW
 REFERENCE: CITY OF BOSTON SEWER AND WATER ATLAS GIS DATABASE.



McPHAIL ASSOCIATES, LLC
 Geotechnical and Geoenvironmental Engineers
 2269 Massachusetts Avenue
 Cambridge, MA 02140
 617/868-1420
 617/868-1423 (Fax)

60 BRAINERD ROAD			
ALLSTON		MASSACHUSETTS	
STORM DRAIN DISCHARGE FLOW PLAN			
FOR			
GO-GG BRAINERD ROAD LLC			
BY			
McPHAIL ASSOCIATES, LLC			
CONSULTING GEOTECHNICAL ENGINEERS			
Date: JANUARY 2012	Dwn: F.G.P.	Chkd: W.J.B.	Scale: 1" = 80'
Project No: 5233			

FIGURE 3C



FILE NAME: H:\Acad\JOB95265\RGPF5265-F03.dwg

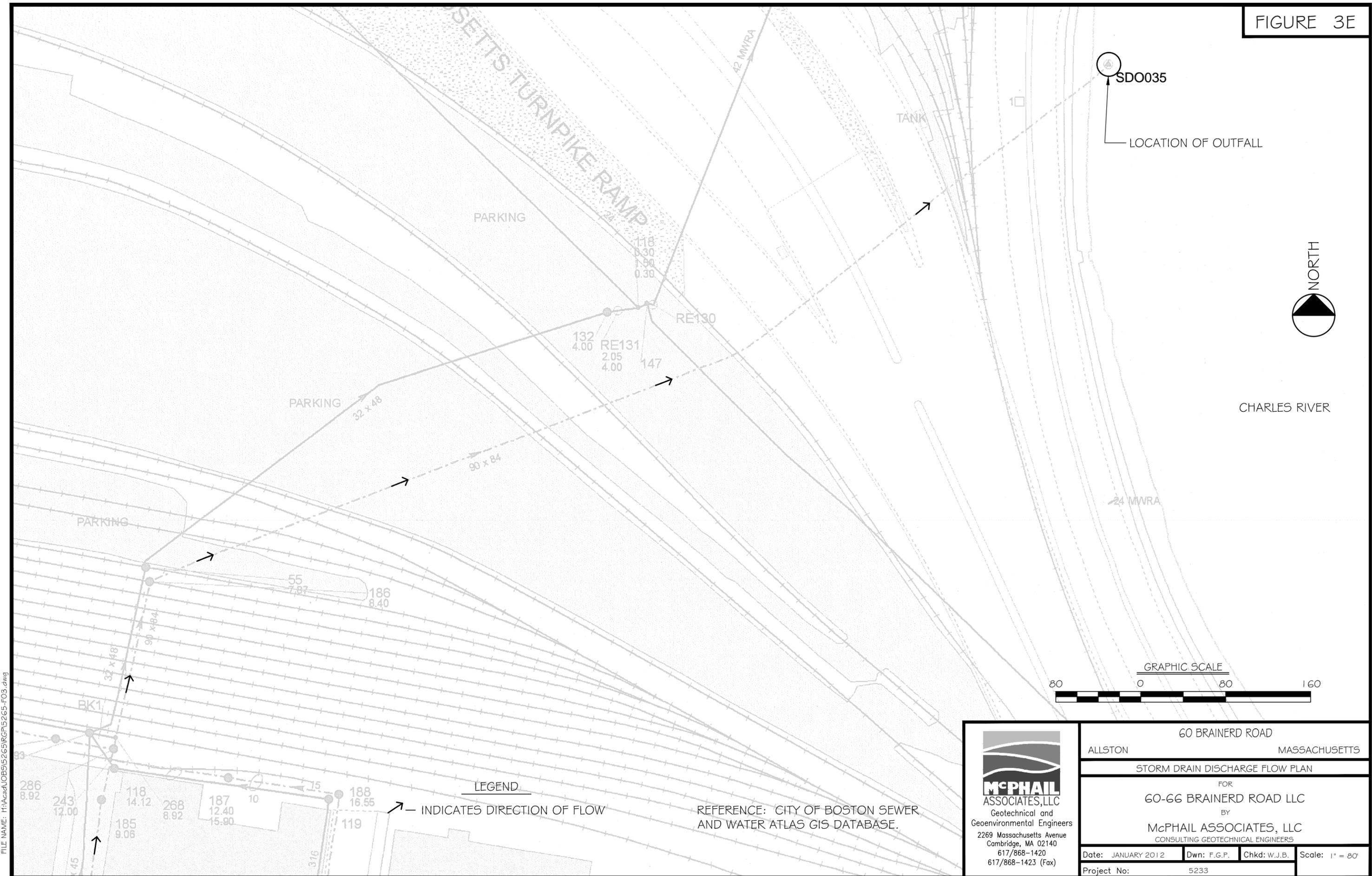
LEGEND
→ INDICATES DIRECTION OF FLOW

REFERENCE: CITY OF BOSTON SEWER AND WATER ATLAS GIS DATABASE.

McPHAIL ASSOCIATES, LLC
 Geotechnical and Geoenvironmental Engineers
 2269 Massachusetts Avenue
 Cambridge, MA 02140
 617/868-1420
 617/868-1423 (Fax)

60 BRAINERD ROAD			
ALLSTON		MASSACHUSETTS	
STORM DRAIN DISCHARGE FLOW PLAN			
FOR			
GO-GG BRAINERD ROAD LLC			
BY			
McPHAIL ASSOCIATES, LLC			
CONSULTING GEOTECHNICAL ENGINEERS			
Date: JANUARY 2012	Dwn: F.G.P.	Chkd: W.J.B.	Scale: 1" = 80'
Project No: 5233			

FIGURE 3E



FILE NAME: H:\Acad\LOB5\265\RGPF\265-F03.dwg

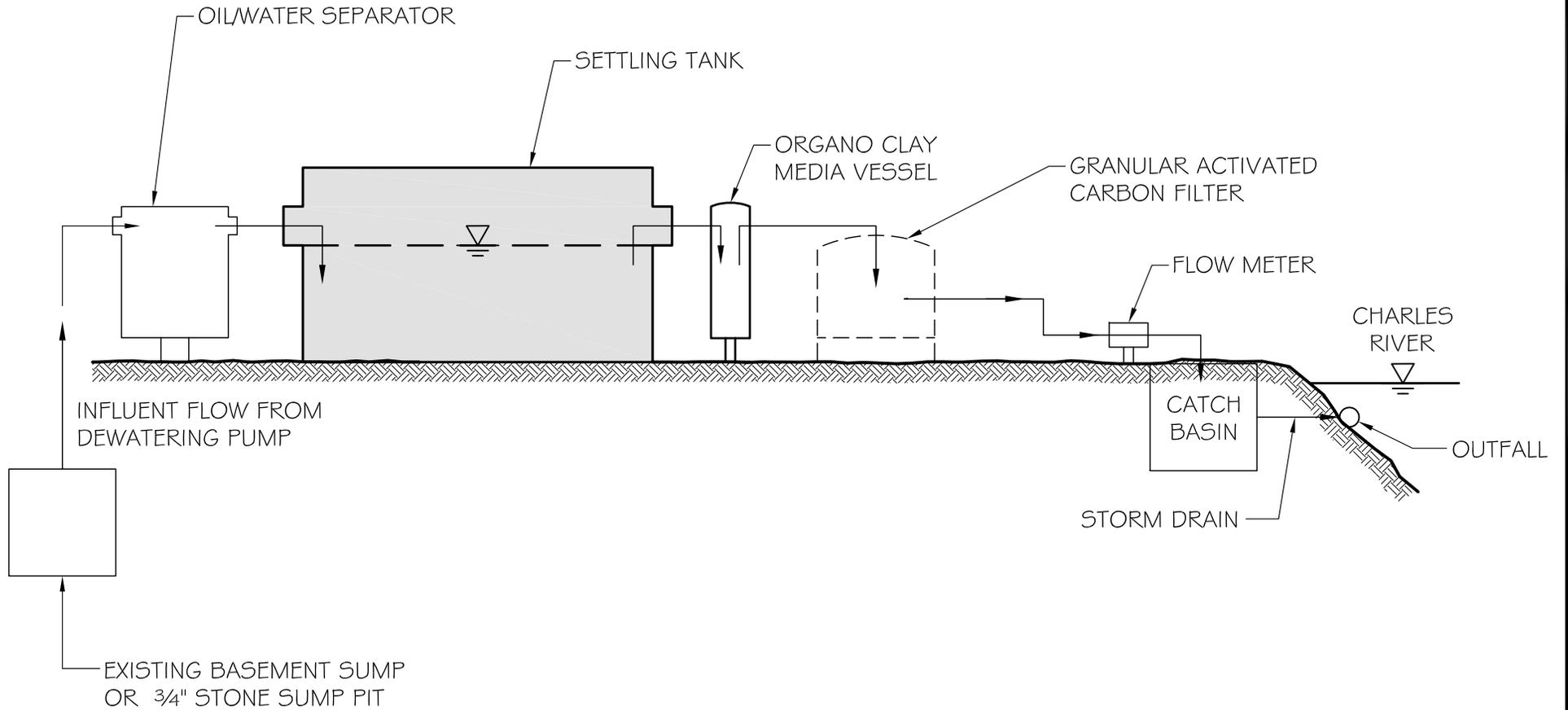
LEGEND
 — INDICATES DIRECTION OF FLOW

REFERENCE: CITY OF BOSTON SEWER AND WATER ATLAS GIS DATABASE.

MCPHAIL ASSOCIATES, LLC
 Geotechnical and Geoenvironmental Engineers
 2269 Massachusetts Avenue
 Cambridge, MA 02140
 617/868-1420
 617/868-1423 (Fax)

60 BRAINERD ROAD		MASSACHUSETTS	
ALLSTON			
STORM DRAIN DISCHARGE FLOW PLAN			
FOR			
60-66 BRAINERD ROAD LLC			
BY			
MCPHAIL ASSOCIATES, LLC			
CONSULTING GEOTECHNICAL ENGINEERS			
Date: JANUARY 2012	Dwn: F.G.P.	Chkd: W.J.B.	Scale: 1" = 80'
Project No: 5233			

FIGURE 4



 <p>McPHAIL ASSOCIATES, LLC Geotechnical and Geoenvironmental Engineers 2269 Massachusetts Avenue Cambridge, MA 02140 617/868-1420 617/868-1423 (Fax)</p>	60 BRAINERD ROAD		
	ALLSTON	MASSACHUSETTS	
	SCHEMATIC OF TREATMENT SYSTEM		
	FOR 60-66 BRAINERD ROAD LLC		
	BY McPHAIL ASSOCIATES, LLC CONSULTING GEOTECHNICAL ENGINEERS		
Date: JANUARY 2012	Dwn: F.G.P.	Chkd: W.J.B.	Scale: N.T.S.
Project No: 5265			



ATTACHMENT A

LIMITATIONS

The purpose of this report is to present the results of testing of groundwater samples obtained from monitoring wells located at 60 Brainerd Road in Allston, Massachusetts, in support of an application for approval of construction site dewatering discharge into surface waters of the Commonwealth of Massachusetts under EPA's Massachusetts Remedial General Permit MAG910000.

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

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

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

This report and application have been prepared on behalf of and for the exclusive use of 60-66 Brainerd Road LLC. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party nor used in whole or in part by any other party without prior written consent of McPhail Associates, LLC.



APPENDIX B

Notice of Intent Transmittal Form

Boston Water & Sewer Dewatering Discharge Permit Application

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of facility/site : 60 Brainerd Road		Facility/site mailing address:	
Location of facility/site : longitude: -71.133 latitude: 42.348	Facility SIC code(s):	Street: 60 Brainerd Road	
b) Name of facility/site owner : 60-66 Brainerd Road LLC		Town: Allston	
Email address of facility/site owner : jayb@mvernon.com	State: MA	Zip: 02134	County: Suffolk
Telephone no. of facility/site owner : 617-267-0006	Owner is (check one): 1. Federal <input type="radio"/> 2. State/Tribal <input type="radio"/> 3. Private <input checked="" type="radio"/> 4. Other <input type="radio"/> if so, describe:		
Fax no. of facility/site owner : 617-267-8908			
Address of owner (if different from site):			
Street: 29 Commonwealth Avenue, 6th Floor			
Town: Boston	State: MA	Zip: 02116	County: Suffolk
c) Legal name of operator : 60-66 Brainerd Road LLC		Operator telephone no.: 617-267-0006	
		Operator fax no.: 617-267-8908	Operator email: jayb@mvernon.com
Operator contact name and title: Mr. Jay Bisognano			
Address of operator (if different from owner):		Street:	
Town:	State:	Zip:	County:

d) Check Y for “yes” or N for “no” for the following:

1. Has a prior NPDES permit exclusion been granted for the discharge? Y N , if Y, number:
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y N , if Y, date and tracking #:
3. Is the discharge a “new discharge” as defined by 40 CFR 122.2? Y N
4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y N

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y N
 If Y, please list:

1. site identification # assigned by the state of NH or MA:
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:

f) Is the site/facility covered by any other EPA permit, including:

1. Multi-Sector General Permit? Y N , if Y, number:
2. Final Dewatering General Permit? Y N , if Y, number:
3. EPA Construction General Permit? Y N , if Y, number:
4. Individual NPDES permit? Y N , if Y, number:
5. any other water quality related individual or general permit? Y N , if Y, number:

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y N

h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.

<u>Activity Category</u>	<u>Activity Sub-Category</u>
I - Petroleum Related Site Remediation	A. Gasoline Only Sites <input type="checkbox"/> B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) <input checked="" type="checkbox"/> C. Petroleum Sites with Additional Contamination <input type="checkbox"/>
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites <input type="checkbox"/> B. VOC Sites with Additional Contamination <input type="checkbox"/> C. Primarily Heavy Metal Sites <input type="checkbox"/>
III - Contaminated Construction Dewatering	A. General Urban Fill Sites <input type="checkbox"/> B. Known Contaminated Sites <input type="checkbox"/>

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites <input type="checkbox"/> B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites <input type="checkbox"/> C. Hydrostatic Testing of Pipelines and Tanks <input type="checkbox"/> D. Long-Term Remediation of Contaminated Sumps and Dikes <input type="checkbox"/> E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) <input type="checkbox"/>
---------------------------------------	---

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

a) Describe the discharge activities for which the owner/applicant is seeking coverage:	
Temporary Construction Dewatering and active sump	
b) Provide the following information about each discharge:	
1) Number of discharge points:	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)?
1	Max. flow <input type="text" value="0.167525"/> Is maximum flow a design value ? Y <input type="radio"/> N <input checked="" type="radio"/> Average flow (include units) <input type="text" value="0.1 ft<sup>3</sup>/s"/> Is average flow a design value or estimate? <input type="text" value="estimate"/>
3) Latitude and longitude of each discharge within 100 feet:	
pt.1: lat. <input type="text" value="42.348"/> long. <input type="text" value="71.133"/>	pt.2: lat. <input type="text"/> long. <input type="text"/> ;
pt.3: lat. <input type="text"/> long. <input type="text"/>	pt.4: lat. <input type="text"/> long. <input type="text"/> ;
pt.5: lat. <input type="text"/> long. <input type="text"/>	pt.6: lat. <input type="text"/> long. <input type="text"/> ;
pt.7: lat. <input type="text"/> long. <input type="text"/>	pt.8: lat. <input type="text"/> long. <input type="text"/> ; etc.
4) If hydrostatic testing, total volume of the discharge (gals): <input type="text"/>	5) Is the discharge intermittent <input checked="" type="radio"/> or seasonal <input type="radio"/> ? Is discharge ongoing? Y <input checked="" type="radio"/> N <input type="radio"/>
c) Expected dates of discharge (mm/dd/yy): start <input type="text" value="02/14/2012"/> end <input type="text" value="06/01/2013"/>	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water. 2. contributing flow from the operation. 3. treatment units. and 4. discharge points and receiving waters(s). <input type="text" value="Please refer to the attached report"/>	

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
1. Total Suspended Solids (TSS)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	30,2540D	10000	ND			
2. Total Residual Chlorine (TRC)		<input type="checkbox"/>	<input type="checkbox"/>								
3. Total Petroleum Hydrocarbons (TPH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
4. Cyanide (CN)	57125	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1							
5. Benzene (B)	71432	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	100, VPH-04-1.1	2	ND			
6. Toluene (T)	108883	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	100, VPH-04-1.1	2	ND			
7. Ethylbenzene (E)	100414	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	100, VPH-04-1.1	2	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	100, VPH-04-1.1 ⁺	2	ND			
9. Total BTEX ²	n/a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab			ND			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
11. Methyl-tert-Butyl Ether (MtBE)	1634044	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	100, VPH-04-1.1 ⁺	3	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	<input checked="" type="checkbox"/>	<input type="checkbox"/>								

* Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

² BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

³ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
13. tert-Amyl Methyl Ether (TAME)	9940508	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
14. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,8260B	0.2	ND			
15. Carbon Tetrachloride	56235	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
16. 1,2 Dichlorobenzene (o-DCB)	95501	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
17. 1,3 Dichlorobenzene (m-DCB)	541731	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
18. 1,4 Dichlorobenzene (p-DCB)	106467	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
18a. Total dichlorobenzene		<input checked="" type="checkbox"/>	<input type="checkbox"/>								
19. 1,1 Dichloroethane (DCA)	75343	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
20. 1,2 Dichloroethane (DCA)	107062	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
21. 1,1 Dichloroethene (DCE)	75354	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
22. cis-1,2 Dichloroethene (DCE)	156592	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
23. Methylene Chloride	75092	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
24. Tetrachloroethene (PCE)	127184	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
25. 1,1,1 Trichloro-ethane (TCA)	71556	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
26. 1,1,2 Trichloro-ethane (TCA)	79005	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
27. Trichloroethene (TCE)	79016	<input checked="" type="checkbox"/>	<input type="checkbox"/>								

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
29. Acetone	67641	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
30. 1,4 Dioxane	123911	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
31. Total Phenols	108952	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
32. Pentachlorophenol (PCP)	87865	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
33. Total Phthalates (Phthalate esters) ⁴		<input checked="" type="checkbox"/>	<input type="checkbox"/>								
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>					ND			
a. Benzo(a) Anthracene	56553	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
b. Benzo(a) Pyrene	50328	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
c. Benzo(b)Fluoranthene	205992	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1 ⁺	10	ND			
d. Benzo(k)Fluoranthene	207089	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1 ⁺	10	ND			
e. Chrysene	21801	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
f. Dibenzo(a,h)anthracene	53703	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1 ⁺	10	ND			
g. Indeno(1,2,3-cd) Pyrene	193395	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1 ⁺	10	ND			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								

⁴The sum of individual phthalate compounds.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
h. Acenaphthene	83329	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
i. Acenaphthylene	208968	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
j. Anthracene	120127	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
k. Benzo(ghi) Perylene	191242	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
l. Fluoranthene	206440	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
m. Fluorene	86737	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
n. Naphthalene	91203	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
o. Phenanthrene	85018	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
p. Pyrene	129000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	98,EPH-04-1.1	10	ND			
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
38. Chloride	16887006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	44,300		40000	16.377		
39. Antimony	7440360	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020	1	ND			
40. Arsenic	7440382	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020		0.7	0.0003		
41. Cadmium	7440439	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020	0.2	ND			
42. Chromium III (trivalent)	16065831	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	30,3500CR-D	10	0.6	0.0002		
43. Chromium VI (hexavalent)	18540299	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	30,3500-CR	10	ND			
44. Copper	7440508	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020		3.1	0.0013		
45. Lead	7439921	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020	0.5	1.2	0.0005		
46. Mercury	7439976	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	3,245.1	0.2	ND			
47. Nickel	7440020	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020		3	0.0012		
48. Selenium	7782492	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020		4	0.0016		
49. Silver	7440224	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020		ND			
50. Zinc	7440666	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020		281.7	0.1153		
51. Iron	7439896	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	19,200.7		70	0.0287		
Other (describe):		<input type="checkbox"/>	<input type="checkbox"/>								

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
		<input type="checkbox"/>	<input type="checkbox"/>								
		<input type="checkbox"/>	<input type="checkbox"/>								

b) For discharges where **metals** are believed present, please fill out the following (attach results of any calculations):

<p><i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y <input type="radio"/> N <input checked="" type="radio"/></p>	<p>If yes, which metals?</p>																				
<p><i>Step 2:</i> For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals?</p> <table border="1" style="width: 100%;"> <tr> <td>Metal:</td> <td></td> <td>DF:</td> <td></td> </tr> <tr> <td>Etc.</td> <td></td> <td></td> <td></td> </tr> </table>	Metal:		DF:		Metal:		DF:		Metal:		DF:		Metal:		DF:		Etc.				<p>Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y <input type="radio"/> N <input checked="" type="radio"/> If Y, list which metals:</p>
Metal:		DF:																			
Metal:		DF:																			
Metal:		DF:																			
Metal:		DF:																			
Etc.																					

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:						
Oil/water separator, settling tank, organo clay vessel and granular activated carbon filtration in series						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank <input checked="" type="checkbox"/>	Air stripper <input type="checkbox"/>	Oil/water separator <input checked="" type="checkbox"/>	Equalization tanks <input type="checkbox"/>	Bag filter <input type="checkbox"/>	GAC filter <input checked="" type="checkbox"/>
	Chlorination <input type="checkbox"/>	De-chlorination <input type="checkbox"/>	Other (please describe):	Organoclay media vessel		

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate(s)** (gallons per minute) of the treatment system:

Average flow rate of discharge gpm Maximum flow rate of treatment system gpm
 Design flow rate of treatment system gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct to receiving water <input type="checkbox"/>	Within facility (sewer) <input type="checkbox"/>	Storm drain <input checked="" type="checkbox"/>	Wetlands <input type="checkbox"/>	Other (describe): <input type="text"/>
------------------------------------	--	--	---	-----------------------------------	---

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

Please refer to attached report for narrative description and plan

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:

1. For multiple discharges, number the discharges sequentially.
 2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
- The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water cfs
 Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y N If yes, for which pollutant(s)?
chlorophyll-a, combined biota/habitat bioassessments, DDT, dissolved oxygen, oil and grease, secchi disk transparency, nutrient/eutrophication, biological indicators, phosphorous, PCB in fish tissue

Is there a final TMDL? Y N If yes, for which pollutant(s)?

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

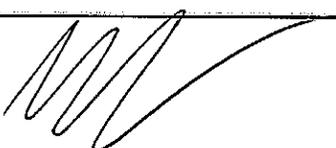
<p>a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit? A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/></p> <p>b) If you selected Criterion D or F, has consultation with the federal services been completed? Y <input type="radio"/> N <input type="radio"/> Underway <input type="radio"/></p> <p>c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is “not likely to adversely affect” listed species or critical habitat received? Y <input type="radio"/> N <input type="radio"/></p> <p>d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.</p>
<p>e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit? 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/></p> <p>f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.</p>

7. Supplemental information.

<p>Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.</p>
<p>Please refer to attached report</p>

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly 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/Site Name:	60 Brainerd Road
Operator signature:	
Printed Name & Title:	Mr. Jay Bisognano Project Manager
Date:	1/25/12



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

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: 60-66 Brainerd Road LLC Address: 29 Commonwealth Avenue; 6th Floor

Phone number: 617-963-0862 Fax number: 617-267-8908

Contact person name: Mr. Jay Bisognano Title: Project Manager

Cell number: _____ Email address: jayb@mvernon.com

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

Owner's Information (if different from above):

Owner of property being dewatered: _____

Owner's mailing address: _____ Phone number: _____

Location of Discharge & Proposed Treatment System(s):

Street number and name: 60 Brainerd Road Neighborhood Allston

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

Describe Proposed Pre-Treatment System(s): Oil/water separator, settling tank, organo clay media, granular activated carbon filter in series

BWSC Outfall No. SDO035 Receiving Waters Charles River

Temporary Discharges (Provide Anticipated Dates of Discharge): From February 14, 2012 To June 1, 2013

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Groundwater Remediation | <input type="checkbox"/> Tank Removal/Installation | <input checked="" type="checkbox"/> Foundation Excavation |
| <input type="checkbox"/> Utility/Manhole Pumping | <input type="checkbox"/> Test Pipe | <input type="checkbox"/> Trench Excavation |
| <input type="checkbox"/> Accumulated Surface Water | <input type="checkbox"/> Hydrogeologic Testing | <input type="checkbox"/> Other _____ |

Permanent Discharges

- | | |
|---|---|
| <input type="checkbox"/> Foundation Drainage | <input type="checkbox"/> Crawl Space/Footing Drain |
| <input type="checkbox"/> Accumulated Surface Water | <input type="checkbox"/> Non-contact/Uncontaminated Cooling |
| <input type="checkbox"/> Non-contact/Uncontaminated Process | <input type="checkbox"/> Other; _____ |

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

Submit Completed Application to: Boston Water and Sewer Commission
Engineering Customer Services
980 Harrison Avenue, Boston, MA 02119
Attn: Francis M. McLaughlin, Manager Engineering Customer Services
E-mail: MclaughlinF@bwsc.org
Phone: 617-989-7208 Fax: 617-989-7716

BWSC Use Only: Date Received _____ Comments: _____



APPENDIX C

RESULTS OF GROUNDWATER ANALYSIS

During October 2011, a sample of groundwater was obtained from MW-3 and analyzed for the presence of extractable petroleum hydrocarbons (EPH), target polynuclear aromatic hydrocarbons (PAH), volatile petroleum hydrocarbons (VPH) and target volatile organic compounds (VOCs). The purpose of the analysis was to assess the extent of the No. 2 fuel oil release migration from the 74 Brainerd Road property onto the southern portion of the subject property. In addition, on January 11, 2012, a sample of groundwater was obtained from MW-3 and submitted for laboratory analysis for the presence of total suspended solids, total metals (antimony, arsenic, cadmium, chromium III, chromium IV, copper, lead, mercury, nickel, selenium, silver, zinc, and iron), and chloride. The purpose of this analysis was to pre-characterize groundwater in anticipation of off-site discharge.

In summary, the results of the analysis did not detect the presence of the compounds analyzed in excess of the applicable EPA discharge effluent limits and/or MCP RCGW-2 reporting thresholds. The results of the analysis are summarized in **Table 1** and the laboratory data is included in **Appendix C**.

As indicated previously in this report, non-aqueous phase liquid (NAPL) has been detected at the western portion of the subject property. Specifically, gauging of monitoring wells B-102(OW) and B-103(OW) has measured the presence of NAPL at thicknesses ranging from 1.48 feet to 1.69 feet. Monitoring well reports prepared by McPhail Associates, LLC for each monitoring well at the subject property is included in **Appendix C**.

Although the analysis of groundwater at the southern portion of the subject property has not detected the presence of petroleum constituents in excess of the applicable EPA effluent limits, dissolved petroleum contamination may be present in groundwater at the western portion of the subject property. In addition, NAPL is present on the surface of groundwater at the western portion of the subject property. Therefore, a treatment system will be necessary to remove NAPL and potentially dissolved petroleum constituents prior to off-site discharge during construction dewatering activities

Further analysis of groundwater beneath the basement of the building for the presence of petroleum hydrocarbons will be performed prior to the planned site development. Based upon the analysis of groundwater, temporary shutdown of the basement sump may be necessary if dissolved petroleum constituents and/or NAPL are encountered in groundwater beneath the building footprint. Since the basement is currently occupied, a treatment system would be immediately installed to remove NAPL and to reduce dissolve levels of petroleum constituents in the dewatered groundwater prior to the commencement of off-site discharge.

As indicated in the letter portion of this report, the influent will be passed through an oil/water separator, settling tank, organo clay media vessel and a granular activated carbon (GAC) filtration system to remove NAPL and to reduce elevated levels of dissolved petroleum constituents in the water to meet allowable limits established by the US EPA prior to discharge.

**TABLE 1
ANALYTICAL RESULTS - GROUNDWATER**

60 Brainerd Road; Allston, MA
Project No. 5265

LOCATION	EPA Effluent Criteria (Freshwater)	RCGW-2	MW-3	MW-3
SAMPLING DATE			9/30/2011	1/11/2012
LAB SAMPLE ID			L1115717-01	L1200568-01
General Chemistry				
Solids, Total Suspended (ug/l)	30000		-	ND(10000)
Anions by Ion Chromatography				
Chloride (ug/l)			-	40000
Extractable Petroleum Hydrocarbons (ug/l)				
C9-C18 Aliphatics		5000	ND(100)	-
C19-C36 Aliphatics		50000	ND(100)	-
C11-C22 Aromatics, Adjusted		5000	ND(100)	-
Naphthalene	20	1000	ND(10)	-
2-Methylnaphthalene		2000	ND(10)	-
Benzo(a)anthracene	Total Group I PAH	1000	ND(10)	-
Chrysene	Total Group I PAH	70	ND(10)	-
Benzo(b)fluoranthene	Total Group I PAH	400	ND(10)	-
Benzo(k)fluoranthene	Total Group I PAH	100	ND(10)	-
Benzo(a)pyrene	Total Group I PAH	500	ND(10)	-
Indeno(1,2,3-cd)Pyrene	Total Group I PAH	100	ND(10)	-
Dibenzo(a,h)anthracene	Total Group I PAH	40	ND(10)	-
Acenaphthylene	Total Group II PAH	40	ND(10)	-
Acenaphthene	Total Group II PAH	6000	ND(10)	-
Fluorene	Total Group II PAH	40	ND(10)	-
Phenanthrene	Total Group II PAH	10000	ND(10)	-
Anthracene	Total Group II PAH	30	ND(10)	-
Fluoranthene	Total Group II PAH	200	ND(10)	-
Pyrene	Total Group II PAH	20	ND(10)	-
Benzo(ghi)perylene	Total Group II PAH	20	ND(10)	-
Volatile Petroleum Hydrocarbons (ug/l)				
C9-C10 Aromatics		7000	ND(50)	-
C5-C8 Aliphatics, Adjusted		3000	ND(50)	-
C9-C12 Aliphatics, Adjusted		5000	ND(50)	-
Benzene	Total BTEX	2000	ND(2)	-
Toluene	Total BTEX	40000	ND(2)	-
Ethylbenzene	Total BTEX	5000	ND(2)	-
p/m-Xylene	Total BTEX	5000	ND(2)	-
o-Xylene	Total BTEX	5000	ND(2)	-
Methyl tert butyl ether	70	5000	ND(3)	-
Naphthalene	20	1000	ND(4)	-
Total Metals (ug/l)				
Antimony, Total	5.6	8000	-	ND(0.5)
Arsenic, Total	10	900	-	0.7
Cadmium, Total	0.2	4	-	ND(0.2)
Chromium, Total	48.8	300	-	0.6
Chromium, Hexavalent	11.4	300	-	ND(10)
Copper, Total	5.2	100000	-	3.1
Iron, Total	1000		-	70
Lead, Total	1.3	10	-	1.2
Mercury, Total	0.9	20	-	ND(0.2)
Nickel, Total	29	200	-	3
Selenium, Total	5	100	-	4
Silver, Total	66.6	7	-	ND(0.4)
Zinc, Total	1000	900	-	281.7

ND-not detected in excess of the laboratory method detection limit in ()



ANALYTICAL REPORT

Lab Number:	L1200568
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	60 BRAINERD ROAD
Project Number:	5265.9.00
Report Date:	01/17/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



Project Name: 60 BRAINERD ROAD
Project Number: 5265.9.00

Lab Number: L1200568
Report Date: 01/17/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1200568-01	MW-3	ALLSTON, MA	01/11/12 14:30

Project Name: 60 BRAINERD ROAD
Project Number: 5265.9.00

Lab Number: L1200568
Report Date: 01/17/12

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 all of the requirements of NELAC, for all NELAC accredited parameters. 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. 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. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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.

For additional information, please contact Client Services at 800-624-9220.

Metals

The WG513605-4 MS recovery, performed on L1200568-01, is above the acceptance criteria for Mercury (136%). A post digestion spike was performed with an acceptable recovery of 108%.

Solids, Total Suspended

L1200568-01 has an elevated detection limit 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:  Cynthia McQueen

Title: Technical Director/Representative

Date: 01/17/12

METALS

Project Name: 60 BRAINERD ROAD
Project Number: 5265.9.00

Lab Number: L1200568
Report Date: 01/17/12

SAMPLE RESULTS

Lab ID: L1200568-01
 Client ID: MW-3
 Sample Location: ALLSTON, MA
 Matrix: Water

Date Collected: 01/11/12 14:30
 Date Received: 01/11/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:49	EPA 3005A	1,6020	BM
Arsenic, Total	0.0007		mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:49	EPA 3005A	1,6020	BM
Cadmium, Total	ND		mg/l	0.0002	--	1	01/12/12 16:30	01/16/12 18:49	EPA 3005A	1,6020	BM
Chromium, Total	0.0006		mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:49	EPA 3005A	1,6020	BM
Copper, Total	0.0031		mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:49	EPA 3005A	1,6020	BM
Iron, Total	0.07		mg/l	0.05	--	1	01/12/12 16:30	01/16/12 09:19	EPA 3005A	19,200.7	AI
Lead, Total	0.0012		mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:49	EPA 3005A	1,6020	BM
Mercury, Total	ND		mg/l	0.0002	--	1	01/13/12 12:15	01/13/12 19:37	EPA 245.1	3,245.1	JP
Nickel, Total	0.0030		mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:49	EPA 3005A	1,6020	BM
Selenium, Total	0.004		mg/l	0.001	--	1	01/12/12 16:30	01/16/12 18:49	EPA 3005A	1,6020	BM
Silver, Total	ND		mg/l	0.0004	--	1	01/12/12 16:30	01/16/12 18:49	EPA 3005A	1,6020	BM
Zinc, Total	0.2817		mg/l	0.0050	--	1	01/12/12 16:30	01/16/12 18:49	EPA 3005A	1,6020	BM



Project Name: 60 BRAINERD ROAD
Project Number: 5265.9.00

Lab Number: L1200568
Report Date: 01/17/12

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG513400-1									
Antimony, Total	ND	mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:05	1,6020	BM
Arsenic, Total	ND	mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:05	1,6020	BM
Cadmium, Total	ND	mg/l	0.0002	--	1	01/12/12 16:30	01/16/12 18:05	1,6020	BM
Chromium, Total	ND	mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:05	1,6020	BM
Copper, Total	ND	mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:05	1,6020	BM
Lead, Total	ND	mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:05	1,6020	BM
Nickel, Total	ND	mg/l	0.0005	--	1	01/12/12 16:30	01/16/12 18:05	1,6020	BM
Selenium, Total	ND	mg/l	0.001	--	1	01/12/12 16:30	01/16/12 18:05	1,6020	BM
Silver, Total	ND	mg/l	0.0004	--	1	01/12/12 16:30	01/16/12 18:05	1,6020	BM
Zinc, Total	ND	mg/l	0.0050	--	1	01/12/12 16:30	01/16/12 18:05	1,6020	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG513402-1									
Iron, Total	ND	mg/l	0.05	--	1	01/12/12 16:30	01/16/12 09:10	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG513605-1									
Mercury, Total	ND	mg/l	0.0002	--	1	01/13/12 12:15	01/13/12 19:34	3,245.1	JP

Prep Information

Digestion Method: EPA 245.1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 60 BRAINERD ROAD

Project Number: 5265.9.00

Lab Number: L1200568

Report Date: 01/17/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG513400-2								
Antimony, Total	91		-		80-120	-		
Arsenic, Total	106		-		80-120	-		
Cadmium, Total	106		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Copper, Total	106		-		80-120	-		
Lead, Total	106		-		80-120	-		
Nickel, Total	105		-		80-120	-		
Selenium, Total	111		-		80-120	-		
Silver, Total	97		-		80-120	-		
Zinc, Total	106		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG513402-2								
Iron, Total	98		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG513605-2								
Mercury, Total	101		-		85-115	-		

Matrix Spike Analysis Batch Quality Control

Project Name: 60 BRAINERD ROAD

Lab Number: L1200568

Project Number: 5265.9.00

Report Date: 01/17/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513400-4 QC Sample: L1200568-01 Client ID: MW-3												
Antimony, Total	ND	0.5	0.4678	94		-	-		80-120	-		20
Arsenic, Total	0.0007	0.12	0.1253	104		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0553	108		-	-		80-120	-		20
Chromium, Total	0.0006	0.2	0.1940	97		-	-		80-120	-		20
Copper, Total	0.0031	0.25	0.2702	107		-	-		80-120	-		20
Lead, Total	0.0012	0.51	0.5409	106		-	-		80-120	-		20
Nickel, Total	0.0030	0.5	0.5243	104		-	-		80-120	-		20
Selenium, Total	0.004	0.12	0.130	105		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0491	98		-	-		80-120	-		20
Zinc, Total	0.2817	0.5	0.8019	104		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513402-4 QC Sample: L1200568-01 Client ID: MW-3												
Iron, Total	0.07	1	1.0	93		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513605-4 QC Sample: L1200568-01 Client ID: MW-3												
Mercury, Total	ND	0.001	0.0014	136	Q	-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 60 BRAINERD ROAD

Project Number: 5265.9.00

Lab Number: L1200568

Report Date: 01/17/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513400-3 QC Sample: L1200568-01 Client ID: MW-3						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.0007	0.0007	mg/l	6		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.0006	0.0007	mg/l	14		20
Copper, Total	0.0031	0.0030	mg/l	1		20
Lead, Total	0.0012	0.0012	mg/l	0		20
Nickel, Total	0.0030	0.0030	mg/l	0		20
Selenium, Total	0.004	0.004	mg/l	3		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.2817	0.2777	mg/l	1		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513402-3 QC Sample: L1200568-01 Client ID: MW-3						
Iron, Total	0.07	0.07	mg/l	6		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513605-3 QC Sample: L1200568-01 Client ID: MW-3						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: 60 BRAINERD ROAD

Lab Number: L1200568

Project Number: 5265.9.00

Report Date: 01/17/12

SAMPLE RESULTS

Lab ID: L1200568-01

Date Collected: 01/11/12 14:30

Client ID: MW-3

Date Received: 01/11/12

Sample Location: ALLSTON, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	10	NA	2	-	01/16/12 14:20	30,2540D	DW
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/11/12 23:05	01/11/12 23:22	30,3500CR-D	TP
General Chemistry										
Trivalent Chromium	ND		mg/l	0.01	--	1	-	01/17/12 12:30	30,3500-Cr	ED
Anions by Ion Chromatography - Westborough Lab										
Chloride	40		mg/l	0.50	--	1	-	01/13/12 20:20	44,300.0	AU



Project Name: 60 BRAINERD ROAD

Lab Number: L1200568

Project Number: 5265.9.00

Report Date: 01/17/12

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG513204-1									
Chromium, Hexavalent	ND	mg/l	0.010	--	1	01/11/12 23:05	01/11/12 23:13	30,3500CR-D	TP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG513759-1									
Solids, Total Suspended	ND	mg/l	5.0	NA	1	-	01/16/12 14:20	30,2540D	DW
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG513877-1									
Chloride	ND	mg/l	0.50	--	1	-	01/13/12 17:20	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: 60 BRAINERD ROAD

Project Number: 5265.9.00

Lab Number: L1200568

Report Date: 01/17/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG513204-2								
Chromium, Hexavalent	105		-		85-115	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG513877-2								
Chloride	102		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 60 BRAINERD ROAD

Lab Number: L1200568

Project Number: 5265.9.00

Report Date: 01/17/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513204-3 QC Sample: L1200568-01 Client ID: MW-3												
Chromium, Hexavalent	ND	0.1	0.103	103	-	-	-	-	85-115	-	-	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513877-3 QC Sample: L1200568-01 Client ID: MW-3												
Chloride	40	4	44	100	-	-	-	-	40-151	-	-	18

Lab Duplicate Analysis Batch Quality Control

Project Name: 60 BRAINERD ROAD
Project Number: 5265.9.00

Lab Number: L1200568
Report Date: 01/17/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513204-4 QC Sample: L1200568-01 Client ID: MW-3						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513759-2 QC Sample: L1200633-04 Client ID: DUP Sample						
Solids, Total Suspended	79	80	mg/l	1		32
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG513877-4 QC Sample: L1200568-01 Client ID: MW-3						
Chloride	40	41	mg/l	2		18



Project Name: 60 BRAINERD ROAD

Lab Number: L1200568

Project Number: 5265.9.00

Report Date: 01/17/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1200568-01A	Plastic 1000ml unpreserved	A	7	3	Y	Absent	SPECWC(),CL-300(28),HEXCR-3500(1),TSS-2540(7)
L1200568-01B	Plastic 500ml HNO3 preserved	A	<2	3	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1200568-01C	Plastic 500ml HNO3 preserved	A	<2	3	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)

*Values in parentheses indicate holding time in days

Project Name: 60 BRAINERD ROAD
Project Number: 5265.9.00

Lab Number: L1200568
Report Date: 01/17/12

GLOSSARY

Acronyms

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.
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.

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

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 five times (5x) 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.
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 RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value 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.

Report Format: Data Usability Report



Project Name: 60 BRAINERD ROAD
Project Number: 5265.9.00

Lab Number: L1200568
Report Date: 01/17/12

Data Qualifiers

- 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.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: 60 BRAINERD ROAD
Project Number: 5265.9.00

Lab Number: L1200568
Report Date: 01/17/12

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

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.



Certificate/Approval Program Summary

Last revised January 3, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Page 20 of 23
for: *Non-Potable Water* (Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: 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-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE.
Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**
 Refer to MA-DEP Certificate for Potable and Non-Potable Water.
 Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 3005A,3015,1312,6010B,6010C,SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.



ANALYTICAL REPORT

Lab Number:	L1115717
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Bill Burns
Phone:	(617) 868-1420
Project Name:	60 BRAINERD RD
Project Number:	5265
Report Date:	10/12/11

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Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

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



Project Name: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1115717-01	MW-3	ALLSTON, MA	09/30/11 00:00

Project Name: 60 BRAINERD RD

Lab Number: L1115717

Project Number: 5265

Report Date: 10/12/11

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).	YES
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)?	NO
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)?	YES
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: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

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 all of the requirements of NELAC, for all NELAC accredited parameters. 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. 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. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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.

For additional information, please contact Client Services at 800-624-9220.

MCP Related Narratives

EPH

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG493351-2 LCS recoveries, associated with L1115717-01, were outside the acceptance criteria for Nonane (C9) (28%) and Decane (C10) (35%); however, the target carbon ranges and analytes were within overall method allowances. The results of the original analysis are reported.

The WG493351-2/-3 LCS/LCSD RPDs, associated with L1115717-01, are above the acceptance criteria for Nonane (C9) (33%) and Decane (C10) (31%).

Project Name: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

Case Narrative (continued)

VPH

In reference to question H:

The WG494987-1 LCS recovery, associated with L1115717-01, was outside the acceptance criteria for n-Decane (156%); however, the target carbon ranges and analytes were within overall method allowances. The results of the original analysis are reported.

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

Authorized Signature:  Elizabeth Simmons

Title: Technical Director/Representative

Date: 10/12/11

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

SAMPLE RESULTS

Lab ID: L1115717-01
 Client ID: MW-3
 Sample Location: ALLSTON, MA
 Matrix: Water
 Analytical Method: 100, VPH-04-1.1
 Analytical Date: 10/12/11 06:25
 Analyst: TB

Date Collected: 09/30/11 00:00
 Date Received: 09/30/11
 Field Prep: Not Specified

Quality Control Information

Condition of sample received: Satisfactory
 Aqueous Preservative: Laboratory Provided Preserved Container
 Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	80		70-130
2,5-Dibromotoluene-FID	87		70-130

Project Name: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

SAMPLE RESULTS

Lab ID: L1115717-01
 Client ID: MW-3
 Sample Location: ALLSTON, MA
 Matrix: Water
 Analytical Method: 98,EPH-04-1.1
 Analytical Date: 10/04/11 02:43
 Analyst: AS

Date Collected: 09/30/11 00:00
 Date Received: 09/30/11
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 09/30/11 23:18
 Cleanup Method1: EPH-04-1
 Cleanup Date1: 10/02/11

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.0	--	1
2-Methylnaphthalene	ND		ug/l	10.0	--	1
Acenaphthylene	ND		ug/l	10.0	--	1
Acenaphthene	ND		ug/l	10.0	--	1
Fluorene	ND		ug/l	10.0	--	1
Phenanthrene	ND		ug/l	10.0	--	1
Anthracene	ND		ug/l	10.0	--	1
Fluoranthene	ND		ug/l	10.0	--	1
Pyrene	ND		ug/l	10.0	--	1
Benzo(a)anthracene	ND		ug/l	10.0	--	1
Chrysene	ND		ug/l	10.0	--	1
Benzo(b)fluoranthene	ND		ug/l	10.0	--	1
Benzo(k)fluoranthene	ND		ug/l	10.0	--	1
Benzo(a)pyrene	ND		ug/l	10.0	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	10.0	--	1
Benzo(ghi)perylene	ND		ug/l	10.0	--	1

Project Name: 60 BRAINERD RD

Lab Number: L1115717

Project Number: 5265

Report Date: 10/12/11

SAMPLE RESULTS

Lab ID: L1115717-01

Date Collected: 09/30/11 00:00

Client ID: MW-3

Date Received: 09/30/11

Sample Location: ALLSTON, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	58		40-140
o-Terphenyl	77		40-140
2-Fluorobiphenyl	82		40-140
2-Bromonaphthalene	81		40-140

Project Name: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 10/04/11 01:14
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 09/30/11 23:18
Cleanup Method1: EPH-04-1
Cleanup Date1: 10/02/11

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG493351-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	10.0	--
2-Methylnaphthalene	ND		ug/l	10.0	--
Acenaphthylene	ND		ug/l	10.0	--
Acenaphthene	ND		ug/l	10.0	--
Fluorene	ND		ug/l	10.0	--
Phenanthrene	ND		ug/l	10.0	--
Anthracene	ND		ug/l	10.0	--
Fluoranthene	ND		ug/l	10.0	--
Pyrene	ND		ug/l	10.0	--
Benzo(a)anthracene	ND		ug/l	10.0	--
Chrysene	ND		ug/l	10.0	--
Benzo(b)fluoranthene	ND		ug/l	10.0	--
Benzo(k)fluoranthene	ND		ug/l	10.0	--
Benzo(a)pyrene	ND		ug/l	10.0	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--
Dibenzo(a,h)anthracene	ND		ug/l	10.0	--
Benzo(ghi)perylene	ND		ug/l	10.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	80		40-140
o-Terphenyl	70		40-140
2-Fluorobiphenyl	72		40-140
2-Bromonaphthalene	76		40-140

Project Name: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 100, VPH-04-1.1
Analytical Date: 10/11/11 15:56
Analyst: TB

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG494987-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--
Benzene	ND		ug/l	2.00	--
Toluene	ND		ug/l	2.00	--
Ethylbenzene	ND		ug/l	2.00	--
p/m-Xylene	ND		ug/l	2.00	--
o-Xylene	ND		ug/l	2.00	--
Methyl tert butyl ether	ND		ug/l	3.00	--
Naphthalene	ND		ug/l	4.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	74		70-130
2,5-Dibromotoluene-FID	83		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 60 BRAINERD RD

Lab Number: L1115717

Project Number: 5265

Report Date: 10/12/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG493351-2 WG493351-3								
C9-C18 Aliphatics	50		59		40-140	17		25
C19-C36 Aliphatics	71		79		40-140	11		25
C11-C22 Aromatics	69		75		40-140	8		25
Naphthalene	53		65		40-140	20		25
2-Methylnaphthalene	60		71		40-140	17		25
Acenaphthylene	57		69		40-140	19		25
Acenaphthene	62		72		40-140	15		25
Fluorene	64		73		40-140	13		25
Phenanthrene	67		76		40-140	13		25
Anthracene	65		75		40-140	14		25
Fluoranthene	67		76		40-140	13		25
Pyrene	67		77		40-140	14		25
Benzo(a)anthracene	63		72		40-140	13		25
Chrysene	65		76		40-140	16		25
Benzo(b)fluoranthene	66		76		40-140	14		25
Benzo(k)fluoranthene	63		72		40-140	13		25
Benzo(a)pyrene	60		71		40-140	17		25
Indeno(1,2,3-cd)Pyrene	63		72		40-140	13		25
Dibenzo(a,h)anthracene	61		70		40-140	14		25
Benzo(ghi)perylene	62		70		40-140	12		25
Nonane (C9)	28	Q	39		30-140	33	Q	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG493351-2 WG493351-3								
Decane (C10)	35	Q	48		40-140	31	Q	25
Dodecane (C12)	49		60		40-140	20		25
Tetradecane (C14)	61		69		40-140	12		25
Hexadecane (C16)	69		75		40-140	8		25
Octadecane (C18)	73		80		40-140	9		25
Nonadecane (C19)	74		82		40-140	10		25
Eicosane (C20)	74		82		40-140	10		25
Docosane (C22)	74		83		40-140	11		25
Tetracosane (C24)	75		84		40-140	11		25
Hexacosane (C26)	73		82		40-140	12		25
Octacosane (C28)	68		77		40-140	12		25
Triacontane (C30)	65		76		40-140	16		25
Hexatriacontane (C36)	62		72		40-140	15		25

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Chloro-Octadecane	59		77		40-140
o-Terphenyl	70		77		40-140
2-Fluorobiphenyl	73		79		40-140
2-Bromonaphthalene	75		75		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 60 BRAINERD RD

Project Number: 5265

Lab Number: L1115717

Report Date: 10/12/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG494987-1 WG494987-2								
C5-C8 Aliphatics	103		96		70-130	7		25
C9-C12 Aliphatics	130		112		70-130	15		25
C9-C10 Aromatics	82		82		70-130	0		25
Benzene	95		103		70-130	8		25
Toluene	94		103		70-130	9		25
Ethylbenzene	90		99		70-130	9		25
p/m-Xylene	96		103		70-130	7		25
o-Xylene	93		100		70-130	8		25
Methyl tert butyl ether	88		84		70-130	4		25
Naphthalene	76		83		70-130	9		25
1,2,4-Trimethylbenzene	82		82		70-130	0		25
Pentane	103		90		70-130	13		25
2-Methylpentane	104		98		70-130	6		25
2,2,4-Trimethylpentane	102		100		70-130	2		25
n-Nonane	116		105		30-130	10		25
n-Decane	156	Q	124		70-130	23		25
n-Butylcyclohexane	116		108		70-130	7		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 60 BRAINERD RD

Project Number: 5265

Lab Number: L1115717

Report Date: 10/12/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG494987-1 WG494987-2

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	74		83		70-130
2,5-Dibromotoluene-FID	79		89		70-130

Project Name: 60 BRAINERD RD

Lab Number: L1115717

Project Number: 5265

Report Date: 10/12/11

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal**Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1115717-01A	Vial HCl preserved	A	N/A	2.9	Y	Absent	VPH-DELUX-10(14)
L1115717-01B	Vial HCl preserved	A	N/A	2.9	Y	Absent	VPH-DELUX-10(14)
L1115717-01C	Amber 1000ml HCl preserved	A	<2	2.9	Y	Absent	EPH-DELUX-10(14)
L1115717-01D	Amber 1000ml HCl preserved	A	<2	2.9	Y	Absent	EPH-DELUX-10(14)

*Values in parentheses indicate holding time in days

Project Name: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

GLOSSARY

Acronyms

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.
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.

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

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 five times (5x) 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.
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 RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value 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.

Report Format: Data Usability Report



Project Name: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

Data Qualifiers

- 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.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: 60 BRAINERD RD
Project Number: 5265

Lab Number: L1115717
Report Date: 10/12/11

REFERENCES

- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.
- 100 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, July 2010.

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.



Certificate/Approval Program Summary

Last revised September 19, 2011 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE,
Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 6010B, 7196A, 7471A,
 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3545, 3546, 3550B,
 3580A, 3630C, 5035, 8015B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**
 Refer to MA-DEP Certificate for Potable and Non-Potable Water.
 Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2,
 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C,
 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D,
 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0,
 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015,
 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH,
 MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B,
 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082,
 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine,
 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total
 Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total
 Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄
 in a soil matrix.



ATTACHMENT D

AREAS OF CRITICAL CONCERN, ENDANGERED AND THREATENED SPECIES

The 60 Brainerd Road property is located in an area of Allston, Massachusetts that is generally occupied by residential, commercial and retail properties. Based on a review of Massachusetts Geographic Information Systems DEP Priority Resources' Map, there are no drinking water supplies, no Areas of Critical Environmental Concern, no Sole Source Aquifers, no fish habitats, and no habitats of Species of Special Concern or Threatened or Endangered Species at or within 500-feet of the subject site. No Protected Open Space is indicated within 500-feet of the subject property. Wetlands and a 500-year flood zone are indicated along part of the seawall to the north of the property.

There are no surface water bodies located within the site boundaries. The Charles River, the nearest surface water body, is located approximately 0.93 miles to the northeast of the site. The Charles River is a 303(d) water quality impaired water body for pollutants such as chlorophyll-a, DDT, Escherichia Coli, non-native aquatic plants, oil and grease, dissolved oxygen, nutrients, total phosphorus, PCBs, sediment, and pH.

A review of the most recent federal listing of threatened and endangered species published by the U.S. Fish and Wildlife Service did not identify the presence of threatened and/or endangered species or critical habitats at or in the vicinity of the discharge location and/or discharge outfall. In addition, a review of the Massachusetts Division of Fisheries and Wildlife on-line database did not indicate the presence of threatened or endangered species at the point of discharge and/or the discharge outfall.

Based upon the above, the site is considered criterion A pursuant to Appendix IV of the RGP.

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

June 2009

Total Approximate Acreage: 268,000 acres

Approximate acreage and designation date follow ACEC names below.

Bourne Back River

(1,850 acres, 1989) Bourne

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

Cedar Swamp

(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley

(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed

(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor

(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog

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

Golden Hills

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

Great Marsh (originally designated as Parker River/Essex Bay)

(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Herring River Watershed

(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed

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

Hockomock Swamp

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

Inner Cape Cod Bay

(2,600 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin

(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed

(7,000 acres, 1992) Egremont and Mount Washington

Miscoe, Warren, and Whitehall Watersheds

(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary

(1,300 acres, 1995) Boston, Milton, and Quincy

Petapawag

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

Pleasant Bay

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

Pocasset River

(160 acres, 1980) Bourne

Rumney Marshes

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

Sandy Neck Barrier Beach System

(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin

(13,750 acres, 1990) Mount Washington and Sheffield

Squannassit

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

Three Mile River Watershed

(14,280 acres, 2008) Dighton, Norton, Taunton

Upper Housatonic River

(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

Waquoit Bay

(2,580 acres, 1979) Falmouth and Mashpee

Weir River

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

Wellfleet Harbor

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

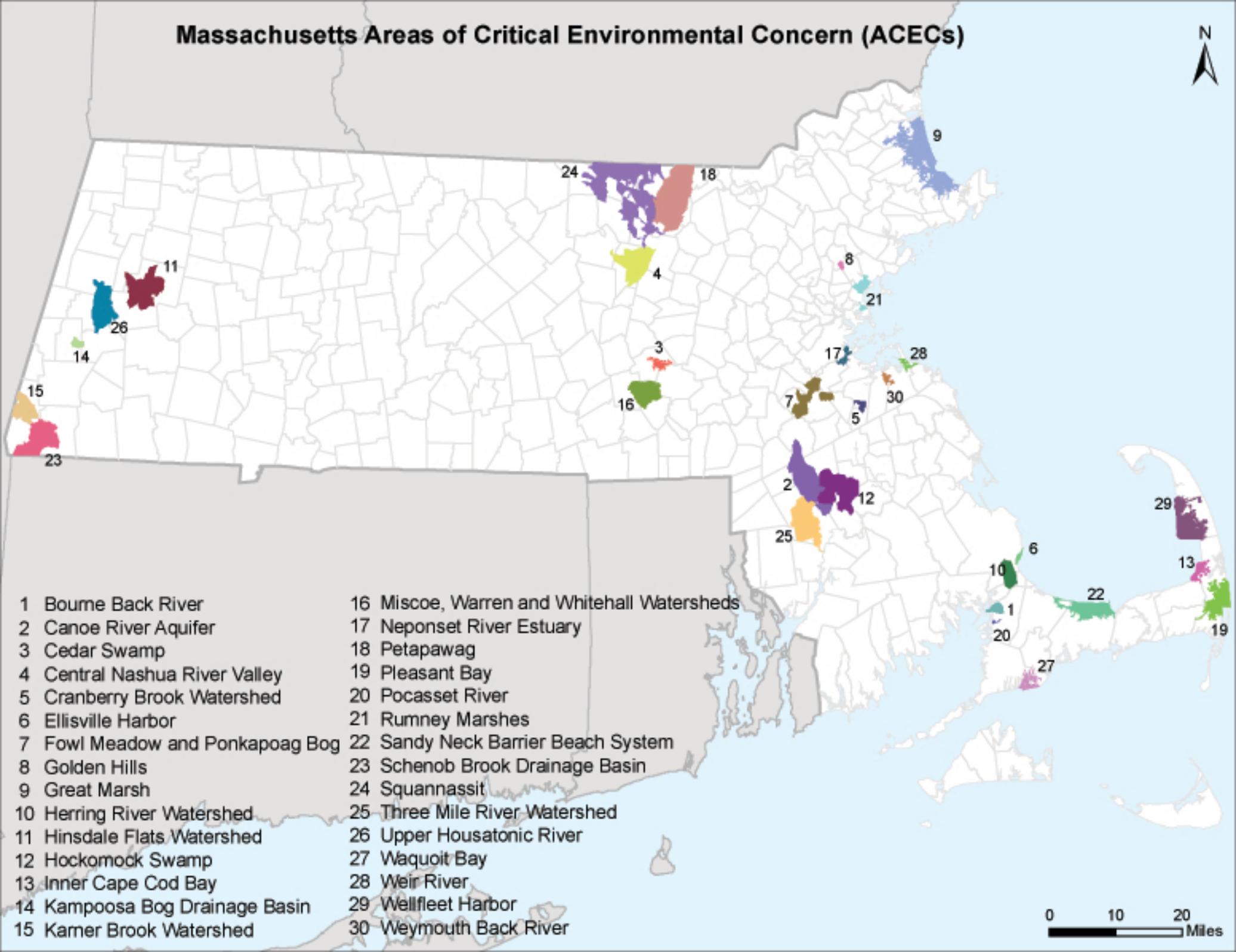
Weymouth Back River

(800 acres, 1982) Hingham and Weymouth

Towns with ACECs within their Boundaries
June 2009

TOWN	ACEC	TOWN	ACEC
Ashby	Squannassit	Mt. Washington	Karner Brook Watershed
Ayer	Petapawag		Schenob Brook
	Squannassit	Newbury	Great Marsh
Barnstable	Sandy Neck Barrier Beach System	Norton	Hockomock Swamp
Bolton	Central Nashua River Valley		Canoe River Aquifer
Boston	Rumney Marshes		Three Mile River Watershed
	Fowl Meadow and Ponkapoag Bog	Norwood	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary	Orleans	Inner Cape Cod Bay
Bourne	Pocasset River		Pleasant Bay
	Bourne Back River	Pepperell	Petapawag
	Herring River Watershed		Squannassit
Braintree	Cranberry Brook Watershed	Peru	Hinsdale Flats Watershed
Brewster	Pleasant Bay	Pittsfield	Upper Housatonic River
	Inner Cape Cod Bay	Plymouth	Herring River Watershed
Bridgewater	Hockomock Swamp		Ellisville Harbor
Canton	Fowl Meadow and Ponkapoag Bog	Quincy	Neponset River Estuary
Chatham	Pleasant Bay	Randolph	Fowl Meadow and Ponkapoag Bog
Cohasset	Weir River	Raynham	Hockomock Swamp
Dalton	Hinsdale Flats Watershed	Revere	Rumney Marshes
Dedham	Fowl Meadow and Ponkapoag Bog	Rowley	Great Marsh
Dighton	Three Mile River Watershed	Sandwich	Sandy Neck Barrier Beach System
Dunstable	Petapawag	Saugus	Rumney Marshes
Eastham	Inner Cape Cod Bay		Golden Hills
	Wellfleet Harbor	Sharon	Canoe River Aquifer
Easton	Canoe River Aquifer		Fowl Meadow and Ponkapoag Bog
	Hockomock Swamp	Sheffield	Schenob Brook
Egremont	Karner Brook Watershed	Shirley	Squannassit
Essex	Great Marsh	Stockbridge	Kampoosa Bog Drainage Basin
Falmouth	Waquoit Bay	Taunton	Hockomock Swamp
Foxborough	Canoe River Aquifer		Canoe River Aquifer
Gloucester	Great Marsh	Truro	Three Mile River Watershed
Grafton	Miscoe-Warren-Whitehall Watersheds	Townsend	Wellfleet Harbor
		Tyngsborough	Squannassit
Groton	Petapawag	Upton	Petapawag
	Squannassit		Miscoe-Warren-Whitehall Watersheds
Harvard	Central Nashua River Valley	Wakefield	Golden Hills
	Squannassit	Washington	Hinsdale Flats Watershed
Harwich	Pleasant Bay		Upper Housatonic River
Hingham	Weir River	Wellfleet	Wellfleet Harbor
	Weymouth Back River	W Bridgewater	Hockomock Swamp
Hinsdale	Hinsdale Flats Watershed	Westborough	Cedar Swamp
Holbrook	Cranberry Brook Watershed	Westwood	Fowl Meadow and Ponkapoag Bog
Hopkinton	Miscoe-Warren-Whitehall Watersheds	Weymouth	Weymouth Back River
		Winthrop	Rumney Marshes
	Cedar Swamp		
Hull	Weir River		
Ipswich	Great Marsh		
Lancaster	Central Nashua River Valley		
	Squannassit		
Lee	Kampoosa Bog Drainage Basin		
	Upper Housatonic River		
Lenox	Upper Housatonic River		
Leominster	Central Nashua River Valley		
Lunenburg	Squannassit		
Lynn	Rumney Marshes		
Mansfield	Canoe River Aquifer		
Mashpee	Waquoit Bay		
Melrose	Golden Hills		
Milton	Fowl Meadow and Ponkapoag Bog		
	Neponset River Estuary		

Massachusetts Areas of Critical Environmental Concern (ACECs)



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



**FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
 IN MASSACHUSETTS**

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

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

7/31/2008



New England Field Office

Conserving the Nature of New England

Friday,
November 18, 2011

ENDANGERED SPECIES

Overview
Consultation
N.E. Listed Species
Species Under Review
Recovery Activities
Habitat Conservation
Images
Biological Opinions

PARTNERS FOR FISH & WILDLIFE

Overview
Restoration Initiatives
Species & Habitats of
Special Concern
Accomplishments
How to Participate
Habitat Restoration
Links

ENVIRONMENTAL CONTAMINANTS

Overview
BTAG
NRDAR
Special Studies
Oil Spills

FEDERAL ACTIVITIES

Overview
Federal Projects &
Permits
Wetland Permits
FERC_ Hydropower
Projects
River Flow Protection
Wind Energy Projects

OUTREACH

NH Envirothon
Kids Corner
Let's Go Outside

Staff Directory

Our Location

HOME



Endangered Species

New England Listed Species

The following federally-listed species are protected in New England. This list includes links to species information on our National Fish and Wildlife Service website including current Federal Register documents, HCPs, Recovery Plans, Life History accounts.

Vertebrates

Mammals

Eastern Cougar - [Puma \(=Felis\) concolor cougar](#)
Gray Wolf - [Canis lupus](#)
Indiana Bat - [Myotis sodalis](#)
Canada Lynx - [Lynx canadensis](#)

Birds

Atlantic Coast Piping Plover - [Charadrius melodus](#)
Birds of North America Species Account [Piping Plover](#)
Atlantic Coast piping plover website [Piping Plover](#)
Roseate Tern – [Sterna dougallii dougallii](#)
Birds of North America Species Account [Roseate Tern](#)

Reptiles

Bog Turtle - [Clemmys muhlenbergii](#)
Northern Redbelly Cooter (Plymouth redbelly turtle) [Pseudemys rubriventris bangsii](#)
[Northern Redbelly Cooter 5-year Review](#); (pdf size 1.6MB*) May 2007

Fish

Atlantic Salmon - [Salmo salar](#) (Maine only)
[Maine Atlantic Salmon Atlas](#)

Invertebrates

Insects

American Burying Beetle - [Nicrophorus americanus](#)
Karner Blue Butterfly - [Lycaeides melissa samuelis](#)
Karner Blue Butterfly Fact sheet
Northeastern Beach Tiger Beetle - [Cicindela dorsalis dorsalis](#)
Puritan Tiger Beetle - [Cicindela puritana](#)
[Draft Puritan Tiger Beetle](#); (pdf size 2.4MB*) 5-year Review

Mussels

Dwarf Wedgemussel - [Alasmidonta heterodon](#)
[Dwarf Wedgemussel 5-Year Status Review 2007](#) (pdf size 1.14MB*)

Plants

Jesup's Milkvetch - [Astragalus robbinsii var. jesupi](#)
Northeastern Bulrush - [Scirpus ancistrochaetus](#)
Sandplain Gerardia - [Agalinis acuta](#)
Small Whorled Pogonia - [Isotria medeoloides](#)
Seabeach Amaranth - [Amaranthus pumilus](#) (historic)
American Chaffseed - [Schwalbea americana](#) (historic)
Eastern Prairie Fringed Orchid - [Platanthera leucophaea](#) (Maine only)
Furbish's Lousewort - [Pedicularis furbishiae](#) (Maine only)

Candidate species and species recently delisted are identified below, including links for additional information regarding their status.

Candidate Species

The Service has recently completed a status assessment for the following species and determined that federal listing is "warranted, but precluded", i.e. the status of the species indicates that it should be listed but the listing is superceded by higher listing actions.

While there is currently no obligation for Federal Agencies to consult with us regarding these species, coordination is encouraged to avoid project delays that may occur as a result of the species becoming federally-listed during the planning or construction phases of a given project. In addition, the Service is interested in promoting conservation actions that may result in benefits to these species that will prevent the need to list it. Information regarding our [candidate conservation](#) program may help you decide if you would like to become involved.

- [New England Cottontail; *Sylvilagus transitionalis*](#)
- Red Knot [Calidris canutus rufa](#); [Red Knot Fact Sheet](#)

Delisted Species

Bald Eagle - [Haliaeetus leucocephalus](#)
[Bald Eagle Guidance](#)



NCTC Eagle Cam

This Bald Eagle image is a link to a Service website that chronicles the activities of the eagle nest located on the grounds of the USFWS National Conservation Training Center near the Potomac River in Shepherdstown, West Virginia. The nest has been active for four seasons, fledging several juvenile bald eagles.

Files in PDF format will require Acrobat Reader to access the content. If you do not have a copy, please select the link [or click the image] to take you to the Adobe website where you can download a free copy. [Get Adobe Acrobat Reader](#)

Last updated: October 28, 2010



ATTACHMENT E

NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places on-line database was reviewed for listings located within the immediate vicinity of the subject site in Boston, Massachusetts. A review of the most recent National Register of Historical Places for Suffolk County, Massachusetts did not identify records or addresses of Historic Places that exist in the immediate vicinity of the subject site and/or outfall location. The nearest National Historic Place to the subject site is the Allston Congregational Church which is located approximately 0.2 miles to the north of the subject site. It is not anticipated that dewatering activities at the subject site will affect the Allston Congregational Church.

Based upon the above, the site considered criterion 2 pursuant to Appendix IV of the RGP.



APPENDIX F

Best Management Practice Plan

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction dewatering that may occur at the 60 Brainerd Road property located in Allston, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

Construction dewatering effluent is anticipated to be pumped from localized sumps and trenches within the excavation and directly into a treatment system consisting of an oil/water separator, settling tank, an organo clay media vessel, and granular activated carbon filter. The effluent will be discharged through hoses into a storm water catch basin located at the western portion of the 60 Brainerd Road property which flows to a dedicated storm drain located beneath Brainerd Road. Based upon a review of the Boston Water and Sewer Commission stormwater drain GIS database, the stormwater drain beneath Brainerd Road ultimately discharges into the Charles River.

Discharge Monitoring and Compliance

Regular sampling and testing will be conducted at the influent to the system and the treated effluent as required by the RGP. This includes chemical testing required within days 1 and 3 of initial discharge and the monthly testing to be conducted through the end of the scheduled discharge.

Monitoring will include checking the condition of the treatment system, assessing the need for treatment system adjustments based on monitoring data, observing and recording daily flow rates and discharge quantities, and verifying the flow path of the discharged effluent.

The total monthly flow will be monitored by checking and documenting the flow through the flow meter to be installed on the system. Flow will be maintained below the "system design flow" by regularly monitoring flow and adjusting the amount of construction dewatering as needed.

Monthly monitoring reports will be compiled and maintained at the site



System Maintenance

A number of methods will be used to minimize the potential for violations for the term of this permit. Scheduled regular maintenance of the treatment system will be conducted to verify proper operation. Regular maintenance will include checking the condition of the treatment system equipment such as the oil/water separator, settling tank, organo clay media vessel, GAC filter, hoses, pumps, and flow meters. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.

Employees who have direct or indirect responsibility for ensuring compliance with the RGP will be trained by the Contractor.

Miscellaneous Items

It is anticipated that the erosion control measures and the nature of the site will minimize potential runoff to or from the site. The project specifications also include requirements for erosion control. Site security for the treatment system will be covered within the overall site security plan.

No adverse affects on designated uses of surrounding surface water bodies is anticipated. The nearest surface water body is the Charles River which is located 0.93 miles to the northeast of the subject site. Groundwater will be pumped through a treatment system consisting of an oil/water separator, settling tank, organo clay media vessel, and GAC filter in series prior to discharge into the City of Boston storm drain system.

Management of Treatment System Materials

Dewatering effluent will be pumped directly to the treatment system from the excavation with use of hoses and sumps to minimize handling. The Contractor will establish staging areas for equipment or materials storage that may be possible sources of pollution away from any dewatering activities, to the extent practicable.

Sediment and oil from the oi/water separator and settling tank used in the treatment system will be characterized and removed from the site to an appropriate receiving facility, in accordance with applicable laws and regulations. Organo clay and carbon resin will be recycled and/or removed from the site to an appropriate receiving facility as necessary.