Cochituate Rail Trail Phase I Environmental Site Assessment

Prepared for:
Town of Natick
13 East Central Street
Natick, MA 01760

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May 27, 2016

Sign-off Sheet and Signatures of Environmental Professionals

This document entitled Cochituate Rail Trail Phase I Environmental Site Assessment was prepared by Stantec Consulting Services Inc. (Stantec) for the account of Town of Natick. The material in it reflects Stantec's best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

All information, conclusions, and recommendations provided by Stantec in this document regarding the Phase I ESA have been prepared under the supervision of and reviewed by the professionals whose signatures appear below.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

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Abbreviations

AAI	All Appropriate Inquiry
ACM	Asbestos containing material
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
BER	Business Environmental Risk
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulation
CREC	Controlled Recognized Environmental Conditions
CWA	Clean Water Act
ELUC	Environmental Land Use Control
EP	Environmental Professional
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
ft msl	Feet above mean sea level
HREC	Historical Recognized Environmental Conditions
HWMU	Hazardous Waste Management Unit
LBP	Lead-based Paint
LNAPL	Light Non-Aqueous Phase Liquid
LUST	Leaking Underground Storage Tank
NESHAP	National Emissions Standard for Hazardous Air Pollutants
PAHs	Polynuclear Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
pVEC	Potential Vapor Encroachment Condition
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
SWMU	Solid Waste Management Unit
TSCA	Toxic Substance Control Act
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

1.0 SUMMARY

Stantec has completed a Phase I Environmental Site Assessment (ESA) report of the property designated as the Cochituate Rail Trail (a railroad right of way between Cochituate Road and North Main Street) in Natick, Massachusetts (the "Property"), on behalf of Town of Natick (the "Client"). The Property includes a former rail spur, currently referred to as the former Wonder Bread spur, which extends west off the northern portion of the main rail line, and ends at Speen Street. The work was performed according to Stantec's proposal and terms and conditions dated November 20, 2015 and Authorization for Additional Services dated March 29, 2016; these documents were accepted by the Client on March 9, 2016, and May 11, 2016, respectively. The Town of Natick (the "User") has been designated as the User of this report.

The Phase I ESA was conducted in conformance with the requirements of American Society for Testing and Materials (ASTM) Designation E 1527-13, except as may have been modified by the scope of work, and terms and conditions, requested by the Client. Any exceptions to, or deletions from, the ASTM practice are described in Section 2.3.

The Property is an estimated 2.5 mile long and approximately 45 feet to 100 feet wide vacant former rail bed located between Cochituate Road and North Main Street in Natick, MA. All rails and ties have been removed with the exception of a small section of the former Wonder Bread Spur where several railroad ties were observed to be buried under topsoil along the former rail bed. The Property is comprised of approximately 21.04 acres of land. According to the Town of Natick Zoning Map, dated December 31, 2015, and the Town of Natick Assessors Department, portions of the Property are zoned residential and industrial. A USGS Topographic Plan depicting the location of the Property is included as Figure 1. A Property map illustrating the main features of the Property and surficial soil sampling locations are provided on Figure 2A through E. Photographs taken during the Property reconnaissance visit are provided in Appendix A.

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of the Property designated as the Cochituate Rail Trail (a railroad right of way between Cochituate Road and North Main Street) in Natick, Massachusetts. The Property includes a former rail spur, currently referred to as the former Wonder Bread spur, which extends west off the northern portion of the main rail line, and ends at Speen Street. Any exceptions to, or deletions from, this practice are described in Section 2.3 of this report. In Stantec's opinion, this assessment has not revealed any HRECs or CRECs; however, the following two (2) RECs were identified in association with the Property.

REC #1:

On April 11th, 13th, 15th and 26th, 2016 and May 9th, 2016, Stantec personnel performed a limited subsurface investigation at the Property to determine if the Property's prior historical use as an active railroad has resulted in a reportable release under 310 CMR 40.0000 of the Massachusetts Contingency Plan (MCP). Composite soil samples were collected from a depth of 0 to 6 inches and in accordance with CSX Transportation Inc., guidelines. Stantec collected a total of thirty (30) five point composite soil samples (SS-1 through SS-30), from along the entire transect of the Property; one five point composite sample every 470 +/- feet from within the former rail bed. Composite sample collection started at

Cochituate Road and continued to North Main Street and included the former Wonder Bread Spur to Speen Street. Stantec collected a total of thirty (30) two point composite soil samples (SS-1 OT through SS-30 OT) every 470 +/- feet from outside the former rail bed but within the Property boundaries.

Stantec collected a total of seven (7) five point composite soil samples, one five point composite sample covering 50 feet, at the approximate former rail switch locations (the Wonder Bread Spur, Boston Scientific Spur, Edison Building Spur and Cochituate Street Spur) and the north and south sides of the overpass at Route 9. In addition, Stantec collected a five point composite over 170 feet along the Property line immediately adjacent to the Edison building substation with pad mounted transformer.

The composite samples were submitted to Eurofins Spectrum Analytical, Inc. for laboratory analysis of lead, arsenic, EPH with PAHs and PCBs with the exception of the SS-1 OT through SS-30 OT samples which were only analyzed for lead and arsenic. Laboratory analytical results show several analytes to be above applicable MCP RCS-1 Reportable Concentrations which include arsenic (33 samples), lead (2 samples) and PAHs (30 samples). Furthermore the concentration of arsenic detected in eleven (11) samples exceeds the applicable imminent hazard concentration of 40 parts per million (ppm) for soil located between 0 and 12 inches below the ground surface in accordance with 310 CMR 40.0321(2)b of the MCP.

It is Stantec's opinion that the detected compounds above applicable RCS-1 Reportable Concentrations are attributable to the historic use of the Property as an active railway. Contaminant concentrations at the Property are consistent with background concentrations found in soil containing coal or wood ash (MADEP Technical Update, *Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil*). According to the United States Geological Survey, Arsenic in Coal, dated February 2006, the average concentration of arsenic in coal from the United States is 24 ppm and concentrations of arsenic from certain regions may be as high as 71 ppm. According to MADEPs guidance document titled *Best Management Practices for Controlling Exposure to Soil during the Development of Rail Trails,* it would not be uncommon to find arsenic (up to ten times natural background levels) present in soil along a right of way from old railroad ties dipped in an arsenic solution, arsenic weed control sprays and arsenic laced slag used as railroad bed fill. It is known that CSX Transportation Inc. lines, and likely the Property, used arsenic based herbicides (lead arsenate) for vegetation control along the railway. In accordance with 310 CMR 40.0317(8)(9), releases or threats of releases which do not require notification to the MADEP include releases resulting from the application of pesticides in a manner consistent with their labeling and releases related to coal, coal ash or wood ash.

Coal and/or coal ash are common components of rail bed fill and were observed in surficial soils (at a depth of 0 to 6 inches) at the Property. Stantec submitted composite soil sample SS-21 to Eurofins Spectrum Analytical, Inc. for coal/coal ash analysis using polarized light microscopy with energy dispersive x-ray spectroscopy. Laboratory analytical results confirmed the presence of heavy concentrations of coal, coal ash and wood ash within the composite sample.

The Town of Natick is anticipating the development of the Property into a recreational trail. Although the contaminants found at the Property are exempt from reporting under the MCP, human exposure to contaminated soils at the Property during pre-construction, construction and post-construction activities

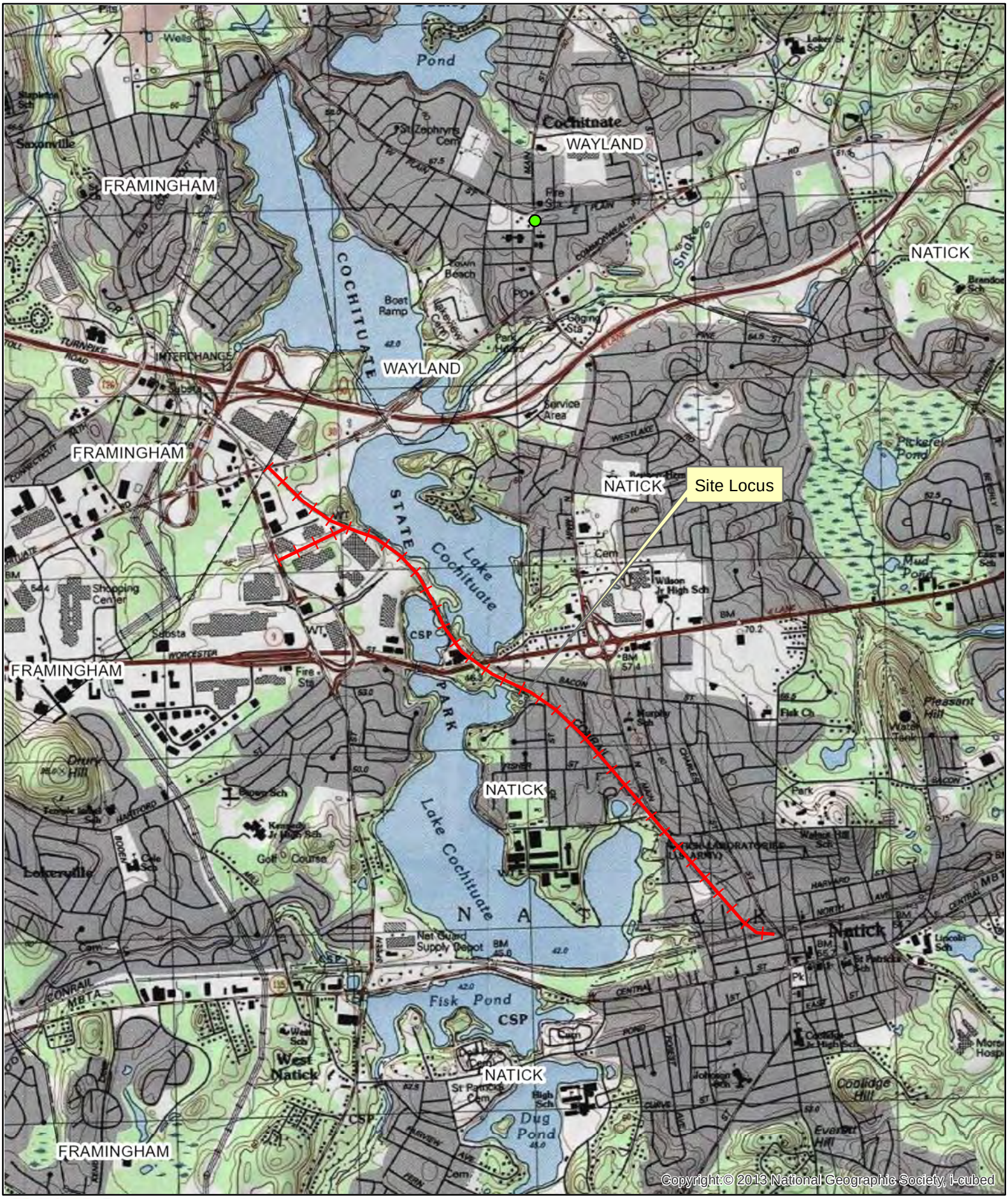
must be limited in accordance with the MADEPs guidance document titled *Best Management Practices for Controlling Exposure to Soil during the Development of Rail Trails*. The recreational path will be constructed by grading and capping the existing rail bed. Section 6.0 of The Town of Natick, MA Cochituate Rail Trail conceptual Design Study, performed by Fay, Spofford & Thorndike, Inc., dated April 2010 for the Town of Natick, provides several design options for the rail bed cap. Section 6.0 of this document is included in Appendix B. The Town of Natick anticipates the rail bed cap to be constructed with a minimum of 8 inches of a compacted base gravel layer and 4 inches of hot mix asphalt. This capping meets MassDOT's standards for multi-use paths. The cap will be approximately 12 to 14 feet wide and cover the former railway bed. The cap will cover the entire 2.5 mile length of the former rail bed associated with the Property. This measure will adequately reduce future potential exposure to historical contaminants associated with the former rail bed. It is anticipated that no existing soils at the Property will be stockpiled or moved off-Property. However, Stantec has developed a Soil Management Plan (SMP) to manage and reduce exposure to potentially impacted soils during the redevelopment of the Property into a recreational path. A copy of this SMP is included in Appendix G and should be used in conjunction with MADEP's best management practices.

REC #2:

A petroleum release (RTN 3-26050) to soil and groundwater, at the adjacent property located at 82 North Main Street (the former Natick Paperboard Facility), has impacted the soil and groundwater at the Property via migration of LNAPL on groundwater. This release is currently undergoing response actions under the MCP by the property owner associated with the source of the release.

The preceding summary is intended for informational purposes only. Reading of the full body of this report is recommended.

Figure 1 Property Location Map



0 0.25 0.5 1 1.5 Miles

N

Stantec

Figure 1
Site Locus Map
Cochituate Rail Trail
Natick, Massachusetts
Source: ArcGIS Online Datalayers

Figure 2A through E Soil Sampling Locations and Property Map

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2016/05/25 2:04 PM By: Harrison, Lanston

ORIGINAL SHEET - ANSI B

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Legend

SOIL SAMPLING LOCATION

2 COMPOSITE SOIL SAMPLING LOCATION

Client/Project

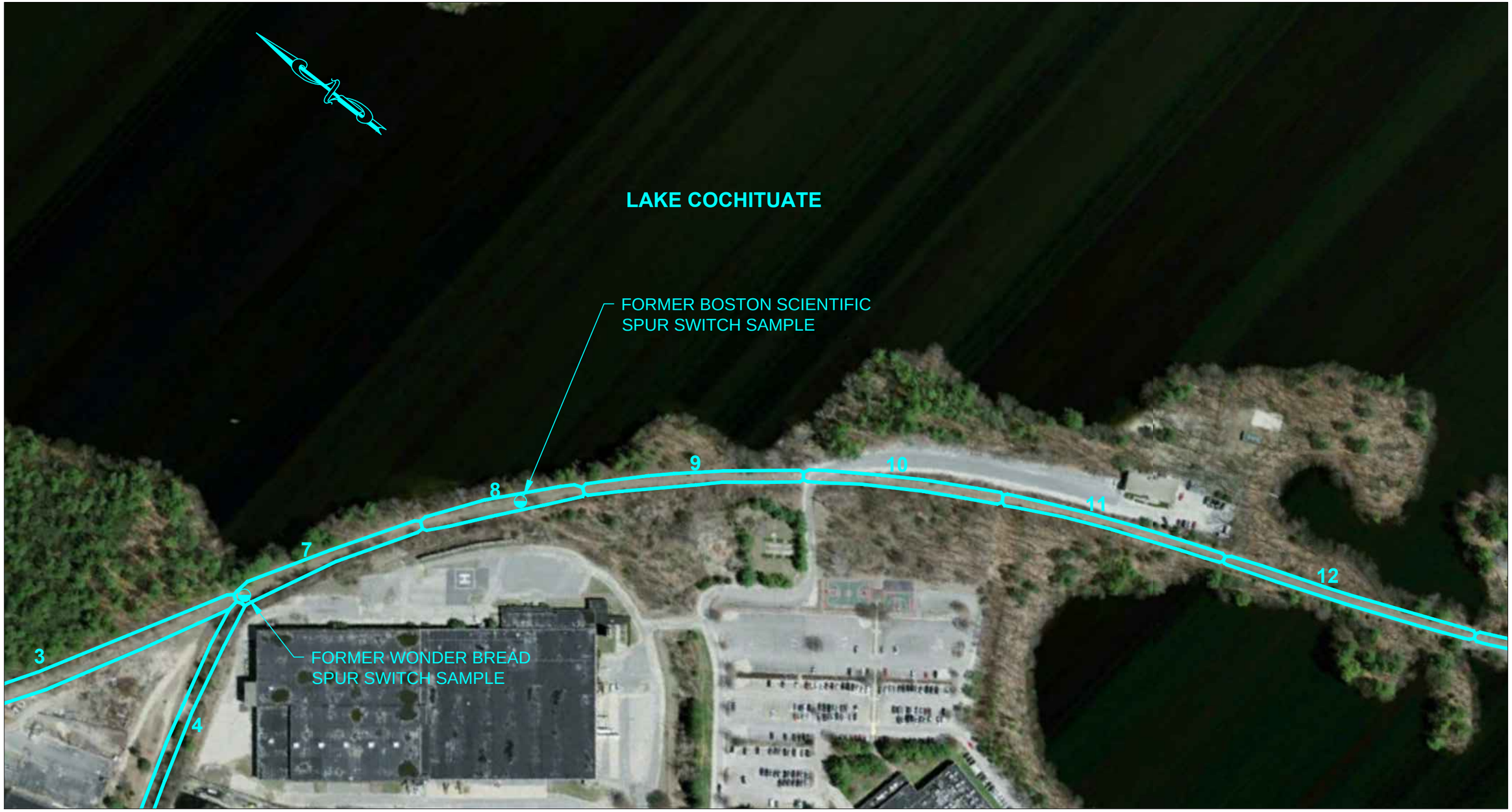
TOWN OF NATICK
NATICK, MASSACHUSETTS

Figure No.

2A

Title

SOIL SAMPLING MAP
NATICK MASSACHUSETTS



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SOIL SAMPLING LOCATION

2 COMPOSITE SOIL SAMPLING LOCATION

Client/Project

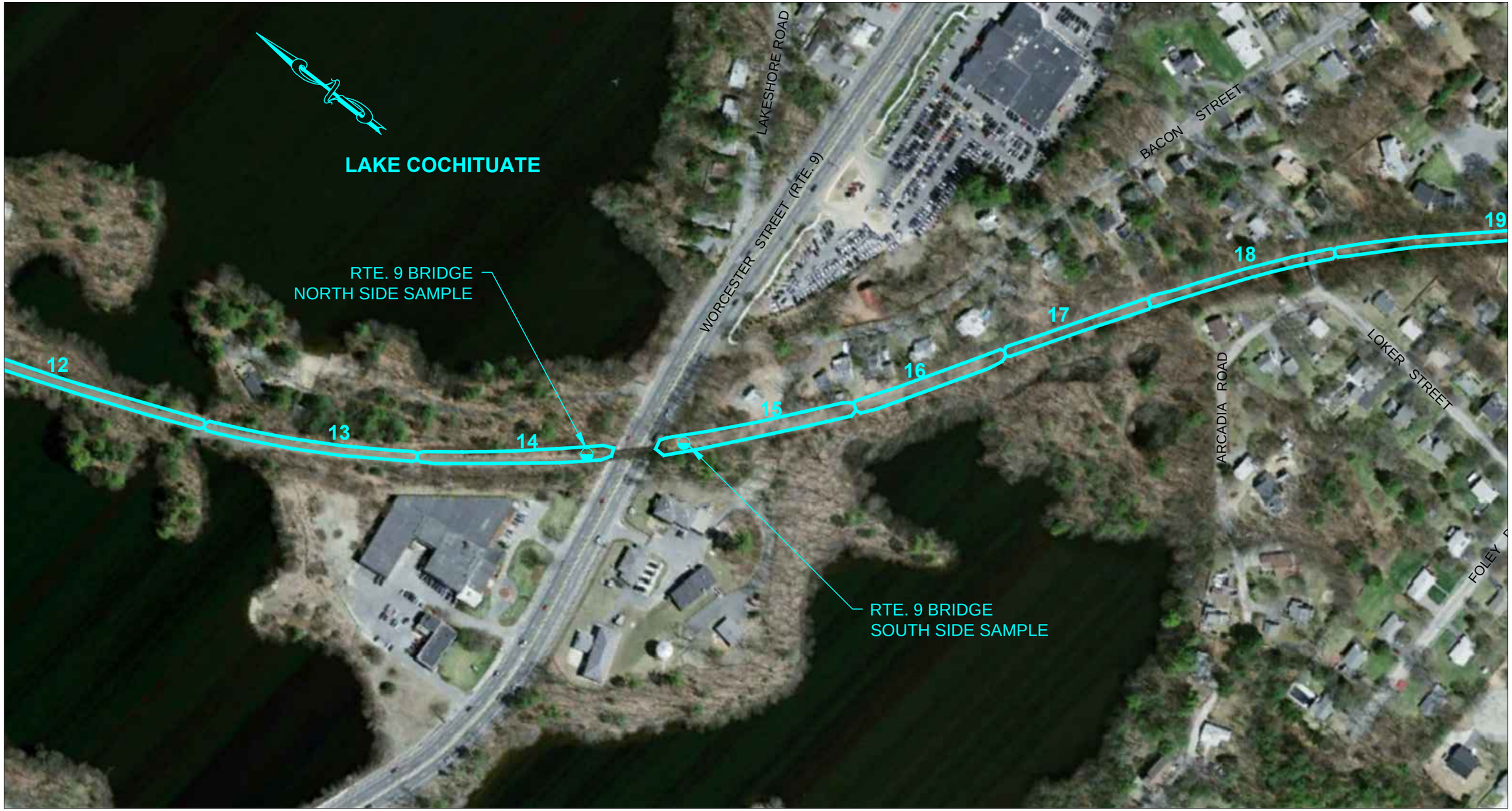
TOWN OF NATICK
NATICK, MASSACHUSETTS

Figure No.

2B

Title

SOIL SAMPLING MAP
NATICK MASSACHUSETTS



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SOIL SAMPLING LOCATION

2 COMPOSITE SOIL SAMPLING LOCATION

Client/Project

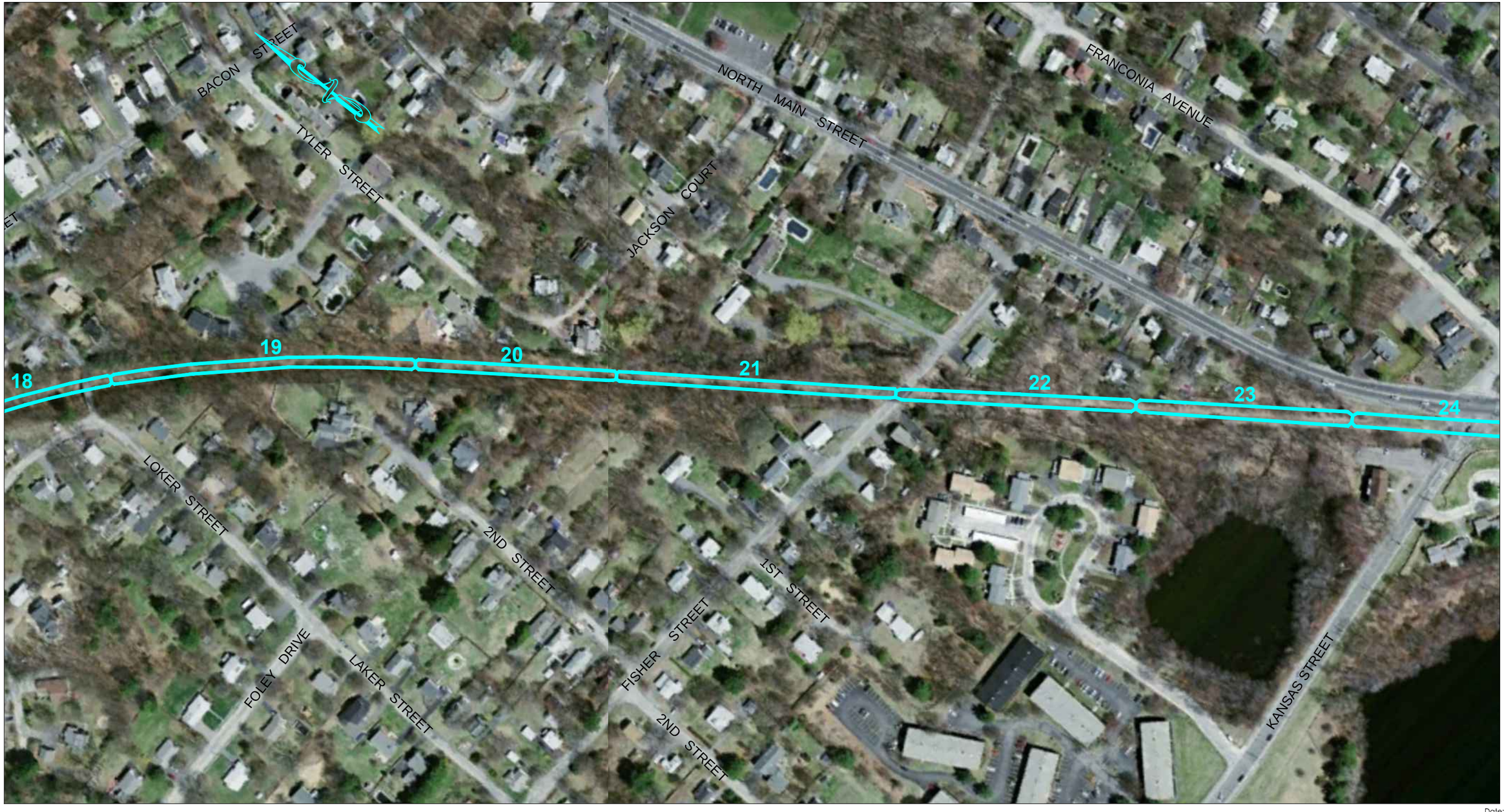
TOWN OF NATICK
NATICK, MASSACHUSETTS

Figure No.

2C

Title

SOIL SAMPLING MAP
NATICK MASSACHUSETTS



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Legend

SOIL SAMPLING LOCATION

2 COMPOSITE SOIL SAMPLING LOCATION

Client/Project

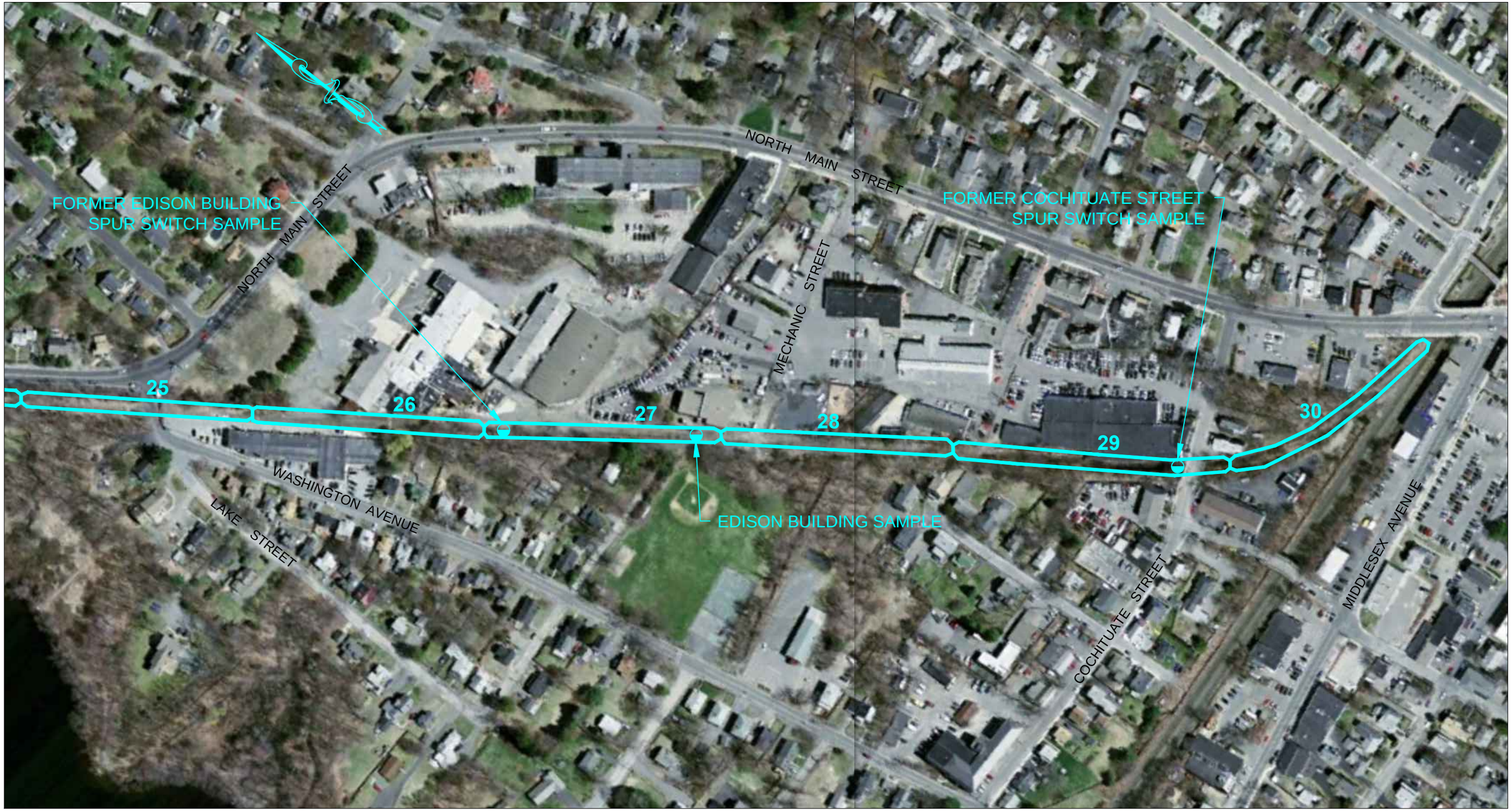
TOWN OF NATICK
NATICK, MASSACHUSETTS

Figure No.

2D

Title

SOIL SAMPLING MAP
NATICK MASSACHUSETTS



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2016/05/25 2:07 PM By: Harrison, Lanston

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SOIL SAMPLING LOCATION

2 COMPOSITE SOIL SAMPLING LOCATION

Client/Project

TOWN OF NATICK
NATICK, MASSACHUSETTS

Figure No.

2E

Title

SOIL SAMPLING MAP
NATICK MASSACHUSETTS

TABLE 1 Soil Laboratory Analytical Data Summary

Table 1 (page 1 of 4)
Summary of EPH, PAHs, Lead, Arsenic and PCBs in Soil Laboratory Analytical Data
Natick Cochituate Rail Trail: Route 30 to North Main Street
Natick, Massachusetts

		<----Route 30						Wonder Bread Spur									Continued--->
Composite Sample ID:		**1**	**1-OT**	**2**	**2-OT**	**3**	**3-OT**	**4**	**4-OT**	**5**	**5-OT**	**6**	**6-OT**	**7**	**7-OT**	**8**	**8-OT**
Sample Depth:		**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**
Sample Date:		**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**
	RCS-1																
Extractable Petroleum Hydrocarbons (mg/kg dry)																	
C9-C18 Aliphatic Hydrocarbons	1000	< 10.9	NS	< 10.8	NS	< 10.8	NS	< 10.7	NS	< 10.5	NS	< 11.1	NS	< 10.9	NS	< 10.9	NS
C19-C36 Aliphatic Hydrocarbons	3000	< 10.9	NS	< 10.8	NS	< 10.8	NS	< 10.7	NS	< 10.5	NS	< 11.1	NS	**49.9**	NS	< 10.9	NS
C11-C22 Aromatic Hydrocarbons	1000	**43**	NS	**240**	NS	**117**	NS	**124**	NS	**53.1**	NS	**20.2**	NS	**244**	NS	**117**	NS
Polycyclic Aromatic Hydrocarbons (mg/kg)																	
Naphthalene	4	< 0.361	NS	< 0.360	NS	< 0.360	NS	< 0.356	NS	< 0.349	NS	< 0.369	NS	**0.825**	NS	< 0.363	NS
2-Methylnaphthalene	0.7	< 0.361	NS	< 0.360	NS	< 0.360	NS	< 0.356	NS	< 0.349	NS	< 0.369	NS	< 0.365	NS	< 0.363	NS
Acenaphthylene	1	< 0.361	NS	**1.32**	NS	**0.587**	NS	**0.575**	NS	< 0.349	NS	< 0.369	NS	< 0.365	NS	**0.576**	NS
Acenaphthene	4	< 0.361	NS	< 0.360	NS	< 0.360	NS	< 0.356	NS	< 0.349	NS	< 0.369	NS	**1.35**	NS	< 0.363	NS
Fluorene	1000	< 0.361	NS	< 0.360	NS	< 0.360	NS	< 0.356	NS	< 0.349	NS	< 0.369	NS	**1.59**	NS	< 0.363	NS
Phenanthrene	10	**0.386**	NS	**1.23**	NS	**0.47**	NS	**1.93**	NS	**0.356**	NS	< 0.369	NS	**15.2**	NS	**0.73**	NS
Anthracene	1000	< 0.361	NS	**0.618**	NS	< 0.360	NS	< 0.356	NS	< 0.349	NS	< 0.369	NS	**3.98**	NS	< 0.363	NS
Fluoranthene	1000	**3.11**	NS	**16.7**	NS	**6.49**	NS	**9.94**	NS	**3.55**	NS	**1.36**	NS	**19.7**	NS	**5.52**	NS
Pyrene	1000	**3.27**	NS	**17.4**	NS	**7.14**	NS	**9.01**	NS	**3.37**	NS	**1.28**	NS	**17.1**	NS	**5.53**	NS
Benzo (a) anthracene	7	**2**	NS	**10.8**	NS	**4.41**	NS	**4.64**	NS	**1.98**	NS	**0.746**	NS	**10.4**	NS	**3.62**	NS
Chrysene	70	**2.16**	NS	**9.67**	NS	**4.32**	NS	**5.44**	NS	**2.27**	NS	**0.888**	NS	**8.81**	NS	**3.82**	NS
Benzo (b) fluoranthene	7	**2.43**	NS	**11.3**	NS	**4.53**	NS	**5.93**	NS	**3.05**	NS	**1.11**	NS	**8.76**	NS	**5.79**	NS
Benzo (k) fluoranthene	70	**2.62**	NS	**10.7**	NS	**4.75**	NS	**5.73**	NS	**2.59**	NS	**0.791**	NS	**7.46**	NS	**4.47**	NS
Benzo (a) pyrene	2	**2.13**	NS	**8.11**	NS	**4.12**	NS	**4.41**	NS	**1.89**	NS	**0.807**	NS	**9.11**	NS	**3.95**	NS
Indeno (1,2,3-cd) pyrene	7	**1.33**	NS	**4.48**	NS	**2.63**	NS	**2.9**	NS	**1.55**	NS	**0.619**	NS	**5.29**	NS	**2.91**	NS
Dibenzo (a,h) anthracene	0.7	**0.611**	NS	**1.67**	NS	**0.897**	NS	**1.05**	NS	**0.49**	NS	< 0.369	NS	**2.03**	NS	**1.05**	NS
Benzo (g,h,i) perylene	1000	**1.36**	NS	**4.11**	NS	**2.53**	NS	**2.79**	NS	**1.55**	NS	**0.723**	NS	**5.79**	NS	**2.99**	NS
Metals (mg/kg dry)																	
Arsenic	20	**24.2**	**10.9**	**32**	**28.7**	**27.3**	**5.23**	**36.8**	**4.1**	**5.32**	**4.63**	**4.55**	**5.74**	**5.4**	**3.43**	**24.2**	**23.2**
Lead	200	**49.7**	**58.1**	**32.9**	**41.7**	**22.3**	**22.4**	**33.8**	**13.5**	**9.88**	**11**	**23**	**29.6**	**28.1**	**18.8**	**25**	**65.1**
All Aroclor PCBs (ug/kg)	1000	< 21.5	NS	< 20.8	NS	**82.2**	NS	**59.7**	NS	< 20.5	NS	< 21.8	NS	**87.8**	NS	**76**	NS

NOTES:
RCS-1 indicates Massachusetts Contingency Plan 310 CMR 40.00 Reportable Concentrations
BLUE indicates detection is below RCS-1 Reportable Concentration
RED indicates detection is above RCS-1 Reportable Concentration
<0.345 indicates analyte was not detected above the laboratory detection limit
Composite Samples Collected every 470 feet from 5 discrete samples
NS indicates sample not analyzed

Table 1 (page 2 of 4)
Summary of EPH, PAHs, Lead, Arsenic and PCBs in Soil Laboratory Analytical Data
Natick Cochituate Rail Trail: Route 30 to North Main Street
Natick, Massachusetts

		<--- AMVETS Lodge										Route 9 Overpass					Continued--->
Composite Sample ID:		**9**	**9-OT**	**10**	**10-OT**	**11**	**11-OT**	**12**	**12-OT**	**13**	**13-OT**	**14**	**14-OT**	**15**	**15-OT**	**16**	**16-OT**
Sample Depth:		**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**
Sample Date:		**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/11/2016**	**4/13/2016**	**4/13/2016**
	RCS-1																
Extractable Petroleum Hydrocarbons (mg/kg dry)																	
C9-C18 Aliphatic Hydrocarbons	1000	< 11.1	NS	< 11.3	NS	< 10.7	NS	< 10.7	NS	< 10.5	NS	< 10.5	NS	< 11.0	NS	< 11.0	NS
C19-C36 Aliphatic Hydrocarbons	3000	< 11.1	NS	**43.9**	NS	**34.2**	NS	< 10.7	NS	**23.3**	NS	< 10.5	NS	< 11.0	NS	< 11.0	NS
C11-C22 Aromatic Hydrocarbons	1000	**119**	NS	**146**	NS	**92.1**	NS	**99.2**	NS	**153**	NS	**147**	NS	**207**	NS	**150**	NS
Polycyclic Aromatic Hydrocarbons (mg/kg)																	
Naphthalene	4	< 0.371	NS	< 0.377	NS	< 0.357	NS	< 0.355	NS	< 0.350	NS	< 0.350	NS	< 0.366	NS	< 0.368	NS
2-Methylnaphthalene	0.7	< 0.371	NS	< 0.377	NS	< 0.357	NS	< 0.355	NS	< 0.350	NS	< 0.350	NS	< 0.366	NS	< 0.368	NS
Acenaphthylene	1	**0.446**	NS	**0.57**	NS	**0.413**	NS	**0.45**	NS	**0.896**	NS	**0.447**	NS	**1.05**	NS	**0.446**	NS
Acenaphthene	4	< 0.371	NS	< 0.377	NS	< 0.357	NS	< 0.355	NS	< 0.350	NS	< 0.350	NS	< 0.366	NS	< 0.368	NS
Fluorene	1000	< 0.371	NS	< 0.377	NS	< 0.357	NS	< 0.355	NS	< 0.350	NS	< 0.350	NS	< 0.366	NS	< 0.368	NS
Phenanthrene	10	**0.957**	NS	**0.988**	NS	**0.649**	NS	**0.442**	NS	**0.62**	NS	**0.634**	NS	**1.42**	NS	**0.586**	NS
Anthracene	1000	< 0.371	NS	**1.91**	NS	< 0.357	NS	< 0.355	NS	**0.356**	NS	< 0.350	NS	**0.687**	NS	< 0.368	NS
Fluoranthene	1000	**6.53**	NS	**7.21**	NS	**4.85**	NS	**4.24**	NS	**7.56**	NS	**8.33**	NS	**13.8**	NS	**6.7**	NS
Pyrene	1000	**6.44**	NS	**7.59**	NS	**4.75**	NS	**4.52**	NS	**7.56**	NS	**10.8**	NS	**13.8**	NS	**7.31**	NS
Benzo (a) anthracene	7	**3.53**	NS	**4.62**	NS	**3.12**	NS	**2.99**	NS	**4.88**	NS	**5.85**	NS	**9.61**	NS	**4.88**	NS
Chrysene	70	**4.1**	NS	**5.48**	NS	**3.73**	NS	**3.59**	NS	**4.65**	NS	**6.03**	NS	**9.43**	NS	**5.22**	NS
Benzo (b) fluoranthene	7	**4.6**	NS	**6.7**	NS	**4.86**	NS	**5.46**	NS	**4.72**	NS	**6.62**	NS	**12.5**	NS	**7.06**	NS
Benzo (k) fluoranthene	70	**4.71**	NS	**6.13**	NS	**3.84**	NS	**3.7**	NS	**4.63**	NS	**5.74**	NS	**10.1**	NS	**6.27**	NS
Benzo (a) pyrene	2	**3.77**	NS	**5.24**	NS	**3.81**	NS	**3.47**	NS	**4.37**	NS	**4.53**	NS	**8.53**	NS	**5.14**	NS
Indeno (1,2,3-cd) pyrene	7	**2.74**	NS	**4.05**	NS	**2.67**	NS	**2.35**	NS	**2.7**	NS	**3.03**	NS	**6.06**	NS	**3.51**	NS
Dibenzo (a,h) anthracene	0.7	**0.964**	NS	**1.39**	NS	**0.91**	NS	**0.845**	NS	**1.07**	NS	**1.04**	NS	**2.17**	NS	**1.3**	NS
Benzo (g,h,i) perylene	1000	**2.72**	NS	**4.06**	NS	**2.8**	NS	**2.27**	NS	**2.71**	NS	**2.88**	NS	**5.8**	NS	**3.24**	NS
Metals (mg/kg dry)																	
Arsenic	20	**41.7**	**18.1**	**44.7**	**5.75**	**49.3**	**12.7**	**30.3**	**21.9**	**26.5**	**15.5**	**30.2**	**13.4**	**50.7**	**7.84**	**36**	**9.76**
Lead	200	**38.8**	**43.5**	**48.6**	**22.1**	**31.1**	**88.8**	**35.3**	**88.6**	**33.9**	**175**	**29.7**	**75.3**	**112**	**85**	**41.5**	**73.5**
All Aroclor PCBs (ug/kg)	1000	**51.1**	NS	< 22.4	NS	< 21.3	NS	< 21.4	NS	< 21.1	NS	< 20.7	NS	< 21.1	NS	< 22.2	NS

NOTES:
RCS-1 indicates Massachusetts Contingency Plan 310 CMR 40.00 Reportable Concentrations
BLUE indicates detection is below RCS-1 Reportable Concentration
RED indicates detection is above RCS-1 Reportable Concentration
<0.345 indicates analyte was not detected above the laboratory detection limit
Composite Samples Collected every 470 feet from 5 discrete samples
NS indicates sample not analyzed

Table 1 (page 3 of 4)
Summary of EPH, PAHs, Lead, Arsenic and PCBs in Soil Laboratory Analytical Data
Natick Cochituate Rail Trail: Route 30 to North Main Street
Natick, Massachusetts

		<--- Loker Street Bridge								Fisher Street							Continued--->
Composite Sample ID:		**17**	**17-OT**	**18**	**18-OT**	**19**	**19-OT**	**20**	**20-OT**	**21*****	**21-OT**	**22**	**22-OT**	**23**	**23-OT**	**24**	**24-OT**
Sample Depth:		**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**
Sample Date:		**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**
	RCS-1																
Extractable Petroleum Hydrocarbons (mg/kg dry)																	
C9-C18 Aliphatic Hydrocarbons	1000	< 10.8	NS	< 11.0	NS	< 11.0	NS	< 11.0	NS	< 12.0	NS	< 10.9	NS	< 11.3	NS	< 11.0	NS
C19-C36 Aliphatic Hydrocarbons	3000	< 10.8	NS	**18.1**	NS	< 11.0	NS	< 11.0	NS	**37.1**	NS	**13.9**	NS	< 11.3	NS	**85**	NS
C11-C22 Aromatic Hydrocarbons	1000	**113**	NS	**218**	NS	**165**	NS	**163**	NS	**155**	NS	**175**	NS	**180**	NS	**199**	NS
Polycyclic Aromatic Hydrocarbons (mg/kg)																	
Naphthalene	4	< 0.361	NS	< 0.367	NS	< 0.365	NS	< 0.368	NS	< 0.399	NS	< 0.363	NS	< 0.376	NS	< 0.366	NS
2-Methylnaphthalene	0.7	< 0.361	NS	< 0.367	NS	< 0.365	NS	< 0.368	NS	< 0.399	NS	< 0.363	NS	< 0.376	NS	< 0.366	NS
Acenaphthylene	1	< 0.361	NS	**1.04**	NS	**0.792**	NS	**0.82**	NS	**0.487**	NS	**0.668**	NS	**0.687**	NS	**0.517**	NS
Acenaphthene	4	< 0.361	NS	< 0.367	NS	< 0.365	NS	< 0.368	NS	< 0.399	NS	< 0.363	NS	< 0.376	NS	< 0.366	NS
Fluorene	1000	< 0.361	NS	< 0.367	NS	< 0.365	NS	< 0.368	NS	< 0.399	NS	< 0.363	NS	< 0.376	NS	< 0.366	NS
Phenanthrene	10	**1.72**	NS	**0.63**	NS	**1.45**	NS	**1.18**	NS	**0.926**	NS	**3.9**	NS	**1.29**	NS	**0.906**	NS
Anthracene	1000	< 0.361	NS	**0.496**	NS	**0.46**	NS	**0.443**	NS	**0.843**	NS	**0.668**	NS	**0.481**	NS	< 0.366	NS
Fluoranthene	1000	**10.4**	NS	**16.2**	NS	**13.3**	NS	**10.2**	NS	**6.32**	NS	**13.3**	NS	**9.54**	NS	**6.3**	NS
Pyrene	1000	**10.6**	NS	**15.6**	NS	**12.6**	NS	**9.63**	NS	**6.86**	NS	**11.4**	NS	**9.4**	NS	**6.11**	NS
Benzo (a) anthracene	7	**5.52**	NS	**9.13**	NS	**7.43**	NS	**6.5**	NS	**4.36**	NS	**5.18**	NS	**5.7**	NS	**3.83**	NS
Chrysene	70	**6.38**	NS	**8.23**	NS	**7.34**	NS	**6.14**	NS	**5.07**	NS	**6.55**	NS	**5.95**	NS	**3.79**	NS
Benzo (b) fluoranthene	7	**6.51**	NS	**8.5**	NS	**6.09**	NS	**7.52**	NS	**6.89**	NS	**7.49**	NS	**6.55**	NS	**4.86**	NS
Benzo (k) fluoranthene	70	**5.76**	NS	**8.13**	NS	**6.88**	NS	**6.2**	NS	**5.13**	NS	**6.04**	NS	**6.2**	NS	**3.74**	NS
Benzo (a) pyrene	2	**5.02**	NS	**6.87**	NS	**6.37**	NS	**5.54**	NS	**5.26**	NS	**4.89**	NS	**4.85**	NS	**3.47**	NS
Indeno (1,2,3-cd) pyrene	7	**3.02**	NS	**4**	NS	**3.82**	NS	**3.45**	NS	**4.02**	NS	**3.32**	NS	**3.14**	NS	**2.35**	NS
Dibenzo (a,h) anthracene	0.7	**1.02**	NS	**1.51**	NS	**1.36**	NS	**1.36**	NS	**1.32**	NS	**1.12**	NS	**1.26**	NS	**0.806**	NS
Benzo (g,h,i) perylene	1000	**2.92**	NS	**3.69**	NS	**3.57**	NS	**3.18**	NS	**4.28**	NS	**3.08**	NS	**2.83**	NS	**2.29**	NS
Metals (mg/kg dry)																	
Arsenic	20	**32.8**	**11.6**	**47.7**	**33.7**	**37.5**	**14.9**	**49.2**	**4.56**	**23.5**	**18.1**	**73.2**	**20.4**	**41.1**	**66.8**	**18.9**	**7.17**
Lead	200	**36.3**	**102**	**54.2**	**63.3**	**26.9**	**36**	**25.9**	**48.1**	**112**	**169**	**54.8**	**89.8**	**101**	**151**	**64.5**	**162**
All Aroclor PCBs (ug/kg)	1000	< 21.5	NS	< 21.9	NS	< 21.9	NS	< 20.8	NS	< 23.8	NS	< 22.3	NS	< 22.4	NS	< 21.6	NS

NOTES:
RCS-1 indicates Massachusetts Contingency Plan 310 CMR 40.00 Reportable Concentrations
BLUE indicates detection is below RCS-1 Reportable Concentration
RED indicates detection is above RCS-1 Reportable Concentration
<0.345 indicates analyte was not detected above the laboratory detection limit
***Sample submitted for coal/coal ash analysis. Results show heavy amounts of coal, coal ash and wood ash.
NS indicates sample not analyzed

Table 1 (page 4 of 4)
Summary of EPH, PAHs, Lead, Arsenic and PCBs in Soil Laboratory Analytical Data
Natick Cochituate Rail Trail: Route 30 to North Main Street
Natick, Massachusetts

		<---												Cochituate Street Bridge		End at N. Main St.	Additional 5 Point Composite Samples			
Composite Sample ID:		**25**	**25-OT**	**26**	**26-OT**	**27**	**27-OT**	**28**	**28-OT**	**29**	**29-OT**	**30**	**30-OT**	**Wonder Bread Switch**	**Boston Scientific Switch**	**Route 9 Bridge North**	**Route 9 Bridge South**	**Edison Building**	**Cochituate Street Switch**	**Edison Switch**
Sample Depth:		**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**	**(0-6)"**
Sample Date:		**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/13/2016**	**4/15/2016**	**5/9/2016**	**4/15/2016**	**4/15/2016**	**4/15/2016**	**4/15/2016**	**4/15/2016**
	RCS-1																			
Extractable Petroleum Hydrocarbons (mg/kg dry)																				
C9-C18 Aliphatic Hydrocarbons	1000	< 11.4	NS	< 11.3	NS	< 10.9	NS	< 10.6	NS	< 10.4	NS	< 11.3	NS	<11.0	<12.2	< 11.1	< 10.8	22.3	< 10.5	< 11.0
C19-C36 Aliphatic Hydrocarbons	3000	75.5	NS	31.7	NS	21.9	NS	137	NS	< 10.4	NS	< 11.3	NS	90.7	<12.2	49.8	45.9	133	< 10.5	< 11.0
C11-C22 Aromatic Hydrocarbons	1000	207	NS	163	NS	257	NS	158	NS	< 10.4	NS	34.6	NS	318	130	435	336	613	43.2	63
Polycyclic Aromatic Hydrocarbons (mg/kg)																				
Naphthalene	4	< 0.378	NS	< 0.377	NS	< 0.364	NS	< 0.352	NS	< 0.345	NS	< 0.375	NS	< 0.367	<0.405	< 0.370	< 0.361	< 1.91	< 0.349	< 0.366
2-Methylnaphthalene	0.7	< 0.378	NS	< 0.377	NS	< 0.364	NS	< 0.352	NS	< 0.345	NS	< 0.375	NS	< 0.367	<0.405	< 0.370	< 0.361	< 1.91	< 0.349	< 0.366
Acenaphthylene	1	0.597	NS	0.743	NS	1.2	NS	< 0.352	NS	< 0.345	NS	< 0.375	NS	0.604	0.462	1.1	0.868	< 1.91	< 0.349	< 0.366
Acenaphthene	4	< 0.378	NS	< 0.377	NS	< 0.364	NS	< 0.352	NS	< 0.345	NS	< 0.375	NS	< 0.367	<0.405	< 0.370	< 0.361	4.51	< 0.349	< 0.366
Fluorene	1000	< 0.378	NS	< 0.377	NS	< 0.364	NS	< 0.352	NS	< 0.345	NS	< 0.375	NS	< 0.367	<0.405	< 0.370	< 0.361	3.57	< 0.349	< 0.366
Phenanthrene	10	1.16	NS	1.14	NS	1.46	NS	0.525	NS	< 0.345	NS	0.386	NS	0.593	0.749	1.07	1.3	38.4	< 0.349	0.733
Anthracene	1000	0.389	NS	< 0.377	NS	0.578	NS	< 0.352	NS	< 0.345	NS	< 0.375	NS	0.385	<0.405	0.833	0.665	7.8	< 0.349	< 0.366
Fluoranthene	1000	5	NS	7.11	NS	14.4	NS	1.08	NS	< 0.345	NS	1.17	NS	5.4	6.49	17.9	11.3	43.7	< 0.349	0.824
Pyrene	1000	5.84	NS	6.92	NS	14.8	NS	1.03	NS	< 0.345	NS	1.04	NS	5.85	6.34	17.1	10.8	35.7	< 0.349	0.718
Benzo (a) anthracene	7	3.92	NS	4.57	NS	9.48	NS	0.519	NS	< 0.345	NS	0.588	NS	3.92	4.43	12.2	7.02	19.9	< 0.349	0.371
Chrysene	70	3.99	NS	4.71	NS	8.69	NS	0.573	NS	< 0.345	NS	0.783	NS	4.44	4.48	10.6	6.92	17.8	< 0.349	0.367
Benzo (b) fluoranthene	7	5.27	NS	6.77	NS	8.96	NS	0.609	NS	< 0.345	NS	1.1	NS	6.93	6.27	10.7	8.83	16.1	< 0.349	< 0.366
Benzo (k) fluoranthene	70	4.23	NS	5.27	NS	9.4	NS	0.495	NS	< 0.345	NS	0.71	NS	5.55	5.43	10.7	6.86	13.8	< 0.349	< 0.366
Benzo (a) pyrene	2	4.13	NS	4.54	NS	8.14	NS	0.581	NS	< 0.345	NS	0.752	NS	4.71	4.54	9.19	6.25	15.8	< 0.349	0.371
Indeno (1,2,3-cd) pyrene	7	2.8	NS	3.42	NS	5	NS	0.354	NS	< 0.345	NS	0.623	NS	3.52	3.06	5.17	4.18	7.72	< 0.349	< 0.366
Dibenzo (a,h) anthracene	0.7	1.01	NS	1.19	NS	1.9	NS	< 0.352	NS	< 0.345	NS	< 0.375	NS	1.25	0.86	2.06	1.48	3.29	< 0.349	< 0.366
Benzo (g,h,i) perylene	1000	2.77	NS	3.26	NS	4.53	NS	0.401	NS	< 0.345	NS	0.707	NS	3.69	2.84	4.59	3.89	8.09	< 0.349	< 0.366
Metals (mg/kg dry)																				
Arsenic	20	26.8	19.2	31	5.81	75.3	15.7	12.1	6.68	3.31	10.1	4.23	19.7	26.7	7.88	32.4	46.1	20.2	2.92	5.8
Lead	200	90.4	52.5	95.3	23.1	153	700	66	145	58.3	62.1	71.1	179	30.1	19.7	61.3	55.5	282	67.2	47
All Aroclor PCBs (ug/kg)	1000	< 22.7	NS	< 22.1	NS	< 21.9	NS	< 20.9	NS	< 20.3	NS	< 22.2	NS	<21.5	188	<21.7	<21.5	80.7	<20.8	<22.1

NOTES:
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RED indicates detection is above RCS-1 Reportable Concentration
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Composite Samples Collected every 470 feet from 5 discrete samples
NS indicates sample not analyzed

Appendix A
PHOTOGRAPHS OF THE PROPERTY AND VICINITY

Photograph 1	Description
	<u>Location on Property</u>: Northern Portion of Property looking south and adjacent to current location of Home Depot store to west of the Property. **<u>Key Observations in Photograph</u>:** **Former rail bed consists of overgrown vegetation with single path down centerline.**

Photograph 2	Description
	<u>Location on Property</u>: Southern side of Former Wonder Bread Spur. **<u>Key Observations in Photograph</u>: Severely corroded 55-gallon drums in center and left background. No staining or odors were observed in association with the drums.**

Photograph 3	Description
	<u>Location on Property</u>: Former Wonder Bread Spur looking east. **<u>Key Observations in Photograph</u>:.** **This area of the Property consists of landscaped grass ballast for ground cover.**

Photograph 4	Description
	<u>Location on Property</u>: Northern portion of the Property adjacent to Lake Cochituate and the current FedEx Distribution Center (former Boston Scientific building).

Photograph 5	Description
	<u>Location on Property</u>: Stone culvert beneath the Property connecting eastern and western portions of Lake Cohituate. Stone culvert is located north of the Route 9 underpass. **<u>Key Observations in Photograph</u>:** View of Lake Cochituate looking northeast from the Property.

Photograph 6	Description
	<u>Location on Property</u>: Area of the Property north of the Route 9 underpass. **<u>Key Observations in Photograph</u>:** Lake Cochituate is located adjacent to the east and west of the Property.

Photograph 7	Description
	Location on Property: AMVETS Post adjacent to Property to the east off Prime Parkway. **Key Observations in Photograph**: The Property is located in the overgrown vegetated area to the right of the photo.

Photograph 8	Description
	Location on Property: South of Mechanic Street looking north. **Key Observations in Photograph**: Residential and commercial properties are located adjacent to the east and west of the Property.

Photograph 9	Description
	<u>Location on Property</u>: **South of Mechanic Street looking north.** **<u>Key Observations in Photograph</u>:** **Cochituate Street overpass can be seen in background and commercial businesses located adjacent to east of the Property.**

Photograph 10	Description
	<u>Location on Property</u>: Southern border of the Property **<u>Key Observations in Photograph</u>:** **North Main Street can be seen in the background and a stone built drainage swale can be seen in the left of the photo.**