River's Edge Development
484 – 490 Boston Post Road
Wayland, Massachusetts
RTN 3-34474 & 36013

PUBLIC INVOLVEMENT PLAN

JUNE 11, 2021

PREPARED FOR:
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Lexington, MA 02421
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SUBMITTED TO:
Massachusetts Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

PREPARED BY:
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VERTEX PROJECT NO: 67404

RELEASE TRACKING NUMBERS (RTNS): 3-36013 and 3-34474

June 11, 2021

Massachusetts Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

RE: **Public Involvement Plan**
River's Edge Development
484 – 490 Boston Post Road
Wayland, Massachusetts
VERTEX Project No. 67404
Release Tracking Numbers 3-36013 and 3-34474

Attention Bureau of Waste Site Cleanup:

The Vertex Companies, Inc. (VERTEX) prepared this Public Involvement Plan (PIP) for the releases of hazardous materials (HM) listed by the Massachusetts Department of Environmental Protection (MassDEP) under Release Tracking Numbers (RTN) 3-36013 and 3-34474. RTN 3-36013 is associated with the detection of semi-volatile organic compounds (SVOCs), lead, antimony, and copper in soil and dissolved nickel, dissolved arsenic, and ammonia in groundwater at the above-referenced property (the Site). RTN 3-34474 is associated with a notification to the MassDEP regarding the presence of debris containing asbestos located within a soil stockpile. This Plan was prepared by VERTEX on behalf of the Alta River's Edge, LLC (Alta), an Eligible Person as defined by the Massachusetts Contingency Plan (MCP).

This document has been prepared in accordance with Title 310 Code of Massachusetts Regulations (CMR) section 40.1405(6) of the MCP. It is being submitted to the MassDEP electronically via the eDEP online filing system and is accompanied by MassDEP Transmittal Form BWSC-126.

Our professional opinions contained herein are based solely on the assessment activities to date as described in this report and are subject to the Limitations contained herein.

Please do not hesitate to contact us should you have any questions or require additional information.

Sincerely,

The Vertex Companies, Inc.

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TABLE OF CONTENTS

Exhibits

Figures

Tables

Appendices

PUBLIC INVOLVEMENT PLAN

River's Edge Development
484 – 490 Boston Post Road
Wayland, Massachusetts
VERTEX Project No. 67404
Release Tracking Numbers 3-36013 and 3-34474

1.0 INTRODUCTION

This Public Involvement Plan (PIP) addresses public involment activities associated with environmental response actions required by the Massachusetts Contingency Plan (MCP) Title 310 Code of Massachusetts Regulations section 40.0000 at the hazardous materials disposal site located at 484-490 Boston Post Road in Wayland, Massachusetts (the "Site"). The location of the Site is shown on Figure 1 and major property features are shown on Figure 2.

On December 28, 2020, the Town of Wayland and the Massachusetts Department of Environmental Protection (MassDEP) received a petition from Wayland residents. The petition requested that the disposal sites identified by MassDEP release tracking numbers (RTNs) 3-36013 and 3-34474 located at the property be designated as Public Involvement Plan (PIP) sites in accordance with section 40.1404 of the MCP. This regulation requires that, upon receiving such a petition, a plan for involving the public in decisions regarding environmental response actions must be prepared and a public meeting held to present the proposed plan. On January 14, 2021, the Town of Wayland formally responded to the petition, designating the Sites as PIP sites.

On February 22, 2021, Alta River's Edge, LLC (Alta) purchased the property on which the Sites are located from the Town of Wayland. Following the purchase of the property, PIP responsibilities were transferred to Alta.

This PIP was prepared by The Vertex Companies, Inc. (VERTEX) on behalf of Alta in accordance with section 40.1405(6) of the MCP to provide a summary of public involvement opportunities during environmental response actions associated with hazardous material releases to the environment referenced by the MassDEP under RTNs 3-36013 and RTN 3-34474.

This PIP has been submitted to the MassDEP electronically via the eDEP system with MassDEP Miscellaneous Document Transmittal Form BWSC-126 and submitted to the online public repository at https://vertexeng.com/rivers-edge-public-involvement-plan-public-repository/. Paper copies can be provided on demand and a paper copy is also available for review at the Town of Wayland Town Clerk's Office at 41 Cochituate Road in Wayland, Massachusetts.

Under Massachusetts General Laws chapter 21E (M.G.L. c. 21E), a Massachusetts Licensed Site Professional (LSP) is responsible for overseeing the response actions required by the MCP at sites at which oil and or hazardous materials have been released to the environment. The MassDEP retains the authority to ensure that public involvement activities are conducted in accordance with state law and regulations. LSPs are individuals who have met the rigorous requirements for licensure established by the Massachuestts Board of Hazardous Waste Site Cleanup Professionals, have passed an examination of technical and regulatory knowledge, and meet continuing education requirements. MCP-required response actions include determining the nature, source, and extent of the OHM released to the environment for which the RTN was assigned; risk posed by the OHM release; whether cleanup actions are necessary and if necessary; determining and implementing appropriate actions. In addition, the response action process provides opportunities for public involvement throughout the process.

Public involvement during response actions is undertaken to ensure that the public is both informed of and involved in planning response actions. Disposal sites for which the public indicates interest in becoming involved in this process are designated as PIP sites, and require the preparation of a plan which identifies specific activities that will be undertaken to address public concerns.

VERTEX, on behalf of Alta, prepared a Draft PIP that was presented to the public during a live online public meeting open to interested parties on March 18, 2021. Following the presentation, VERTEX welcomed interested parties to provide comment and submit questions regarding the Draft PIP Plan during the public comment period. The public comment period extended from March 19, 2021 to April 27, 2021. MassDEP requested a 40-day public comment period for the Draft PIP. MassDEP also reviewed and commented on the Draft PIP.

VERTEX, on behalf of Alta, revised the PIP based on comments received. This Final PIP will be implemented in conjunction with response actions for the Sites.

1.1 Objectives of the PIP

In accordance with the requirements of the MCP the objectives of the PIP and the public involvement responsibilties of Alta are:

- To identify specific opportunities for public participation regarding proposed MCP response actions;
- Describe how and when advance notices of milestone Site activities will be provided; and
- Explain how, when, and where Site environmental information will be made available to the public.

1.2 Distribution of PIP

A copy of this PIP Plan will be provided to those residents who requested their inclusion on the PIP mailing list, to the Chairs of the Wayland Board of Health, Wayland Conservation Commission, Department of Public Works, Planning Board, and Surface Water Quality Commission, to the Wayland Town Administrator, to the Chairs of the Sudbury Conservation Commission, to the Wayland Department of Public Works, and to the Sudbury Town Manager. The people to whom the PIP is to be provided will herein henceforth be referred to as the "PIP Group." An electronic copy of this Final PIP Plan has also been placed in the designated River's Edge PIP Site information repository hosted on VERTEX's public website located at:

- https://vertexeng.com/rivers-edge-public-involvement-plan-public-repository/

The Final PIP Plan is also available on the MassDEP's online file viewer located at:

- https://eeaonline.eea.state.ma.us/EEA/fileviewer/Rtn.aspx?rtn=3-0036013

Paper copies of the documents can be reviewed at:

- Town of Wayland Town Hall, Town Clerk's Office, 41 Cochituate Road, Wayland, MA.

Additionally, all interested parties may also request a copy of the documents in either electronic or paper format by submitting a request to the contact listed below:

Kristen Sarson The Vertex Companies, Inc. 100 North Washington Street, 302 Boston, MA 02114 ksarson@vertexeng.com 781-917-5460	William J. Gibbons, PG, LSP The Vertex Companies, Inc. 100 North Washington Street, 302 Boston, MA 02114 bgibbons@vertexeng.com 617-698-7654

A summary of the comments received during the 40-calendar-day comment period are summarized alongside responses to relevant comments and is included as an Appendix to this report.

1.3 MCP Process Summary

The Massachusetts General Laws Chapter 21E (MGL c. 21E) and the MCP regulations (310 CMR 40.0000) address environmental releases in Massachusetts. MGL c. 21E "The Massachusetts Oil and Hazardous Material Release Prevention and Response Act" establishes who is liable for the assessment and remediation of releases of oil and hazardous materials (OHM) to the environment. MGL c 21E indicates that the liable entities include past and present owners and operators of properties where the release has occurred. MGL c 21E also establishes a limitation on liability for "Eligible Persons" (an "Eligible Person" may be an individual or an organization) who did not own the property when the release occurred and who did not contribute to the release or make it worse. This limitation of liability for Eligible Persons is intended to incentivize the cleanup of properties.

The MCP is a set of detailed regulations that outline the MassDEP's requirements for the assessment and remediation of OHM releases, including MassDEP notification requirements, Reportable Concentrations and Reportable Quantities applicable to releases of OHM, cleanup standards, and public involvement requirements. The MCP requires that the nature and extent of the OHM be determined and that the potential risk of the OHM must be characterized. The MCP requires that a Condition of No Significant Risk to human health, public welfare, safety, and

the environment be achieved for the OHM release and that background conditions that would exist in the absence of the OHM release be achieved or approached to the extent technically and economically feasible.

MCP response actions are overseen by a LSP who is retained by the Party undertaking response actions and who is a state-licensed environmental professional. VERTEX is responsible for providing LSP services for the Site. More information on the LSP Program is located at:

- https://www.mass.gov/how-to/hiring-a-licensed-site-professional, and
- https://www.lspa.org/what-is-an-lsp.

1.4 MCP Requirements for Public Involvement Plan Sites

Based on section 40.1405 of the MCP, the MCP requires the following for PIP designated sites:

- Public Involvement Activities at PIP designated sites will pertain to response actions conducted following the submission of the PIP petition, except at sites where response actions beyond Phase I are conducted prior to the submittal of a Tier Classification. At sites where this is the case, Public Involvement Activities shall pertain to all response actions conducted provided that the PIP petition is received within 30-days of the publication of the public notice required upon submittal of a Tier Classification.

- Within 80-days of receiving the PIP petition for an eligible site, a draft site-specific PIP shall be prepared, and a public meeting shall be held to present the draft PIP, solicit public comment on the draft PIP, and provide information about site conditions. This public meeting shall be held at a time and location convenient to the affected public. Residents of the potentially affected community shall be informed of the public meeting by the following activities:

    - A public notice shall be published at least 14 days prior to the meeting; and

- A copy of the public notice announcing the public meeting shall be mailed to each petitioner, and the Chief municipal Officer and Board of Health in the community in which the disposal site is located.

- The draft Public Involvement Plan shall be made available for public review on the date of the public meeting to present it and a public comment period that runs for a minimum of 20 days from the date of the public meeting shall be provided.

- The PIP shall be finalized within 30 days of the close of the public comment period on the draft PIP.

- A summary of the comments received on the draft PIP will be developed. The summary will contain the received comments, identify comments that have been incorporated into the final PIP, and explanations for comments that were not incorporated into the final PIP. The copy of the response to comments and the final PIP shall be made available in the information repositories established for the site.

- Copies of all the documents related to the public involvement process shall be submitted to the MassDEP upon their availability.

- The PIP shall be implemented throughout the response action process.

1.5 Person/Entity Undertaking Response Actions and Licensed Site Professional

PERSON UNDERTAKING RESPONSE ACTIONS	LICENSED SITE PROFESSIONAL
Alta River's Edge, LLC 91 Hartwell Avenue Lexington, Massachusetts	William J. Gibbons, LSP #5217 The Vertex Companies, Inc. 100 North Washington Street, Suite 302 Boston, Massachusetts (617) 275-5407

1.6 Relevant Report Sections

This document is the Public Involvement Plan for RTNs 3-34474 and 3-36013 located at 484-490 Boston Post Road in Wayland, Massachusetts. This PIP includes the following sections:

- Section 2.0 describes the background information, including historical Site uses and environmental assessments completed to date.
- Section 3.0 describes how the remedial response action process addresses community concerns which have been raised during the development of the Plan.
- Section 4.0 describes the proposed public involvement activities, and milestones for which public meetings and/or public comment will be sought.
- Section 5.0 contains a schedule for public involvement activities.
- Section 5.0 outlines the roles and responsibilities of those involved in implementing the PIP. This section also explains the procedures the MassDEP will use to address situations in which the agency receives complaints about the manner in which the Plan is being implemented.
- Section 7.0 describes how the Plan will be revised in the future.

2.0 SITE BACKGROUND

2.1 Site Description and History

The Alta-owned property and Site consists of approximately 8.25 acres in Wayland, Massachusetts, identified by the Town of Wayland Assessor as Map 22, Lot 6. The western portion of the property is developed with a municipal wastewater treatment plant that was known as the Wayland-Sudbury Septage Treatment Facility Route 20 Septage Facility. The former Septage Facility includes a building, an equalization tank, primary clarifier tank, thickener tank, wastewater discharge basins, an asphalt-paved parking area, and a hazardous material storage trailer. The wastewater treatment plant building and associated buildings are currently being demolished as part of property redevelopment activities. No structures have historically been located on the remainder of the property. Key Site features are shown on Figure 2.

The northwestern portion of the property was historically used as a firing range by the Wayland Police Department since at least the mid-1970s until 2017. The firing range consisted of an earthen berm and a level unvegetated area of sand and gravel in front of the berm. The eastern portion of the property is covered by an approximately 32,000 cubic-yard stockpile of soil containing minor amounts of demolition debris, and crushed asphalt, brick, and concrete generated by the Wayland Department of Public Works (DPW) from projects conducted over many years at locations throughout the Town. Also located in the eastern half of the property is an approximately 4,500 cubic-yard stockpile of screened soil.

The property historically consisted of undeveloped cleared land prior to the construction of the firing range sometime prior to the mid-1970s. The southwestern portion of the property was developed with the municipal Septage Treatment Facility plant in 1983. Based on available historical records, it appears that the storage of DPW soil and waste asphalt, masonry, concrete, and other debris began in the mid-1980s, following the construction of the Septage Treatment Facility. Operation of the Septage Treatment Facility ended in 2009 and use of the firing range and DPW stockpiling of excess material at the property ceased in 2017.

Several historical releases of OHM have been reported at the property. In 1987, RTN 3-1724 was assigned to the reported discharge of approximately 3 gallons of unknown oil into the Septage Treatment Facility's receiving tanks. In 1993 the MassDEP determined the area associated with the release was no longer considered a "Disposal Site" and the RTN status was changed to DEPNDS (MassDEP Not a Disposal Site).

In August 2017, MassDEP assigned RTN 3-34474 to the discovery of debris containing greater than one pound of asbestos within the 32,000 cubic-yard stockpile. The asbestos containing waste material (ACWM), consisted of transite pipe and floor tiles and was discovered during regrading of the 32,000 cubic yard stockpile.

In December 2019, MassDEP assigned RTN 3-36013 to the detection of dissolved arsenic, dissolved nickel, and ammonia in groundwater, to the detection of lead, antimony, and copper in soil at the former firing range, and to the detection of lead and semi-volatile organic compounds (SVOCs) in soil within the 32,000 cubic yard stockpile.

Additional information about the RTN 3-34474 and RTN 3-36013 releases is presented in Section 2.3 below.

2.2 MCP Soil and Groundwater Categories

2.2.1 Soil

The MCP OHM Reportable Concentration category that applies to soil at the property is category RCS-1. Category RCS-1 applies because the property is located within an area mapped by the MassDEP as a medium and high yield aquifer and is therefore considered a potential drinking water resource area.

Based upon current property usage and on the definitions in section 40.0933(5) of the MCP, the Method 1 risk characterization cleanup standards applicable to soil at the property are categories S-2 and S-3 standards. However, since the Site is currently being developed for residential use, soil samples collected at the Site will be compared to the more stringent S-1 cleanup standards

applicable when children may be frequently present and their activities may result in intensive contact with soil.

2.2.2 Groundwater

The MCP OHM Reportable Concentration category that applies to groundwater at the property is category RCGW-1. Category RCGW-1 applies because the property is located within an area mapped by the MassDEP as medium and high yield aquifers and is therefore considered a potential drinking water resource area.

The MCP Method 1 risk characterization cleanup standards currently applicable to groundwater at the property are categories GW-1 and GW-3, and after development category GW-2 standards will apply within 30 feet of occupied buildings. Category GW-1 applies because the area of the property is located in a potential drinking water resource area. However, VERTEX notes that due to the presence of multiple waste landfills in the immediate area of the property, the potential for groundwater to be used for drinking water appears to be low. Category GW-2 will apply in the future to locations within 30 feet of occupied buildings and where the average annual depth to groundwater is less than 15 feet. Depth to groundwater at the property measured during VERTEX investigations has ranged between 13 to 32 feet below the ground surface. The GW-2 category is considered protective of potential risks from OHM volatilization from groundwater into indoor air. Category GW-3 applies because all groundwater in Massachusetts is considered a potential source of discharge to surface water.

2.3 Environmental Assessment History

In 2017, Alta retained VERTEX to conduct an American Society for Testing and Materials standard Phase I Environmental Site Assessment (ESA) to identify Recognized Environmental Conditions (RECs) in connection with the property. Phase I ESAs are commonly conducted by buyers of properties prior to purchase. A REC is defined as "presence or likely presence of hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose

a material threat of a future release to the environment." The Phase I ESA identified the following RECs at the property:

- The 32,000 cubic yard stockpile of DPW soil and debris;
- The former firing range; and
- Groundwater impacts from the abutting Sudbury Landfill.

VERTEX also identified a former hazardous material storage trailer, former underground storage tanks, and methane impacts from the abutting Sudbury Landfill as environmental concerns at the property.

In 2019, VERTEX conducted a Phase II Limited Subsurface Investigation (LSI) to investigate the identified RECs. The environmental investigation included the collection and analysis of 102 soil samples, seven (7) groundwater samples, and six (6) soil gas samples. The samples were analyzed for a wide variety of parameters and the results were compared to applicable regulatory standards. A summary of the Phase II LSI findings is provided below. Sampling locations are shown on the attached figures and the analytical data are summarized on the attached tables.

2.3.1 Soil Stockpiles

RTN 3-34474 Asbestos Debris in Soil Stockpile

In August 2017, MassDEP assigned RTN 3-34474 to the discovery of debris containing greater than one pound of asbestos within the 32,000 cubic-yard stockpile. The asbestos containing waste material (ACWM) as defined by the Massachusetts asbestos regulations 310 CMR 7.15 (see glossary of terms), consisted of transite pipe and floor tiles and was discovered during regrading of the 32,000 cubic yard stockpile. The Town of Wayland, the owner at the time, reported the condition to the MassDEP and an Immediate Response Action (IRA) Plan prepared by CMG Environmental, Inc. (CMG) for the Town was submitted to the MassDEP. The IRA Plan included an evaluation that determined that an imminent hazard was not present (in accordance with 310 CMR 40.0321), a summary of work completed up to the date of the submittal, and indication that further IRA activities will be conducted under a Non-Traditional Asbestos Work Plan (NTAWP).

Investigation activities completed in support of the IRA Plan and information regarding the NTAWP is described further below.

On September 21, 2021, the MassDEP issued a Notice of Responsibility (NOR) to the Town for the debris containing asbestos.

The extent of the ACWM was delineated in August 2018. Delineation efforts included the collection of 15 soil samples in the area of the ACWM debris and analysis for asbestos. No asbestos was detected in any of the 15 soil samples.

Following delineation, VERTEX, as consultant for the prospective purchaser, Alta, prepared a Non-Traditional Asbestos Work Plan (NTAWP), which was approved by the MassDEP, and in December 2018, approximately 2,000 cubic yards of commingled soil and ACWM was excavated, transported, and disposed of off-site at a licensed disposal facility. Excavation and loading of the material into trucks was conducted under the continuous observation of a Massachusetts-licensed asbestos inspector and continuous air monitoring. Air monitoring results were provided daily to the MassDEP and all air monitoring results were within acceptable MassDEP limits. Following the excavation and off-site disposal of the comingled soil and ACWM, and closure of the NTAWP with the MassDEP, additional characterization of the soil also included collection and analysis of 80 additional soil samples for asbestos; no asbestos was detected. During the collection of the 80 soil samples any debris considered to be potential ACWM was collected and laboratory analyzed, and none were found to be ACWM.

On January 26, 2021, the Town of Wayland submitted a Permanent Solution Statement with No Conditions Statement to the MassDEP indicating that a Condition of No Significant Risk had been achieved, thereby fulfilling the MCP required response actions for RTN 3-34474. This report was submitted following the PIP Site designation and was available for public comment from March 19 to April 27, 2021.

Post-ACWM Abatement Investigation of Soil Stockpiles under RTN 3-34474

VERTEX identified the 32,000-cubic yard soil stockpile as a potential environmental concern due to potential historical impacts and previous detection of ACWM.

In February 2019, following the removal (as described above) of the 2,000 cubic yards of comingled soil and asbestos containing waste debris under RTN 3-34474, the stockpile was graded to an approximate height of 10 feet to enable the collection and analysis of samples to further assess potential impacts to the stockpiled soil. The graded stockpile was surveyed and divided into 50-foot by 50-foot characterization cells and the cell boundaries and nodes were marked with stakes. The volume of each grid cell was approximately 925 cubic yards. In March 2019, VERTEX oversaw the advancement of 39 test pits within the 32,000 cubic yard stockpile; one test pit was completed within each characterization cell. A composite sample composed of approximately five equal weight aliquots was collected from the 0 to 5-foot depth interval and a second five-point composite sample was collected from the 5 to 10-foot depth interval (and from the 10 to 15-foot depth interval in cells E5 and D3 where the stockpile was thicker than 10 feet). A total of 80 soil samples were collected throughout the stockpile. An additional five test pits were advanced within the 4,500 cubic yard stockpile. The sample frequency collected for both the 32,000 cubic yard and 4,500 cubic yard stockpile equated to approximately one sample for every 500 cubic yards, which is the standard frequency required to characterize soil for disposal or reuse at Massachusetts-licensed landfills and soil reclamation facilities. The samples were submitted to Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts for the following analyses:

- Volatile organic compounds (VOC) by United States Environmental Protection Agency (USEPA) Method 8260;
- Semi-VOCs (SVOCs) by USEPA Method 8270;
- Total petroleum hydrocarbons (TPH) by USEPA Method 8100;
- MCP 14 metals by USEPA Method series 6000 and 7000;
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082 with Soxhlet extraction;
- Ignitability by USEPA Method 1030;
- Corrosivity by USEPA Method 9045C;
- Reactivity (cyanide/sulfide) by USEPA Method 9014 and 9030A; and
- Specific conductance by USEPA Method 2510B Modified.

Soil samples were also submitted to CEI Labs, Inc. of Cary, North Carolina for California Air Resources Board (CARB) 435 Method preparation and asbestos analysis by USEPA Method 600/R-93/166 polarized light microscopy.

Soil samples in which equal to or greater than 1,000 mg/kg TPH was detected were also analyzed for extractable petroleum hydrocarbons (EPH) by MassDEP Method 04.01. Additional information regarding the reason for running the EPH analysis is included in the results section below.

The approximate layout of the sample grid with the corresponding grid identification numbers is shown on Figure 3.

Results of Soil Samples Collected from Stockpiles

Based on the laboratory analytical results, TPH was detected at concentrations exceeding the MCP RCS-1 Reportable Concentration in 21 of the samples collected from the test pits. According to the MassDEP Policy WSC-02-411 "Characterizing Risks Posed by Petroleum Contaminated Sites: Implementation of the MADEP VPH/EPH Approach," the TPH analytical method is less precise than other methods for quantifying petroleum concentrations and tends to overestimate concentrations. The soil samples were originally submitted for TPH analysis because this analysis is cited by many disposal facility operating permits. However, in accordance with MCP 40.0360(2) and the MassDEP WSC-02-411 VPH/EPH Policy, the sum of EPH aliphatic and aromatic hydrocarbons may be used as a more accurate quantification of petroleum concentrations in lieu of the TPH data. EPH fractions did not exceed RCS-1 Reportable Concentrations in the 21 samples in which TPH concentrations exceeded the MCP RCS-1 Reportable Concentration. Therefore, based on the MCP and MassDEP VPH/EPH Policy, the EPH fraction data was used in lieu of the TPH data, hence rendering the detected TPH concentrations non-reportable.

Soil samples containing TPH concentrations less than 1,000 mg/kg were not analyzed for EPH because, even though the detected TPH concentration might be an overestimate of the petroleum concentrations, the soil still met in-state landfill acceptance criteria.

Additionally, SVOCs were detected at concentrations exceeding applicable MCP RCS-1 Reportable Concentrations in 12 of the 80 soil samples collected from the 32,000 cubic yard stockpile, and total lead was detected at concentrations exceeding applicable MCP RCS-1 Reportable Concentrations in two (2) of the 80 soil samples collected from the 32,000 cubic yard stockpile. The detected concentrations of SVOCs and lead constituted a condition for which the MCP requires notification to be made to the MassDEP. On December 2, 2019, the Town notified the MassDEP of the condition and RTN 3-36013 was assigned. On December 21, 2019, the MassDEP issued a NOR to the Town for the reported conditions. On May 5, 2021, the MassDEP issued a NOR to Alta for this release.

Additional target analytes were not detected in soil samples collected from the 32,000 cubic yard stockpile or the 4,500 cubic yard stockpile. A summary of soil analytical results is presented in Table 1 for easy reference.

2.3.2 Former Firing Range

Initial Investigation (April 11, 2019)

To assess the potential for lead impacts to soil at the firing range, on April 11, 2019, VERTEX established a grid of 86 characterization cells across the firing range, as depicted in Figure 4A. VERTEX collected a soil sample from depths of approximately 0 to 2 feet within the center of each cell. These initial samples were screened for total lead at the time of collection using a handheld x-ray fluorescence (XRF) analyzer. XRF analyzer readings are considered an indication of potential lead concentrations and are useful indicators of relative lead concentrations between locations. Using the XRF analyzer screening data, VERTEX identified six (6) cells for soil sampling and laboratory analysis. The soil samples from the six cells were also collected from a depth of 0 to 2 feet. Characterization cells and the corresponding XRF lead concentration readings are depicted on Figure 4A. XRF lead concentration readings, obtained from the soil samples in the six selected cells, ranged from 428 parts per million (ppm) to 9,410 ppm. On April 11, 2019, soil samples were collected for laboratory analysis from cells in which a range of XRF total lead concentrations were measured, and not from the cells with the six highest XRF total lead concentration readings, to

assess the correlation between field XRF analyzer readings and laboratory analytical data. Additional detail regarding this correlation is included in the results section below.

The six soil samples collected for laboratory analysis were designated V-201 through V-206 and were submitted to Con-Test for the following laboratory analyses:

- Lead, antimony, copper, and zinc by USEPA Method 6010;
- Tungsten by USEPA Method Tungsten 200.7; and
- Toxicity Characteristic Leaching Procedure (TCLP) extraction and lead analysis by USEPA Methods 1311 and 6010.

One additional sample designated 'FIRING RANGE' was collected to characterize the soil for off-site disposal. This additional sample was a composite sample made up of equal parts of soil collected from each of the six characterization cells that were sampled for metals analysis. The composite sample was analyzed by Con-Test for the following parameters:

- VOCs by USEPA Method 8260;
- SVOCs by USEPA Method 8270;
- TPH by USEPA Method 8100;
- MCP 14 metals[1] by USEPA Method series 6000 and 7000;
- PCBs by USEPA Method 8082 with Soxhlet extraction;
- Ignitability by USEPA Method 1030;
- Corrosivity by USEPA Method 9045C;
- Reactivity (cyanide/sulfide) by USEPA Method 9014 and 9030A; and
- Specific conductance by USEPA Method 2510B Modified.

Results (April 2019)

Total lead was detected at concentrations exceeding the MCP RCS-1 Reportable Concentration in five of the six 0 to 2-foot soil samples. Additionally, antimony was detected at concentrations exceeding the applicable MCP RCS-1 Reportable Concentration in three of the six samples and copper was detected at concentrations exceeding the applicable MCP RCS-1 Reportable

[1] MCP 14 metals are the 14 metals for which the MCP provides method 1 cleanup standards and are antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc.

Concentration in four of the six samples. VERTEX also submitted each of the samples for TCLP extraction and lead analysis. Lead concentrations in the TCLP extract of each of the six samples (V-201 through V-206) d equaled or exceeded the United States Resource Conservation and Recovery Act (RCRA) threshold for classification as a characteristic hazardous waste, if that soil were to be disposed of offsite without stabilization. This soil will therefore be stabilized prior to its removal from the property. A summary of the analytical results for samples V-201 through V-206 and "FIRING RANGE" are included in Table 2.

As identified in the above investigation section, VERTEX performed a basic correlation analysis between the XRF screening values and the laboratory analytical concentrations of lead in samples V-201 through V-206, to identify the approximate horizontal area of lead impacted soil within the firing range. Based on the analysis, a significant correlation exists between these two data sets, allowing VERTEX to estimate the approximate total lead content of the characterization cells based on the XRF screening results. The results of this extrapolation are depicted on Figure 4B.

Investigation for Vertical Delineation (May 8, 2019)

On May 8, 2019, to assess the vertical depth of the metals impacts within the firing range, VERTEX oversaw the advancement of 14 test pits. Eight test pits were advanced within the area east of the firing range berm, with one composite sample collected from each test pit from the 2 to 4-foot depth interval (identified as samples V-301 through V-308). Three test pits were advanced through the berm to depths of 2 feet below the berm into the underlying native soil (e.g. 2 feet below the base of the berm), with one composite sample collected from each test pit from the 0 to 2 feet into the underlying native soil (samples V-309 through V-311). Using a hand auger, VERTEX advanced three soil borings, each to total depths of 4 feet, in the western edge of the firing range, beyond the firing range berm. VERTEX collected one composite sample from each boring from the 2 to 4-foot depth interval (samples V-312 through V-314). Con-Test analyzed each composite sample for the following parameters:

- Antimony, copper, and lead by USEPA Method 6010.

Vertical Delineation Results (May 2019)

Based on the laboratory analytical results, antimony, copper, and lead were not detected at concentrations exceeding the applicable MCP RCS-1 Reportable Concentrations in samples V-301 through V-308 and V-312 through V-314 from the 2 to 4-foot depth interval or in samples V-309 through V-314 from the 0 to 2-foot depth interval (below the base of the berm). Separate portions of samples V-310 and V-312 were additionally extracted using the TCLP method and were analyzed for lead. TCLP extractable lead was detected in sample V-310 at a concentration exceeding the RCRA regulatory threshold. A summary of the firing range soil analytical results is presented in Table 2 and the location of the vertical delineation are depicted on Figure 4C

Antimony, copper, and lead impacts in the firing range at concentrations exceeding the applicable MCP RCS-1 Reportable Concentrations were not detected deeper than 2 feet. However, based on the TCLP extractable lead result in sample (V-310) collected from directly underneath the center of the berm, an additional sample will be collected to define the vertical extent of TCLP lead in the immediate area of V-310.

The antimony, copper, and lead detected in the samples collected in April 2019 at concentrations exceeding applicable MCP RCS-1 Reportable Concentrations were reported to the MassDEP by the Town on December 2, 2019 and are included in RTN 3-36013.

2.3.3 Former Hazardous Material Storage

VERTEX identified three main areas of oil and hazardous materials (OHM) storage within the former Route 20 Septage Facility portion of the property. The areas were identified as the laboratory area, the machine shop area, and the hazardous materials storage trailer. There was no visual evidence of releases of OHM to the environment in the area of the laboratory and the machine shop and the floor in those locations was observed to be intact. Because the floor of the hazardous materials storage trailer was obstructed by various containers of hazardous materials, VERTEX identified this location as a recognized environmental condition (REC). VERTEX collected soil sample V-107 from 5 to 10 feet below ground surface west of the trailer and a groundwater

sample from a monitoring well installed east and hydraulically downgradient of the trailer (V-103(MW)) to assess for the potential presence of OHM releases to the environment. The samples were analyzed for:

- VOCs by USEPA Method 8260;
- SVOCs by USEPA Method 8270;
- TPH by USEPA Method 8100;
- MCP 14 metals[2] by USEPA Method series 6000 and 7000;
- PCBs by USEPA Method 8082 with Soxhlet extraction;
- Ignitability, corrosivity, reactivity (cyanide/sulfide), and Specific conductance (soil sample only);
- Ammonia/Nitrogen by USEPA Method SM 19-22 (groundwater sample only);
- Chloride, nitrite, and nitrate by USEPA Method 300 (groundwater sample only);
- Total nitrogen by USEPA Method SM 19-22 (groundwater sample only); and
- Phosphorus/orthophosphate by USEPA Method SM 21-22.

The results did not exceed the MCP RCS-1 or RCGW-1 Reportable Concentrations. A summary of the soil analytical results is presented in Table 3 and a summary of the groundwater analytical results is presented in Table 4. Locations of the soil boring and monitoring well are depicted on Figure 2.

2.3.4 Former Underground Storage Tanks

In the Phase I ESA, VERTEX identified the historical presence of four former underground storage tanks (USTs), formerly located north of the Route 20 Septage Facility Building. The four former USTs ranged in capacity from 1,000 to 4,000 gallons and were used to store diesel fuel, No. 2 fuel-oil, and ferric chloride. Based on Wayland Fire Department files, the USTs were removed in 1998; however, no soil screening or soil analytical data associated with the removal was available. VERTEX advanced five soil borings, including one groundwater monitoring well within the area of the former USTs. Four soil samples, identified as V-108 through V-111 were collected from 0 to 5 feet, 5 to 10 feet, 5 to 10 feet, and 0 to 10 feet below ground surface, respectively. One

[2] MCP 14 metals are the 14 metals for which the MCP provides method 1 cleanup standards and are antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc.

groundwater sample was also collected from a monitoring well installed in the fifth soil boring (identified as V-104(MW)) and submitted for laboratory analysis of TPH and soil disposal characterization parameters.

OHM was not detected at concentrations exceeding the applicable MCP Reportable Concentrations. A summary of the soil analytical results is presented in Table 3 and a summary of the groundwater analytical results is presented in Table 4. Locations of the soil boring and monitoring well are depicted on Figure 2.

2.3.5 Groundwater Impacts from Sudbury Landfill

Investigation (March 2019)

The Phase I ESA historical records review identified that the property was bordered to the west by a gravel pit from at least the 1940s until 1970 when the gravel pit was converted into the Sudbury Landfill. The Sudbury Landfill remained in operation until 1996 and was capped in 2005. During a subsurface investigation completed by others in 2015 total arsenic was detected in monitoring wells installed hydraulically upgradient and adjacent to the property, on a portion of land between the Sudbury Landfill and the property. Total arsenic includes both dissolved and undissolved arsenic; however, MCP Reportable Concentrations apply only to dissolved arsenic; therefore, the detection was not a reportable condition but may be indicative of dissolved arsenic in groundwater from the landfill at concentrations exceeding the MCP Reportable Concentrations.

In March 2019, VERTEX installed six groundwater monitoring wells to evaluate groundwater conditions throughout the property and collected groundwater samples that were submitted to Con-Test for the following analyses:

- VOCs USEPA Method 8260;
- SVOCs by USEPA Method 8270;
- Total MCP 14 metals, total manganese, and total copper by USEPA Method series 6000 and 7000;
- PCBs by USEPA Method 8082;

- Ammonia/Nitrogen by USEPA Method SM 19-22;
- Chloride, nitrite, and nitrate by USEPA Method 300;
- Total nitrogen by USEPA Method SM 19-22;
- Phosphorus/Orthophosphate by USEPA Method SM 21-22; and
- Dissolved arsenic and dissolved nickel by USEPA Method 6020B.

Results (March 2019)

Dissolved arsenic was detected in the groundwater sample collected from monitoring well V-102 (MW) at a concentration exceeding the MCP RCGW-1 Reportable Concentration. Ammonia was detected in groundwater samples collected from wells V-101 (MW), V-102 (MW), V-105 (MW), and V-106 (MW) at concentrations exceeding the MCP RCGW-1 Reportable Concentration. Dissolved nickel was detected in well V-106 (MW) at a concentration, exceeding the applicable MCP RCGW-1 Reportable Concentration. The concentrations of no other parameters exceeded MCP Reportable Concentrations in the March 2019 samples. A summary of the groundwater analytical results compared to MCP RCGW-1 Reportable Concentrations is presented in Table 4.

Based on a review of historical environmental reports, dissolved metals have been historically detected in groundwater at the abutting upgradient Sudbury Landfill at concentrations also exceeding the MCP RCGW-1 Reportable Concentrations. Furthermore, based on the groundwater contour map produced based on groundwater elevations measured during the April 2019 sampling event (Figure 5), the highest concentrations of metals and ammonia were detected in hydraulically upgradient portions of the property. Therefore, these detected concentrations have been attributed to migration from the Sudbury Landfill and VERTEX anticipates that a Downgradient Property Status (DPS) Opinion will be submitted to the MassDEP in accordance with section 40.0180 of the MCP. Prior to submission and upon completion of a Draft DPS Opinion, the Opinion will go through the PIP process to allow for public comment and discussion.

To assess whether the dissolved metals and ammonia detected in groundwater samples could pose an ecological risk to the abutting wetlands, VERTEX compared the detected concentrations to the MCP Method 1 GW-3 groundwater standards (section 40.0974(2) of the MCP), which applies to all groundwater in the Commonwealth of Massachusetts and are intended to be

protective of surface water from the potential adverse ecological affects resulting from discharge of OHM in groundwater to surface water.

As shown in the table below, concentrations of dissolved arsenic and nickel do not exceed their respective Method 1 GW-3 standards and therefore do not pose a significant risk of adverse ecological effects in surface water. However, the MCP does not establish a GW-3 standard for ammonia.

WELL ID	MCP GW-3 STANDARD	UNITS	MW-3	V-101 (MW)	V-102 (MW)	V-103 (MW)	V-104 (MW)	V-105 (MW)	V-106 (MW)
SAMPLE DATE			4/2/2019	4/1/2019	4/1/2019	4/2/2019	4/2/2019	4/1/2019	4/2/2019
Arsenic (Dissolved)	900	µg/L	0.74	0.98	26	0.74	0.79	1.1	1.0
Nickel (Dissolved)	200	µg/L	-	-	-	-	-	-	110
Ammonia	NS	µg/L	ND (300)	1,500	1,500	ND (300)	ND (300)	1,100	2,000

Note: µg/L represents the measurement of micrograms per liter.

In accordance with MassDEP guidance documents, VERTEX calculated an equivalent groundwater protection criterion for ammonia to assess whether concentrations of ammonia detected in groundwater samples would pose a significant ecological risk if the groundwater were to discharge to surface water. The equivalent groundwater protection criterion was calculated using equations provided in MCP Numerical Standards by MassDEP (reformatted December 2017). Based on calculations using the lowest and most protective dilution factors, the equivalent groundwater criterion for ammonia was calculated to be 47,500 µg/L.

Because concentrations of ammonia detected in groundwater samples are well below the calculated groundwater criterion of 47,500 µg/L, VERTEX does not anticipate adverse ecological effects to the abutting wetlands as a result of the ammonia impacts originating from the Sudbury Landfill.

The proposed construction of an on-site stormwater and treated wastewater infiltration system may cause localized groundwater mounding near the area of infiltration during significant rain events because that is when discharge rates to the infiltration system will be the highest. However, the mounding will not result in any adverse effects from the ammonia and dissolved

metals in groundwater because the detected concentrations of the ammonia and metals are well below applicable standards for the protection of surface water and ecological receptors. No exacerbation of the extent of ammonia in groundwater from the landfill at concentrations exceeding MCP Reportable Concentrations is anticipated; ammonia in groundwater was widespread across the Site and therefore, groundwater mounding on the Site is not anticipated to result in any expansion of the extent. No exacerbation of the extent of dissolved metals in groundwater from the landfill at concentrations exceeding MCP Reportable Concentrations is anticipated because dissolved metals in groundwater exceeding MCP Reportable Concentrations were only detected on the western portion of the Site, indicating that with greater distance from the landfill the metal concentrations are naturally attenuating. Natural attenuation of dissolved metals occurs from dilution, adsorption to organic carbon, and from binding with less soluble metal oxides. For example, dissolved arsenic concentrations are known to increase when ferrous oxide is reduced to ferric oxide in an acidic and oxygen depleted environment, such as a landfill, because the arsenic readily binds to ferrous oxide but is released when ferrous oxide is converted to ferric oxide. As the groundwater moves away from the landfill's geochemical reducing affects the dissolved arsenic once again binds with available ferrous oxide and is removed from solution. Groundwater mounding from the development's future infiltration system will not reduce the natural attenuation of the dissolved metals because the groundwater elevation and flow direction are not factors in the natural attenuation.

2.3.6 Methane Impacts from Sudbury Landfill

Investigation (April 2019)

In April 2019, VERTEX installed six soil vapor sample points and collected soil vapor samples throughout the property. A four-gas meter was calibrated with a methane standard to provide readings of flammable gas readings as methane equivalents. Four-gas meter readings are not considered actual methane concentrations in soil vapor but are useful indicators of relative methane concentrations. Soil vapor samples were also collected using 6-liter batch-certified Summa canisters and submitted to Con-Test for analysis of methane by USEPA Method 3C.

Results (April 2019)

Field screening with the four-gas meter detected flammable gas concentrations ranging from 1% of the lower explosive limit (LEL) to 10% of the LEL. However, these readings were detected almost immediately after the four-gas meter was connected to the sample points and dissipated to 0% after less than one minute. Laboratory analysis of soil vapor samples collected from the sampling points did not detect methane. A summary of soil vapor analytical results is presented on Table 5.

2.4 Status of MCP Response Actions

The following reports and documents have been submitted to the MassDEP for RTNs 3-34474 and 3-36013.

Report/Document	RTN	Prepared By	Prepared For	Date Submitted to MassDEP
Release Notification	3-34474	The Town of Wayland	The Town of Wayland	08/14/2017
IRA Plan	3-34474	CMG	The Town of Wayland	10/12/2017
IRA Status Report	3-34474	CMG	The Town of Wayland	12/11/2017
IRA Status Report	3-34474	CMG	The Town of Wayland	6/11/2018
Phase I Initial Site Investigation Report / Phase II Conceptual Scope of Work	3-34474	CMG	The Town of Wayland	8/14/2018
IRA Status Report	3-34474	CMG	The Town of Wayland	12/14/2018
IRA Status Report	3-34474	CMG	The Town of Wayland	6/12/2019
Release Notification	3-36013	The Town of Wayland	The Town of Wayland	12/2/2019
IRA Status Report	3-34474	CMG	The Town of Wayland	12/11/2019
IRA Status Report	3-34474	CMG	The Town of Wayland	6/12/2020

Report/Document	RTN	Prepared By	Prepared For	Date Submitted to MassDEP
Phase I Initial Site Investigation Report / Phase II Conceptual Scope of Work	3-36013	CMG	The Town of Wayland	12/2/2020
Revised Phase I Initial Site Investigation Report and Errata Memorandum	3-36013	CMG	The Town of Wayland	12/21/2020
RAM Plan	3-36013	VERTEX	Alta	1/8/2021
IRA Completion and Permanent Solution Report	3-34474	CMG	The Town of Wayland	1/26/2021
BOL – Southbridge Landfill	3-36013	VERTEX	Alta	3/15/2021
Draft PIP	3-34474 & 3-36013	VERTEX	Alta	3/18/2021
BOL – Ondrick Recycling Facility	3-36013	VERTEX	Alta	3/23/2021
RAM Status Report	3-36013	VERTEX	Alta	3/31/2021
BOL – Winchendon Landfill	3-36013	VERTEX	Alta	4/14/2021
BOL – Turnkey Landfill (Firing Range)	3-36013	VERTEX	Alta	4/30/2021
BOL – Turnkey Landfill (Cell E-7)	3-36013	VERTEX	Alta	5/3/2021
RAM Status Report	3-36013	VERTEX	Alta	5/7/2021
Tier Classification Transfer	3-36013	VERTEX	Alta	5/11/2021

Notes:
*IRA = Immediate Response Action
*RAM = Release Abatement Measure
*BOL = Bill of Lading
*PIP = Public Involvement Plan

2.4.1 Required Regulatory Agency Approvals

The public requested a list of required regulatory agency approvals and notice of substantive contacts with those regulatory agencies. The public also requested notice of public meetings and hearings associated with those activities. The only regulatory agency approval required and obtained for the MCP remedial activities is the January 10, 2020 Town of Wayland Conservation Commission Chapter 194 Permit issued to Wood Partners East Acquisition, LLC (an affiliated

company of Alta River's Edge, LLC). A copy of the Order of Conditions is available at https://www.wayland.ma.us/board-selectmen/alta-rivers-edge-development-project/pages/5-information-related-water-wastewater and from the Town of Wayland Conservation Commission. The MCP does not require MassDEP approval to initiate Release Abatement Measure (RAM) activities. Requests for other regulatory agency approvals that pertain to aspects of the site development that are not regulated by the MCP should be directed to the property owner (Alta River's Edge, LLC) at 781.541.5822 or to the issuing regulatory agency. Section 4.0 identifies how notices of public meetings regarding MCP activities will be made and to whom the notices will be sent.

Substantive contact with the MassDEP regarding MCP response actions at the Site have included discussions with MassDEP staff regarding the RAM Plan and the first RAM Status Report. Information regarding those discussions is provided in the RAM Status Report and all orders, conditions, or approvals received from the MassDEP regarding MCP response actions are required by MCP regulation to be noted in the RAM Completion Report, MCP Phase Reports, and in the Permanent Solution Statement. Substantive contact with MassDEP staff was also made regarding this Public Involvement Plan and scope and means for public meetings. Future written orders, conditions, and approvals received from the MassDEP regarding MCP response actions will be posted in the VERTEX-hosted information repository and provided in hard copy format to the hard copy local information repository at the Town Clark's Office. Other substantive contacts with the MassDEP regarding MCP response actions will be noted in major milestone documents.

2.5 Current Response Actions

On January 8, 2021, on behalf of Alta, VERTEX submitted a RAM Plan to the MassDEP. The RAM Plan provided details regarding the existing conditions at the property, and the assessment activities that were completed to date. The RAM Plan also indicated the environmental response actions that are to be completed at the property to address the OHM detected in soil at concentrations above MassDEP standards. RAM Status Reports are required to be submitted to the MassDEP every six months until such time a RAM Completion Report is submitted. MassDEP

requested additional information about the RAM activities to be provided in an interim RAM Status Report. The RAM Status Report was submitted on March 31, 2021. The RAM Status Report provided additional information regarding Site conditions and RAM activities, including information regarding historical soil-gas testing, soil stabilization methods and groundwater monitoring to be conducted during soil stabilization, groundwater conditions, and post-excavation confirmatory sampling and analysis, and provided an update of RAM activities conducted up to that time. A summary of the response actions to be completed as a RAM is included below:

- 32,000 cubic yards stockpile
    - Based on the soil samples collected in 2019, as described in Section 2.3.1, appropriate and licensed off-site soil reuse, recycling, and disposal facilities have been identified and the soil meeting each facilities acceptance criteria will be removed from the Site and transported to the selected facilities. The shipments will be accompanied by the appropriate paperwork (Material Shipment Records [MSRs] or Bills of Lading [BOLs]) to track the volume of soil that is taken to each facility and records of the shipments will be submitted to the MassDEP.
    - VERTEX, on behalf of Alta, has been and will continue to be on-site to provide the appropriate paperwork to the trucks, track the soils to make sure the correct, pre-characterized soil is going to the correct facility, and monitor dust at the work perimeters to document that dust levels are remaining below the dust action level specified in the RAM Plan. If elevated dust levels approach the action level, dust control measures such as water spraying, covering areas not being actively worked, or if necessary, suspension of work will be initiated until such time that dust levels no longer exceed the acceptable limits.
    - One cell within the stockpile (Cell E7) where extractable lead was detected above the RCRA criteria will require stabilization prior to transport and disposal off-site. This will be completed by mixing in a stabilization compound with the soil where

the extractable lead was detected. VERTEX, on behalf of Alta, will oversee stabilization activities and collect additional soil samples to confirm that the lead was appropriately stabilized.

- Firing Range
    - Based on the soil analyses conducted in 2019, as described in Section 2.3.2, concentrations of metals (antimony, copper, and lead) exceeding MCP Reportable Concentrations were detected in the soils of the former firing range. Based on the concentrations of metals detected, this soil will be excavated and transported off-site to a hazardous waste landfill.
    - Prior to excavation and transport, based on the detected concentrations of extractable lead, the soil will need to be stabilized. Stabilization will be completed by mixing in a stabilization compound with the metal impacted soil. VERTEX, on behalf of Alta, will oversee stabilization activities and collect additional soil samples to make sure that the metals were appropriately stabilized. Groundwater samples will also be collected from locations hydraulically upgradient and downgradient of the landfill to monitor groundwater conditions before, during, and after stabilizations.
    - VERTEX, on behalf of Alta, will oversee soil stabilization, sampling, and excavation activities and document that dust levels remain below the dust action level specified in the RAM Plan. If elevated dust levels approach the action level, dust control measures such as water spraying, covering of areas not being actively worked, or if necessary, suspension of work will be initiated until such time the dust levels no longer exceed the acceptable limits.

2.6 Public Involvement History

2.6.1 RTN 3-34474

On October 12, 2017, in response to the discovery of asbestos in soil, the Town of Wayland, submitted an IRA Plan, written by CMG Environmental, Inc. (CMG) for the Town, to the MassDEP. The IRA Plan outlined the steps to be undertaken to respond to the asbestos in soil. The Wayland Board of Health and Town Administrator were notified of the submittal in CMG correspondence dated October 9, 2017.

On December 28, 2020, the Town of Wayland received a petition from residents of the Town requesting that the RTN 3-34474 Site be designated a PIP site in accordance with M.G.L. c. 21E § 14(a) and section 40.1404 of the MCP. On January 14, 2021, the Town formally responded to the petition, designating the Site as a PIP site.

On January 26, 2021, the Town submitted an Immediate Response Action Completion and Permanent Solution Report, prepared by CMG for the Town of Wayland, to the MassDEP. The Wayland Board of Health and Town Administrator were notified of the submittal in correspondence dated January 26, 2021. However, because this report was submitted following the designation of the Site as a PIP site, the report was made available for public comment during the 40-day period from March 19, 2021 to April 27, 2021 under the regulations summarized in Section 4.2.

Electronic copies of the RTN 3-34474 reports are available in the online River's Edge PIP Site information repository and in the MassDEP online file viewer, and a paper copy is available for review at the Town Clerk's Office. Additionally, all interested parties may request a copy of the Immediate Response Action Completion & Permanent Solution Report in either electronic or paper format by submitting a request to the contact listed below:

Kristen Sarson The Vertex Companies, Inc. 100 North Washington Street, 302 Boston, MA 02114 ksarson@vertexeng.com 781-917-5460	William J. Gibbons, PG, LSP The Vertex Companies, Inc. 100 North Washington Street, 302 Boston, MA 02114 bgibbons@vertexeng.com 617-698-7654

2.6.2 RTN 3-36013

On December 2, 2020, the Town of Wayland submitted a Phase I Initial Site Investigation Report and Tier Classification Report, prepared by CMG for the Town of Wayland, to the MassDEP. The Wayland Board of Health and Town Administrator were notified of the submittal by correspondence dated December 2, 2020. The legal notice for the Tier Classification was submitted for publication in the Wayland Town Crier and was printed on December 10, 2020.

On December 28, 2020, the Town of Wayland received a petition from residents of the Town of Wayland requesting that the Site be designated a PIP site in accordance with M.G.L. c. 21E § 14(a) and 310 CMR 40.1404. On January 14, 2021, the Town of Wayland formally responded to the petition, designating the RTN 3-36013 Site as a PIP site. On February 22, 2021, the Site was purchased by Alta River's Edge, LLC. Subsequently, on behalf of Alta River's Edge, LLC, VERTEX prepared a Draft PIP and initiated public involvement activities in accordance with the MCP requirements for PIP sites. In developing this PIP, VERTEX, on behalf of Alta, solicited input from the petitioners on their concerns relative to environmental issues at the Site. A summary of feedback received from the community members is included in Appendix A of this report.

On January 8, 2021, VERTEX submitted a RAM Plan to the MassDEP on behalf of Alta. The Wayland Board of Health and Town Administrator were notified of the submittal in correspondence dated January 8, 2021. However, as this report was submitted following the submittal of the petition, this report, and the subsequent RAM Status Report, submitted to the MassDEP on March 31, 2021, were made available for public comment during the 20-day period from April 21, 2021 to May 11, 2021. under the regulations summarized in Section 4.2.

Electronic copies of the RTN 3-36013 reports are available in the online River's Edge PIP Site information repository and in the MassDEP online file viewer, and paper copies are available for review at the Town Clerk's Office. Additionally, all interested parties may request a copy of the RAM Plan and RAM Status Report in either electronic or paper format by submitting a request to the contact listed below.

Kristen Sarson The Vertex Companies, Inc. 100 North Washington Street, 302 Boston, MA 02114 ksarson@vertexeng.com 781-917-5460	William J. Gibbons, PG, LSP The Vertex Companies, Inc. 100 North Washington Street, 302 Boston, MA 02114 bgibbons@vertexeng.com 617-698-7654

3.0 ADDRESSING PUBLIC CONCERNS

The phased process for assessing and cleaning up disposal sites as set forth in the MCP (310 CMR 40.0000), is designed to address the effects of the site on health, safety, public welfare, and the environment. Once a release of OHM has been confirmed at a site (Phase I of the remedial response action process), the process proceeds to:

- Comprehensive field investigation of the nature and extent of contamination, and an evaluation of risks posed to the public and the environment from the site (Phase II);
- Identification and evaluation of potential remedial alternatives and selection of feasible measures that will achieve a level of no significant risk at the site (Phase III);
- Implementation of the selected remedial actions, as necessary (Phase IV);
- The operation, maintenance, and monitoring of the selected remedial actions, as necessary (Phase V); and
- Achieving a Permanent or Temporary Solution.

Physical work at a disposal site includes sampling and other environmental field testing, and the implementation of the selected response actions. It may also include the implementation of measures designed to stabilize conditions at the site to prevent the continued migration of contaminants or eliminate an imminent threat to public health, safety, welfare, or the environment until planning for remedial response is underway (i.e., RAMs or IRAs).

At each step of the remedial response action process, plans for work are developed, the work is conducted, and reports describing results and recommendations for the next step are prepared. The documents which describe each of these steps are the cornerstone of the remedial response action planning process, since they provide the information necessary to support the decisions made about how a site should be cleaned up.

The response action planning process is designed to address the concerns about the nature and extent of affected media; risks posed by the site to health, safety, public welfare, and the environment; and the feasibility of any proposed cleanup measures. These concerns will primarily be addressed in Phases II and III of the MCP process. At any point in this process, if the criteria for achieving a "Permanent Solution" is achieved, then a Permanent Solution Statement may be filed with sufficient evidence demonstrating that a condition of No Significant Risk of harm to human health, public safety and welfare, and the environment as defined by the MCP exists.

In developing the initial PIP, VERTEX representatives talked with the key petitioners, petitioners who wished to be interviewed, as well as municipal officials on the behalf of Alta. These interviews provided an opportunity to initiate a dialogue with the community and identify their questions, concerns, and needs. Issues identified in these discussions primarily related to potential impacts on off-site locations, the availability of documents, and the ways in which the public could be involved in the process (see Exhibit I for a summary of the discussions).

4.0 PUBLIC INVOLVEMENT ACTIVITIES

In accordance with section 40.1400 of the MCP, the purpose of public involvement in environmental response actions at OHM release sites is:

- To inform the public about risks posed by the Site, the status of the remedial response actions, and the opportunities for public involvement, and
- To solicit the concerns of the public about the Site and remedial response actions so that these concerns can be addressed and incorporated in planning remedial response actions.

To meet each of these objectives, VERTEX on behalf of Alta, proposes to undertake specific activities during the remedial response actions at the Site. These activities are described below.

4.1 Informing the Public

Alta will provide site-specific information to the public through:

- The establishment of a publicly accessible online information repository;
- The development and maintenance of a mailing list that will include all identified persons to whom information about MCP response actions will be distributed; and
- Timely advance notification to local officials and residents as required by the MCP about notable MCP response actions, and/or opportunities for public involvement (see Section 4.2).

4.1.1 Notification to Local Officials and Residents of Major Milestones and Events

MassDEP requires community notification of major planning and implementation milestones at MCP sites. In accordance with 310 CMR 40.1403(3), major milestones requiring notification of submittal include the following documents:

- Release Notifications;

- Completion Statements for IRAs to address Imminent Hazards;
- All Phase Reports including:
    - Conceptual Phase II Scope of Work.
    - Phase II Interim/Comprehensive Site Assessments (and Risk Characterization).
    - Phase III Remedial Action Plans.
    - Phase IV Remedy Implementation Plans.
    - Phase V Remedy Operation Status.
- Activity and Use Limitations;
- Temporary and Permanent Solution Statements;
- Audit Follow-up Plans; and,
- Downgradient Property Status (DPS) Opinion.

Timely notification for document submittals will include a summary of the report and information on where it can be reviewed.

Major events requiring notification of fieldwork include:

- The implementation of any IRAs to address Imminent Hazards or Critical Exposure Pathways;
- The implantation of any RAMs;
- The use of respirators or Level A, B, or C protective clothing;
- Sampling involving residential indoor air, surficial soil, or private drinking water supply wells; and
- Phase IV remedial actions.

If any of these activities are necessary, notification will include information on the type of work and its approximate duration. Notification will be made by Alta to the people on the Notification List by telephone the day before activity is scheduled to begin.

Those to be notified are listed in the table below:

SITE NOTIFICATION LIST		
Name	**Affiliation**	**Address, Phone, and Email**
Carole Plumb	Lead Petitioner	17 Bald Rock Road Wayland, MA 01778 774-270-2482 caplumb@comcast.net
Louise Miller	Town of Wayland Administrator	41 Cochituate Road Wayland, MA 01778 508-358-3620 lmiller@wayland.ma.us
Sean Fair	Town of Wayland Conservation Commission	41 Cochituate Road Wayland, MA 01778 508-358-3669 sfair@wayland.ma.us
Julia Junghanns, R.S., C.H.O.	Town of Wayland Board of Health	41 Cochituate Road Wayland, MA 01778 508-358-3617 JJunghanns@wayland.ma.us
Henry Hayes	Town of Sudbury Town Manager	275 Old Lancaster Road Sudbury, MA 01776 978-639-3381 hayesH@sudbury.ma.us
Lori Capone	Town of Sudbury Conservation Commission	278 Old Sudbury Road Sudbury, MA 01776 978-440-5471 caponel@sudbury.ma.us
William Murphy	Town of Sudbury Health Department	275 Old Lancaster Road Sudbury, MA 01776 978-440-5479 health@sudbury.ma.us
Rebecca L. Rausch	Massachusetts State Senator Norfolk, Bristol and Middlesex Counties	24 Beacon Street, Room 218 Boston, MA 02133 becca.rausch@masenate.gov
Michael J. Barrett	Massachusetts State Senator 3rd Middlesex	24 Beacon Street, Room 109-D Boston, MA 02133 Mike.barrett@masenate.gov
James B. Eldridge	Massachusetts State Senator Middlesex and Worcester Counties	24 Beacon Street, Room 511-C Boston, MA 02133 James.eldridge@masenate.gov
Carmine Lawrence Gentile	Massachusetts State Representative 13th Middlesex	24 Beacon Street, Room 167 Boston, MA 02133 carmine.gentile@mahouse.gov
Alice Hanlon Peisch	Massachusetts State Representative 14th Norfolk	24 Beacon Street, Room 473G Boston, MA 02133 carmine.gentile@mahouse.gov

In addition, the Wayland and Sudbury fire and police departments will be notified in situations where public safety is a concern.

4.1.2 Information Repositories

Alta will maintain the repositories listed below to provide easy access to relevant Site environmental response action reports. Each of the repositories will contain the same reports, with an inventory listing available to assist with locating relevant reports.

MassDEP Local Office

A Site file is maintained at the Northeast Regional MassDEP Office at 205B Lowell Street in Wilmington, Massachusetts. The file contains publicly available documents pertaining to the Site. Files can be viewed online using MassDEP's online Waste Site/Reportable Release file viewer at the following links:

- https://eeaonline.eea.state.ma.us/portal#!/wastesite/3-0036013
- https://eeaonline.eea.state.ma.us/portal#!/wastesite/3-0034474

Appointments to view the hard copy files in person at the Northeast Regional MassDEP Office can be arranged by contacting:

Mr. Ethan Gould, File Review Coordinator
MassDEP Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887
Telephone: (978) 694-3200 or (978) 694-3320

VERTEX Hosted Information Repository

VERTEX has established an online information repository to provide residents with easy access to information about the Site cleanup process and results of Site investigations. The designated River's Edge repository contains copies of files submitted to MassDEP under RTN 3-36013 and

RTN 3-34474 by both VERTEX and previous environmental consultants. Documents included in this repository will include:

- The draft Public Involvement Plan;
- This finalized Public Involvement Plan;
- Technical reports and documents summarizing results and recommendations;
- Relevant correspondence with the Town and the MassDEP;
- Public meeting summaries;
- Summaries of public comments received and responses to the comments; and
- Copies of public notices about the Site.

Information regarding the MCP Site will continue to be uploaded to the designated River's Edge repository as it is developed. The information repository for the Site is located at:

- https://vertexeng.com/rivers-edge-public-involvement-plan-public-repository/

Hard-Copy Local Repository

Due to current COVID-19 pandemic restrictions, hard copies of relevant documents can be requested by contacting Kristen Sarson at 617-275-5407 or ksarson@vertexeng.com. Additionally, hard copies of public documents are kept at:

Town of Wayland Town Clerk
41 Cochituate Road
Wayland, Massachusetts.
Telephone: 508-358-3631
Hours: Mondays 8:00AM to 7:00PM
Tuesday through Thursday 8:00AM to 4:00PM
Fridays 8:00AM to 12:30PM

4.1.3 Site Mailing List

The Mailing List will be used to announce upcoming public meetings, information and public comment periods, and the availability of documents in the information repository. Anyone interested in being added to the Mailing List will be accomodated.

An updated Site Mailing List is included in Exhibit II and includes petitioners, individuals who have requested information related to the Site, owners and ocucpants of properties located in the currently defined disposal site boundary, abutters, municipal and state officials, and MassDEP. VERTEX, on behalf of Alta will maintain the Mailing List and update it as necessary.

Anyone wishing to be added to or removed from the mailing list can contact:

Kristen Sarson - ksarson@vertexeng.com
The Vertex Companies, Inc.
100 North Washington Street, Suite 302
Boston, MA 02114
617.275.5407

4.2 Soliciting Public Input

Alta will provide opportunities for public input regarding Site environmental response actions by holding public meetings that initiate comment periods for oral and written input on key deliverables. Comment summaries and responses to them will be prepared at the end of each public comment period, and the input will be used to finalize documents for submittal to MassDEP. Notices announcing public meetings and other comment periods will be sent to individuals on the Site Mailing List (Exhibit II) so that the meeting notices will be received 14 days in advance of the meeting. Notices will also be published in the Wayland/Weston Town Crier 14 calendar days before the scheduled public meeting date.

4.2.1 Occasions for Public Meetings

In the future, Alta will convene public meetings to discuss the following potential deliverables:

- MCP Phase Reports indicating that response actions have proceeded into the next Phase as described in Section 3.0 of this PIP, including:
    - Conceptual Phase II Scope of Work.
    - Phase II Interim/Comprehensive Site Assessment Report (and Risk Characterization).
    - Phase III Remedial Action Plans.
    - Phase IV Remedy Implementation Plans.

    - Phase V Remedy Operation Status.
- RAM Plans and IRA Plans;
- RAM and IRA Status Reports (see below for more detail);
- RAM and IRA Plan Modifications;
- RAM and IRA Completion Statements;
- Temporary and Permanent Solution Statements; and,
- Downgradient Property Status (DPS) Opinions.

A public comment was received seeking quarterly development updates. Remediation activities at the Site are being conducted as a RAM and the MCP requires the submittal of RAM Status Reports 120 days after the submittal of the RAM Plan and every six months thereafter until submittal of a RAM Completion Report. In response to the public comment, public meetings will be held when RAM Status Reports and IRA Status Reports are submitted to the MassDEP. Meetings at the time of report submittals are appropriate because it is at those times when the most recent data has been compiled, evaluated, and summarized and when response action plans are adjusted if needed. All public meetings will include a question-and-answer period. The amount of new remedial activities information that has been fully compiled and evaluated between the scheduled public meetings will be very limited; therefore, quarterly meetings would not be very informative.

Meetings will serve two purposes:

- To provide community officials and the general public with a progress report regarding remedial response actions at the site.
- To provide an opportunity for the public to question and comment on remedial action plans for the site.

VERTEX, on behalf of Alta, will send announcement of a public meeting to individuals on the Site Mailing List (Exhibit II) so that the meeting notices will be received 14 days in advance of the meeting. Announcements will be published in the Wayland/Weston Town Crier newspaper 14 days in advance of the meeting and included on the Town of Wayland online calendar,

WaylandeNews, Wayland Voters Network, and the Wayland Patch. Meetings will be held on either Wednesdays or Thursdays at 6:30PM or later. Public meetings will not be held on public holidays and if possible, meetings will not be scheduled for weeks during which a public holiday occurs. Due to the current restrictions and concerns surrounding the COVID-19 pandemic, public meetings will be hosted virtually via the online platform Zoom. Once restrictions are eased and town offices relax restrictions, public meetings will be hosted in person at a public location in the Town of Wayland. All the meetings will be live broadcast on the Wayland Public Access television channel "Waycam" and "Waycam.tv/live."

VERTEX, on behalf of Alta, will prepare meeting summaries, submit the summaries to MassDEP, and place a copy of the summaries, sign-in sheets, and presentation materials in the information repositories.

4.2.2 Public Comment Periods

Alta will provide specific opportunities for the public to submit comments about documents concerning the Site. When the key documents are available in draft form, they will be provided to the information repositories, and a notice of their availability will be sent to the Site Mailing List (Exhibit II). The notice will include the title of the document, where it is available for review, information about how to submit comments to VERTEX on behalf of Alta, and the length of the public comment period. The length of the comment period is a minimum of 20 calendar days and can be extended by a maximum of 20 additional days if requested by the public. VERTEX, on behalf of Alta, will be responsible for providing document copies to the information repository and MassDEP as well as sending out notices of availability of any documents it prepares.

The following submittals for response actions will be provided for public comment:

- Revisions to the PIP;
- Conceptual Phase II Scope of Work;
- Phase II – Interim/Comprehensive Site Assessment Report (and Risk Characterization);
- Phase III Remedial Action Plan;

- Phase IV Remedial Action Plan;
- Phase V Remedy Operation Status Submittal;
- RAM or IRA Plan Modifications;
- RAM or IRA Status Reports
- RAM or IRA Completion Statement;
- Activity and Use Limitations (AULs);
- Temporary and Permanent Solution Statement (including partial); and,
- Downgradient Property Status (DPS) Submittal.

4.2.3 Response to Comments

VERTEX, on behalf of Alta, will prepare a summary of all comments received on each document available for public comment, and of responses to these comments. Within 45 calendar days of the close of the comment period, a copy of this response summary will be sent to all those who submitted comments and will be placed in the information repository and submitted to the MassDEP. VERTEX, on behalf of Alta, will also send a notice of availability of the response summary to the Site Mailing List (Exhibit II). The summary will be made available prior to Alta taking the remedial response action submitted for comment, or prior to moving to the next MCP phase.

5.0 SCHEDULE FOR PUBLIC INVOLVEMENT

Exhibit III provides an approximate schedule of the public involvement activities listed in Section 4.0. The schedule identifies the approximate dates of the milestones during the response actions when public involvement activities will be conducted. The specific dates of each public involvement activity will be provided in the public notices when the dates are finalized.

6.0 RESPONSIBILITY FOR PUBLIC INVOLVEMENT PLAN

Alta is responsible for conducting the public involvement activities at the Site. On behalf of Alta, VERTEX has developed this Public Involvement Plan and will assist Alta in carrying out the activities listed in this Plan during the Site cleanup process. These responsibilities will include establishing the local information repository, establishing and maintaining the notification and mailing lists, providing copies of reports to the local information repository and those entities identified by the MassDEP, mailing notices of meetings and the availability of reports, notifying local officials and residents of major planning and Site implementation events, providing an update on the status of the Site to local officials and residents, and preparing responses to public comments on proposed response actions.

7.0 REVISIONS TO PUBLIC INVOLVEMENT PLAN

This PIP may be revised as necessary during the course of the MCP response action process. If revisions are proposed, VERTEX, on behalf of Alta, will upload a summary of the proposed changes to the designated River's Edge repositories and will send a notice of the availability of the proposed changes to those on the Site Mailing List (Exhibit II). Alta will hold a 20-day public comment period (see Section 4.2.2) on the proposed revised Plan. VERTEX, on behalf of Alta, will review any comments received and revise the Plan as appropriate. The final revised Plan will be placed in the information repository.

EXHIBIT I:

SUMMARY OF PUBLIC CONCERNS

EXHIBIT I
Summary of Public Concerns
River's Edge
484-490 Boston Post Road, Wayland, MA
RTN 3-34474 & 3-36013

SUMMARY OF PUBLIC CONCERNS

Below is a summary of the concerns that were identified during VERTEX's communications with the PIP Group. The comments summarized below are specific to concerns regarding the Massachusetts Contingency Plan (MCP) process for Release Tracking Numbers (RTNs) 3-34474 and 3-36013.

A: Concerns About the Nature and Extent of Contamination:

- The public are concerned about groundwater impacts that have been detected at the Site migrating to the abutting wetlands and subsequently the Sudbury River. Concerns have been expressed regarding the amount of groundwater data and whether it was sufficient to characterize the groundwater impacts identified at the Site.
- There are concerns regarding the possible impacts that a future on-site leach field designed to accommodate about 38,000 gallons/day of wastewater would have on the extent of groundwater contamination.

- Petitioners also commented about concerns the potential for n-nitrosodimethylamine (NDMA) in groundwater as a result of the historical use of the Site by the Town of Wayland for wastewater treatment. The public understands that NDMA can be produced as an unintended byproduct of wastewater chlorination at wastewater treatment plants that utilize chloramines in the disinfection process.

- A few people interviewed expressed concern about the delineation and remediation of asbestos impacts within the large soil stockpile at the Site.

- Questions were also posed during the interview process as to whether a Downgradient Property Status Opinion was applicable to the groundwater impacts detected at the Site due to the operation of a wastewater treatment plant at the Site and whether sufficient investigations have been completed to support the opinion.

B: Concerns About Routes of Exposure and Neighborhood Health Issues:

- The public have general concerns about the potential for groundwater impacts at the Site migrating into the abutting wetlands and subsequently the Sudbury River. It was noted that the abutting wetlands and Sudbury River is home to a large amount of native wildlife and vegetation and there are concerns that both are going to be harmed by groundwater impacts.

C: Concerns About the Site Remediation Process:

- No concerns were expressed specifically regarding the anticipated Site remediation process.

D: Concerns About Opportunities for Public Involvement During the Remedial Response Action Process:

- The public have concerns regarding the transparency of cleanup operations at the Site. The majority of those interviewed indicated that they were not made aware of the environmental response actions and subsequent closure of RTN 3-34474 associated with asbestos materials that were identified at the Site.

- The petitioners requested that information be provided through quarterly public meetings in addition to those public meetings which are required under the MCP for 'Milestone Reports.' The petitioners requested that each public meeting have question and answer periods directly following the presentation of materials and that the meetings occur on Wednesdays and Thursdays at 6:30PM or later.

- The majority of those interviewed expressed frustration regarding the availability of documents pertaining to the property indicating that locating them is difficult since they are scattered about the Town of Wayland website. It was requested that a central location be established where to make available publicly-available documents pertaining to environmental response actions at the Site.

- Concerns were expressed about documents using technical terms that are not easily understood to those outside of the environmental response field. The public requested short summaries describing the contents of technical documents to assist with comprehension.

- In addition to notices being placed in the Wayland/Weston Town Crier, the public requested that notices for public meetings be included various other locations including the Town of Wayland website, the Wayland Voter Network, WaylandeNews, and the Wayland Patch. Requests have also been made to broadcast each of the public meetings via the local public broadcast network, WayCam.

E: Other Concerns:

- The public appear to have a high level of interest in being briefed about the status of the property development. While not part of the MCP process, the developer understands the public's interest and has worked with Town representatives in designing the property development to meet the Town's needs. Public information regarding non-MCP aspects of the site development is available from the Town and the MassDEP Bureau of Air and Waste.

EXHIBIT II:

PUBLIC INVOLVEMENT PLAN MAILING LIST

EXHIBIT II

PUBLIC INVOLVEMENT PLAN MAILING LIST

Name	Address		Town	State	Zip	PIP Petioner
Carole Plumb	17 Bald Rock Road		Wayland	MA	01778	X
Sherre Greenbaum	161 Plain Road		Wayland	MA	01778	X
Stephen Greenbaum	161 Plain Road		Wayland	MA	01778	X
Donna Bouchard	72 Concord Road		Wayland	MA	01778	X
David M^{c}Harg	72 Concord Road		Wayland	MA	01778	X
Barbara Harris	8 Holiday Road		Wayland	MA	01778	X
George Harris	8 Holiday Road		Wayland	MA	01778	X
Cynthia Hill	54 Orchard Lane		Wayland	MA	01778	X
David M. Hill	54 Orchard Lane		Wayland	MA	01778	X
Anette Lewis	33 Claypit Hill Road		Wayland	MA	01778	X
Susan Reed	58 Glezen Lane		Wayland	MA	01778	X
Stuart Edelman	58 Glezen Lane		Wayland	MA	01778	X
Molly Upton			Wayland	MA	01778	
Alice Boelter	106 Lakeshore Drive		Wayland	MA	01778	
Robert Goldsmith			Wayland	MA	01778	
Kim Sarkisian			Wayland	MA	01778	
Sean Fair	Conservation Commission	41 Cochituate Road	Wayland	MA	01778	
Julia Junghanns, R.S, C.H.O.	Board of Health	41 Cochituate Road	Wayland	MA	01778	
Robert DeFrancesco	Board of Health	41 Cochituate Road	Wayland	MA	01778	
Susan Green	Board of Health	41 Cochituate Road	Wayland	MA	01778	
Arne Soslow, MD	Board of Health	8 Fox Meadow Lane	Wayland	MA	01778	
Louise Miller	Town Administrator	41 Cochituate Road	Wayland	MA	01778	
Michael Wegerbauer	Department of Public Works	66 River Road	Wayland	MA	01778	
Michale Lowry	Department of Public Works	66 River Road	Wayland	MA	01778	
Albert I. Montague Jr.	Planning Board	41 Cochituate Road	Wayland	MA	01778	
Michael Gitten	Wastewater Management District	66 River Road	Wayland	MA	01778	
Elizabeth Newton	Surface Water Quality Commission	41 Cochituate Road	Wayland	MA	01778	
Cherry C. Karlson	Board of Selectmen	41 Cochituate Road	Wayland	MA	01778	
Rebecca Stanizzi	Economic Development Committee	41 Cochituate Road	Wayland	MA	01778	
Daniel Nason	Department of Public Works	275 Old Lancaster Road	Sudbury	MA	01776	
Lori Capone	Conservation Commission	278 Old Sudbury Road	Sudbury	MA	01776	
Henry Hayes	Town Manager	275 Old Lancaster Road	Sudbury	MA	01776	
William Murphy	Health Department	275 Old Lancaster Road	Sudbury	MA	01776	
Tom Sciacca	Sudbury, Assabet, and Concord Wild and Scenic River Stewardship Council		Various			
Anne Slugg	Sudbury, Assabet, and Concord Wild and Scenic River Stewardship Council		Various			
Benson Gould, LSP	CMG Environmental Inc.	67 Hall Road	Sturbridge	MA	01566	
Rebecca L. Rausch	Massachusetts State Senator	24 Beacon Street, Room 218	Boston	MA	02133	
Carmine Lawrence Gentile	Massachusetts State Representative	24 Beacon Street, Room 167	Boston	MA	02133	
Alice Hanlon Peisch	Massachusetts State Representative	24 Beacon Street, Room 473G	Boston	MA	02133	
Michael J. Barrett	Massachusetts State Senator	24 Beacon Street, Room 109D	Boston	MA	02133	
James B. Eldridge	Massachusetts State Senator	24 Beacon Street, Room 511C	Boston	MA	02133	
Karen Stromberg	MassDEP Northeast Regional Office	205B Lowell Street	Wilmington	MA	01887	

EXHIBIT III:

SCHEDULE OF PUBLIC INVOLVEMENT ACTIVITIES

EXHIBIT III
SCHEDULE OF PUBLIC INVOLVEMENT ACTIVITIES

ID	Task Name	Duration	Start	Finish
1	**PUBLIC INVOLVEMENT ACTIVITIES**	**402.25 days**	**Thu 3/18/21**	**Sun 4/10/22**
2	Draft PIP Meeting	0 days	Thu 3/18/21	Thu 3/18/21
3	Public Comment Period	40 days	Fri 3/19/21	Mon 4/26/21
4	Interim RAM Status Report	0 days	Wed 3/31/21	Wed 3/31/21
5	End of Public Comment Period	0 days	Tue 4/27/21	Tue 4/27/21
6	RAM Status Report	0 days	Fri 5/7/21	Fri 5/7/21
7	Response to PIP Comments	0 days	Thu 5/27/21	Thu 5/27/21
8	Final PIP Issued	0 days	Thu 5/27/21	Thu 5/27/21
9	RAM Status Report Public Meeting	0 days	Fri 6/24/21	Fri 6/24/21
10	Downgradient Property Status Public Meeting (approx)	0 days	Mon 10/18/21	Mon 10/18/21
11	Public Comment Period	20 days	Mon 10/18/21	Sat 11/6/21
12	RAM Status Report	0 days	Fri 11/5/21	Fri 11/5/21
13	RAM Status Report Public Meeting	0 days	Fri 11/19/21	Fri 11/19/21
14	Response to DPS Comments	0 days	Sun 12/5/21	Sun 12/5/21
15	Final DPS Filed	0 days	Sun 12/5/21	Sun 12/5/21
16	RAM Completion Report and Permanent Solution Public Meeting (approx)	0 days	Mon 2/21/22	Mon 2/21/22
17	Public Comment Period	20 days	Mon 2/21/22	Sat 3/12/22
18	Response to RAM Completion & PSS Comments	0 days	Sun 4/10/22	Sun 4/10/22
19	RAM Completion and Permanent Solution & RTN Closed	0 days	Sun 4/10/22	Sun 4/10/22

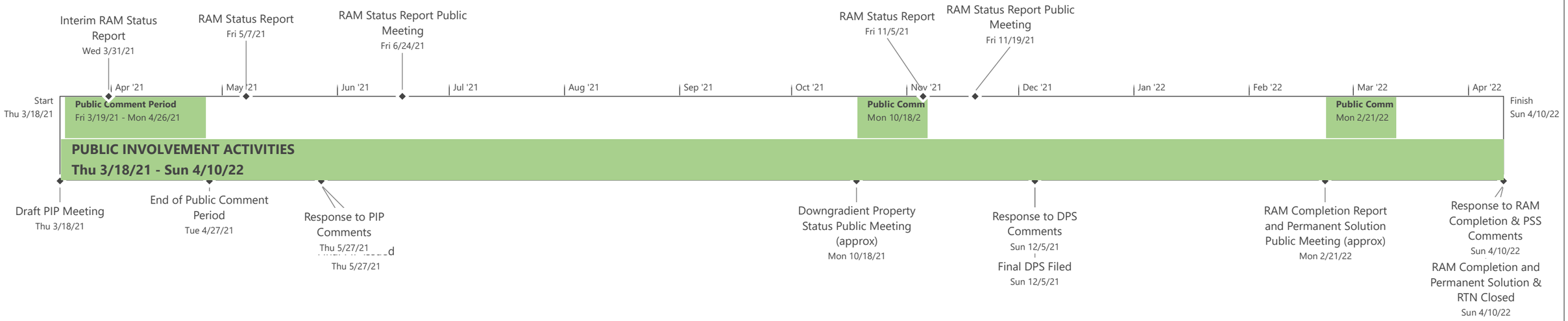

Interim RAM Status Report
Wed 3/31/21
RAM Status Report
Fri 5/7/21
RAM Status Report Public Meeting
Fri 6/24/21
RAM Status Report
Fri 11/5/21
RAM Status Report Public Meeting
Fri 11/19/21
Apr '21
May '21
Jun '21
Jul '21
Aug '21
Sep '21
Oct '21
Nov '21
Dec '21
Jan '22
Feb '22
Mar '22
Apr '22
Start
Thu 3/18/21
Public Comment Period
Fri 3/19/21 - Mon 4/26/21
Public Comm
Mon 10/18/2
Public Comm
Mon 2/21/22
Finish
Sun 4/10/22
PUBLIC INVOLVEMENT ACTIVITIES
Thu 3/18/21 - Sun 4/10/22
Draft PIP Meeting
Thu 3/18/21
End of Public Comment Period
Tue 4/27/21
Response to PIP Comments
Thu 5/27/21
Thu 5/27/21
Downgradient Property Status Public Meeting (approx)
Mon 10/18/21
Response to DPS Comments
Sun 12/5/21
Final DPS Filed
Sun 12/5/21
RAM Completion Report and Permanent Solution Public Meeting (approx)
Mon 2/21/22
Response to RAM Completion & PSS Comments
Sun 4/10/22
RAM Completion and Permanent Solution & RTN Closed
Sun 4/10/22

EXHIBIT IV:

GLOSSARY OF TERMS

EXHIBIT IV
GLOSSARY OF TERMS
River's Edge Public Involvement Plan
484 – 490 Boston Post Road, Wayland, MA
RTN 3-34474 & 3-36013

- **ACWM –** Asbestos Containing Waste Material, defined by Massachusetts asbestos regulations 310 CMR 7.15 as any asbestos containing materials (ACM) removed during a demolition or renovation project and anything contaminated with asbestos in the course of a demolition or renovation project including, but not limited to, asbestos waste from control devices, bags or containers that previously contained asbestos, contaminated clothing, materials used to enclose the work area during the demolition or renovation operation, and demolition or renovation debris. ACWM shall also include ACM on and/or in facility components that are inoperable or have been taken out of service and any ACM that is damaged or deteriorated to the point where it is no longer attached as originally applied or is no longer serving the intended purpose for which it was originally installed.
- **Alta –** Alta River's Edge, LLC (property owner)
- **BOL –** Bill of Lading
    - Under the Massachusetts Contingency Plan, a BWSC-112 Bill of Lading is a document used to track the transportation of Remediation Waste from locations in Massachusetts to licensed in-state and out of state facilities.
- **BWSC –** Bureau of Waste Site Cleanup
- **CARB –** California Air Resources Board
- **CMG –** CMG Environmental Inc.
- **Con-Test –** Con-Test Analytical Laboratories of East Longmeadow, Massachusetts
- **DEPNDS –** MassDEP Not a Disposal Site
    - This identification applies to locations where environmental conditions did not need to be reported, and therefore are not considered a Disposal Site under the Massachusetts Contingency Plan.
- **DPS –** Downgradient Property Status
- **DPW –** Department of Public Works
- **EPH –** Extractable petroleum hydrocarbons
    - Extractable petroleum hydrocarbons are defined as collective fractions of hydrocarbon compounds, excluding target polycyclic aromatic hydrocarbons. EPH is comprised of C_9 through C_{18} aliphatic hydrocarbons, C_{19} through C_{36} aliphatic hydrocarbons, and C_{11} through C_{22} aromatic hydrocarbons.
- **LEL –** Lower Explosive Limit
    - The lowest concentration (by percentage) of gas or vapor which propagation of a flame does not occur in the presence of an ignition source.

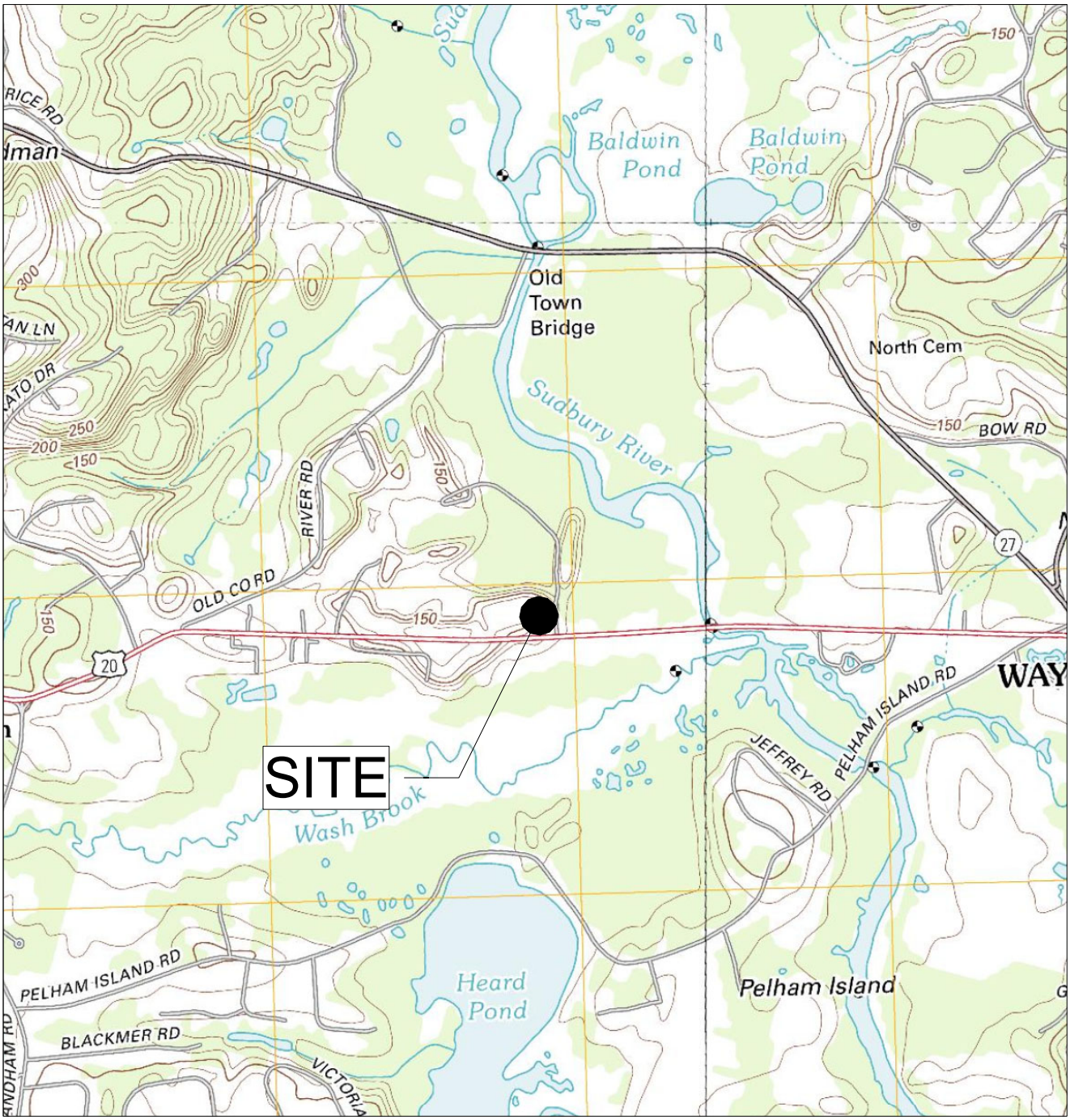
- **LSP –** Licensed Site Professional
    - An LSP is licensed by the State based on education, experience, and satisfactory completion of an examination. The LSP is responsible for overseeing Massachusetts Contingency Plan response actions.
- **M.G.L. –** Massachusetts General Law
- **MassDEP –** Massachusetts Department of Environmental Protection.
    - The MassDEP is an agency in the Commonwealth of Massachusetts that is responsible for protecting the environment in the state.
- **MCP –** Massachusetts Contingency Plan
    - Massachusetts General Law Chapter 21E tasks the MassDEP with enforcing environmental cleanup in the state. The MassDEP implements this law through a set of regulations identified as the Massachusetts Contingency Plan (310 CMR 40.0000).
- **MSR –** Material Shipping Record
    - Material Shipping Records are used in Massachusetts to track the transportation of unregulated soil, urban fill, and/or dredge material.
- **NTAWP –** Non-Traditional Asbestos Work Plan
    - A report outlining the work plan to be followed for asbestos abatement at a designated location that, prior to implementation, is submitted to the Massachusetts Department of Environmental Protection for approval.
- **OHM –** Oil and hazardous materials
- **PCBs –** Polychlorinated biphenyls
    - Polychlorinated biphenyls are a group of man-made hydrocarbons. They were domestically manufactured from 1929 until manufacturing was banned in 1979.
- **Phase I ESA –** Phase I Environmental Site Assessment
    - A Phase I Environmental Site Assessment, as defined by the American Society of Testing and Materials (ASTM), is commonly conducted by buyers of properties prior to purchase to evaluate for the presence of Recognized Environmental Conditions.
- **Phase II LSI –** Phase II Limited Site Investigation
- **PIP –** Public Involvement Plan
- **ppm –** parts per million
- **Property –** The area with the address 484-490 Boston Post Road, identified by the Town of Wayland Assessor as Map 22, Lot 6
- **RAM –** Release Abatement Measure
    - A Release Abatement Measure is a voluntary measure taken to remediate environmental conditions at a Site. A Release Abatement Measure Plan must be submitted to the Massachusetts Department of Environmental Protection prior to commencement of any remedial activities to be completed as a Release Abatement Measure.

- **RCRA –** Resource Conservation and Recovery Act
- **REC –** Recognized Environmental Condition
    - A Recognized Environmental Condition is defined as: *presence or likely presence of hazardous substances or petroleum products in, on, or at a property:*
        - Due to a release to the environment;
        - Under conditions indicative of a release to the environment; or
        - Under conditions that pose a material threat of a future release to the environment.
- **RTN –** Release Tracking Number
    - A Release Tracking Number is the unique number assigned to every Site/reportable release. The number is preceded by a 1-, 2-, 3-, or 4- depending on the region where the Site/reportable release is located. Corresponding regions are:
        - 1- Western Region
        - 2- Central Region
        - 3- Northeast Region
        - 4- Southeast Region
- **Site –** The area of the property within the boundaries of environmental conditions defined by the MassDEP under Release Tracking Numbers 3-36013 and 3-34474.
- **SVOC –** Semi-volatile organic compound
    - Semi-volatile organic compounds are a subset of volatile organic compounds that generally have a higher molecular weight and boiling point temperatures; therefore, they are not as volatile as general volatile organic compounds.
- **TCLP –** Toxicity characteristic leaching procedure
    - Toxicity characteristic leaching procedure is a soil extraction method for laboratory analysis which is used to simulate leaching that occurs in landfills.
- **TPH –** Total petroleum hydrocarbons
    - Total petroleum hydrocarbons is a term used to describe a large family of several hundred chemical compounds that originally come from crude oil.
- **µg/L –** micrograms per liter
    - Unit of measurement most often used to measure concentrations of substances within water.
- **USEPA –** United States Environmental Protection Agency
- **UST –** Underground storage tank
- **VERTEX –** The Vertex Companies, Inc.
- **VOC –** Volatile organic compound

    - Volatile organic compounds are organic chemical compounds whose composition makes it possible for them to evaporate under normal indoor atmospheric conditions of temperature and pressure.

- **XRF analyzer–** X-ray fluorescence analyzer

FIGURES



N

0 0.5 1.0 1.5

SCALE: 1" = 0.5 miles
(WHEN PRINTED AT 8.5"x11")

SOURCE: UNITED STATES GEOLOGICAL SURVEY MAP FRAMINGHAM MA QUADRANGLE 7.5 MINUTE SERIES (2012)

SITE LOCUS

RIVER'S EDGE
484 - 490 Boston Post Road
Wayland, Massachusetts
RTN 3-36013

Date:	04/22/19
Drawn:	KS
Checked:	FC
Job No.:	67404

FIGURE 1

VERTEX®
VERTEXENG.COM

100 N WASHINGTON ST, 302
BOSTON, MA 02114
617.275.5407

LEGEND:

- V-103 (MW) — VERTEX Monitoring Well
- V-113 — Soil Boring
- MW-3 — Monitoring Well Installed by Others
- V-SG-101 — Soil Vapor Sample Point
- Approximate Location of Former USTs
- 32,000 cy Stockpile Material Management Area
- Approximate Configuration of 4,500 cy Stockpile
- Former Firing Range Material Management Area
- Approximate Site Boundary
- Former Hazardous Material Storage Trailer
- RTN 3-36013 Boundary

0 100 200 300

SCALE: 1" = 100'-0"
(WHEN PRINTED AT 11"x17")

SITE SCHEMATIC

RIVER'S EDGE
484 - 490 BOSTON POST ROAD
WAYLAND, MA

Date: 11/19/2020
Drawn: KS
Checked: FC
Job No.: 67404

FIGURE 2

REVISIONS
04/26/2021

VERTEX
VERTEXENG.COM
100 N WASHINGTON ST, STE 302
BOSTON, MA 02114
617.275.5407

LEGEND:

B3 Test Pit Grid Number

SVOCs Dectected Above RCS-1 Reportable Concentrations

Total Lead Detected Above RCS-1 Reportable Concentrations

Approximate Configuration of 32,000 cy Stockpile

Test Pit Location
TP-V-101

Approximate Configuration of 4,500 cy Stockpile

N

0 50 100 150

SCALE: 1" = 50'-0"
(WHEN PRINTED AT 11x17)

SOIL STOCKPILE CLASSIFICATION

RIVER'S EDGE
484-490 BOSTON POST ROAD
WAYLAND, MA
RTN 3-36013

Date: 03/09/21
Drawn: KS
Checked: FC
Job No.: 67404

FIGURE 3

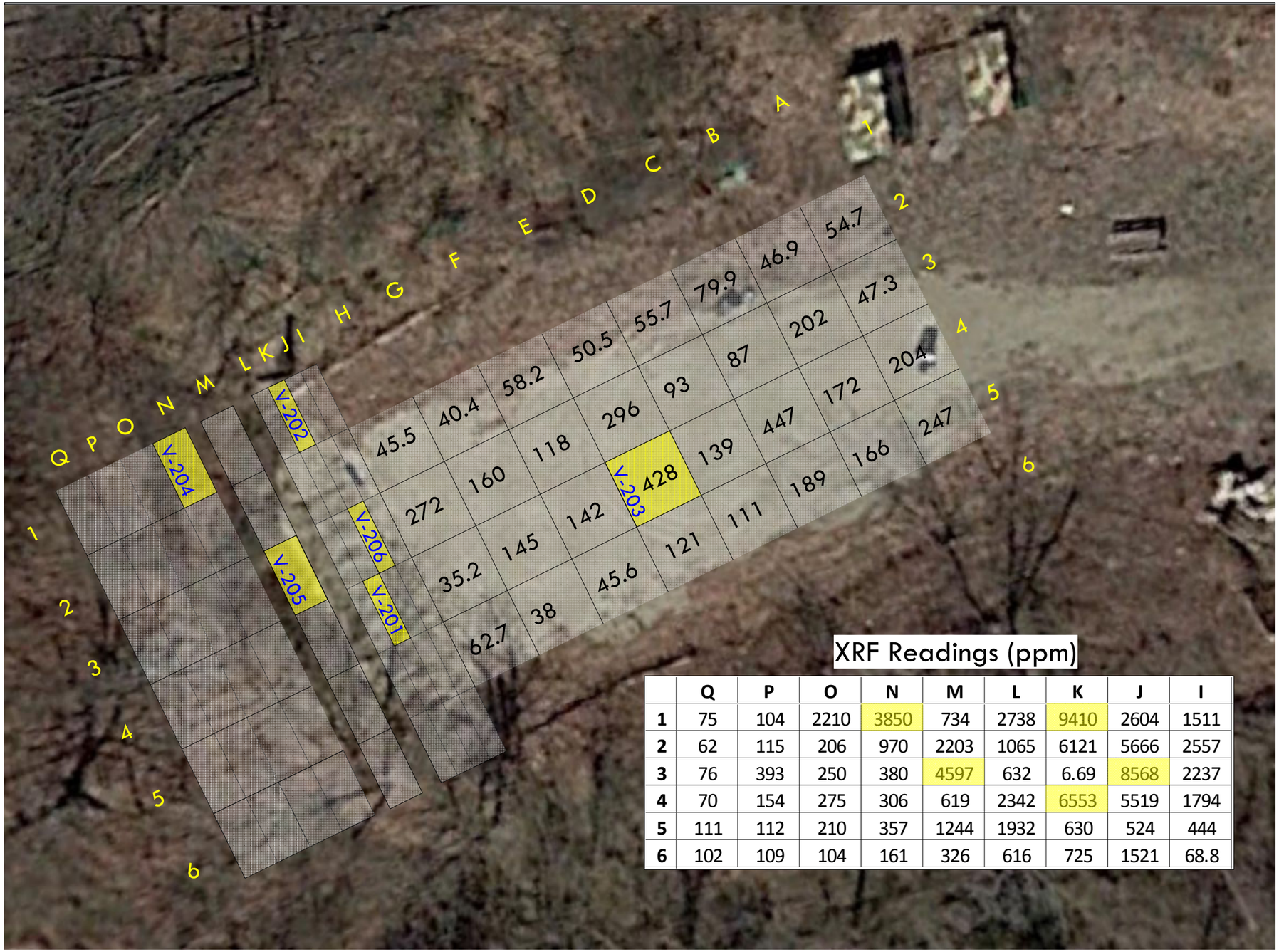
REVISIONS

VERTEX
100 N WASHINGTON ST, STE 302
BOSTON, MA 02114
617.275.5407
VERTEXENG.COM

LEGEND:

45.5 XRF Reading (ppm)

V-201 Grid Sampled



XRF Readings (ppm)

	Q	P	O	N	M	L	K	J	I
1	75	104	2210	3850	734	2738	9410	2604	1511
2	62	115	206	970	2203	1065	6121	5666	2557
3	76	393	250	380	4597	632	6.69	8568	2237
4	70	154	275	306	619	2342	6553	5519	1794
5	111	112	210	357	1244	1932	630	524	444
6	102	109	104	161	326	616	725	1521	68.8

N

0 15 30 45

SCALE: 1" = 15'-0"
(WHEN PRINTED AT 11"x17")

FIRING RANGE GRID LAYOUT

RIVER'S EDGE
484 BOSTON POST ROAD
WAYLAND, MA
RTN 3-36013

File No.:
Date: 04/12/19
Drawn: KS
Checked: FC
Job No.: 67404

FIGURE 4A

REVISIONS

VERTEX®
100 N WASHINGTON ST, STE 302
BOSTON, MA 02114
617.275.5407
VERTEXENG.COM

LEGEND:

Approximate Area Stabilized & Proposed for Disposal at TREE

N

0 15 30 45

SCALE: 1" = 15'-0"
(WHEN PRINTED AT 11x17)

FIRING RANGE AREA TO BE STABILIZED

RIVER'S EDGE
484-490 BOSTON POST ROAD
WAYLAND, MA

File No.:	
Date:	10/08/20
Drawn:	KS
Checked:	FC
Job No.:	67404

FIGURE 4B

REVISIONS

VERTEX
100 N WASHINGTON ST, STE 302
BOSTON, MA 02114
617.275.5407
VERTEXENG.COM

LEGEND:

Lead Vertical Delineation Sample

V-311 (Soil Boring)

V-301 (Test Pit)

V-301 through V-308 (2-4 feet bgs)*
V-309 through V-311 (0-2 feet bgs)*
V-312 through V-314 (2-4 feet bgs)*

**Sample collection depth.*

N

0 15 30 45

SCALE: 1" = 15'-0"
(WHEN PRINTED AT 11x17)

FIRING RANGE VERTICAL DELINEATION SAMPLES

RIVER'S EDGE
484-490 BOSTON POST ROAD
WAYLAND, MA
RTN 3-36013

File No.:
Date: 10/08/20
Drawn: KS
Checked: FC
Job No.: 67404

FIGURE 4C

REVISIONS 05/03/21

VERTEX®
100 N WASHINGTON ST, STE 302
BOSTON, MA 02114
617.275.5407
VERTEXENG.COM

LEGEND:

(118.03)
Approximate Groundwater Elevation

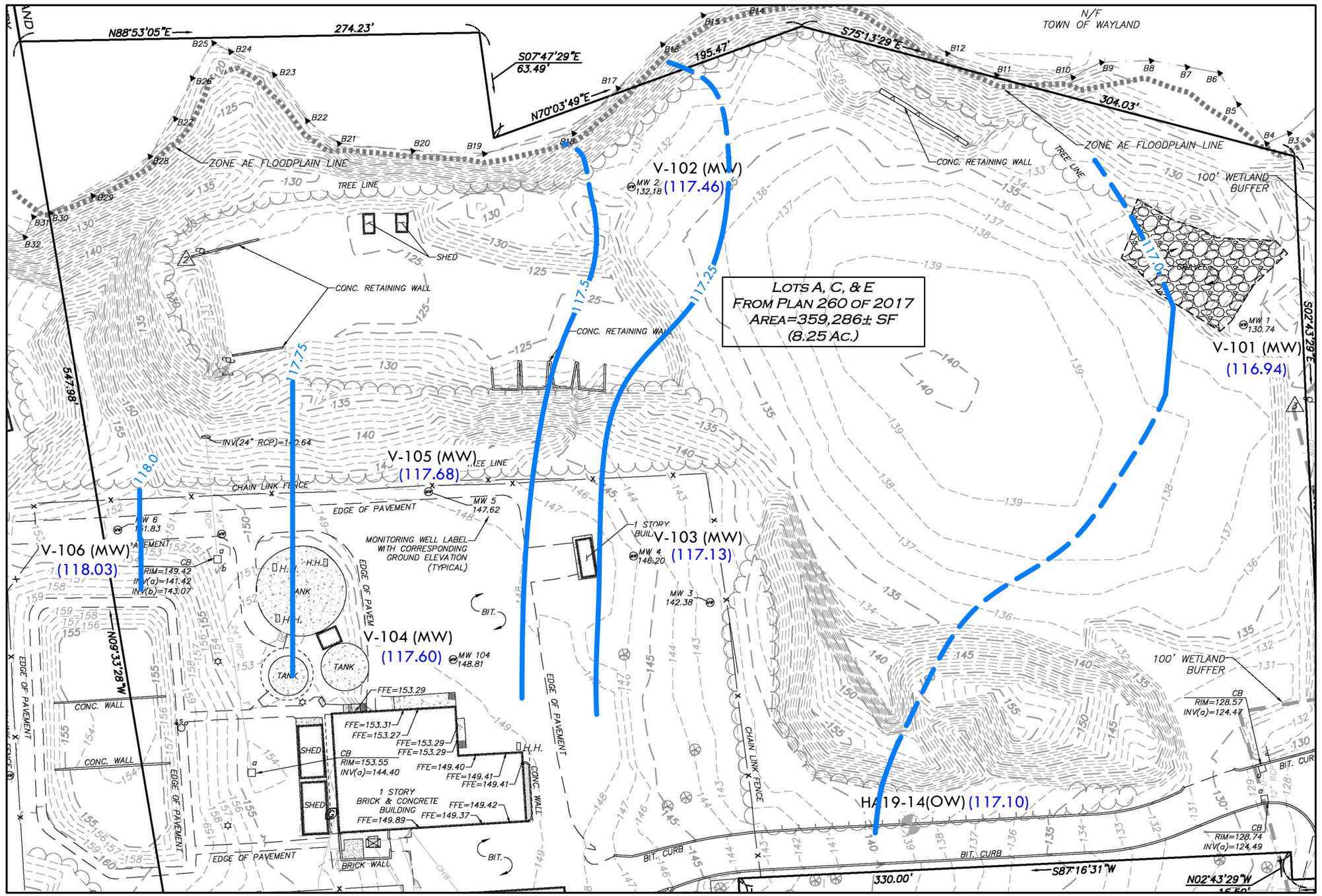
117.25
Contour of Equal Groundwater Elevation

117.25
Inferred Contour of Equal Groundwater Elevation

Notes:

**Elevations are displayed as NAVD 88.*

**Elevations and basemap based on Allen & Major Associates, Inc. Existing Conditions Plan, May 15, 2019.*



0 60 120 180

SCALE: 1" = 60'-0"
(WHEN PRINTED AT 11x17)

GROUNDWATER CONTOUR MAP
RIVER'S EDGE

484 - 490 BOSTON POST ROAD
WAYLAND, MA

File No.:
Date: 05/16/19
Drawn: KS
Checked: FC
Job No.: 67404

FIGURE 5

REVISIONS 04/22/21

VERTEX
100 N WASHINGTON ST, STE 302
BOSTON, MA 02114
617.275.5407
VERTEXENG.COM

TABLES

Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-A1	TP-A1	TP-A2	TP-A2	TP-A3	TP-A3	TP-A4	TP-A4	TP-A5	TP-A5	TP-B1	TP-B1	TP-B2
Sample ID			TP-A1 (0-5)	TP-A1 (5-10)	TP-A2 (0-5)	TP-A2 (5-10)	TP-A3 (0-5)	TP-A3 (5-10)	TP-A4 (0-5)	TP-A4 (5-10)	TP-A5 (0-5)	TP-A5 (5-10)	TP-B1 (0-5)	TP-B1 (5-10)	TP-B2 (0-5)
Sample Date			3/12/2019	3/12/2019	3/12/2019	3/12/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/12/2019	3/12/2019	3/12/2019
Depth Interval (ft)			0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5
Asbestos															
CARB 435	NSE	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extractable Petroleum Hydrocarbons (EPH) with target Polynuclear Aromatic Hydrocarbons (PAHs)															
C09-C18 Aliphatic Hydrocarbons	1000	mg/kg	--	--	--	--	--	--	ND(23)	ND(23)	ND(22)	ND(23)	--	--	--
C11-C22 Aromatic Hydrocarbons	1000	mg/kg	--	--	--	--	--	--	190	290	280	300	--	--	--
C19-C36 Aliphatics	3000	mg/kg	--	--	--	--	--	--	140	210	220	190	--	--	--
Total Petroleum Hydrocarbons (TPH)															
TPH	1000	mg/kg	440	530	410	590	790	940	1000	1000	1400	1300	760	480	300
Volatile Organic Compounds (VOCs)															
Total VOCs	NSE	mg/kg	ND(0.17)	0.0019	ND(0.18)	ND(0.17)	ND(0.18)	ND(0.16)	ND(0.16)	ND(0.19)	ND(0.21)	ND(0.19)	ND(0.092)	0.0045	ND(0.17)
Semivolatile Organic Compounds (SVOCs)															
Benzo(a)Pyrene	2	mg/kg	0.72	0.40	ND(0.76)	1.4	1.2	1.2	1.5	1.5	1.5	2.0	0.82	1.4	0.72
Benzo(b)Fluoranthene	7	mg/kg	0.84	0.45	0.77	1.6	1.5	1.3	1.7	1.8	1.8	2.5	1.0	1.6	0.86
Benzo(g,h,i)Perylene	1000	mg/kg	0.44	0.26	ND(0.76)	0.76	0.80	ND(0.96)	ND(0.96)	1.1	0.93	1.2	0.43	0.98	0.57
Benzo(k)Fluoranthene	70	mg/kg	ND(0.39)	ND(0.20)	ND(0.76)	0.64	ND(0.77)	ND(0.96)	ND(0.96)	ND(0.98)	ND(0.78)	ND(0.98)	0.43	ND(0.92)	0.34
Chrysene	70	mg/kg	0.66	0.39	ND(0.76)	1.3	1.2	1.2	1.4	1.3	1.4	1.9	0.80	1.4	0.74
Dibenzo(a,h)Anthracene	0.7	mg/kg	ND(0.39)	ND(0.20)	*ND(0.76)*	ND(0.36)	*ND(0.77)*	*ND(0.96)*	*ND(0.96)*	*ND(0.98)*	*ND(0.78)*	*ND(0.98)*	ND(0.38)	*ND(0.92)*	ND(0.19)
Dibenzofuran	100	mg/kg	ND(0.77)	ND(0.39)	ND(1.5)	ND(0.72)	ND(1.5)	ND(1.9)	ND(1.9)	ND(2.0)	ND(1.6)	ND(2.0)	ND(0.76)	ND(1.8)	ND(0.38)
Fluoranthene	1000	mg/kg	1.3	0.62	0.94	2.3	2.4	1.9	2.8	2.5	3.2	3.8	1.1	2.4	1.3
Fluorene	1000	mg/kg	ND(0.39)	ND(0.20)	ND(0.76)	ND(0.36)	ND(0.77)	ND(0.96)	ND(0.96)	ND(0.98)	ND(0.78)	ND(0.98)	ND(0.38)	ND(0.92)	ND(0.19)
Indeno(1,2,3-cd)Pyrene	7	mg/kg	0.43	0.27	ND(0.76)	0.81	ND(0.77)	ND(0.96)	ND(0.96)	1.1	0.95	1.3	0.45	ND(0.92)	0.55
Naphthalene	4	mg/kg	ND(0.39)	ND(0.20)	ND(0.76)	ND(0.36)	ND(0.77)	ND(0.96)	ND(0.96)	ND(0.98)	ND(0.78)	ND(0.98)	ND(0.38)	ND(0.92)	ND(0.19)
Phenanthrene	10	mg/kg	0.56	0.28	ND(0.76)	1.1	1.3	1.2	1.6	1.3	2.7	2.3	0.49	1.7	0.80
Pyrene	1000	mg/kg	1.4	0.75	1.3	2.5	2.2	2.4	3.2	2.8	3.2	4.3	1.3	3.1	1.4
Total SVOCs	NSE	mg/kg	6.35	3.42	3.01	12.41	10.60	9.20	12.20	13.40	15.68	19.30	6.82	12.58	7.28
Metals															
Antimony	20	mg/kg	ND(1.8)	ND(1.9)	ND(1.8)	ND(1.7)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.8)	ND(1.8)	ND(1.8)
Arsenic	20	mg/kg	6.8	5.8	7.6	3.9	7.0	5.7	5.4	4.0	5.7	4.5	9.6	5.4	5.6
Barium	1000	mg/kg	37	31	34	37	36	30	33	34	40	34	34	31	32
Beryllium	90	mg/kg	0.33	0.38	0.38	0.33	0.26	0.26	0.29	0.28	0.28	0.28	0.36	0.35	0.32
Cadmium	70	mg/kg	0.51	0.38	0.47	0.29	0.45	0.38	0.39	0.30	0.45	0.41	0.50	0.33	0.41
Chromium	100	mg/kg	15	15	15	17	13	15	14	17	14	17	17	14	13
Lead	200	mg/kg	44	25	58	43	69	48	44	36	43	35	34	23	62
Mercury	20	mg/kg	0.051	0.029	0.048	0.032	0.042	0.039	0.095	0.044	0.055	0.054	0.034	ND(0.026)	0.054
Nickel	600	mg/kg	12	12	11	13	9.8	12	11	13	11	13	13	12	9.4
Selenium	400	mg/kg	ND(3.7)	ND(3.8)	ND(3.7)	ND(3.5)	ND(3.8)	ND(3.8)	ND(3.8)	ND(3.8)	ND(3.8)	ND(3.8)	ND(3.6)	ND(3.6)	ND(3.7)
Silver	100	mg/kg	ND(0.37)	ND(0.38)	ND(0.37)	ND(0.35)	ND(0.38)	ND(0.38)	ND(0.38)	ND(0.38)	ND(0.38)	ND(0.38)	ND(0.36)	ND(0.36)	ND(0.37)
Thallium	8	mg/kg	ND(1.8)	ND(1.9)	ND(1.8)	ND(1.7)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.8)	ND(1.8)	ND(1.8)
Vanadium	400	mg/kg	25	26	21	30	18	23	21	28	29	24	23	22	19
Zinc	1000	mg/kg	49	39	49	50	49	43	48	42	52	44	46	34	48

Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-A1	TP-A1	TP-A2	TP-A2	TP-A3	TP-A3	TP-A4	TP-A4	TP-A5	TP-A5	TP-B1	TP-B1	TP-B2
Sample ID			TP-A1 (0-5)	TP-A1 (5-10)	TP-A2 (0-5)	TP-A2 (5-10)	TP-A3 (0-5)	TP-A3 (5-10)	TP-A4 (0-5)	TP-A4 (5-10)	TP-A5 (0-5)	TP-A5 (5-10)	TP-B1 (0-5)	TP-B1 (5-10)	TP-B2 (0-5)
Sample Date			3/12/2019	3/12/2019	3/12/2019	3/12/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/12/2019	3/12/2019	3/12/2019
Depth Interval (ft)			0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5
Polychlorinated Biphenyls (PCBs)															
Total PCBs	1	mg/kg	ND(0.091)	ND(0.093)	ND(0.091)	ND(0.085)	ND(0.090)	ND(0.086)	ND(0.087)	ND(0.091)	ND(0.090)	ND(0.089)	ND(0.089)	ND(0.087)	ND(0.090)
General Chemistry															
Ignitability	NSE	present/absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent
pH	NSE	pH Units	7.8	7.6	7.9	8.7	7.9	8.1	7.9	8.2	7.7	7.8	7.9	7.2	7.4
Reactivity Cyanide	NSE	mg/kg	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)	ND(4.0)	ND(3.9)	ND(4.0)	ND(3.9)	ND(3.9)	ND(3.9)	ND(4.0)	ND(3.9)
Reactivity Sulfide	NSE	mg/kg	ND(20)	ND(19)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(19)	ND(20)	ND(20)
Solids, Total	NSE	%	ND(20)	ND(19)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(19)	ND(20)	ND(20)
Specific Conductance	2000	umhos/cm	12	13	13	37	14	21	20	24	23	20	16	9.0	11

Notes:
- mg/kg=milligram per kilogram; uhoms/cm=microohms per centimeter
- Reportable Concentrations (RCS-1 & RCS-2) taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
- Highlighted values exceed applicable MCP RCS-1 Reportable Concentration
- Full analytical results are detailed in the laboratory analytical report

Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-B2	TP-B3	TP-B3	TP-B4	TP-B4	TP-B5	TP-B5	TP-B6	TP-B6	TP-C1	TP-C1	TP-C2	TP-C2
Sample ID			TP-B2 (5-10)	TP-B3 (0-5)	TP-B3 (5-10)	TP-B4 (0-5)	TP-B4 (5-10)	TP-B5 (0-5)	TP-B5 (5-10)	TP-B6 (0-5)	TP-B6 (5-10)	TP-C1 (0-5)	TP-C1 (5-10)	TP-C2 (0-5)	TP-C2 (5-10)
Sample Date			3/12/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019
Depth Interval (ft)			5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10
Asbestos															
CARB 435	NSE	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extractable Petroleum Hydrocarbons (EPH) with target Polynuclear Aromati															
C09-C18 Aliphatic Hydrocarbons	1000	mg/kg	--	ND(22)	--	--	--	--	--	ND(23)	--	--	ND(55)	ND(21)	--
C11-C22 Aromatic Hydrocarbons	1000	mg/kg	--	160	--	--	--	--	--	290	--	--	330	140	--
C19-C36 Aliphatics	3000	mg/kg	--	120	--	--	--	--	--	200	--	--	270	100	--
Total Petroleum Hydrocarbons (TPH)															
TPH	1000	mg/kg	510	1000	690	400	390	540	640	1100	660	900	1200	1200	930
Volatile Organic Compounds (VOCs)															
Total VOCs	NSE	mg/kg	ND(0.18)	ND(0.19)	ND(0.31)	ND(0.17)	ND(0.18)	ND(0.10)	ND(0.086)	ND(0.092)	ND(0.10)	ND(0.10)	ND(0.084)	ND(0.083)	ND(0.075)
Semivolatile Organic Compounds (SVOCs)															
Benzo(a)Pyrene	2	mg/kg	0.92	1.7	ND(0.69)	ND(0.92)	1.1	1.1	1.9	ND(0.98)	1.7	1.3	2.2	2.7	1.1
Benzo(b)Fluoranthene	7	mg/kg	1.1	2.0	ND(0.69)	ND(0.92)	1.5	1.4	2.6	1.0	2.2	1.5	2.5	3.2	1.1
Benzo(g,h,i)Perylene	1000	mg/kg	0.70	1.1	ND(0.69)	ND(0.92)	0.65	0.61	1.4	ND(0.98)	0.94	0.72	1.0	1.6	0.76
Benzo(k)Fluoranthene	70	mg/kg	0.40	ND(0.76)	ND(0.69)	ND(0.92)	0.59	0.51	ND(0.95)	ND(0.98)	ND(0.93)	0.57	0.95	1.2	0.42
Chrysene	70	mg/kg	0.88	1.7	ND(0.69)	ND(0.92)	1.2	1.1	2.2	ND(0.98)	1.4	1.2	2.2	2.9	1.1
Dibenzo(a,h)Anthracene	0.7	mg/kg	ND(0.37)	*ND(0.76)*	ND(0.69)	*ND(0.92)*	ND(0.20)	ND(0.38)	*ND(0.95)*	*ND(0.98)*	*ND(0.93)*	ND(0.39)	ND(0.39)	0.45	ND(0.39)
Dibenzofuran	100	mg/kg	ND(0.74)	ND(1.5)	ND(1.4)	ND(1.8)	ND(0.40)	ND(0.75)	ND(1.9)	ND(2.0)	ND(1.9)	ND(0.78)	ND(0.78)	1.2	ND(0.77)
Fluoranthene	1000	mg/kg	1.6	3.9	ND(0.69)	1.0	1.8	1.7	4.9	1.5	2.6	1.9	5.1	7.6	1.5
Fluorene	1000	mg/kg	ND(0.37)	ND(0.76)	ND(0.69)	ND(0.92)	ND(0.20)	ND(0.38)	ND(0.95)	ND(0.98)	ND(0.93)	ND(0.39)	0.70	0.90	ND(0.39)
Indeno(1,2,3-cd)Pyrene	7	mg/kg	0.67	1.2	ND(0.69)	ND(0.92)	0.73	0.71	1.4	ND(0.98)	1.0	0.67	1.1	1.8	0.73
Naphthalene	4	mg/kg	ND(0.37)	ND(0.76)	ND(0.69)	ND(0.92)	ND(0.20)	ND(0.38)	ND(0.95)	ND(0.98)	ND(0.93)	ND(0.39)	ND(0.39)	1.2	ND(0.39)
Phenanthrene	10	mg/kg	0.79	3.1	ND(0.69)	ND(0.92)	0.81	0.97	2.9	1.1	1.1	0.99	4.6	8.3	0.65
Pyrene	1000	mg/kg	1.7	3.8	0.82	1.0	2.2	2.2	4.3	ND(0.98)	3.0	2.4	5.5	7.1	2.2
Total SVOCs	NSE	mg/kg	8.76	18.50	0.82	2.00	30.80	30.34	53.00	3.60	13.94	11.25	25.15	40.15	9.56
Metals															
Antimony	20	mg/kg	ND(1.8)	ND(1.8)	ND(3.4)	ND(1.8)	ND(2.0)	ND(1.8)	ND(1.8)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)
Arsenic	20	mg/kg	5.3	6.0	19	4.7	11	5.0	5.7	4.7	4.1	4.9	5.2	5.1	5.5
Barium	1000	mg/kg	30	32	58	24	41	31	30	36	33	33	32	36	31
Beryllium	90	mg/kg	0.30	0.32	0.44	0.22	0.35	0.26	0.27	0.27	0.29	0.37	0.36	0.34	0.32
Cadmium	70	mg/kg	0.54	0.41	1.2	0.30	0.61	0.41	0.40	0.39	0.32	0.37	0.39	0.42	0.42
Chromium	100	mg/kg	15	15	24	12	16	14	14	14	14	16	17	14	17
Lead	200	mg/kg	53	60	87	70	120	50	30	46	26	63	62	50	37
Mercury	20	mg/kg	0.040	0.036	ND(0.049)	ND(0.026)	0.084	0.035	0.050	0.059	ND(0.027)	0.057	0.028	0.073	0.033
Nickel	600	mg/kg	12	12	19	8.9	11	11	11	11	11	12	12	12	11
Selenium	400	mg/kg	ND(3.7)	ND(3.7)	ND(6.8)	ND(3.5)	ND(4.0)	ND(3.7)	ND(3.7)	ND(3.8)	ND(3.7)	ND(3.8)	ND(3.8)	ND(3.8)	ND(3.7)
Silver	100	mg/kg	ND(0.37)	ND(0.37)	ND(0.68)	ND(0.35)	ND(0.40)	ND(0.37)	ND(0.37)	ND(0.38)	ND(0.37)	0.84	ND(0.38)	ND(0.38)	ND(0.37)
Thallium	8	mg/kg	ND(1.8)	ND(1.8)	ND(3.4)	3.4	4.2	ND(1.8)	ND(1.8)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)
Vanadium	400	mg/kg	22	21	38	16	20	19	22	24	22	23	22	24	20
Zinc	1000	mg/kg	46	51	82	31	69	48	42	48	38	52	49	48	46

Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-B2	TP-B3	TP-B3	TP-B4	TP-B4	TP-B5	TP-B5	TP-B6	TP-B6	TP-C1	TP-C1	TP-C2	TP-C2
Sample ID			TP-B2 (5-10)	TP-B3 (0-5)	TP-B3 (5-10)	TP-B4 (0-5)	TP-B4 (5-10)	TP-B5 (0-5)	TP-B5 (5-10)	TP-B6 (0-5)	TP-B6 (5-10)	TP-C1 (0-5)	TP-C1 (5-10)	TP-C2 (0-5)	TP-C2 (5-10)
Sample Date			3/12/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019
Depth Interval (ft)			5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10
Polychlorinated Biphenyls (PCBs)															
Total PCBs	1	mg/kg	ND(0.089)	ND(0.083)	ND(0.16)	ND(0.085)	ND(0.093)	ND(0.086)	ND(0.086)	ND(0.086)	ND(0.087)	ND(0.092)	ND(0.091)	ND(0.089)	ND(0.090)
General Chemistry															
Ignitability	NSE	present/absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent
pH	NSE	pH Units	7.8	7.8	7.1	8.2	7.6	7.9	8.0	8.1	7.9	7.5	8.3	7.7	7.3
Reactivity Cyanide	NSE	mg/kg	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(3.9)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)
Reactivity Sulfide	NSE	mg/kg	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Solids, Total	NSE	%	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Specific Conductance	2000	umhos/cm	16	17	17	24	7.2	7.8	13	20	5.8	12	16	8.5	9.8

Notes:
- mg/kg=milligram per kilogram; uhoms/cm=microohms per centimeter
- Reportable Concentrations (RCS-1 & RCS-2) taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
- Highlighted values exceed applicable MCP RCS-1 Reportable Concentration
- Full analytical results are detailed in the laboratory analytical report

Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-C3	TP-C3	TP-C4	TP-C4	TP-C5	TP-C5	TP-C6	TP-C6	TP-D1	TP-D1	TP-D2	TP-D2	TP-D3
Sample ID			TP-C3 (0-5)	TP-C3 (5-10)	TP-C4 (0-5)	TP-C4 (5-10)	TP-C5 (0-5)	TP-C5 (5-10)	TP-C6 (0-5)	TP-C6 (5-10)	TP-D1 (0-5)	TP-D1 (5-10)	TP-D2 (0-5)	TP-D2 (5-10)	TP-D3 (0-5)
Sample Date			3/12/2019	3/12/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019
Depth Interval (ft)			0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5
Asbestos															
CARB 435	NSE	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extractable Petroleum Hydrocarbons (EPH) with target Polynuclear Aromati															
C09-C18 Aliphatic Hydrocarbons	1000	mg/kg	ND(53)	ND(55)	--	--	--	--	--	ND(23)	ND(59)	--	--	--	--
C11-C22 Aromatic Hydrocarbons	1000	mg/kg	250	430	--	--	--	--	--	210	250	--	--	--	--
C19-C36 Aliphatics	3000	mg/kg	210	310	--	--	--	--	--	140	190	--	--	--	--
Total Petroleum Hydrocarbons (TPH)															
TPH	1000	mg/kg	1700	1100	700	530	320	70	520	1100	1200	910	860	770	840
Volatile Organic Compounds (VOCs)															
Total VOCs	NSE	mg/kg	ND(0.22)	ND(0.082)	ND(0.16)	ND(0.24)	ND(0.092)	ND(0.19)	ND(0.094)	0.0027	ND(0.093)	ND(0.087)	ND(0.088)	ND(0.10)	0.0022
Semivolatile Organic Compounds (SVOCs)															
Benzo(a)Pyrene	2	mg/kg	2.1	2.9	0.73	0.84	ND(0.21)	ND(0.21)	2.1	12	2.7	2.2	1.6	1.4	0.88
Benzo(b)Fluoranthene	7	mg/kg	2.4	3.3	0.88	1.0	ND(0.21)	ND(0.21)	2.5	13	3.2	2.5	1.9	1.5	1.0
Benzo(g,h,i)Perylene	1000	mg/kg	ND(1.9)	1.3	0.56	0.61	ND(0.21)	ND(0.21)	1.0	5.6	1.5	1.0	1.0	1.0	0.64
Benzo(k)Fluoranthene	70	mg/kg	ND(1.9)	1.3	ND(0.38)	ND(0.41)	ND(0.21)	ND(0.21)	0.97	4.8	1.2	0.88	0.71	0.50	ND(0.41)
Chrysene	70	mg/kg	2.2	2.7	0.71	0.83	ND(0.21)	ND(0.21)	2.2	12	2.9	1.9	1.4	1.3	0.83
Dibenzo(a,h)Anthracene	0.7	mg/kg	*ND(1.9)*	ND(0.38)	ND(0.38)	ND(0.41)	ND(0.21)	ND(0.21)	*ND(0.96)*	1.5	ND(0.41)	ND(0.38)	ND(0.38)	ND(0.39)	ND(0.41)
Dibenzofuran	100	mg/kg	ND(3.7)	ND(0.75)	ND(0.76)	ND(0.81)	ND(0.42)	ND(0.43)	ND(1.9)	ND(1.9)	ND(0.82)	ND(0.76)	ND(0.76)	ND(0.78)	ND(0.82)
Fluoranthene	1000	mg/kg	4.8	6.0	1.2	1.6	0.24	ND(0.21)	3.8	23	5.7	3.7	2.6	2.3	1.7
Fluorene	1000	mg/kg	ND(1.9)	0.39	ND(0.38)	ND(0.41)	ND(0.21)	ND(0.21)	ND(0.96)	4.2	ND(0.41)	ND(0.38)	ND(0.38)	ND(0.39)	ND(0.41)
Indeno(1,2,3-cd)Pyrene	7	mg/kg	ND(1.9)	1.5	0.53	0.60	ND(0.21)	ND(0.21)	1.1	6.4	1.7	1.1	1.0	1.1	0.61
Naphthalene	4	mg/kg	ND(1.9)	ND(0.38)	ND(0.38)	ND(0.41)	ND(0.21)	ND(0.21)	ND(0.96)	ND(0.97)	ND(0.41)	ND(0.38)	ND(0.38)	ND(0.39)	ND(0.41)
Phenanthrene	10	mg/kg	4.5	3.1	0.62	0.76	ND(0.21)	ND(0.21)	3.0	19	2.4	1.9	1.4	1.1	1.1
Pyrene	1000	mg/kg	5.0	6.4	1.3	1.5	0.28	ND(0.21)	4.5	19	6.0	4.0	2.9	2.4	1.7
Total SVOCs	NSE	mg/kg	21.00	28.50	6.53	7.74	0.52	ND	21.17	120.50	27.30	19.18	14.51	12.60	8.46
Metals															
Antimony	20	mg/kg	ND(1.8)	ND(1.9)	ND(1.8)	ND(2.0)	ND(2.1)	ND(2.1)	ND(1.9)	ND(1.9)	ND(2.0)	ND(1.9)	ND(1.9)	ND(1.9)	ND(2.0)
Arsenic	20	mg/kg	4.5	3.5	7.7	4.0	6.5	6.6	5.9	5.3	3.4	4.6	4.7	4.6	6.2
Barium	1000	mg/kg	30	35	32	31	35	38	46	33	32	31	30	34	38
Beryllium	90	mg/kg	0.28	0.34	0.25	0.24	0.44	0.50	0.32	0.27	0.40	0.33	0.34	0.35	0.40
Cadmium	70	mg/kg	0.29	0.30	0.50	0.34	0.33	0.32	0.40	0.36	0.29	0.31	0.33	0.35	0.42
Chromium	100	mg/kg	13	16	12	14	15	18	23	15	17	15	15	17	18
Lead	200	mg/kg	27	43	79	65	16	11	79	30	40	47	53	51	45
Mercury	20	mg/kg	0.048	0.053	0.049	0.095	0.037	ND(0.030)	0.064	ND(0.029)	0.055	0.059	0.061	0.045	0.086
Nickel	600	mg/kg	12	13	9.2	8.9	10	12	10	12	15	12	12	13	13
Selenium	400	mg/kg	ND(3.6)	ND(3.7)	ND(3.7)	ND(3.9)	ND(4.1)	ND(4.3)	ND(3.8)	ND(3.8)	ND(4.1)	ND(3.7)	ND(3.7)	ND(3.8)	ND(3.9)
Silver	100	mg/kg	ND(0.36)	ND(0.37)	ND(0.37)	ND(0.39)	ND(0.41)	ND(0.43)	ND(0.38)	ND(0.38)	ND(0.41)	ND(0.37)	ND(0.37)	ND(0.38)	ND(0.39)
Thallium	8	mg/kg	ND(1.8)	ND(1.9)	ND(1.8)	ND(2.0)	ND(2.1)	ND(2.1)	ND(1.9)	ND(1.9)	ND(2.0)	ND(1.9)	ND(1.9)	ND(1.9)	ND(2.0)
Vanadium	400	mg/kg	32	31	16	18	18	21	20	21	27	25	24	24	26
Zinc	1000	mg/kg	36	52	48	58	27	28	51	39	52	46	50	50	82

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Sample Grid	MCP RCS-1	Unit	TP-C3	TP-C3	TP-C4	TP-C4	TP-C5	TP-C5	TP-C6	TP-C6	TP-D1	TP-D1	TP-D2	TP-D2	TP-D3
Sample ID			TP-C3 (0-5)	TP-C3 (5-10)	TP-C4 (0-5)	TP-C4 (5-10)	TP-C5 (0-5)	TP-C5 (5-10)	TP-C6 (0-5)	TP-C6 (5-10)	TP-D1 (0-5)	TP-D1 (5-10)	TP-D2 (0-5)	TP-D2 (5-10)	TP-D3 (0-5)
Sample Date			3/12/2019	3/12/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019
Depth Interval (ft)			0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5
Polychlorinated Biphenyls (PCBs)															
Total PCBs	1	mg/kg	ND(0.088)	ND(0.089)	ND(0.091)	ND(0.096)	ND(0.096)	ND(0.10)	ND(0.089)	ND(0.088)	ND(0.098)	ND(0.090)	ND(0.090)	ND(0.092)	ND(0.097)
General Chemistry															
Ignitability	NSE	present/absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent
pH	NSE	pH Units	8.5	7.9	8.0	7.9	7.1	8.0	7.3	7.6	7.9	7.9	7.8	7.7	7.7
Reactivity Cyanide	NSE	mg/kg	ND(4.0)	ND(3.9)	ND(3.9)	ND(3.9)	ND(4.0)	ND(3.9)	ND(4.0)	ND(4.0)	ND(3.9)	ND(4.0)	ND(4.0)	ND(3.9)	ND(3.9)
Reactivity Sulfide	NSE	mg/kg	ND(20)	ND(19)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(19)	ND(19)
Solids, Total	NSE	%	ND(20)	ND(19)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(19)	ND(19)
Specific Conductance	2000	umhos/cm	20	17	9.1	17	21	18	21	17	13	11	8.8	8.7	11

Notes:
- mg/kg=milligram per kilogram; uhoms/cm=microohms per centimeter
- Reportable Concentrations (RCS-1 & RCS-2) taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
- Highlighted values exceed applicable MCP RCS-1 Reportable Concentration
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Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-D3	TP-D3	TP-D4	TP-D4	TP-D5	TP-D5	TP-D6	TP-D6	TP-D7	TP-D7	TP-E2	TP-E2	TP-E3
Sample ID			TP-D3 (5-10)	TP-D3 (10-15)	TP-D4 (0-5)	TP-D4 (5-10)	TP-D5 (0-5)	TP-D5 (5-10)	TP-D6 (0-5)	TP-D6 (5-10)	TP-D7 (0-5)	TP-D7 (5-10)	TP-E2 (0-5)	TP-E2 (5-10)	TP-E3 (0-5)
Sample Date			3/12/2019	3/12/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/12/2019	3/12/2019	3/12/2019
Depth Interval (ft)			5-10	10-15	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5
Asbestos															
CARB 435	NSE	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extractable Petroleum Hydrocarbons (EPH) with target Polynuclear Aromati															
C09-C18 Aliphatic Hydrocarbons	1000	mg/kg	ND(23)	ND(53)	ND(22)	--	ND(25)	--	--	ND(24)	--	ND(22)	ND(55)	--	--
C11-C22 Aromatic Hydrocarbons	1000	mg/kg	170	360	310	--	230	--	--	210	--	220	210	--	--
C19-C36 Aliphatics	3000	mg/kg	180	240	200	--	220	--	--	160	--	140	150	--	--
Total Petroleum Hydrocarbons (TPH)															
TPH	1000	mg/kg	1100	1200	1000	960	1100	510	590	1000	330	1000	1100	870	780
Volatile Organic Compounds (VOCs)															
Total VOCs	NSE	mg/kg	ND(0.090)	ND(0.10)	ND(0.12)	ND(0.17)	ND(0.24)	ND(0.15)	ND(0.085)	ND(0.089)	ND(0.089)	ND(0.075)	ND(0.076)	0.0023	ND(0.077)
Semivolatile Organic Compounds (SVOCs)															
Benzo(a)Pyrene	2	mg/kg	1.3	1.8	2.6	ND(0.92)	1.7	0.43	ND(0.97)	3.2	1.0	ND(1.9)	1.7	1.5	0.56
Benzo(b)Fluoranthene	7	mg/kg	1.4	2.2	3.0	ND(0.92)	2.4	0.53	ND(0.97)	3.8	1.1	ND(1.9)	1.9	1.7	0.67
Benzo(g,h,i)Perylene	1000	mg/kg	0.82	0.83	1.5	ND(0.92)	1.3	0.28	ND(0.97)	1.3	0.58	ND(1.9)	1.2	0.99	ND(0.37)
Benzo(k)Fluoranthene	70	mg/kg	0.59	0.85	1.3	ND(0.92)	0.89	0.23	ND(0.97)	1.4	0.44	ND(1.9)	ND(0.75)	ND(0.79)	ND(0.37)
Chrysene	70	mg/kg	1.2	1.8	2.6	ND(0.92)	2.0	0.41	ND(0.97)	3.2	1.1	ND(1.9)	1.8	1.3	0.48
Dibenzo(a,h)Anthracene	0.7	mg/kg	ND(0.39)	ND(0.37)	*ND(0.73)*	*ND(0.92)*	*ND(0.84)*	ND(0.19)	*ND(0.97)*	*ND(1.0)*	ND(0.38)	*ND(1.9)*	*ND(0.75)*	*ND(0.79)*	ND(0.37)
Dibenzofuran	100	mg/kg	ND(0.78)	ND(0.74)	ND(1.5)	ND(1.8)	ND(1.7)	ND(0.38)	ND(1.9)	ND(2.0)	ND(0.76)	ND(3.7)	ND(1.5)	ND(1.6)	ND(0.75)
Fluoranthene	1000	mg/kg	2.2	3.3	6.1	0.95	4.3	0.70	ND(0.97)	8.4	2.0	2.9	3.1	2.5	0.70
Fluorene	1000	mg/kg	ND(0.39)	0.38	ND(0.73)	ND(0.92)	ND(0.84)	ND(0.19)	ND(0.97)	ND(1.0)	ND(0.38)	ND(1.9)	ND(0.75)	ND(0.79)	ND(0.37)
Indeno(1,2,3-cd)Pyrene	7	mg/kg	0.80	0.93	1.6	ND(0.92)	1.2	0.29	ND(0.97)	1.6	0.67	ND(1.9)	1.1	1.0	ND(0.37)
Naphthalene	4	mg/kg	ND(0.39)	ND(0.37)	ND(0.73)	ND(0.92)	ND(0.84)	ND(0.19)	ND(0.97)	ND(1.0)	ND(0.38)	ND(1.9)	ND(0.75)	ND(0.79)	ND(0.37)
Phenanthrene	10	mg/kg	1.4	2.4	3.6	ND(0.92)	2.3	0.28	ND(0.97)	4.8	1.3	2.2	2.2	1.3	ND(0.37)
Pyrene	1000	mg/kg	2.5	3.8	5.7	1.1	3.7	0.75	ND(0.97)	7.9	2.2	3.0	3.6	2.6	0.81
Total SVOCs	NSE	mg/kg	12.21	17.91	28.00	2.05	19.79	3.90	ND	35.60	10.39	8.10	16.60	12.89	3.22
Metals															
Antimony	20	mg/kg	ND(1.9)	ND(1.8)	ND(1.8)	ND(1.8)	ND(2.1)	ND(1.8)	ND(2.0)	ND(2.0)	ND(1.9)	ND(1.9)	ND(1.8)	ND(1.9)	ND(1.8)
Arsenic	20	mg/kg	9.1	5.7	3.4	3.7	4.2	4.6	6.8	3.9	6.1	4.8	4.8	3.9	5.2
Barium	1000	mg/kg	30	29	37	27	25	27	46	32	34	34	33	38	33
Beryllium	90	mg/kg	0.32	0.33	0.28	0.27	0.24	0.32	0.34	0.36	0.32	0.29	0.37	0.37	0.38
Cadmium	70	mg/kg	0.57	0.35	0.31	0.27	0.65	0.34	0.44	0.30	0.41	0.39	0.37	0.40	0.34
Chromium	100	mg/kg	14	15	14	15	14	15	13	19	15	17	15	16	17
Lead	200	mg/kg	110	46	56	25	25	20	110	32	71	40	41	53	25
Mercury	20	mg/kg	0.071	0.031	0.28	ND(0.027)	ND(0.032)	ND(0.028)	0.11	0.041	0.079	0.038	0.046	0.045	0.031
Nickel	600	mg/kg	10	13	12	13	10	13	9.9	15	10	13	13	13	14
Selenium	400	mg/kg	ND(3.9)	ND(3.7)	ND(3.6)	ND(3.7)	ND(4.2)	ND(3.7)	ND(3.9)	ND(4.0)	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.9)	ND(3.6)
Silver	100	mg/kg	ND(0.39)	ND(0.37)	ND(0.36)	ND(0.37)	ND(0.42)	ND(0.37)	ND(0.39)	ND(0.40)	ND(0.38)	ND(0.38)	ND(0.37)	ND(0.39)	ND(0.36)
Thallium	8	mg/kg	ND(1.9)	ND(1.8)	ND(1.8)	ND(1.8)	ND(2.1)	ND(1.8)	ND(2.0)	ND(2.0)	ND(1.9)	ND(1.9)	ND(1.8)	ND(1.9)	ND(1.8)
Vanadium	400	mg/kg	21	26	26	29	20	23	19	32	20	25	29	28	25
Zinc	1000	mg/kg	68	49	54	37	52	36	56	45	54	51	53	51	44

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Sample Grid	MCP RCS-1	Unit	TP-D3	TP-D3	TP-D4	TP-D4	TP-D5	TP-D5	TP-D6	TP-D6	TP-D7	TP-D7	TP-E2	TP-E2	TP-E3
Sample ID			TP-D3 (5-10)	TP-D3 (10-15)	TP-D4 (0-5)	TP-D4 (5-10)	TP-D5 (0-5)	TP-D5 (5-10)	TP-D6 (0-5)	TP-D6 (5-10)	TP-D7 (0-5)	TP-D7 (5-10)	TP-E2 (0-5)	TP-E2 (5-10)	TP-E3 (0-5)
Sample Date			3/12/2019	3/12/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/11/2019	3/12/2019	3/12/2019	3/12/2019
Depth Interval (ft)			5-10	10-15	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5
Polychlorinated Biphenyls (PCBs)															
Total PCBs	1	mg/kg	ND(0.093)	ND(0.088)	ND(0.087)	ND(0.088)	ND(0.095)	ND(0.085)	ND(0.093)	ND(0.091)	ND(0.088)	ND(0.090)	ND(0.088)	ND(0.093)	ND(0.089)
General Chemistry															
Ignitability	NSE	present/absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent
pH	NSE	pH Units	7.7	8.2	8.2	7.8	8.2	8.5	7.7	7.7	7.7	8.2	7.7	8.0	8.2
Reactivity Cyanide	NSE	mg/kg	ND(4.0)	ND(3.9)	ND(4.0)	ND(3.9)	ND(4.0)	ND(4.0)	ND(3.9)	ND(4.0)	ND(4.0)	ND(4.0)	ND(3.9)	ND(3.9)	ND(3.9)
Reactivity Sulfide	NSE	mg/kg	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Solids, Total	NSE	%	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Specific Conductance	2000	umhos/cm	8.0	22	24	6.2	17	11	9.0	23	11	18	18	15	13

Notes:
- mg/kg=milligram per kilogram; uhoms/cm=microohms per centimeter
- Reportable Concentrations (RCS-1 & RCS-2) taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
- Highlighted values exceed applicable MCP RCS-1 Reportable Concentration
- Full analytical results are detailed in the laboratory analytical report

Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-E3	TP-E4	TP-E4	TP-E5	TP-E5	TP-E5	TP-E6	TP-E6	TP-E7	TP-E7	TP-E8	TP-E8	TP-F3
Sample ID			TP-E3 (5-10)	TP-E4 (0-5)	TP-E4 (5-10)	TP-E5 (0-5)	TP-E5 (5-10)	TP-E5 (10-15)	TP-E6 (0-5)	TP-E6 (5-10)	TP-E7 (0-5)	TP-E7 (5-10)	TP-E8 (0-5)	TP-E8 (5-10)	TP-F3 (0-5)
Sample Date			3/12/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/12/2019
Depth Interval (ft)			5-10	0-5	5-10	0-5	5-10	10-15	0-5	5-10	0-5	5-10	0-5	5-10	0-5
Asbestos															
CARB 435	NSE	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extractable Petroleum Hydrocarbons (EPH) with target Polynuclear Aromati															
C09-C18 Aliphatic Hydrocarbons	1000	mg/kg	ND(24)	--	--	--	--	--	--	--	--	--	--	--	ND(55)
C11-C22 Aromatic Hydrocarbons	1000	mg/kg	170	--	--	--	--	--	--	--	--	--	--	--	280
C19-C36 Aliphatics	3000	mg/kg	130	--	--	--	--	--	--	--	--	--	--	--	220
Total Petroleum Hydrocarbons (TPH)															
TPH	1000	mg/kg	1100	430	680	590	470	110	980	54	430	160	370	300	1300
Volatile Organic Compounds (VOCs)															
Total VOCs	NSE	mg/kg	ND(0.11)	ND(0.20)	0.0052	0.0026	0.0028	ND(0.18)	ND(0.093)	ND(0.097)	ND(0.10)	ND(0.098)	0.0021	0.0036	ND(0.086)
Semivolatile Organic Compounds (SVOCs)															
Benzo(a)Pyrene	2	mg/kg	3.1	1.6	0.49	ND(0.94)	ND(0.37)	ND(0.19)	1.7	ND(0.37)	0.60	ND(0.36)	1.5	0.53	1.6
Benzo(b)Fluoranthene	7	mg/kg	3.6	1.9	0.57	0.98	ND(0.37)	ND(0.19)	2.0	ND(0.37)	0.84	ND(0.36)	1.7	0.60	1.8
Benzo(g,h,i)Perylene	1000	mg/kg	1.5	0.71	0.37	ND(0.94)	ND(0.37)	ND(0.19)	ND(0.94)	ND(0.37)	ND(0.39)	ND(0.36)	0.89	ND(0.39)	0.93
Benzo(k)Fluoranthene	70	mg/kg	1.4	0.72	0.21	ND(0.94)	ND(0.37)	ND(0.19)	ND(0.94)	ND(0.37)	ND(0.39)	ND(0.36)	0.62	ND(0.39)	ND(0.76)
Chrysene	70	mg/kg	3.3	1.5	0.46	ND(0.94)	ND(0.37)	ND(0.19)	1.9	ND(0.37)	0.64	ND(0.36)	1.5	0.48	1.5
Dibenzo(a,h)Anthracene	0.7	mg/kg	ND(0.40)	ND(0.19)	ND(0.19)	*ND(0.94)*	ND(0.37)	ND(0.19)	*ND(0.94)*	ND(0.37)	ND(0.39)	ND(0.36)	ND(0.38)	ND(0.39)	*ND(0.76)*
Dibenzofuran	100	mg/kg	ND(0.80)	ND(0.38)	ND(0.39)	ND(1.9)	ND(0.75)	ND(0.38)	ND(1.9)	ND(0.74)	ND(0.79)	ND(0.73)	ND(0.76)	ND(0.78)	ND(1.5)
Fluoranthene	1000	mg/kg	6.6	3.0	0.84	1.4	ND(0.37)	ND(0.19)	2.9	ND(0.37)	0.92	ND(0.36)	3.7	0.75	2.9
Fluorene	1000	mg/kg	ND(0.40)	0.21	ND(0.19)	ND(0.94)	ND(0.37)	ND(0.19)	ND(0.94)	ND(0.37)	ND(0.39)	ND(0.36)	0.47	ND(0.39)	ND(0.76)
Indeno(1,2,3-cd)Pyrene	7	mg/kg	1.7	0.87	0.34	ND(0.94)	ND(0.37)	ND(0.19)	0.96	ND(0.37)	0.41	ND(0.36)	1.0	ND(0.39)	0.95
Naphthalene	4	mg/kg	ND(0.40)	ND(0.19)	ND(0.19)	ND(0.94)	ND(0.37)	ND(0.19)	ND(0.94)	ND(0.37)	ND(0.39)	ND(0.36)	ND(0.38)	ND(0.39)	ND(0.76)
Phenanthrene	10	mg/kg	4.2	2.0	0.43	ND(0.94)	ND(0.37)	ND(0.19)	1.4	ND(0.37)	ND(0.39)	ND(0.36)	3.3	ND(0.39)	1.5
Pyrene	1000	mg/kg	7.5	3.4	1.0	1.4	0.40	ND(0.19)	3.4	ND(0.37)	1.2	ND(0.36)	3.6	0.95	3.0
Total SVOCs	NSE	mg/kg	32.90	15.91	4.71	3.78	0.40	ND	14.26	ND	4.61	ND	18.28	3.31	14.18
Metals															
Antimony	20	mg/kg	ND(2.0)	ND(1.9)	ND(1.9)	ND(1.8)	ND(1.8)	ND(1.9)	ND(1.9)	ND(1.9)	9.3	ND(1.8)	ND(1.9)	ND(1.9)	ND(1.9)
Arsenic	20	mg/kg	5.3	3.7	4.9	4.4	5.9	4.3	5.1	4.4	8.7	3.7	6.4	6.6	4.0
Barium	1000	mg/kg	42	37	34	38	26	29	28	27	34	22	31	32	32
Beryllium	90	mg/kg	0.42	0.34	0.34	0.33	0.38	0.30	0.32	0.33	0.37	0.23	0.33	0.34	0.35
Cadmium	70	mg/kg	0.40	0.31	0.36	0.35	0.33	0.31	0.41	0.29	0.52	0.22	0.42	0.43	0.34
Chromium	100	mg/kg	18	14	16	15	15	14	14	15	15	8.5	15	16	17
Lead	200	mg/kg	53	74	23	26	19	37	48	8.9	780	300	59	41	39
Mercury	20	mg/kg	0.072	0.075	ND(0.028)	ND(0.026)	ND(0.026)	ND(0.028)	ND(0.029)	ND(0.026)	0.030	ND(0.026)	0.040	0.036	0.045
Nickel	600	mg/kg	14	12	13	12	13	11	11	10	11	7.2	12	12	14
Selenium	400	mg/kg	ND(4.0)	ND(3.7)	ND(3.7)	ND(3.6)	ND(3.6)	ND(3.8)	ND(3.7)	ND(3.7)	ND(3.9)	ND(3.5)	ND(3.8)	ND(3.8)	ND(3.7)
Silver	100	mg/kg	ND(0.40)	ND(0.37)	ND(0.37)	ND(0.36)	ND(0.36)	ND(0.38)	ND(0.37)	ND(0.37)	ND(0.39)	ND(0.35)	ND(0.38)	ND(0.38)	ND(0.37)
Thallium	8	mg/kg	ND(2.0)	ND(1.9)	ND(1.9)	ND(1.8)	ND(1.8)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.8)	ND(1.9)	ND(1.9)	ND(1.9)
Vanadium	400	mg/kg	27	27	25	26	24	17	22	17	20	13	22	24	26
Zinc	1000	mg/kg	59	50	36	39	33	48	48	26	56	44	51	48	47

Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-E3	TP-E4	TP-E4	TP-E5	TP-E5	TP-E5	TP-E6	TP-E6	TP-E7	TP-E7	TP-E8	TP-E8	TP-F3
Sample ID			TP-E3 (5-10)	TP-E4 (0-5)	TP-E4 (5-10)	TP-E5 (0-5)	TP-E5 (5-10)	TP-E5 (10-15)	TP-E6 (0-5)	TP-E6 (5-10)	TP-E7 (0-5)	TP-E7 (5-10)	TP-E8 (0-5)	TP-E8 (5-10)	TP-F3 (0-5)
Sample Date			3/12/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/12/2019
Depth Interval (ft)			5-10	0-5	5-10	0-5	5-10	10-15	0-5	5-10	0-5	5-10	0-5	5-10	0-5
Polychlorinated Biphenyls (PCBs)															
Total PCBs	1	mg/kg	ND(0.096)	ND(0.083)	ND(0.088)	ND(0.085)	ND(0.082)	ND(0.085)	ND(0.085)	ND(0.083)	ND(0.090)	ND(0.081)	ND(0.090)	ND(0.089)	ND(0.089)
General Chemistry															
Ignitability	NSE	present/absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent
pH	NSE	pH Units	8.1	8.5	7.9	7.9	8.6	7.7	8.1	8.3	7.2	7.6	8.2	8.3	7.7
Reactivity Cyanide	NSE	mg/kg	ND(4.0)	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)	ND(4.0)	ND(3.9)	ND(3.9)	ND(4.0)	ND(3.9)
Reactivity Sulfide	NSE	mg/kg	ND(20)	ND(19)	ND(19)	ND(19)	ND(20)	ND(19)	ND(19)	ND(20)	ND(20)	ND(20)	ND(19)	ND(20)	ND(20)
Solids, Total	NSE	%	ND(20)	ND(19)	ND(19)	ND(19)	ND(20)	ND(19)	ND(19)	ND(20)	ND(20)	ND(20)	ND(19)	ND(20)	ND(20)
Specific Conductance	2000	umhos/cm	19	10	10	12	11	7.0	9.3	9.3	10	18	11	9.8	17

Notes:
- mg/kg=milligram per kilogram; uhoms/cm=microohms per centimeter
- Reportable Concentrations (RCS-1 & RCS-2) taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
- Highlighted values exceed applicable MCP RCS-1 Reportable Concentration
- Full analytical results are detailed in the laboratory analytical report

Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-F3	TP-F4	TP-F4	TP-F5	TP-F5	TP-F6	TP-F6	TP-F7	TP-F7	TP-F8	TP-F8	TP-G6	TP-G6
Sample ID			TP-F3 (5-10)	TP-F4 (0-5)	TP-F4 (5-10)	TP-F5 (0-5)	TP-F5 (5-10)	TP-F6 (0-5)	TP-F6 (5-10)	TP-F7 (0-5)	TP-F7 (5-10)	TP-F8 (0-5)	TP-F8 (5-10)	TP-G6 (0-5)	TP-G6 (5-10)
Sample Date			3/12/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019
Depth Interval (ft)			5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10
Asbestos															
CARB 435	NSE	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extractable Petroleum Hydrocarbons (EPH) with target Polynuclear Aromati															
C09-C18 Aliphatic Hydrocarbons	1000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
C11-C22 Aromatic Hydrocarbons	1000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
C19-C36 Aliphatics	3000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Petroleum Hydrocarbons (TPH)															
TPH	1000	mg/kg	910	390	310	640	680	420	510	580	560	250	380	400	430
Volatile Organic Compounds (VOCs)															
Total VOCs	NSE	mg/kg	ND(0.096)	ND(0.16)	0.0049	ND(0.20)	0.004	0.0026	ND(0.12)	ND(0.11)	ND(0.082)	ND(0.11)	ND(0.089)	ND(0.12)	ND(0.12)
Semivolatile Organic Compounds (SVOCs)															
Benzo(a)Pyrene	2	mg/kg	ND(0.82)	0.53	0.42	1.1	ND(0.96)	1.2	1.3	0.90	ND(0.97)	1.3	0.58	0.98	0.73
Benzo(b)Fluoranthene	7	mg/kg	ND(0.82)	0.60	0.45	1.5	1.1	1.4	1.6	1.1	ND(0.97)	1.4	0.67	1.2	0.86
Benzo(g,h,i)Perylene	1000	mg/kg	ND(0.82)	0.25	0.22	ND(0.97)	ND(0.96)	0.65	0.68	0.45	ND(0.97)	0.85	0.43	0.57	ND(0.39)
Benzo(k)Fluoranthene	70	mg/kg	ND(0.82)	0.26	ND(0.19)	ND(0.97)	ND(0.96)	0.53	0.66	0.46	ND(0.97)	0.51	ND(0.38)	0.49	ND(0.39)
Chrysene	70	mg/kg	ND(0.82)	0.56	0.44	1.1	ND(0.96)	1.2	1.4	0.92	ND(0.97)	1.4	0.57	0.95	0.72
Dibenzo(a,h)Anthracene	0.7	mg/kg	*ND(0.82)*	ND(0.20)	ND(0.19)	*ND(0.97)*	*ND(0.96)*	ND(0.37)	ND(0.40)	ND(0.37)	*ND(0.97)*	ND(0.38)	ND(0.38)	ND(0.38)	ND(0.39)
Dibenzofuran	100	mg/kg	ND(1.6)	ND(0.39)	ND(0.38)	ND(1.9)	ND(1.9)	ND(0.75)	ND(0.79)	ND(0.75)	ND(1.9)	ND(0.76)	ND(0.76)	ND(0.75)	ND(0.79)
Fluoranthene	1000	mg/kg	0.83	0.80	0.54	1.8	1.2	2.2	2.7	1.5	ND(0.97)	2.7	0.89	1.6	1.1
Fluorene	1000	mg/kg	ND(0.82)	ND(0.20)	ND(0.19)	ND(0.97)	ND(0.96)	ND(0.37)	ND(0.40)	ND(0.37)	ND(0.97)	ND(0.38)	ND(0.38)	ND(0.38)	ND(0.39)
Indeno(1,2,3-cd)Pyrene	7	mg/kg	ND(0.82)	0.25	0.23	ND(0.97)	ND(0.96)	0.69	0.75	0.54	ND(0.97)	0.96	0.44	0.65	0.47
Naphthalene	4	mg/kg	ND(0.82)	ND(0.20)	ND(0.19)	ND(0.97)	ND(0.96)	ND(0.37)	ND(0.40)	ND(0.37)	ND(0.97)	ND(0.38)	ND(0.38)	ND(0.38)	ND(0.39)
Phenanthrene	10	mg/kg	ND(0.82)	0.62	0.31	ND(0.97)	ND(0.96)	1.1	1.6	0.97	ND(0.97)	2.2	0.40	0.93	0.62
Pyrene	1000	mg/kg	0.90	1.1	0.82	2.2	1.5	2.3	2.8	1.7	ND(0.97)	3.1	1.1	1.9	1.3
Total SVOCs	NSE	mg/kg	1.73	4.97	3.43	7.70	3.80	11.27	13.49	8.54	ND	14.42	5.08	9.27	5.80
Metals															
Antimony	20	mg/kg	ND(2.0)	ND(2.0)	ND(1.8)	ND(2.0)	ND(1.9)	ND(1.8)	ND(1.9)	ND(1.8)	ND(1.9)	ND(1.8)	ND(1.8)	ND(1.9)	ND(1.9)
Arsenic	20	mg/kg	4.7	7.0	5.8	4.8	4.4	4.1	4.5	6.7	5.9	6.4	6.9	5.3	5.3
Barium	1000	mg/kg	34	31	28	29	28	46	37	30	30	38	34	31	28
Beryllium	90	mg/kg	0.34	0.37	0.37	0.28	0.31	0.31	0.32	0.35	0.35	0.35	0.35	0.35	0.30
Cadmium	70	mg/kg	0.40	0.44	0.39	0.56	0.49	0.37	0.55	0.51	0.41	0.43	0.45	0.42	0.50
Chromium	100	mg/kg	13	16	16	21	15	18	16	15	15	14	15	16	15
Lead	200	mg/kg	26	34	32	25	26	63	51	57	34	74	69	56	49
Mercury	20	mg/kg	0.030	ND(0.029)	0.028	ND(0.028)	ND(0.027)	0.039	0.048	0.038	0.032	0.050	0.041	0.040	0.35
Nickel	600	mg/kg	12	12	11	12	11	13	14	12	12	11	12	11	10
Selenium	400	mg/kg	ND(4.1)	ND(3.9)	ND(3.7)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.8)	ND(3.6)	ND(3.7)	ND(3.6)	ND(3.7)	ND(3.7)	ND(3.8)
Silver	100	mg/kg	ND(0.41)	ND(0.39)	ND(0.37)	ND(0.39)	ND(0.37)	ND(0.37)	ND(0.38)	ND(0.36)	ND(0.37)	ND(0.36)	ND(0.37)	ND(0.37)	ND(0.38)
Thallium	8	mg/kg	ND(2.0)	ND(2.0)	ND(1.8)	ND(2.0)	ND(1.9)	ND(1.8)	ND(1.9)	ND(1.8)	ND(1.9)	ND(1.8)	ND(1.8)	ND(1.9)	ND(1.9)
Vanadium	400	mg/kg	21	21	19	20	21	26	25	21	23	20	21	21	18
Zinc	1000	mg/kg	67	38	38	67	49	60	66	46	41	52	55	50	57

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Sample Grid	MCP RCS-1	Unit	TP-F3	TP-F4	TP-F4	TP-F5	TP-F5	TP-F6	TP-F6	TP-F7	TP-F7	TP-F8	TP-F8	TP-G6	TP-G6
Sample ID			TP-F3 (5-10)	TP-F4 (0-5)	TP-F4 (5-10)	TP-F5 (0-5)	TP-F5 (5-10)	TP-F6 (0-5)	TP-F6 (5-10)	TP-F7 (0-5)	TP-F7 (5-10)	TP-F8 (0-5)	TP-F8 (5-10)	TP-G6 (0-5)	TP-G6 (5-10)
Sample Date			3/12/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019	3/1/2019
Depth Interval (ft)			5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10	0-5	5-10
Polychlorinated Biphenyls (PCBs)															
Total PCBs	1	mg/kg	0.21	ND(0.088)	ND(0.086)	ND(0.092)	ND(0.087)	ND(0.087)	ND(0.090)	ND(0.084)	ND(0.089)	ND(0.086)	ND(0.084)	ND(0.088)	ND(0.094)
General Chemistry															
Ignitability	NSE	present/absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent
pH	NSE	pH Units	7.9	7.7	7.6	7.9	8.0	8.4	8.6	7.7	7.9	7.9	8.0	8.0	7.8
Reactivity Cyanide	NSE	mg/kg	ND(4.0)	ND(3.9)	ND(3.9)	ND(3.9)	ND(4.0)	ND(4.0)	ND(3.9)	ND(3.9)	ND(4.0)	ND(3.9)	ND(3.9)	ND(3.9)	ND(4.0)
Reactivity Sulfide	NSE	mg/kg	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(19)	ND(19)	ND(20)
Solids, Total	NSE	%	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(19)	ND(19)	ND(20)
Specific Conductance	2000	umhos/cm	31	11	16	9.0	6.7	19	21	15	11	8.1	16	7.5	15

Notes:
- mg/kg=milligram per kilogram; uhoms/cm=microohms per centimeter
- Reportable Concentrations (RCS-1 & RCS-2) taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
- Highlighted values exceed applicable MCP RCS-1 Reportable Concentration
- Full analytical results are detailed in the laboratory analytical report

Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-G7	TP-G7	TP-V-101	TP-V-102	TP-V-103	TP-V-104	TP-V-105
Sample ID			TP-G7 (0-5)	TP-G7 (5-10)	TP-V-101	TP-V-102	TP-V-103	TP-V-104	TP-V-105
Sample Date			3/1/2019	3/1/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019
Depth Interval (ft)			0-5	5-10	-	-	-	-	-
Asbestos									
CARB 435	NSE	%	0.00	0.00	--	--	--	--	--
Extractable Petroleum Hydrocarbons (EPH) with target Polynuclear Aromati									
C09-C18 Aliphatic Hydrocarbons	1000	mg/kg	--	--	--	ND(22)	--	--	--
C11-C22 Aromatic Hydrocarbons	1000	mg/kg	--	--	--	110	--	--	--
C19-C36 Aliphatics	3000	mg/kg	--	--	--	81	--	--	--
Total Petroleum Hydrocarbons (TPH)									
TPH	1000	mg/kg	360	430	500	3100	530	960	180
Volatile Organic Compounds (VOCs)									
Total VOCs	NSE	mg/kg	ND(0.11)	0.0026	ND(0.16)	ND(0.17)	ND(0.28)	ND(0.18)	ND(0.23)
Semivolatile Organic Compounds (SVOCs)									
Benzo(a)Pyrene	2	mg/kg	0.58	0.58	1.3	1.2	0.24	ND(0.38)	0.32
Benzo(b)Fluoranthene	7	mg/kg	0.71	0.68	1.4	1.4	0.26	0.42	0.36
Benzo(g,h,i)Perylene	1000	mg/kg	ND(0.39)	ND(0.38)	ND(0.75)	ND(0.93)	ND(0.20)	ND(0.38)	ND(0.20)
Benzo(k)Fluoranthene	70	mg/kg	ND(0.39)	ND(0.38)	ND(0.75)	ND(0.93)	ND(0.20)	ND(0.38)	ND(0.20)
Chrysene	70	mg/kg	0.60	0.58	1.1	1.2	ND(0.20)	ND(0.38)	0.33
Dibenzo(a,h)Anthracene	0.7	mg/kg	ND(0.39)	ND(0.38)	*ND(0.75)*	*ND(0.93)*	ND(0.20)	ND(0.38)	ND(0.20)
Dibenzofuran	100	mg/kg	ND(0.77)	ND(0.77)	ND(1.5)	ND(1.9)	ND(0.41)	ND(0.77)	ND(0.41)
Fluoranthene	1000	mg/kg	0.96	1.1	2.0	2.2	0.41	ND(0.38)	0.77
Fluorene	1000	mg/kg	ND(0.39)	ND(0.38)	ND(0.75)	ND(0.93)	ND(0.20)	ND(0.38)	ND(0.20)
Indeno(1,2,3-cd)Pyrene	7	mg/kg	ND(0.39)	ND(0.38)	0.86	ND(0.93)	ND(0.20)	ND(0.38)	0.21
Naphthalene	4	mg/kg	ND(0.39)	ND(0.38)	ND(0.75)	ND(0.93)	ND(0.20)	ND(0.38)	ND(0.20)
Phenanthrene	10	mg/kg	0.58	0.82	1.1	ND(0.93)	0.21	ND(0.38)	0.76
Pyrene	1000	mg/kg	1.2	1.2	2.2	2.5	0.42	0.53	0.87
Total SVOCs	NSE	mg/kg	4.63	4.96	9.96	8.50	1.54	0.95	3.62
Metals									
Antimony	20	mg/kg	ND(1.9)	ND(1.9)	ND(1.8)	ND(1.8)	ND(2.0)	ND(1.9)	ND(2.0)
Arsenic	20	mg/kg	5.0	11	4.3	5.3	6.9	4.7	4.3
Barium	1000	mg/kg	37	38	25	42	56	37	39
Beryllium	90	mg/kg	0.39	0.40	0.31	0.33	0.54	0.28	0.35
Cadmium	70	mg/kg	0.36	0.56	0.26	0.38	0.39	0.30	0.26
Chromium	100	mg/kg	16	15	13	17	25	16	18
Lead	200	mg/kg	53	50	18	31	20	24	15
Mercury	20	mg/kg	0.043	0.031	ND(0.027)	0.034	0.040	0.073	ND(0.031)
Nickel	600	mg/kg	13	12	11	14	18	11	13
Selenium	400	mg/kg	ND(3.8)	ND(3.8)	ND(3.6)	ND(3.7)	ND(4.0)	ND(3.8)	ND(3.9)
Silver	100	mg/kg	ND(0.38)	ND(0.38)	ND(0.36)	ND(0.37)	ND(0.40)	ND(0.38)	ND(0.39)
Thallium	8	mg/kg	ND(1.9)	ND(1.9)	ND(1.8)	ND(1.8)	ND(2.0)	ND(1.9)	ND(2.0)
Vanadium	400	mg/kg	25	24	22	26	32	19	23
Zinc	1000	mg/kg	51	46	32	42	48	48	37

Table 1
Summary of Stockpile Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample Grid	MCP RCS-1	Unit	TP-G7	TP-G7	TP-V-101	TP-V-102	TP-V-103	TP-V-104	TP-V-105
Sample ID			TP-G7 (0-5)	TP-G7 (5-10)	TP-V-101	TP-V-102	TP-V-103	TP-V-104	TP-V-105
Sample Date			3/1/2019	3/1/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019
Depth Interval (ft)			0-5	5-10	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)									
Total PCBs	1	mg/kg	ND(0.087)	ND(0.089)	ND(0.083)	ND(0.088)	ND(0.094)	ND(0.085)	ND(0.094)
General Chemistry									
Ignitability	NSE	present/absent	absent	absent	absent	absent	absent	absent	absent
pH	NSE	pH Units	8.0	7.7	7.7	8.1	7.8	7.3	7.7
Reactivity Cyanide	NSE	mg/kg	ND(3.9)	ND(3.9)	ND(4.0)	ND(3.9)	ND(4.0)	ND(4.0)	ND(4.0)
Reactivity Sulfide	NSE	mg/kg	ND(20)	ND(19)	ND(20)	ND(19)	ND(20)	ND(20)	ND(20)
Solids, Total	NSE	%	ND(20)	ND(19)	ND(20)	ND(19)	82.4	88.1	82.2
Specific Conductance	2000	umhos/cm	13	11	14	23	16	9.3	17

Notes:
- mg/kg=milligram per kilogram; uhoms/cm=microohms per centimeter
- Reportable Concentrations (RCS-1 & RCS-2) taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
- Highlighted values exceed applicable MCP RCS-1 Reportable Concentration
- Full analytical results are detailed in the laboratory analytical report

Table 2
Summary of Firing Range Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample ID	RCS-1	Units	V-201	V-202	V-203	V-204	V-205	V-206	FIRING RANGE
Sample Date			4/11/2019	4/11/2019	4/11/2019	4/11/2019	4/11/2019	4/11/2019	4/11/2019
Sample Depth (feet)			0-2	0-2	0-2	0-2	0-2	0-2	0-2
Metals									
Antimony	20	mg/kg	41	140	ND(1.7)	3.3	5.1	140	290
Arsenic	20	mg/kg	--	--	--	--	--	--	9.2
Barium	1000	mg/kg	--	--	--	--	--	--	13
Beryllium	90	mg/kg	--	--	--	--	--	--	ND(0.17)
Cadmium	70	mg/kg	--	--	--	--	--	--	0.40
Chromium	100	mg/kg	--	--	--	--	--	--	4.3
Copper	1000	mg/kg	4200	4200	120	74	1000	7100	--
Lead	200	mg/kg	4000	13000	46	290	630	24000	24000
Mercury	20	mg/kg	--	--	--	--	--	--	ND(0.025)
Nickel	600	mg/kg	--	--	--	--	--	--	3.6
Selenium	400	mg/kg	--	--	--	--	--	--	ND(3.3)
Silver	100	mg/kg	--	--	--	--	--	--	1.2
Thallium	8	mg/kg	--	--	--	--	--	--	ND(1.7)
Tungsten	NSE	mg/kg	ND(0.4)	14	5	ND(0.4)	ND(0.4)	ND(0.3)	--
Vanadium	400	mg/kg	--	--	--	--	--	--	7.7
Zinc	1000	mg/kg	18	29	27	37	23	69	46
Metals, TCLP									
Lead	5*	mg/l	180	360	7.5	8.3	48	830	--
Total Petroleum Hydrocarbons (TPH)									
TPH	1000	mg/kg	--	--	--	--	--	--	27
Volatile Organic Compounds (VOCs)									
Total VOCs	NSE	mg/kg	--	--	--	--	--	--	ND
Semivolatile Organic Compounds (SVOCs)									
Total SVOCs	NSE	mg/kg	--	--	--	--	--	--	ND
Polychlorinated Biphenyls (PCBs)									
Total PCBs	1	mg/kg	--	--	--	--	--	--	ND(0.081)
General Chemistry									
Ignitability	NSE	present/absent	--	--	--	--	--	--	absent
pH	5-9	pH Units	--	--	--	--	--	--	6.6
Reactivity Cyanide	NSE	mg/kg	--	--	--	--	--	--	ND(3.9)
Reactivity Sulfide	NSE	mg/kg	--	--	--	--	--	--	20
Solids, Total	NSE	%	93.3	95.4	95.3	92.1	92.3	92.9	96.4
Specific Conductance	2000	umhos/cm	--	--	--	--	--	--	2.0

Notes:
- mg/kg=milligram per kilogram; mg/l=milligram per liter; uhoms/cm= microohms per centimeter
- Reportable Concentrations (RCS-1) taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- * = MCP RCS-1 does not apply. Regulatory concentration taken from the Resource Conservation and Recovery Act (RCRA) hazardous waste regulations 40 CFR Part 261 Subpart C.
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
- Highlighted values exceeds the applicable Reportable Concentration (*regulatory concentration)
- Full analytical results, including QA/QC information and data flags, are detailed in the laboratory analytical report

Table 2
Summary of Firing Range Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Sample ID	RCS-1	Units	V-301 (2-4)	V-302 (2-4)	V-303 (2-4)	V-304 (2-4)	V-305 (2-4)	V-306 (2-4)	V-307 (2-4)	V-308 (2-4)	V-309 (0-2)	V-310 (0-2)	V-311 (0-2)	V-312 (2-4)	V-313 (2-4)	V-314 (2-4)
Sample Date			5/8/2019	5/8/2019	5/8/2019	5/8/2019	5/8/2019	5/8/2019	5/8/2019	5/8/2019	5/8/2019	5/8/2019	5/8/2019	5/8/2019	5/8/2019	5/8/2019
Sample Depth (feet)			2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	0-2	0-2	0-2	2-4	2-4	2-4
Metals																
Antimony	20	mg/kg	ND(1.7)	ND(1.8)	ND(1.8)	ND(1.7)	ND(1.7)	ND(1.8)	ND(1.8)	ND(1.7)	ND(1.7)	ND(1.7)	ND(1.7)	ND(1.9)	ND(1.8)	ND(1.8)
Arsenic	20	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	1000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	90	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	70	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	100	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	1000	mg/kg	13	22	45	13	37	31	28	43	4.2	400	5.9	20	24	32
Lead	200	mg/kg	5.0	31	28	12	22	25	57	22	5.9	140	8.8	150	86	55
Mercury	20	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	600	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	400	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	100	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	8	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tungsten	NSE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	400	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	1000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals, TCLP																
Lead	5*	mg/l	--	--	--	--	--	--	--	--	--	20	--	0.099	--	--
Total Petroleum Hydrocarbons (TPH)																
TPH	1000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds (VOCs)																
Total VOCs	NSE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semivolatile Organic Compounds (SVOCs)																
Total SVOCs	NSE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polychlorinated Biphenyls (PCBs)																
Total PCBs	1	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General Chemistry																
Ignitability	NSE	present/absent	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	5-9	pH Units	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactivity Cyanide	NSE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Reactivity Sulfide	NSE	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solids, Total	NSE	%	93.9	91.5	93.3	94.1	93.5	92.6	93.2	93.6	96.2	96.4	96.0	89.5	89.1	91.3
Specific Conductance	2000	umhos/cm	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
- mg/kg=milligram per kilogram; mg/l=milligram per liter; uhoms/cm= microohms per centimeter
- Reportable Concentrations (RCS-1) taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- * = MCP RCS-1 does not apply. Regulatory concentration taken from the Resource Conservation and Recovery Act (RCRA) hazardous waste regulations 40 CFR Part 261 Subpart C.
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
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Table 3
Summary of Soil Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Location ID	MCP RCS-1	Units	V-107	V-108	V-109	V-110	V-111	V-112	V-113	V-114	V-115	V-116
Sample ID			V-107 (5-10)	V-108 (0-5)	V-109 (5-10)	V-110 (5-10)	V-111 (0-10)	V-112 (0-5)	V-113 (0-5)	V-114 (5-10)	V-115 (5-10)	V-116 (0-5)
Sample Date			3/27/2019	3/27/2019	3/27/2019	3/27/2019	3/27/2019	3/27/2019	3/28/2019	3/28/2019	3/28/2019	3/28/2019
Sample Depth			5-10	0-5	5-10	5-10	0-10	0-5	0-5	5-10	5-10	0-5
Total Petroleum Hydrocarbons (TPH)												
TPH	1000	mg/kg	ND(8.4)	ND(8.8)	ND(8.7)	11	13	ND(8.6)	ND(8.9)	27	--	--
Volatile Organic Compounds (VOCs)												
Toluene	30	mg/kg	ND(0.0015)	ND(0.0018)	ND(0.0030)	0.0045	0.0041	0.0030	ND(0.0018)	0.0068	--	--
Total VOCs	NSE	mg/kg	ND	ND	ND	0.0045	0.0041	0.003	ND	0.0068	--	--
Semivolatile Organic Compounds (SVOCs)												
Total SVOCs	NSE	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	--	--
Metals												
Antimony	20	mg/kg	ND(1.7)	ND(1.7)	ND(1.8)	ND(1.7)	ND(1.7)	ND(1.8)	ND(1.8)	ND(1.7)	--	--
Arsenic	20	mg/kg	11	5.6	6.5	6.4	11	5.0	2.8	4.5	--	--
Barium	1000	mg/kg	27	30	33	26	32	21	15	31	--	--
Beryllium	90	mg/kg	0.27	0.28	0.28	0.26	0.31	0.25	ND(0.18)	0.26	--	--
Cadmium	70	mg/kg	0.34	0.19	0.21	0.23	0.37	ND(0.18)	ND(0.18)	ND(0.17)	--	--
Chromium	100	mg/kg	12	12	12	33	11	9.1	11	15	--	--
Lead	200	mg/kg	6.1	5.2	5.0	3.9	5.6	3.9	2.3	5.8	--	--
Mercury	20	mg/kg	ND(0.025)	ND(0.026)	ND(0.026)	ND(0.028)	ND(0.026)	ND(0.027)	ND(0.026)	ND(0.026)	--	--
Nickel	600	mg/kg	9.3	9.4	9.6	11	11	7.1	4.8	12	--	--
Selenium	400	mg/kg	ND(3.4)	ND(3.5)	ND(3.5)	ND(3.5)	ND(3.4)	ND(3.5)	ND(3.6)	ND(3.4)	--	--
Silver	100	mg/kg	0.42	0.41	0.37	ND(0.35)	0.44	ND(0.35)	ND(0.36)	0.57	--	--
Thallium	8	mg/kg	ND(1.7)	ND(1.7)	ND(1.8)	ND(1.7)	ND(1.7)	ND(1.8)	ND(1.8)	ND(1.7)	--	--
Vanadium	400	mg/kg	17	17	17	17	17	12	9.6	23	--	--
Zinc	1000	mg/kg	26	25	23	24	25	17	11	30	--	--
Polychlorinated Biphenyls (PCBs)												
Total PCBs	1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
General Chemistry												
Ignitability	NSE	present/ absent	absent	absent	absent	absent	absent	absent	absent	absent	--	--
pH	5-9	pH Units	8.1	8.2	8.1	8.5	8.2	6.3	6.5	6.4	--	--
Reactivity Cyanide	NSE	mg/kg	ND(3.9)	ND(3.9)	ND(4.0)	ND(4.0)	ND(3.9)	ND(3.9)	ND(3.9)	ND(4.0)	--	--
Reactivity Sulfide	NSE	mg/kg	ND(19)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	--	--
Solids, Total	NSE	%	97.0	93.8	94.2	94.8	95.2	94.5	93.3	95.4	94.6	94.6
Specific Conductance	2000	umhos/cm	4.9	5.7	5.8	5.3	6.5	4.7	ND(2.0)	2.1	--	--

Notes:
- mg/kg=milligram per kilogram; uhoms/cm=microohms per centimeter
- MCP RCS-1 Reportable Concentrations taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
- Highlighted values exceeds the applicable Reportable Concentration
- Full analytical results, including QA/QC information and data flags, are detailed in the laboratory analytical report

Table 4
Summary of Groundwater Analytical Data
Rivers Edge
484 - 490 Boston Post Road, Wayland, MA
VERTEX PROJECT NO. 67404

Location ID	RCGW-1	Units	MW-3	V-101 (MW)	V-102 (MW)	V-103 (MW)	V-104 (MW)	V-105 (MW)	V-106 (MW)
Sample Date			4/2/2019	4/1/2019	4/1/2019	4/2/2019	4/2/2019	4/1/2019	4/2/2019
Screened Interval (Feet bgs)			Unknown	10-20	10-20	25-35	26.5-36.5	27-37	27-37
Volatile Organic Compounds (VOCs)									
Methyl Tert-Butyl Ether	70	ug/l	ND(1.0)	8.2	1.1	ND(1.0)	ND(1.0)	1.6	14
Tertiary-Amyl Methyl Ether (TAME)	NSE	ug/l	ND(2.0)	4.5	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	6.4
Total VOCs	NSE	ug/l	ND	12.7	1.1	ND	ND(2.0)	1.6	20.4
Semivolatile Organic Compounds (SVOCs)									
Total SVOCs	NSE	ug/l	ND	ND	ND	ND	ND	ND	ND
Metals, Total									
Antimony	NSE	ug/l	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Arsenic	NSE	ug/l	ND(0.40)	ND(0.40)	22	ND(0.40)	0.50	ND(0.40)	1.6
Barium	NSE	ug/l	13	93	210	14	14	150	190
Beryllium	NSE	ug/l	ND(0.40)	ND(0.40)	ND(0.40)	ND(0.40)	ND(0.40)	ND(0.40)	ND(0.40)
Cadmium	NSE	ug/l	ND(0.50)	0.52	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	3.0
Chromium	NSE	ug/l	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	2.8
Copper	NSE	ug/l	ND(5.0)	5.1	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	6.9
Lead	NSE	ug/l	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	1.6
Manganese	NSE	ug/l	73	4400	7000	91	95	870	5400
Mercury	NSE	ug/l	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)
Nickel	NSE	ug/l	ND(5.0)	17	9.0	ND(5.0)	ND(5.0)	44	110
Selenium	NSE	ug/l	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Silver	NSE	ug/l	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Thallium	NSE	ug/l	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Vanadium	NSE	ug/l	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Zinc	NSE	ug/l	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	33
Metals, Dissolved									
Arsenic	10	ug/l	0.74	0.98	26	0.74	0.79	1.1	1.0
Nickel	100	ug/l	-	-	-	-	-	-	110
Polychlorinated Biphenyls (PCBs)									
Total PCBs	0.5	ug/l	ND	ND	ND	ND	ND	ND	ND
General Chemistry									
Ammonia	1000	ug/l	ND(300)	1500	1500	ND(300)	ND(300)	1100	2000
Chloride	NSE	ug/l	120000	260000	95000	230000	26000	140000	210000
Nitrogen	NSE	ug/l	3500	5100	7000	1700	4100	11000	39000
Nitrogen, Nitrate	NSE	ug/l	1500	2700	4700	1700	2100	7800	35000
Nitrogen, Nitrate/Nitrite	NSE	ug/l	ND(100)	400	254	ND(100)	ND(100)	810	302
Nitrogen, Total Kjeldahl	NSE	ug/l	2000	2000	2000	ND(1000)	2000	2000	4000
Ortho-phosphate	NSE	ug/l	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Phosphorus	NSE	ug/l	ND(62)	ND(62)	ND(62)	140	ND(62)	ND(62)	93

Notes:
- ug/l=micrograms per liter; bgs=below ground surface
- Reportable Concentrations (RCGW-1) taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0974(2) dated April 2014
- ND = Not Detected above laboratory reporting limits shown in parenthesis
- -- = Not Analyzed
- NSE = No Standard Exists
- Highlighted values exceeds the applicable Reportable Concentration
- Italicized values represent laboratory detection limit equal to or above applicable RCGW-1 standard
- Full analytical results, including QA/QC information and data flags, are detailed in the laboratory analytical report

Table 5
Summary of Soil Vapor Analytical Data
Rivers Edge
484 - 490 Boston Post Road
Wayland, MA
VERTEX PROJECT NO. 67404

Location ID	V-SG-101	V-SG-102	V-SG-103	V-SG-104	V-SG-105	V-SG-106
Sample Date	4/9/2019	4/9/2019	4/9/2019	4/9/2019	4/9/2019	4/9/2019
CHEMICAL NAME						
Methane	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)

Notes:
- Results reported in parts per million/volume (ppmv)
- Full analytical results, including QA/QC information and data flags, are detailed in the laboratory analytical report

ATTACHMENT A:

SUMMARY OF

PUBLIC COMMENTS

EXHIBIT II
Public Comments Draft Public Involvement Plan & Meeting
River's Edge
484 – 490 Boston Post Road, Wayland, MA
RTN 3-34474 & 3-36013

Overview Comments

1.) Comment: "We note that in the published legal notices and the multiple letters sent to us, we understood that the meeting on March 18, 2021 was for the purpose of presenting the draft Public Involvement Plan (PIP) and also to solicit public comment at the meeting. We were surprised that there was no opportunity for even a minimal interchange. Please assure that there is a question and answer session at the end of your presentation at all future public meetings and include that requirement in the final PIP."

- **Response:** Opportunities for public interaction with question-and-answer periods for every public meeting have been clarified in this Final PIP. Every future public meeting will include a question-and-answer period during the meeting.

2.) Comment: "Absent from the PIP is the previously requested list of required approvals from all regulatory agencies, notice of public meetings/hearings and continuances of same, and notice of substantive contacts with those regulatory agencies. Please include that list and a provision for providing notices of same to at least the PIP Petitioners."

- **Response:** We have revised the PIP to add Section 2.4.1 to reflect that the only regulatory agency approval required and obtained for the Massachusetts Contingency Plan (MCP) remedial activities is the January 10, 2020 Town of Wayland Conservation Commission Chapter 194 Permit issued to Wood Partners East Acquisition, LLC (an affiliated company of Alta River's Edge, LLC). A copy of the Order of Conditions is available at https://www.wayland.ma.us/board-selectmen/alta-rivers-edge-development-project/pages/5-information-related-water-wastewater and from the Town of Wayland Conservation Commission. The MCP does not require Massachusetts Department of Environmental Protection (MassDEP) approval to initiate Release Abatement Measure (RAM) activities. Requests for other regulatory agency approvals that pertain to aspects of the site development that are not regulated by the Massachusetts Contingency Plan (MCP) should be

directed to the property owner (Alta River's Edge, LLC) at 781.541.5822 or to the issuing regulatory agency. The PIP identifies how notices of public meetings regarding MCP activities will be made and to whom the notices will be sent. Copies of the notices are available in the River's Edge PIP Site information repository hosted on VERTEX's public website, in the MassDEP's online file viewer, and at the Town of Wayland Town Hall, Town Clerk's Office at 41 Cochituate Road in Wayland. The web addresses of the VERTEX information repository, and for the two MassDEP online file viewers for each Release Tracking Number (RTN), are:

- https://vertexeng.com/rivers-edge-public-involvement-plan-public-repository/
- https://eeaonline.eea.state.ma.us/EEA/fileviewer/Rtn.aspx?rtn=3-0034474
- https://eeaonline.eea.state.ma.us/EEA/fileviewer/Rtn.aspx?rtn=3-0036013

As noted in sections 1.0, 2.3.1, and 2.5 of the Final PIP, substantive contact with the MassDEP regarding MCP response actions at the Site have included discussions with MassDEP staff regarding the RAM Plan and the first RAM Status Report. Information regarding those discussions was provided in Section 2.5 of the PIP, and the RAM Status Report and all orders, conditions, or approvals received from the MassDEP regarding MCP response actions are required by MCP regulation to be noted in the RAM Completion Report, MCP Phase Reports, and in the Permanent Solution Statement. Substantive contact with MassDEP staff was also made regarding the Public Involvement Plan and scope and means for public meetings. All future orders, conditions, or approvals received from the MassDEP, if any, will be noted as indicated above.

3.) Comment: "We were surprised at the unilateral extension of time for public comment on the draft PIP from the required 20 days to 40 days (see draft PIP Sec. 1.4 at p. 3), thus slowing down implementation of a Plan. We did not notice anything in the DEP's on-line guidance "MCP Q&A: COVID-19 Edition" that would suggest that, absent a request from the public, the required 20-day comment period should be extended especially by an additional 20 days."

- **Response:** There was not a unilateral extension of time for public comment. MassDEP requested the extension of time, because MassDEP stated that it wanted to ensure everyone had an opportunity to review and provide comment, based on COVID complications prohibiting access to a local physical repository. We do not expect that the extension will materially delay implementation of the Plan.

4.) Comment: **"**Please include a provision for providing quarterly progress reports that, where appropriate, can be combined with the required information for the milestones."

- **Response:** Public meetings to provide updates of RAM activities have been added to the PIP at Section 4.3.3. The RAM Status Public meetings will be held following the submittal of RAM Status Reports to the MassDEP. These RAM Status meetings will be in addition to the public meetings to be held for major milestone documents. The RAM Status Report public meetings will include a question-and-answer period. The RAM Status reports will be made available in the information repositories prior to the public meeting. The amount of new information regarding remedial activities that will be available between the RAM Status Report public meetings will be very limited; therefore, quarterly RAM Status meetings would not be very informative.

5.) Comment: **"**Wherever in the PIP reference is made to the fact that notices are to be provided, please include the statement that they will be given timely."

- **Response:** This has been added to the Final PIP.

6.) Comment: **"**In the PIP and in future documents, when providing results of sampling analyses in the text and in tables, in addition to the information you have already provided, please clearly state: a) the dates the samples were collected; b) at what depth; and c) when the result exceeds an applicable MCP standard, state how many exceedences there were for each constituent."

- **Response:** Additional information and clarifications have been included in the PIP. The information will also be provided in data tables to provide an easier way to reference the information.

7.) Comment: **"**A Release Abatement Measure (RAM) Plan was apparently filed with the Massachusetts Department of Environmental Protection (DEP) on January 8, 2021, eleven days after the PIP Petition was submitted to both the Town and the DEP. Please explain why there was no opportunity for the public to comment on the RAM Plan and why VERTEX believes that the public is precluded from commenting on that document."

- **Response:** Information regarding the availability of the RAM for review was added to the Final PIP. The PIP Petition was provided to the former owner (The Town of Wayland) and the current

owner (Alta River's Edge, LLC) and VERTEX were not aware the Site had been designated a PIP Site when the RAM was submitted.

Introduction

8.) Comment: "Sec. 1.1 Property Description – There was not a facility known to residents as "Town of Wayland Municipal Waste Water Treatment Plant" on the property. The only Town-owned wastewater treatment plant that the public is aware of is located within the Town Center shopping area and is operated by the Wayland Wastewater Management District Commission (WWMDC). The property that VERTEX is describing is the location of the former Wayland-Sudbury Septage Treatment Facility. We request that in this section and in subsequent mentions of the former facility (see pp. 8, 9, 16, & 17), it be referred to as the former Wayland-Sudbury Septage Treatment Facility so that what you are speaking about will be easily understood by residents. There were numerous documents and analytical data filed with DEP and the Wayland Board of Health over the years that deal with that particular facility. And, using the correct name should make it easier to access that information."

- **Response:** This clarification has been made in Section 2.1 of the Final PIP. Please note that the section numbering and pagination of the PIP has changed to accommodate updates and clarifications to the Final PIP. At the request of the MassDEP the Draft PIP sections were.

Description of Release Conditions

9.) Comment: "Sec. 2.4.1 Soil Stockpiles - Results – Please help us understand why, when analyzing the sum of EPH carbon-range fractions, all of the TPH results are not taken into account but rather the calculation only used the data from those samples where an individual TPH result tripped the standard."

- **Response:** Further explanation of the reasoning behind these analyses has been added to Section 2.3.1 of the PIP. Please note that the section numbering and pagination of the PIP has changed to accommodate updates and clarifications to the Final PIP.

10.) Comment: "Sec. 2.4.1 Soil Stockpiles - Results – p. 13 - In the second paragraph, the information would be clearer and easier for the public to understand if it informed us that 12 of the 14 soil samples exceeded the reportable concentrations for SVOCs and 2 of the samples exceeded the reportable concentrations for total lead."

- **Response:** Section 2.3.1 of the Final PIP has been clarified to reflect that 12 of 80 samples exceeded the MCP Reportable Concentrations for semi-volatile organic compounds (SVOCs) and 2 of the 80 samples exceeded the MCP Reportable Concentrations for total lead. Please note that the section numbering and pagination of the PIP has changed to accommodate updates and clarifications to the Final PIP.

11.) Comment: "Sec. 2.4.2 Former Firing Range – The write up becomes quite confusing when one tries to correlate the text with the Firing Range Assessment Figure (incorrectly numbered 3) and Table 2's 2 pages of analytical data. It would help to provide the date that samples were collected and at what depth so that we can understand which of the analytical data pages are being discussed. In addition, at p. 16, the draft PIP states that "MCP RCS-1 Reportable Concentrations were not detected deeper than 2 feet" but it appears that samples were not always collected at a depth of greater than 2 feet. Please rewrite this section to be more easily understood and refer the reader to the Figure by number."

- **Response:** This information has been clarified in Section 2.3.2 of the Final PIP and on the accompanying tables and figures.

12.) Comment: "Sec. 2.4.3 Former Hazardous Material Storage – For the 1 soil sample and the 1 groundwater sample, is there: a) a plan showing where each was taken; b) I.D. numbers for the samples; c) date the samples were taken; d) a table of the results; e) information on depth at which the sample was taken; f) information on depth to groundwater? Please include the information in the final PIP."

- **Response:** This information is included in the Final PIP at Section 2.3.3 and included in Table 4 and Figure 2.

13.) Comment: "Sec. 2.4.4 Former Underground Storage Tanks – See the previous comment. This section is in need of the same information."

- **Response:** This information is included in the Final PIP at Section 2.3.4 and included in Table 4 and Figure 2.

14.) Comment: "Sec. 2.4.5 Groundwater Impacts from Sudbury Landfill"

A. Comment: **"**We want to make sure that you are aware that the former Wayland-Sudbury Septage Treatment Facility, as part of its operation, had a leach field located just over the town line on the adjacent property in Sudbury between the Septage Facility and the Sudbury landfill."

- **Response:** Yes, we are aware of the leach field.

B. Comment: **"**Please clarify under "Results", first paragraph, that the summary of the groundwater analytical results presented in Table 4 is just for the GW-1 standard."

- **Response:** The PIP has been updated to note that the groundwater sample analysis results are compared in Table 4 to the MCP RCGW-1 Reportable Concentrations. MCP Reportable Concentrations do not exist for all analytes and are applicable only to dissolved chemicals, so no Reportable Concentrations are shown for total metal (non-dissolved) concentrations.

C. Comment: **"**Is there a reason why analytical results were not compared to the GW-2 standards?"

- **Response:** Groundwater results were compared to the RCGW-1 Reportable Concentrations because RCGW-1 Reportable Concentrations apply to the Site. RCGW-2 Reportable Concentrations do not apply to the Site. Exposure Point Concentrations will be compared to applicable MCP risk standards during the risk characterization phase of the project. MCP RCGW-1 Reportable Concentrations apply to the site because it is located within an area mapped by the MassDEP as being a medium and high yield aquifer and, although it is not a current drinking water resource are, it is currently considered potentially suitable for future use as a drinking water resource area.

D. Comment: **"**It sounds as though the proposed Downgradient Property Status Opinion that VERTEX anticipates filing will be based on sampling from early April 2019. We have seen reports from two different consultants subsequent to that April date indicating that more groundwater sampling locations are necessary across the site to: a) support such an opinion: and b) better understand future site groundwater flow due to stormwater from the development project and infiltration of treated water from the leach field. *See* October 31, 2019 Report of BSC Group at p. 10, paragraph p. https://www.wayland.ma.us/sites/g/files/vyhlif4016/f/uploads/2019-10-31_final_bscwayland_rivers_edge_development_peer_review_letter.pdf and November 4, 2019 Report

of Benson Gould, LSP of CMG Environmental, Inc. at pp. 8-9 https://www.wayland.ma.us/sites/g/files/vyhlif4016/f/uploads/cmgreview_letter_11-4-19.pdf ."

- **Response:** VERTEX is currently evaluating whether additional locations for groundwater sampling are needed and if so, the types of analyses to be completed.

E. Comment: **"**Please provide a fuller explanation of the basis for the statement on p. 20 that "no exacerbation of the extent these metals and ammonia is anticipated [sic]. Additional water infiltration will further disperse and dilute the low-level metal and ammonia concentrations within and downgradient of the property.""

- **Response:** A fuller explanation has been added to Section 2.3.5 of the PIP. While localized infiltration of stormwater and treated wastewater will dilute and disperse the low-level metal and ammonia concentrations within and downgradient of the property, such dilution will reduce the already low concentrations and the dispersion will not increase risks to human health, public safety, welfare, or the environment because it will not create any new potential exposure pathways.

F. Comment: "The draft PIP is focused almost exclusively on contaminated soil and its remediation. There is no information concerning depth to groundwater across the site nor could we find anything concerning the direction of flow of groundwater. Please add that information to the final PIP."

- **Response:** We have created a groundwater elevation contour map reflecting anticipated groundwater flow direction and the range of the observed depths to groundwater have been added to the Final PIP as Figure 5. Depth to groundwater information has been added to Section 2.2.2 of the Final PIP.

Public Involvement

15.) Comment: **"**Sec. 5.1.1 Information Repositories -- Please confirm that the VERTEX-Hosted Information Repository and the Hard-Copy Local Repository will contain the same materials, including everything that is in the DEP file. And, as part of the repository, please maintain an inventory listing all available documents in chronological order."

- **Response:** The VERTEX-Hosted Information Repository and the Hard Copy Local Repository will contain the same materials, including everything that is in the MassDEP file.

16.) Comment: "Sec. 5.1.2 Site Mailing List – The River's Edge Advisory Committee has not met since January 18, 2018 when it's [sic] charge expired. The Town of Sudbury Board of Health is missing from the Appendix B Mailing List. The Town of Sudbury has a Town Manager rather than a Town Administrator. Also on Appendix B, Carole Plumb is listed twice and the correct name of the Wayland Conservation Commission Chair is Sean Fair."

- **Response:** We have corrected this information in the Final PIP.

17.) Comment: "Sec. 5.2 Notification to Local Officials and Residents of Major Milestones and Events – Reading this section in conjunction with Sec. 5.1.2, the PIP Petitioners cannot determine exactly for what items they should expect to receive written notice. Please clarify and we request receipt of timely written notice of the availability of all draft and final documents."

- **Response:** This information has been clarified and updated in the Final PIP in Section 4.2.

18.) Comment: "Sec. 5.2 at p. 32, first bullet, should it read "remedial activities" rather than "remedial additives"?"

- **Response:** We have corrected this information in the Final PIP.

19.) Comment: "Sec. 5.3 Soliciting Public Input"

A. Comment: "Although the draft PIP states that "Following each meeting in which a draft milestone report is presented", for example the Draft PIP, there will be a public comment period to provide opportunities for oral input. That was not afforded to the public in the case of the draft PIP. Please broaden the language here to encompass posing questions as well as input on the plans and documents."

- **Response:** The PIP has been updated to clarify that each public meeting will include a question-and-answer period. Comments received during the question-and-answer period will be included in the summary of public comments received during the public comment period.

B. Comment: **"**Please reduce the time for responses to public comment from 60 days following the close of the comment period to a more realistic 30 days. In addition, we request that the Final Public Involvement Plan include the responses to public comments together with a statement of where they were or were not incorporated into the final PIP Plan. *See* 310 C.M.R. Sec. 40.1405 (5) (c) & (d)."

- **Response:** The 60-day period to respond to public comments has been reduced to 45 days in Section 4.3 of the Final PIP to provide a timelier response and which will still accommodate time to prepare responses to comments of varying complexity; however, if feasible written responses to public comments regarding major milestone documents will be provided sooner. Public comments received regarding the Draft PIP and the responses to comments have been included as an attachment to the Final PIP.

20.) Comment: **"**Sec. 5.3.1 Public Meetings"

A. Comment: **"**A Question & Answer period at the end of such meetings is customary and we request that it be included here."

- **Response:** A question-and-answer period will be included in all future public meetings regarding the MCP response actions.

B. Comment: **"**Meeting summaries should be available within 20 days after the meeting and the PIP should so state."

- **Response:** Meeting summaries consisting of a copy of any new materials, such as presentation slides, presented in the meeting, and recordings of video meetings will be uploaded to the information repositories within 20 days of the meetings. The PIP has been updated at Section 4.3.3 to reflect this.

21.) Comment: **"**Sec. 5.3.2 Public Comment Periods – Please clarify and broaden the term "the designated River's Edge repository" which appears twice in this section because there are actually at least three repositories that VERTEX will be using."

- **Response:** This has been clarified in the Final PIP. There are three electronic repositories and a hard copy repository pertaining to MCP response actions. The information repositories are:

- The VERTEX's public website located at: https://vertexeng.com/rivers-edge-public-involvement-plan-public-repository/, and
- The MassDEP's online file viewers [there is a separate link for each MassDEP Release Tracking Number (RTN)] located at:
  - https://eeaonline.eea.state.ma.us/EEA/fileviewer/Rtn.aspx?rtn=3-0036013, and
  - https://eeaonline.eea.state.ma.us/EEA/fileviewer/Rtn.aspx?rtn=3-0034474
- The Town Clerk's office maintains an information repository of document hard copies. The Town Clerk's Office is located at the Town of Wayland Town Hall, 41 Cochituate Road, Wayland, MA.

22.) Comment: "Sec. 5.3.3 Response to Comments -- Please clarify and broaden the term "the designated River's Edge repository". *See* comment 21 above."

- **Response:** This has been clarified in the Final PIP and in the response to question number 21. above.

Schedule for Public Involvement

23.) Comment: "Sec. 6.0 Schedule for Public Involvement – Please revise the language in this section to also provide for the requested quarterly progress reports and also add that to Appendix C."

- **Response:** The schedule for public involvement activities presented as Exhibit IV in the Final PIP has been updated to add public meetings after the submittal of each RAM Status Report. Remediation activities at the Site are being conducted as a RAM and the MCP requires the submittal of RAM Status Reports 120 days after submittal of the RAM Plan and every six months thereafter until submittal of a RAM Completion Report. These RAM Status public meetings will provide an opportunity for updates in addition to the public meetings to be held for major milestone documents. The RAM Status public meetings will include a question-and-answer period and the RAM Status reports will be made available in the information repositories prior to the public meeting. The amount of new information regarding remedial activities that will be available between the RAM Status public meetings will be very limited; therefore, quarterly RAM Status meetings would not be very informative and are not proposed.

Figures

24.) Comment: "Figure 2 Site Schematic (listed in the Table of Contents as "Property Schematic") appears to have been referenced only once in the text and that is at p. 1 where it says that "major property features are shown on Figure 2." However, Figure 2 also shows the locations of monitoring wells, soil borings and some sampling points. Please provide a description somewhere up front in the text explaining the relationship of these particular locations to the actual sampling events. And, if the locations were part of a particular area of an environmental investigation outlined in the draft PIP, please specifically refer to the Figure when describing the sampling event."

- **Response:** Figure 2 has been updated to reflect particular areas of concern and has been referenced where applicable in the Final PIP.

25.) Comment: "Figure 3 Firing Range Assessment"

A. Comment: "The Figure appears to be incorrectly numbered here. The table of contents refers to it as Figure 4. We could not find any mention of this Figure in the text."

- **Response:** This has been corrected in the Final PIP.

B. Comment: "As stated on the Figure, the depths of the soil borings and test pits is 0-2 feet and 2-4 feet but at p. 15 of the PIP there is also reference to samples taken at a depth of 6 feet. Please clarify all of the references."

- **Response:** Additional figures pertaining to the firing range investigations have been created to clarify the scope of the firing range investigations. Figure 4C has been added to clarify the depth references. A total of fourteen test pits were completed in the firing range. Eight test pits were competed to depths of 6 feet below ground surface (bgs), three test pits were completed to depths of 4 feet bgs, and three test pits were completed to depths of 2 feet below the base of the end berm. Samples were collected from depth intervals of 2 to 4 feet from eleven of the fourteen test pits and from depth intervals of 4 to 6 feet bgs in eight of the test pits. The samples collected from the 2 to 4-foot depth interval were submitted for laboratory analysis and the 4-to-6-foot depth interval samples were held by the laboratory pending the results of the 2 to 4 foot depth interval samples. The analytical results for the 2-4 foot depth interval samples indicated that firing

range contamination did not extend deeper than 4 feet below ground surface; therefore, analysis of the 4 to 6 foot samples was not required. Samples were also collected from a depth interval of 0 to 2 feet below surrounding surface grade (under the berm below its base). An additional vertical delineation sample has been collected from the 2 to 4-foot bgs depth interval from the location of test pit V-310. The data from this additional sample will be included in the next RAM Status Report.

C. Comment: "With regard to the XRF Readings on the Figure, only 5 of them are highlighted but the text states that based on the readings, 6 samples were analyzed. Please clarify."

- **Response:** The firing range data has been separated into multiple figures in the Final PIP for clarification. The x-ray fluorescence (XRF) meter readings in the table included in the bottom right of Figure 4A are the readings collected from characterization cells in columns Q through I of the characterization grid. The sixth sample (sample V-203) referenced in the text was collected from characterization cell E4; the XRF readings for characterization cells in columns A through H are shown in the figure within each characterization cell.

Tables

26.) Comment: "Table 3 Summary of Soil Analytical Data – What section of the draft PIP is this Table meant to belong to? The Table does not appear to be referred to in the text."

- **Response:** The Final PIP includes a reference to the table in Sections 2.3.3 and 2.3.4. This table presents the results of laboratory analysis of additional soil samples collected to investigate potential environmental concerns at the Site.

27.) Comment: "Table 4 Summary of Groundwater Analytical Data – Is the data for MW-3 one of the samples from the former underground storage tank area?"

- **Response:** The groundwater sample from well MW-3 was not collected to characterize potential releases of oil or hazardous materials (OHM) from the underground storage tank (UST) area, although it is located hydraulically downgradient of the UST area. Well V-104(MW) was the monitoring well installed in the former UST area. This has been clarified in the text and on Figure 2 of the Final PIP.

Appendices

28.) Comment: "Appendix A Summary of Public Comments – With regard to groundwater impacts, PIP Petitioners specifically stated their concern about "the impact of groundwater contamination on plans for a future on-site leach field to accommodate about 38,000 gallons/day of wastewater." Please add that to the summary of public comments under "Groundwater Impacts". One additional concern has surfaced based on recent news accounts and that is whether there might be NDMA present at the site. We understand that it is an unintended byproduct of chlorination of wastewater at wastewater treatment plants that use chloramines for disinfection and is classified as a B2 (probable human) carcinogen."

- **Response:** This concern has been added to Exhibit I "Summary of Public Concerns" and additional discussion regarding the potential for future treated wastewater and stormwater infiltration to impact existing groundwater contamination has been added to section 2.3.5 of the Final PIP.

29.) Comment: "Appendix C Schedule of Public Involvement Activities – Please revise the schedule to show the requested quarterly status reports and the requested shorter 30-day time periods for response to public comments."

- **Response:** The schedule for public involvement activities presented as Exhibit IV in the Final PIP has been updated to add public meetings after the submittal of each RAM Status Report. Please refer to the response to comment number 23 above.

- **Comment:** The 60-day period to respond to public comments has been reduced to 45 days in Section 4.3 of the Final PIP to provide a timelier response and which will still accommodate time to prepare responses to comments of varying complexity; however, if feasible written responses to public comments regarding major milestone documents will be provided sooner. Public comments received regarding the Draft PIP and the responses to comments have been included as an attachment to the Final PIP.

30. Comment: "Please add an "Appendix D Glossary of Terms" that lists those terms and acronyms used throughout the PIP. That will assist the public by easily finding the meaning of a term without having to search through the entire PIP for a definition."

- **Response:** A Glossary of Terms has been added as Exhibit V which is included as an attachment to the Final PIP.

31.) Comment: "On page 4 of the draft PIP and again on page 23 Vertex provides an incorrect name for CMG; the word "Services" does not appear in our full legal name – it is just "CMG Environmental, Inc.""

- **Response:** This has been corrected Final PIP.

32.) Comment: "The last item in the bullet list on page 13 of the draft PIP implies that Con-Test Analytical Laboratory (Con-Test) conducted asbestos testing on soil samples which Vertex collected from the Site in March 2019. However, you submitted samples for asbestos testing to CEI Labs, Inc. of Cary, North Carolina (Con-Test did perform the other listed analyses)."

- **Response:** This has been corrected in the Final PIP.

33. Comment: "Page 23 of the draft PIP incorrectly states that CMG submitted an Immediate Response Action (IRA) Plan for release tracking number (RTN) 3-34474 to the DEP on October 12, 2017; an IRA Completion and Permanent Solution report for RTN 3-34474 to DEP on January 26, 2021; and a Phase I Initial Site Investigation Report and Tier Classification Report for RTN 3-36013 to DEP on December 2, 2020. We certainly prepared those reports, but it was the Town of Wayland (specifically, Town Engineer Paul Brinkman) who submitted these, via the eDEP online submittal system. CMG also prepared six IRA Status Reports for RTN 3-34474, which the Town of Wayland submitted via eDEP."

- **Response:** This has been clarified in the Final PIP.