Chittenden County Brownfields Program
Site Nomination / Assistance Request Form

For information on types of assistance available and
CCRPC's protocol for deciding if, and to what degree to assist a request, see:
http://www.ccrpcvt.org/our-work/economic-development/brownfields/

Site Name: 195-201 Flynn Avenue

Site's Street Address/Town/Zip Code: 195-201 Flynn Avenue, Burlington, VT 05401

Parcel Tax ID #: 57-2-124-000 & 057-2-125-000 Property Size (Acres): 3.78

Zoning District: Enterprise Light Manufacturing

Describe current use(s): Light Industrial - one building with three commercial spaces; outdoor storage.

Describe former use(s):

Are there plans for acquisition and/or redevelopment? X Yes ___ No

If yes, attach a separate one to two-page document describing the anticipated benefits of the redevelopment such as housing units, commercial development, jobs, economic impact, recreation, etc. (see Site Evaluation Criteria at link above for the types of information to provide).

Have studies been conducted to identify or assess contamination? X Yes ___ No

If yes, please identify the title, author and date of the report, and if available, send us a PDF: Phase I is in process by VHB. Report will be submitted when available.

Potential contaminants include: X Petroleum X Other contaminants

What type(s) of site assessment or cleanup planning assistance are you seeking? Circle all that apply

Phase I Environmental Site Assessment	Phase II Environmental Site Assessment
Soil Monitoring during Construction	Archeological Site Assessment / Recon
Historic Preservation issues	Cleanup / Corrective Action Planning
Other	

Property Owner Information:

Name: CSWD Signature: Sarah Reeves

Mailing Address: 19 Gregory Drive, Suite 204, South Burlington VT. 05403

Phone: (802) 872-8100 X209 Email: sreeves@cswd.net

Nomination Submitted By: DocuSigned by: 16A952D842EF4B5...

Name or Office: City of Burlington Date Submitted: 6/21/2023

Mailing Address: 645 Pine Street, Burlington, VT 05401

Phone: (802) 829-6385 Email: sdunn@burlingtonvt.gov

Please Return Site Nomination Form (via PDF is preferred) to:

Dan Albrecht, Senior Planner
Chittenden County Regional Planning Commission 110 West Canal St., Suite 202 Winooski, VT 05404
*Phone: (802) 846-4490 Ext. *29; Email: dalbrecht@ccrpcvt.org*

CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS

645 Pine St. Suite A
Burlington, VT 05401
802.865.7200 VOX
802.863.0466 FAX
802.863.0450 TTY

June 22, 2023

Dan Albrecht, Senior Planner
Chittenden County Regional Planning Commission
110 West Canal Street, Suite 202
Winooski, VT 05404

Dear Dan,

Here is a project description for 195-201 Flynn Avenue to accompany our Brownfields application.

The project site is located in Burlington, VT in the City's light manufacturing district and the metro region of the Regional Plan. The project consists of two parcels of land for a combined 3.77 acres. The site is served by existing water, sewer, electricity and natural gas utilities. The site is adjacent to the railroad tracks and is in an area where there are multiple brownfield sites. The site located in the Enterprise Light Manufacturing district where housing is not an allowed use.

The purchase and redevelopment of this site will give the City of Burlington the ability to:

- Provide space for a permanent, well-designed location for City soil management
- Enable CSWD to expand their drop off center (DOC) operations at 339 Pine Street in the short term by removing City soil management from 339 Pine St
- Free up space to better accommodate the future Railyard Enterprise Project at 339 Pine Street
- Give the City and CSWD the option long-term whether to locate the full-service, modern DOC at Pine Street or Flynn Avenue
- Secure additional "enterprise" land for current and future municipal operational needs
- Accommodate interests in the Intervale to repurpose Water Distributions' existing soils management area by relocating to 195-201 Flynn Avenue

These activities will contribute to a more sustainable Burlington for all residents. Specifically:

1) Not having a full-service drop off center in Burlington is a barrier for low-income people to access affordable, easy ways to responsibly dispose of solid waste.
2) Moving soil storage out of the Intervale allows for reuse of this land and the Intervale Center has been exploring expanding gardening opportunities for underrepresented residents.
3) Moving soil storage from 339 Pine opens up land for the Railyard Enterprise Project, which will reduce vehicle traffic in the King & Maple neighborhood.
4) Having well-designed modern facilities for soil management and drop off center activities will provide a safer work environment for employees and customers.

Thank you for considering this request. Reach out with any questions.

Sincerely,

Chapin Spencer
DPW Director

July 10, 2023

Ref: 58630.07

Laura Wheelock, PE
City of Burlington – Department of Public Works
645 Pine Street
Burlington, VT 05401

Re: Proposal for Phase II ESA Investigation,
195-201 Flynn Avenue, Burlington, Vermont

Dear Laura:

Vanasse Hangen Brustlin, Inc. ("VHB") is pleased to present the City of Burlington ("the City") with the following proposal to prepare a Work Plan and perform a Phase II Environmental Site Assessment ("ESA") at the properties located at 195-201 Flynn Avenue, Burlington, Vermont (the "Site"). The Site consists of two north-south adjacent parcels: 195 Flynn Ave ("Lot 1", southern lot) and 201 Flynn Ave ("Lot 2", northern lot). The Site currently contains one building that was formerly used as a general auto repair and services shop. This Phase II ESA will be designed to support the future redevelopment of the Site by investigating the potential for impacts to soil, groundwater, and soil vapor associated with multiple Recognized Environmental Conditions ("RECs") identified during VHB's July 2023 Phase I ESA conducted for the Site.

Background

VHB conducted a Phase I ESA at the Site in support of its future redevelopment and reuse on behalf of the City and identified the following RECs:

REC #1 – Former Automotive Repair Shop On-site

According to the EDR Database Report, between 1987 and 1998, an auto and home supply store, carwash, and general automotive repair shop operated on the Site, in the existing building on Lot 2. An interview with a tenant of the building revealed that spray-painting of cars occurred within the building on a raised concrete platform. Circular patches in the concrete floor of the building were observed during Site reconnaissance that may be patches over former floor drains. The historical use of the existing building on the Site as an automotive repair shop, and the potential presence of floor drains within that building represents a REC.

REC #2 – Oil Staining on Ground Surface

A small, approximately 3-feet by 3-feet, area of intermittently stained soil was observed in the grassed area north of the existing building on Lot 2. VHB observed a petroleum like odor to the soil during Site reconnaissance. The nature and extent of potential contaminant impacts associate with this staining on a pervious surface could not be determined, and therefore represent a REC.

40 IDX Drive, Building 100
Suite 200
South Burlington, Vermont 05403
P 802.497.6100
F 802.495.5130

REC #3 – Historical Oil and Gasoline Storage On-Site

Sanborn maps from 1942 identify on-Site storage of bulk oil and gasoline by Cities Service Company. No further documentation regarding this bulk oil and gasoline storage was found, including but not limited to potential storage tank removal reports or confirmatory soil samples. The former use of the Site for bulk oil and gasoline storage, without record of removal, represents a REC.

REC #4 – Vermont Railroad

A section of abandoned railroad extends into the Site from the active railroad corridor to the east, ending near the location of the former oil storage area. The presence of railroad tracks on the Site represents a REC due to the possibility of releases of hazardous materials from locomotive cars, and metals, pesticides/herbicides, and other wood preservation chemicals that are typically used along rail corridors.

REC #5 – 199 and 205 Flynn Avenue, Exxon Oil Terminal Hazardous Site, SMS #87-0002

The parcels located at 199 and 205 Flynn Avenue were formerly one property (listed under 199 Flynn Avenue) and formerly associated with a bulk oil storage and distribution terminal that spanned across multiple parcels on Flynn Ave between 1940 and 1981. The bulk oil storage and distribution terminal was operated by various companies, including Colonial Beacon Oil Company, Esso Standard Oil Company, and Exxon Oil Company. 199 Flynn Avenue is currently listed as a Hazardous Site by the Department of Environmental Conservation ("DEC"). Based on environmental investigation reporting available for the Exxon Oil Terminal Hazardous Site, petroleum related volatile organic compound ("VOC") impacts to soil and groundwater have been documented at both the 199 and 205 Flynn Avenue parcels. Several detections of VOCs have been recently reported in groundwater an 205 Flynn Ave, directly north of Lot 2 of the Site, including benzene at concentrations as high 2,120 ug/L, which exceeds the Vermont Groundwater Enforcement Standard of 5 ug/L. Given the proximity of these known impacts to groundwater to the Site, it may be possible that concentrations of VOC compounds in groundwater are above applicable criteria in the northern portion of the Site, and therefore represent a REC.

REC #6 – Former Underground Storage Tanks Associated with Exxon Terminal Facility SMS #87-0002

The Vermont UST database reports that two underground storage tanks associated with the former Exxon Terminal Facility (199 and 205 Flynn Avenue) were removed from the ground at that facility in 1998. As no information was provided in the UST database regarding the exact location or condition of the tanks at removal or any information pertaining to confirmation sampling, the absence of information represents a significant data gap, and represents a REC. As records of tank conditions during removal were not found, it is possible the tanks could have been in poor condition and could have caused a release to soil and groundwater at 199 and/or 205 Flynn Avenue, which are presumed to be hydrologically cross-gradient, or potentially up-gradient of the Site. Based on available reporting for the Exxon Oil Terminal Hazardous Site (#87-0002), it is possible that these USTs are

associated with known petroleum releases at 199 and 205 Flynn Avenue; however, VHB was not able to determine whether the above referenced USTs were or were not related to those releases.

REC #7 – 75 Briggs Street Hazardous Site, SMS #2017-4731

The parcel located at 75 Briggs Street is currently listed as a Hazardous Site by the DEC. Previous environmental investigations associated with the Hazardous Site identified elevated levels of lead, polycyclic aromatic hydrocarbons ("PAHs"), VOCs, and chlorinated volatile organic compounds ("CVOCs") in soil, soil gas, and groundwater related to the industrial history of the property that included combustion sources, leaking petroleum storage tanks, and foundry and machine shop operations that included the use of cleaning solvents. Based on the proximity of this property to the Site, the known impacts to soil, soil vapor, and groundwater, and the potential of airborne contaminant distribution associated with certain former land uses and site operations, the contaminant impacts found in soil, groundwater, and soil vapor at 75 Briggs Street may exist at the Site, and thus represents a REC.

REC #8 – 207 Flynn Avenue, Vermont Structural Steel Hazardous Site, SMS #2016-4619

The parcel located at 207 Flynn Avenue is currently listed as a Hazardous Site by the DEC. According to various prior environmental investigations completed at 207 Flynn Avenue, historical industrial operations on the property, included a foundry, metal machining, vehicle storage and maintenance, fuel storage, and blast cleaning. These environmental investigations determined that soil at 207 Flynn Avenue was impacted with PAHs, arsenic, lead and to a lesser degree VOCs and CVOCs. Soil vapor and groundwater were also determined to be impacted with VOCs and CVOCs. Based on the proximity of this property to the Site, the known impacts to soil, soil vapor, and groundwater, and the potential of airborne contaminant distribution associated with certain former land uses and site operations, the contaminant impacts found in soil, groundwater, and soil vapor at 207 Flynn Avenue may exist at the Site, and thus represents a REC.

The scope of services presented in this proposal includes: 1) prepare a Work Plan for the Phase II ESA; 2) conduct the Phase II ESA investigation; and 3) prepare a Site Investigation Report that is compliant with the DEC July 6, 2019, Investigation and Remediation of Contaminated Properties Rule ("IRule").

1.0 WORK PLAN DEVELOPMENT

VHB will prepare a Work Plan describing the objectives, methodologies and quality control specifications of the proposed Phase II ESA. The Work Plan will be developed in accordance with the IRule. This Work Plan will include detailed information pertaining to the sampling design and methods, including field and analytical procedures for the field investigation. The Work Plan will be required to be submitted to the DEC for approval prior to conducting any subsurface investigation work.

2.0 PHASE II ESA INVESTIGATION

To evaluate the nature and extent of potential impacts to soil, soil vapor, and groundwater at the Site associated with the RECs reported in the July 2023 Phase I ESA, VHB proposes an investigation at the Site that includes a preliminary utility locating survey as well as the sampling and laboratory analysis of soil, soil vapor, and groundwater samples.

Utility Locating Survey

VHB proposes to use a private utility locating subcontractor to pre-clear proposed soil boring locations for potential underground utility conflicts. The private utility locating subcontractor will also evaluate for apparent evidence of potential former floor drain piping or outlets adjacent to the existing building on Lot 2. The findings of this survey will be used to adjust and/or refine the proposed locations for the sampling of soil, soil vapor, and groundwater at the Site.

Sampling and Analysis

To evaluate for potential impacts to soil, soil vapor, and groundwater at the Site due to the aforementioned RECs, VHB proposes to advance a total of 12 soil borings, install six monitoring wells, and install one sub-slab soil vapor point as outlined below. Prior to intrusive activity, VHB will pre-mark the investigation locations, submit a DigSafe ticket, and subcontract a private utility locating service to pre-clear proposed locations.

Soil Sampling

- Advance 12 soil borings with an environmental drilling subcontractor or with decontaminated hand tooling
    - Six soil borings will be advanced to the depth of observed groundwater, with two soil samples collected from each soil boring. These 6 soil borings will be completed as groundwater monitoring wells.
    - Six soil borings will be advanced to a depth of approximately 1.5 feet below ground surface at various locations around the Site.
- Soils recovered will be described on soil boring logs, screened with a photoionization detector (PID) and sampled as outlined below
    - A surface soil sample (defined as 0-1.5 feet by DEC) will be collected from all soil borings. In addition, a soil sample will be collected from the observed groundwater interface at each of the six soil borings advanced to the observed groundwater table. The samples will be submitted for analysis of Volatile Organic Compounds ("VOCs"; if PID screening levels are recorded above background), Semi-VOCs ("SVOCs"), polychlorinated biphenyls ("PCBs"), and metals.

Groundwater

- Six groundwater monitoring wells will be installed. The final locations of groundwater monitoring wells will be selected and described in the Work Plan.
- Groundwater samples (plus QA/QC) will be collected from the monitoring wells for analysis of VOCs, and potentially SVOCs and metals, pending results of soil sample analysis.

Soil Gas/Sub-Slab Soil Vapor

- Two temporary sub-slab soil vapor points will be installed through the existing building concrete slab to evaluate for undocumented releases to the sub-slab environment and possible vapor intrusion risk to current and future building(s).
    - Two samples of sub-slab soil vapor (plus QA/QC) will be collected for analysis of VOCs. Additionally, one ambient air sample from within the existing building, and one duplicate sub-slab soil vapor sample will be collected for quality assurance and quality control purposes.

3.0 REPORTING

Following completion of the Phase II ESA and receipt of analytical results, an IRule-compliant Phase II ESA report will be prepared by VHB. This report will include summaries of sample collection activities, results of field screening/field observations, result summary tables, laboratory analysis reports, Site and area maps, a conceptual site model ("CSM") and sample collection forms. Data will be presented in tabular, graphical, and text forms as appropriate. The report will contain conclusions regarding the nature and extent of contamination at the Site, as well as recommendations in the context of the IRule. The CIty will receive a first draft of this report for review. Comments and/or suggested changes will be addressed by VHB and a revised version of the report will be forwarded electronically for DEC review.

4.0 SCHEDULE

Following written authorization to proceed by the City, the Work Plan will be prepared prior to the end of August 2023, and the proposed site investigation activities will be conducted in the late summer or early fall of 2023. Following receipt of laboratory analytical results, the Site Investigation Report will be prepared and submitted to the City for review prior to December 8, 2023. Although we will endeavor to adhere to this timeline, delays may be beyond our control due to weather, private utility locator availability, drilling contractor availability, regulatory review, etc.

5.0 COST ESTIMATE

VHB estimates that the cost to prepare an IRule-compliant Work Plan, perform a Phase II ESA investigation at the Site, and prepare an IRule-compliant investigation report to be approximately **$46,250.**

These costs assume that the time and degree of effort allocated to each task will be sufficient to implement the work and that no additional tasks are added to VHB's scope. A detailed cost estimate with breakdown of cost per task for this work is attached. This cost assumes electronic delivery of documents to

stakeholders; however, hard copies of documents can be produced upon request at additional cost. Should additional time and/or expenses be required to complete this project, a detailed description of the circumstances leading to any needed additional effort, along with a proposed revised budget will be prepared and submitted to DEC for review and approval prior to proceeding with any additional work.

We appreciate the opportunity to present this Scope of Work and Cost Estimate to the City to conduct a Phase II ESA investigation at the 195-201 Flynn Avenue property in Burlington, Vermont. We look forward to continuing to work with you. Should you have any questions pertaining to this proposal, please feel free to contact me at (802) 497-6177.

Sincerely,

Zack Clark
Project Manager

Attachments: Cost Estimate
Figure 1 - Site Features

Phase II ESA

195-201 Flynn Ave

Site Investigation Work Plan

Assumptions:

1) An IRule Compliant workplan and DEC review is required.

2) Assumes a site-specific QAPP and EPA review is not required.

VHB Labor	*Billing Rate*	*# Units*	*Units*	*Estimated Cost*	*Notes and Assumptions*
Program Manager	$200.00	4	hrs.	$800	Workplan review / Client Correspondence / Meetings / Contracting
Project Manager/Project Scientist	$130.00	10	hrs.	$1,300	Preparation of IRule Work Plan, figures, edits, etc.
Staff Scientist/Engineer	$100.00	16	hrs.	$1,600	Support Work Plan, preparation.
			Subtotal	**$3,700**	

Site Investigation Preparatory Tasks

VHB Labor	*Billing Rate*	*# Units*	*Units*	*Estimated Cost*	*Notes and Assumptions*
Program Manager	$200.00	2	hrs.	$400	Subcontractor, Laboratory, and Field Staff Coordination; Prepare HASP,
Project Manager/Project Scientist	$130.00	6	hrs.	$780	
Staff Scientist/Engineer	$100.00	8	hrs.	$800	Digsafe Pre-mark and Subcontractor Subsurface Utility Clearance
Mileage	$0.625	10	miles	$7	Mileage from VHB South Burlington office (1 trip @ 10 miles)
Subcontractor Fees					
Private Utility Locator	$1,500	1	days	$1,500	
VHB 10% General and Administrative Fee for Subcontractors				$150	
			Subtotal	**$3,637**	

Site Investigation

VHB Labor	*Billing Rate*	*# Units*	*Units*	*Estimated Cost*	*Notes and Assumptions*
Program Manager	$200.00	4	hrs.	$800	Subcontractor, Laboratory, and Field Staff Coordination; Project Manager site visit
Project Manager/Project Scientist	$130.00	12	hrs.	$1,560	
Staff Scientist/Engineer	$100.00	60	hrs.	$6,000	Up to 6 days of field investigation (including 2 days of drilling)
Mileage	$0.58	60	miles	$35	Mileage from VHB South Burlington office (6 trips @ 10 miles)
VHB Equipment and Field Supplies					
Misc. Equipment/Tools/PPE/Decon	$40	6	event	$240	Gloves, consumables, hand tools, etc.
Photoionization Detector	$100	3	day	$300	To screen soil cores for volatiles
Mobile Collector Tablet	$100	3	day	$300	To record MW, soil vapor, and soil boring locations
Hammer Drill	$30	1	day	$30	To install vapor pin
Generator	$60	1	day	$60	
Temporary Sub-Slab Vapor Pin	$20	2	pins	$40	
Pin Install Kit	$40	1	event	$40	
Hydraulic Cement	$20	1	event	$20	To collect sub-slab and soil gas samples
Helium Leak Detection Equipment/Gas	$300	1	event	$300	
Flow meter	$36	1	day	$36	
Dedicated Sample Tubing/valves	$75	3	samples	$225	
Subcontractor Fees					
Drilling Services	$7,500	1	event	$7,500	2 days of drilling
Soil Sample Analysis					
VOC 8260	$110	20	sample	$2,200	
PCB 8082	$70	20	sample	$1,400	18 soil samples and 2 duplicates
RCRA 8 Metals	$120	20	sample	$2,400	(12 from MW borings shallow/deep, and 6 shallow borings)
ABN 8270	$235	20	sample	$4,700	
Groundwater Sample Analysis					
VOC 8260	$108	7	sample	$756	6 monitoring well samples and duplicate sample
RCRA 8 Metals	$120	7	sample	$840	6 monitoring well samples, potentially dependant on soil sample results/schedule
Soil Vapor Sample Analysis					
VOC TO-15	$330	3	sample	$990	2 soil vapor samples and 1 duplicate
VHB 10% General and Administrative Fee for Subcontractors				$2,079	
			Subtotal	**$32,851**	

Phase II ESA

195-201 Flynn Ave

Site Investigation Report

VHB Labor	*Billing Rate*	*# Units*	*Units*	*Estimated Cost*	*Notes and Assumptions*
Program Manager	$200.00	4	hrs.	$800	Report review
Project Manager/Project Scientist	$130.00	10	hrs.	$1,300	Report preparation, review, and finalization
Staff Scientist/Engineer	$100.00	30	hrs.	$3,000	Report preparation and figure/table preparation
GIS Specialist	$120.00	8	hrs.	$960	Figure preparation
				$6,060	

Total $46,248

Figure 1: Site Features
195-201 Flynn Avenue | Burlington, Vermont

June 08, 2023

Path: \\vhb\gis\proj\SBurlington\58630.07 BVT DPW Flynn Ave Soil\Project\Site Location Map.aprx (ksheehan, 6/8/2023)

Sources: Basemap from ESRI/USGS Topo Map; VCGI - Vermont Center For Geographic Information; VHB (2022); VHD - Vermont Hydrography Dataset (2010); VTrans - Vermont Agency of Transportation.

ASTM E 1527-21 PHASE I ENVIRONMENTAL SITE ASSESSMENT

195-201 Flynn Avenue Parcels

195-201 Flynn Avenue

Burlington, Vermont

PREPARED FOR

City of Burlington
Department of Public Works
645 Pine Street
Burlington, Vermont
802.338.2125

PREPARED BY

40 IDX Drive
Building 100, Suite 200
South Burlington, VT 05403
802.497.6100

Effective Date: July 6, 2023
Report Completion Date: July 6, 2023

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Appendices

Executive Summary

Vanasse Hangen Brustlin, Inc. (VHB) was retained by The City of Burlington (the Client) to conduct a Phase I Environmental Site Assessment (Phase I ESA) of two parcels located at 195 and 201 Flynn Avenue, Burlington, Vermont, hereinafter referred to as the "Site" or "subject property." The Site consists of two adjacent parcels: 195 Flynn Ave ("Lot 1", southern lot) and 201 Flynn Ave ("Lot 2", northern lot). Lot 1 is a 2.87-acre parcel that is currently vacant, with evidence of former parking and/or industrial storage areas, as well as an existing stormwater retention pond on the northern portion of the parcel. Lot 2 is a 0.91-acre miscellaneous use plot of land that contains an approximately 7,500 square foot multi-purpose building currently hosting a woodworking shop, art studio, music studio, and various outdoor equipment storage. It is VHB's understanding from the Client that the purpose of this Phase I ESA is to provide environmental due diligence in support of a potential property transaction and redevelopment of the Site as a potential waste transfer station (Lot 1) and City maintenance storage yard (Lot 2). The Client intends to purchase the Site and lease Lot 1 to Chittenden Solid Waste District (CSWD).

This Phase I ESA has been completed using the American Society of Testing and Materials (ASTM) E 1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (the Standard) and the All Appropriate Inquiries (AAI) Final Rule at 40 CFR Part 312 as guidance.

The objective of this Phase I ESA is to identify Recognized Environmental Conditions (RECs) in connection with the Site. RECs are defined in the Standard as *"(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.*

The Client is the sole User of this Phase I ESA. Pursuant to Section 3.2.94.1 of the Standard, "the User has specific obligations for completing a successful application of this practice as outlined in Section 6" of the Standard.

The Phase I ESA should be read in its entirety to gain a comprehensive understanding of the findings presented in this Executive Summary.

Recognized Environmental Conditions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527 for 195 and 201 Flynn Avenue, Burlington VT, the Site. Any exceptions to, or deletions from, this practice are described in Section 8.1 of this report. This assessment has revealed evidence of eight RECs in connection with the Site:

REC #1 – Former Automotive Repair Shop On-site

According to the EDR Database Report, between 1987 and 1998, an auto and home supply store, carwash, and general automotive repair shop operated on the Site, in the existing building on Lot 2. An interview with a tenant of the building revealed that spray-painting of cars occurred within the building on a raised concrete platform. Circular patches in the concrete floor of the building were observed during Site reconnaissance that may be patches over former floor drains. The historical use of the existing building on the Site as an automotive repair shop, and the potential presence of floor drains within that building represents a REC.

REC #2 – Oil Staining on Ground Surface

A small, approximately 3-feet by 3-feet, area of intermittently stained soil was observed in the grassed area north of the existing building on Lot 2. VHB observed a petroleum like odor to the soil during Site reconnaissance. The nature and extent of potential contaminant impacts associate with this staining on a pervious surface could not be determined, and therefore represent a REC.

REC #3 – Historical Oil and Gasoline Storage On-Site

Sanborn maps from 1942 identify on-Site storage of bulk oil and gasoline by Cities Service Company. No further documentation regarding this bulk oil and gasoline storage was found, including but not limited to potential storage tank removal reports or confirmatory soil samples. The former use of the Site for bulk oil and gasoline storage, without record of removal, represents a REC.

REC #4 – Vermont Railroad

A section of abandoned railroad extends into the Site from the active railroad corridor to the east, ending near the location of the former oil storage area. The presence of railroad tracks on the Site represents a REC due to the possibility of releases of hazardous materials from locomotive cars, and metals, pesticides/herbicides, and other wood preservation chemicals that are typically used along rail corridors.

REC #5 – 199 and 205 Flynn Avenue, Exxon Oil Terminal Hazardous Site, SMS #87-0002

The parcels located at 199 and 205 Flynn Avenue were formerly one property (listed under 199 Flynn Avenue) and formerly associated with a bulk oil storage and distribution terminal that spanned across multiple parcels on Flynn Ave between 1940 and 1981. The bulk oil storage and distribution terminal was operated by various companies, including Colonial Beacon Oil Company, Esso Standard Oil Company, and Exxon Oil Company. 199 Flynn Avenue is currently listed as a Hazardous Site by the Department of Environmental Conservation ("DEC"). Based on environmental investigation reporting available for the Exxon Oil Terminal Hazardous Site, petroleum related volatile organic compound ("VOC") impacts to soil

and groundwater have been documented at both the 199 and 205 Flynn Avenue parcels. Several detections of VOCs have been recently reported in groundwater an 205 Flynn Ave, directly north of Lot 2 of the Site, including benzene at concentrations as high 2,120 ug/L, which exceeds the Vermont Groundwater Enforcement Standard of 5 ug/L. Given the proximity of these known impacts to groundwater to the Site, it may be possible that concentrations of VOC compounds in groundwater are above applicable criteria in the northern portion of the Site, and therefore represent a REC.

REC #6 – Former Underground Storage Tanks Associated with Exxon Terminal Facility SMS #87-0002

The Vermont UST database reports that two underground storage tanks associated with the former Exxon Terminal Facility (199 and 205 Flynn Avenue) were removed from the ground at that facility in 1998. As no information was provided in the UST database regarding the exact location or condition of the tanks at removal or any information pertaining to confirmation sampling, the absence of information represents a significant data gap, and represents a REC. As records of tank conditions during removal were not found, it is possible the tanks could have been in poor condition and could have caused a release to soil and groundwater at 199 and/or 205 Flynn Avenue, which is presumed to be hydrologically cross-gradient, or potentially up-gradient of the Site. Based on available reporting for the Exxon Oil Terminal Hazardous Site (#87-0002), it is possible that these USTs are associated with known petroleum releases at 199 and 205 Flynn Avenue; however, VHB was not able to determine whether the above referenced USTs were or were not related to those releases.

REC #7 – 75 Briggs Street Hazardous Site, SMS #2017-4731

The parcel located at 75 Briggs Street is currently listed as a Hazardous Site by the DEC. Previous environmental investigations associated with the Hazardous Site identified elevated levels of lead, polycyclic aromatic hydrocarbons ("PAHs"), VOCs, and chlorinated volatile organic compounds ("CVOCs") in soil, soil gas, and groundwater related to the industrial history of the property that included combustion sources, leaking petroleum storage tanks, and foundry and machine shop operations that included the use of cleaning solvents. Based on the proximity of this property to the Site, the known impacts to soil, soil vapor, and groundwater, and the potential of airborne contaminant distribution associated with certain former land uses and site operations, the contaminant impacts found in soil, groundwater, and soil vapor at 75 Briggs Street may exist at the Site, and thus represents a REC.

REC #8 – 207 Flynn Avenue, Vermont Structural Steel Hazardous Site, SMS #2016-4619

The parcel located at 207 Flynn Avenue is currently listed as a Hazardous Site by the DEC. According to various prior environmental investigations completed at 207 Flynn Avenue, historical industrial operations on the property, included a foundry, metal machining, vehicle storage and maintenance, fuel storage, and blast cleaning. These environmental investigations determined that soil at 207 Flynn Avenue was impacted with PAHs, arsenic, lead and to a lesser degree VOCs and CVOCs. Soil vapor and groundwater were also determined to be impacted with VOCs and CVOCs. Based on the proximity of this property to the Site, the known impacts to soil, soil vapor, and groundwater, and the potential of airborne contaminant distribution associated with certain former land uses and site operations, the contaminant impacts found in soil, groundwater, and soil vapor at 207 Flynn Avenue may exist at the Site, and thus represents a REC.

Vapor Encroachment Conditions (VECs)

As part of this Phase I ESA, VHB conducted an Evaluation of Potential Vapor Encroachment (EPVE) in order to determine whether or not a Vapor Encroachment Condition (VEC) exists at the Site. A VEC is the presence or likely presence of Chemical(s) of Concern (COC) vapors in the subsurface of the Site caused by the off gassing of vapors from contaminated soil or groundwater either on or near the Site. VHB has identified that a VEC exists for the Site. This EPVE consisted of the review of information presented in previous or subsequent sections of this document such as:

- The Site's physical setting and features that may impact vapor migration
- Documented storage and releases of volatile COCs at the Site and/or nearby properties
- Potential preferential pathways for vapor migration such as subsurface utility corridors

VHB has concluded that:

> Based on the historic land use at the Site and surrounding areas including oil and gasoline storage, it is possible that volatile COCs have been released in the vicinity of the Site and that the vadose zone at the Site is impacted by volatile COCs.

Therefore, VHB has concluded that a VEC exists at the Site in connection with REC #7 as detailed in Section 7.1.7.

De Minimis Conditions

De minimis conditions represent conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action by the appropriate regulatory agency. VHB did not identify *de minimis* conditions on the Site.

Business Environmental Risks

The following business environmental risks represent potential risks which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of the Site, but do not constitute RECs or *de minimis* conditions as defined in the Standard. However, the Environmental Professional views these as potential risks that should be considered when making decisions regarding the Site.

Potentially Hazardous Building Materials

The potential presence of asbestos-containing building materials, lead-based paint, and/or PCB-containing building materials is beyond the scope of ASTM 1527-13. However, given the age and construction of the former buildings at the Site there is a possibility that these materials may be present.

Urban Fill

The Site is located in a densely developed urban area with a combination of former industrial and commercial uses at and adjacent to the Site. As a result, it is possible that the Site may have been impacted via the aerial deposition of air-borne contaminants associated with prior and current industrial uses in the area. Additionally, structures and facilities at the Site, including but not limited to small buildings and rail spurs, have been constructed and demolished over the years. Thus, it is possible that fill of unknown origin and quality may have been imported to the Site to achieve the current grade. Considering no evidence of the use of impacted fill was identified during this Phase I ESA, the potential

presence of urban fill alone, does not represent a REC. However, should future development involve the exportation of soil from the Site and soil is sampled and analyzed for typical industrial contaminants, the possibility exists that those results could indicate the presence of impacted soil that may require special consideration for disposal.

Data Gaps

VHB identified six data gaps at the Site during the course of this Phase I ESA. The Environmental Professional's assessment as to whether these data gaps are considered significant is outlined below.

Data Gap	Assessment
No information regarding tank condition during UST removal at 199 Flynn Avenue	Tank condition was not available in documents pertaining to the removal of two USTs at the former Exxon Terminal facility. The absence of this information represents a significant data gap.
Due to rugs covering significant portions of floors in the building, not all the original concrete floor was visible.	VHB believes that observations of visible floor space was likely representative of covered portions of flooring and thus the data gap is not significant.
Dense vegetation along southern wall of building.	Some dense vegetation impeded views to the ground surface along the southern wall of the building. VHB believes that no significant feature was missed due to dense vegetation.
Dense vegetation on southern portion of Lot 1.	Dense vegetation was present on the southern portion of Lot 1 that limited accessibility and visual inspection. However, VHB believes that the visible extent of the vegetated area was representative of the southern portion of Lot 1 and therefore the dense vegetation is not a significant data gap.

1

Introduction

1.1 Purpose and Scope of Work

Vanasse Hangen Brustlin, Inc. (VHB) was retained by The City of Burlington (the Client) to conduct a Phase I Environmental Site Assessment (Phase I ESA) of two parcels located at 195-201 Flynn Avenue, Burlington, Vermont, hereinafter referred to as the "Site" or "subject property" as shown on **Figure 1**. The Site consists of two parcels: 195 Flynn Ave (Lot 1) and 201 Flynn Ave (Lot 2). It is VHB's understanding from the Client that the purpose of this Phase I ESA is to provide environmental due diligence in support of a potential property transaction and redevelopment of the Site as a potential waste transfer station (Lot 1) and City maintenance storage yard (Lot 2). The Client intends to purchase the Site and lease Lot 1 to Chittenden Solid Waste District (CSWD).

This Phase I ESA has been completed using the American Society of Testing and Materials (ASTM) E 1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (the Standard) and the All Appropriate Inquiries (AAI) Final Rule at 40 CFR Part 312 as guidance.

The City of Burlington is the User of this report as defined by the Standard. Pursuant to Section 3.2.94.1 of the Standard, "the User has specific obligations for completing a successful application of this practice as outlined in Section 6" of the Standard. This Phase I ESA is subject to the terms of the Agreement between VHB and the Client dated 4/24/23 (the Agreement). Other than those limitations expressly provided in **Appendix A** and/or specified in Section 8, completion of the Phase I ESA was not subject to additional assumptions, limitations, or exceptions to the Standard.

The objective of this Phase I ESA is to identify, to the extent feasible pursuant to the process described in the Standard, Recognized Environmental Conditions (RECs) in connection with the Site. The Phase I ESA was completed following the Standard as guidance. RECs are defined in the Standard as "(1) *the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.*

A Controlled REC is a REC "affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations)."

Although not considered RECs, the Phase I ESA may identify other concerns or considerations, referred to as Historical RECs, *de minimis* conditions, and/or business environmental risks as defined below.

Historical RECs are *"a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities, without subjecting the property to any controls (for example, activity and use limitations or other property use limitations)."*

A *de minimis* condition is *"a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of the appropriate governmental agencies."*

A business environmental risk is *"a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in [the Phase I ESA] practice."*

Per the agreement between VHB and the Client, the scope of services to complete this Phase I ESA consisted of the following main components:

- an inquiry by an "Environmental Professional" as defined by the Standard;
- interviews with past and present owners, operators, and occupants, or abutters if the *subject property* is abandoned, in an effort to gather any specialized knowledge or experience with regard to the *subject property*;
- a review of historical sources, including, but not limited to, chain of title documents, aerial photographs, building department records, and land use records to determine previous uses and occupancy since first development;
- searches for recorded environmental cleanup liens against the facility/*subject property* that are filed under federal, state or local law;
- a review of federal, state, or local government records; and
- a visual inspection of the *subject property* and surrounding properties.

The scope of the Phase I ESA did not include any environmental testing or sampling of soil, water, air, or soil vapor.

1.2 User Reliance

This Phase I ESA was completed solely for the Client and the Users, subject to the terms, conditions and limitations referenced herein and as issued in connection with the Agreement and the provisions thereof. Any use or reliance upon information provided in this report without the specific written authorization of the Client and VHB shall be at such party's sole risk.

2

Site Description

2.1 Site Location, Ownership, and Description

The approximate center of the Site is located at 44˚27'15' north latitude and 73˚13'10' west longitude.

The Site consists of two adjacent parcels: 195 Flynn Ave (Lot 1, southern lot) and 201 Flynn Ave (Lot 2, northern lot). Lot 1 is a 2.87-acre parcel that is currently vacant, with evidence of former parking and/ or industrial storage areas, as well as an existing stormwater retention pond, on the northern portion of the parcel. Lot 2 is a 0.91-acre miscellaneous use plot of land that contains an approximately 7,500 square foot multi-purpose building currently hosting a woodworking shop, art studio, music studio, and various outdoor equipment storage.

A Site Location and Local Area Map showing the location of the Site is provided as **Figure 1**, a Site Plan depicting the Site and relevant Site features is included as **Figure 2**, and a Site Vicinity Map showing the vicinity of the Site and nearby sensitive receptors is provided as **Figure 3.**

2.2 Site and Vicinity General Characteristics

The Site is located in an urban and formerly industrial area in Burlington, Vermont and is accessed via Flynn Avenue. The topography of the Site is generally flat. The closest named surface water body is Lake Champlain located approximately 1/3 of a mile to the west of the Site. Additional information on the physical setting of the Site and nearby area is presented in Section 4.1.

2.3 Description of Structures, Roads, and Other Site Improvements

Lot 1 is a vacant, mostly wooded parcel with a small, cleared area in the center of the parcel, and a stormwater retention pond on the northern end of the parcel. Lot 2 has a parking area, outdoor equipment storage, and a section of inactive railroad entering the Site boundary from the east. There is one building located in the southern portion of Lot 2 that currently hosts a woodworking shop, art studio, and music studio. The building is heated by a natural gas fired furnace and electricity and served by municipal water and wastewater services.

2.4 Current Uses of Adjoining and Surrounding Properties

The table below presents the properties and features surrounding the Site:

Direction	Adjoining	Surrounding
North	› Metalworks (metal fabricator, 205 Flynn Ave)	› Commercial and Industrial Properties
East	› Railroad corridor followed by City Market (grocery store, 207 Flynn Ave)	› Commercial and Industrial Properties
South	› Multi-tenant commercial building that includes various tenants (7 Ambrose Place) and Barrett Trucking (10 Ambrose Place)	› Commercial and Industrial Properties
West	› Flynn Avenue Self Storage (199 Flynn Ave)	› Commercial Properties

3

User Provided Information

To qualify for one of the Landowner Liability Protections offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, the User(s) and/or Grantee(s) or a party on behalf of the User(s) and/or Grantee(s) must collect the following information, if applicable, and should make the information available to the Environmental Professional upon request:

- Environmental cleanup liens that are filed or recorded against the *subject property*;
- Activity and land use limitations that are in place on the *subject property* or that have been filed or recorded in a registry;
- Specialized knowledge or experience of the person seeking to qualify for the Limited Liability Protections;
- Relationship of the purchase price to the fair market value of the *subject property* if it were not contaminated;
- Commonly known or reasonably ascertainable information about the *subject property*;
- The degree of obviousness of the presence or likely presence of contamination at the *subject property* and the ability to detect the contamination by appropriate investigation.

VHB provided the User Questionnaire to Laura Wheelock of the City of Burlington, which specifically requests information related to each of the six items listed above. As of the date of the report VHB has not received the completed user questionnaire.

4

Records Review

VHB conducted a review of environmental databases and municipal files to identify potential environmental concerns at the Site. This review also included documents related to properties in the vicinity that have had a release or pose a threat of release of petroleum and/or hazardous substances that may potentially impact the quality of environmental media at the Site. VHB reviewed Federal and State environmental databases supplied by Environmental Data Resources, Inc. ("EDR"). VHB also conducted a targeted review of files available from the Vermont Department of Environmental Conservation ("DEC"). The results of the records review are summarized below.

4.1 Physical Setting

VHB reviewed several sources of information pertaining to the Site's physical setting to better understand natural characteristics of the Site and surrounding area as summarized below.

4.1.1 Topography

Topography of the Site and surrounding area generally slopes downward to the west with an elevation ranging between approximately 130 feet and 140 feet above mean sea level.

4.1.2 Soils/Surficial Geology

According to the Vermont Agency of Natural Resources (ANR) website, the soils at the Site are mapped by the Natural Resources Conservation Service as Munson and Raynham, which consists of silty loam. This soil type is classified as somewhat poorly drained to poorly drained.

4.1.3 Bedrock Geology

According to the Bedrock Geologic Map of Vermont, the bedrock at the Site is mapped as the Monkton Quartzite, which consists primarily of sandstone, dolostone, and dolomitic quartz.

4.1.4 Groundwater

Groundwater flow is best determined using site-specific groundwater elevation data and may be affected by surface topography, hydrology, and characteristics of the soil and nearby wells. No site-specific groundwater flow data was provided for the Site. In the absence of site-specific data, other sources of information are typically used to determine flow direction including surface topographic information and hydrogeologic information collected from nearby properties. Based on a review of available information, regional groundwater flow is presumed to be generally to the west and depth to groundwater at adjacent parcels is reported to range from 2-feet to 8-feet below ground surface.

According to the EDR report, one public drinking water well is located in the vicinity of the Site. According to the ANR Natural Resources Atlas Site Vicinity Map, dated June 2. 2023, provided as **Figure 3**, the Site is not located within a groundwater Source Protection Area and is located in a surface water Source Protection Area.

4.1.5 Wetlands

No wetlands are mapped on the Site on the Vermont Significant Wetland Inventory layer of ANR Natural Resources Atlas. However, Wetland Project #2008-088 is mapped on the Site and according to the ANR Wetlands Inventory Map (Vermont ANR - Wetlands Inventory Map (WIM)), Class III wetlands were previously surveyed on the Site. VHB did not complete a formal wetlands survey at the Site.

4.1.6 Surface Water

The closest named surface water body is Lake Champlain located approximately 1700 feet to the west of the Site. A stormwater surface detention pond is present on the northern end of Lot 1 and mapped on City of Burlington stormwater collection system mapping. A buried 36-inch diameter stormwater conveyance pipe is also mapped to run east to west across Lot 1 of the Site. This stormwater piping and associated structures were not observed during the Site reconnaissance.

4.1.7 Flood Plains

According to the Flood Insurance Rate Map (FIRM) for Burlington, Vermont dated July 18, 2011 (Map Number 50007C0253D), the Site is located within Zone X, defined as an area of minimal flood hazard. The National Flood Hazard Layer FIRMette is included as **Figure 4.**

4.2 Prior Environmental Investigations

VHB's review of publicly available records did not identify reports of prior environmental investigation at the Site. Additionally, during this Phase I ESA, VHB requested any potential documents or records related to prior environmental investigations from the DEC. The DEC did not provided reports pertaining to prior environmental investigations at the Site.

4.3 Standard Environmental Record Sources

EDR provided a report dated May 5, 2023, summarizing available and reasonably ascertainable information from standard environmental record sources at the minimum distances required in Section 8.2.2 of the Standard. A copy of the EDR report is provided as **Appendix C**.

Sites with minimal address information that may be located in proximity to the Site are listed separately in the database report as "Orphan sites." A review of listed Orphan sites was conducted to estimate their location, distance, and direction from the Site. Based on information contained in the EDR report and information derived from local maps, no orphan sites were identified on the Site or abutting properties.

A summary of the EDR findings is included in the table below and following sections.

Record Source	Search Radii	Subject Property Listed	Number Sites Within Search Distance
Federal National Priorities List (NPL) Sites	1.0 mile	No	1
Federal Delisted NPL Sites	0.5 miles	No	0
Superfund Enterprise Management System (SEMS) Sites	0.5 miles	No	2
Federal SEMS No Further Action Planned Sites	0.5 miles	No	1
Federal Resource Conservation and Recovery Act (RCRA) Corrective Action (CORRACTS) Sites	1.0 mile	No	1
Federal RCRA Non-CORRACTS Treatment, Storage and Disposal Sites	0.5 miles	No	2
Federal RCRA Generators	Subject Property & Abutting	No	3
Federal Engineering/Institutional Control Sites	Subject Property	No	0
Federal Emergency Release Notification System	Subject Property	No	0
State and Tribal Equivalent SEMS Sites (i.e. State Hazardous Waste Sites, Release Sites)*	1.0 mile	No	37
State and Tribal Landfill or Solid Waste Disposal Sites	0.5 miles	No	0
State and Tribal Leaking Storage Tank Sites*	*1.0 miles	No	55
State and Tribal Registered Storage Tank Sites	Subject Property & Abutting	Yes	15
State and Tribal Engineering/Institutional Control Sites (i.e. Activity and Use Limitations)*	*1.0 Miles	No	0
State and Tribal Voluntary Cleanup Sites	0.5 miles	No	0
State and Tribal Brownfield Sites	0.5 miles	No	6

* For Vermont, standard search distances are extended to that of state hazardous waste sites because sites are broken out into these categories from a single database.

The EDR report provides search results of other federal, state, and local databases which are not listed as *Standard Environmental Resources* in the Standard. These databases include, but are not limited to, Brownfields, Facility Indexing System (FINDS); Polychlorinated Biphenyl (PCB) Activity Database (PADS); Toxic Chemical Release Inventory System (TRIS); Toxic Substances Control Act (TSCA); Federal Insecticide, Fungicide & Rodenticide Act (FIFRA) and TSCA Tracking System; Section Seven Tracking System; Tier 2 data listing; dry cleaners; and manufactured gas plants. Tribal Records were also searched for this report. The Site was listed in one additional database, the EDR Historic Auto Database. The full EDR report is included in **Appendix C**.

4.3.1 Summary of Site Records

According to the EDR report the Site was listed in the standard environmental record sources.

EDR Historic Auto Database

According to the EDR Database Report, between 1987 and 1998, Lot 2 of the Site operated as an auto and home supply store, carwash, and general automotive repair shop. The historical use of the Site as an automotive repair shop represents a REC as discussed in Section 7.1.2.

4.3.2 Summary of Nearby Environmental Listings of Interest

Based on information from the EDR report, certain nearby environmental listings were deemed to require additional review to evaluate their potential to impact environmental conditions at the Site. Available records were reviewed electronically via the DEC and/or other State and federal databases. Information obtained during the additional reviews is summarized below.

199 and 205 Flynn Avenue / Former Exxon Terminal – SMS #87-0002

The parcels located at 199 and 205 Flynn Avenue are located directly north and west of the Site and are currently occupied by Metalworks Inc, a metal fabrication shop, and self-storage facilities, respectively. The parcels were formerly one property (listed under 199 Flynn Avenue) and formerly used as part of an oil storage terminal that spanned across multiple parcels on Flynn Ave between 1940 and 1981. 199 Flynn Avenue is currently listed as a Hazardous Site by the DEC, and according to the EDR Database Report, is also listed as a Brownfield and Facility Index System (FINDS) site.

Based on environmental investigation reporting available for the Hazardous Site, petroleum related volatile organic compound ("VOC") impacts to soil and groundwater are documented on 199 and 205 Flynn Avenue. Remedial actions, including remedial excavation in source areas, groundwater collection and treatment in an interceptor trench, and in-situ bioremediation (nitrogen and phosphorous injections) have occurred on 199 and 205 Flynn Avenue. Groundwater monitoring has also taken place regularly since 1999 for analysis of several VOCs. Several detections of VOCs have been reported in monitoring wells in the parcel north of Lot 2 of the Site (current 205 Flynn Ave), including benzene at concentrations as high 2,120 ug/L, which exceeds the Vermont Groundwater Enforcement Standard ("VGES") of 5 ug/L for benzene, immediately north of the current Metalworks building on 205 Flynn Avenue. Given the proximity of these known impacts to groundwater, it may be possible that

concentrations of VOC compounds are above applicable criteria in the northern portion of the Site, thus representing a REC.

199 Flynn Avenue – Vermont Underground Storage Tank Listing

The parcel located at 199 Flynn Avenue is located directly east of the Site and is currently occupied by self storage facilities, but was formerly used as part of the former Exxon Oil Terminal that spanned across multiple parcels on Flynn Ave, as described above. According to the EDR Database Report, two USTs were formerly located at 199 Flynn Avenue as part of the Former Exxon Terminal Facility. A 2,000-gallon diesel tank and a 1,000 gallon gasoline tank were removed in 1998. Tank condition, spills, and overfills were not reported in the database report. As no information was provided regarding the condition of the tanks at removal or any information pertaining to confirmation sampling, the absence of information represents a significant data gap and represents a REC. Based on available reporting for the Exxon Oil Terminal Hazardous Site (#87-0002), it is possible that these USTs are associated with known petroleum releases associated with that Hazardous Site, however VHB was not able to determine whether the above referenced USTs were or were not related to those releases.

10 Ambrose Place / Barrett Trucking Inc. Hazardous Site, SMS #92-1232 and SMS #2016-4618

The parcel located at 10 Ambrose Place is located directly south of the Site and is currently occupied by Barrett Trucking Inc., a commercial trucking business. 10 Ambrose Place is presumed to be hydraulically cross gradient of the Site. The parcel is currently listed as a Hazardous Sites #92-1232 and #2016-4618 by the DEC, and according to the EDR Database Report, is also listed in the Leaking Underground Storage Tank ("LUST") and Brownfields databases. The status of Hazardous Site #92-1232 is currently listed by the DEC as "No Further Action Planned" and the status of Hazardous Site #2016-4618 is currently listed as "Voluntary Action" with a Sites Management Activity Completion designated recommended by DEC. According to various hazardous site reports from DEC, a 3,000-gallon UST was removed from the Barrett Trucking property, and 35 cubic yards of petroleum contaminated soil was stockpiled on-site in 1992 and eventually disposed of off-site in 1993. Additional investigation at 10 Ambrose Place in 2016 identified the presence of petroleum related compound and chlorinated volatile organic compounds impacts to soil and groundwater in the vicinity of the former UST and existing maintenance shop. Follow up investigation confirmed that those identified impacts are reportedly localized to that immediate vicinity. In 2018 and 2020, groundwater samples were collected from groundwater monitoring wells north of the former UST grave, closer to the Site, and were reported no detectable concentrations of chlorinated volatile organic compounds and petroleum related VOCs in groundwater. Additionally, in 2020 porewater samples were collected in groundwater seep locations in a drainage ditch that drains northward towards the Site, along the eastern edge of the property. Analytical laboratory results of those porewater samples were also reported no detectable concentrations of chlorinated volatile organic compounds and petroleum related VOCs, suggesting that intermittent surface water in the drainage ditch, which may drain northward and along the eastern edge of the Site, was not impacted by those contaminants. Based on these results, it appears that contaminant impacts to groundwater, related to the Barrett Trucking Hazardous Sites, are not migrating towards the Site, and therefore do not represent a REC.

207 Flynn Avenue / Former Vermont Structural Steel Hazardous Site, SMS #770109, Vermont Railway – Flynn Ave Hazardous Site, SMS #931521, and 207 Flynn Ave Hazardous Site, #2016-4619

The parcel located at 207 Flynn Avenue is located 500 feet east of the Site, across the existing active railroad corridor, and is currently occupied by the City Market Co-op food store, but was historically used for various

industrial operations, including but not limited to a steel foundry, bulk fuel storage, blast cleaning, vehicle maintenance, and metal fabrication shop. More recent land uses at 207 Flynn Avenue included a salt storage shed, a wood reclamation shop, a roofing contractor, an antique dealer, and a general contractor. 207 Flynn Ave has been listed and or associated with three DEC Hazardous Sites, including Former Vermont Structural Steel SMS #770109, Vermont Railway – Flynn Ave SMS #931521, and 207 Flynn Ave #2016-4619. SMS #770109 and SMS #931521 are currently listed by the DEC as closed with No Further Action Planed and Sites Management Activities Completed designations, respectively. Based on available environmental investigation reporting associated with those Hazardous Sites, 207 Flynn Ave is understood to be located hydraulically upgradient from the Site. According to various prior environmental investigations completed between 1988 and 2016 at 207 Flynn Ave, the property's operation as a foundry and bulk fuel storage is reported to have resulted in various environmental impacts to soil, soil vapor, and groundwater, primarily from direct releases of petroleum and chlorinated solvents, and indirect releases of metals and polycyclic aromatic hydrocarbons ("PAHs"). Various remedial excavations have occurred in suspected or known contaminant source areas, and long-term monitoring of various groundwater monitoring wells, in both source areas and downgradient areas has also occurred. Results of those investigations suggest that while the extent of detectable contaminant impacts to groundwater may extended westward off the property, no exceedances of applicable groundwater standards have been documented at the western, downgradient boundary of 207 Flynn Ave. Most recently, prior to redevelopment of 207 Flynn Ave for use as the City Market Co-op, a Corrective Action Plan was prepared for the property and implemented in 2018. The Corrective Action Plan included installation of engineered isolation barriers over residual contaminated soil to prevent direct contact with contaminated soil during future use.

Based on the results of previous environmental investigations at 207 Flynn Avenue, that report a lack of substantial downgradient migration of contaminants through groundwater off the property, it is unlikely that impacts would have migrated onto the Site. However, given the potential of airborne contaminant distribution associated with certain former land uses and site operations, the contaminant impacts found in soil, groundwater, and soil vapor at 207 Flynn Avenue may exist at the Site, and thus represents a REC

75 Briggs Street SMS #2017-4731

The parcel located at 75 Briggs Street is located 500 feet east of the Site, across the existing active railroad corridor, and directly south of 207 Flynn Ave. The property is currently a mostly vacant lot; however, Petro Cliffs Climbing Center & Mountaineering School is currently proposing to construct a new facility on this property. Former land uses of 75 Briggs Street are similar to what occurred historically at 207 Flynn Ave, described above, as the two properties were formerly joined. Previous environmental investigations at 75 Briggs Street identified elevated concentrations of lead, PAHs, VOCs and CVOCs to soil, soil vapor, and groundwater, primarily from direct releases of petroleum and chlorinated solvents, and indirect releases of metals and PAHs. In 1991, approximately 100 tons of CVOC contaminated soil was excavated and disposed of off-site, and follow up groundwater monitoring was conducted until contaminant impacts to groundwater were reported to be localized to the immediate on-site source area. Soil, soil gas, and groundwater samples at the downgradient parcel boundary, closest to the Site, reported detections of contaminants, but no exceedances of applicable regulatory standards. A Corrective Action Plan was developed for redevelopment of 75 Briggs Street in 2019 that addressed documented contaminant impacts to soil and soil gas. The Corrective Action Plan was partially implemented in 2020 (pending completion of future re-development) and included installation of engineered isolation barriers over residual contaminated soil to prevent direct contact with contaminated soil during future use.

Based on the results of previous environmental investigations at 75 Briggs Street Street there does not appear to be substantial downgradient migration of contaminants via groundwater off the property, and therefore it is unlikely that those impacts would have migrated onto the Site. However, based on the proximity of this property to the Site, the known impacts to soil, soil vapor, and groundwater, and the potential of airborne contaminant distribution associated with certain former land uses and site operations, the contaminant impacts found in soil, groundwater, and soil vapor at 75 Briggs Street may exist at the Site, and thus represents a REC.

4.4 Local Records Review

VHB personnel visited various municipal departments in the city of Burlington in person on May 24, 2023. The following is a summary of the files reviewed by department.

Office	Types of Information Available	Summary of Available Information
Assessor's Office	Assessor's Card and Map	Unsworth MAACO LLC sold the parcels to Chittenden Solid Waste District on December 14, 2001.
Health Department	Supply Well, Septic/Sewer Information	The Site is on municipal water and sewer.
Fire Department	Fires, Releases	No record of calls dating back to 2002 when electronic record keeping began per the Fire Marshall.
Town Clerk	UST Information, Permits, Land Records	Warranty Deed available and provided as Appendix I.
Planning/Zoning	Zoning Map, Applications	Site plans labelled the building north of the workshop as a garage.

4.4.1 Land Records

A search of the land records at the Burlington Clerk's Office was conducted. VHB staff are not title search professionals; a formal land records review should be conducted by a title insurance company or qualified title search professional. The table below provides a summary of ownership history for the Site that was generated based on VHB's limited review of land records.

Grantor	Grantee	Book/Pg.	Date
Unsworth MAACO LLC	Chittenden Solid Waste District	711/181	12/14/2001

Copies of pertinent documents are provided in **Appendix I**.

4.4.2 Assessor's Office

Based on a review of the information on the Assessor's Office website, the Site is comprised of two parcels. The Assessor's card included information of the past two property transfers, most recently Unsworth MAACO LLC to Chittenden Solid Waste District, and a number of building permits. The metal garage building north of the workshop was permitted to be removed on April 7, 2006. No information regarding storage tanks or septic systems was reported.

4.4.3 Fire Department

VHB spoke with the Burlington Fire Marshall on May 25, 2023. The Fire Marshall informed VHB that the fire station has had no calls regarding the Site since 2002, which is when electronic records began being kept. There were no hazardous waste spills known by the Fire Marshall at the Site.

4.4.4 Summary of Records Review

VHB reviewed the EDR computer database search results, the Vermont DEC online database, and relevant municipal files for properties that have or could potentially have impacted environmental conditions at the Site. Nearby properties of interest and releases of petroleum and/or hazardous substances have been documented.

4.5 Historical Use Information

VHB reviewed the historical use information for the Site and nearby properties for conditions that have the potential to environmentally impact the Site.

4.5.1 Sanborn Maps

Sanborn maps are a uniform series of large-scale detailed maps, dating from 1867, that depict the commercial, industrial, and residential sections of cities. These maps historically assisted fire insurance agents in determining the degree of hazard associated with a particular property. Sanborn maps are currently used to track the changing landscape and property uses.

Summary of Sanborn Maps

Year(s)	Description	
1894	Site:	The Site is not depicted on this map.
	Surrounding Area:	The eastern adjoining area is comprised of industrial operations including Lang & Goodhue Manufacturing Co., Stewart Hartshorn Co., and Ransom Hardware Co. that include several metal manufacturing buildings, lumber stockpile areas, and storage sheds. There is no depiction of the properties to the north, west, or south of the Site.
1900	Site:	The Site is not depicted on this map.
	Surrounding Area:	All industrial buildings east of the Site on the 1894 map remain. Queen City Cotton Company occupies the former Ransom Hardware Co building, and the Stewart Hartshorn Co. building is now labeled as the former Ransom Hardware Co.

Year(s)		Description
1906	Site:	The Site is not depicted on this map.
	Surrounding Area:	A storage shed and manufacturing building in the northeast corner of the east adjoining area are no longer depicted. All remaining buildings in this industrial area are labelled as vacant.
1912	Site:	The Site is not depicted on this map.
	Surrounding Area:	The building in the southern portion of the east adjoining area is no longer depicted. Vermont Construction Company occupies the manufacturing buildings on the property east of the Site. The buildings are used as a machine shop, foundry, storage, office, and store house.
1919	Site:	The Site is not depicted on this map.
	Surrounding Area:	Vermont Construction Company continues to occupy the manufacturing buildings on the property east of the Site. Some development, including the connection of some building, were made. A gas tank is depicted in the northwest portion of the east adjoining area. Railroad development has occurred easterly adjacent to the Site.
1926	Site:	The Site is not depicted on this map.
	Surrounding Area:	A second gas tank is depicted in the northwest corner of the east adjoining property.
1938	Site:	The Site is not depicted on this map.
	Surrounding Area:	The map depicts Vermont Structural Steel as the occupants of the manufacturing area east of the Site. The two gas tanks are no longer depicted in the northwest section of the east adjoining property. Gulf Oil Corporation is depicted in the southern portion of the east adjoining area.
1942	Site:	Colonial Beacon Oil Company Inc. occupies an area in the northern portion of the Site. There is an oil storage area and two gasoline tanks within the Site. There is a railway spur leading onto the Site, ending adjacent to the oil storage area.
	Surrounding Area:	The north and northeast adjoining area includes nine above ground oil and gasoline tanks. There is an oil storage area in a building in the northern adjoining area. Vermont Structural Steel Corporation, and Gulf Oil Corporation continue to occupy the east adjoining area. An oil storage area, gas tank, and two oil tanks are depicted on that property.
1950	Site:	The oil storage area and two gasoline tanks included on the 1942 map are no longer depicted. Vermont Structural Steel Corporation occupies two warehouses within the Site. Colonial Beacon Oil is now Esso Standard Oil Company, Inc. A portion of Esso Standard Oil Company Inc. is within the Site, though there are no related buildings or tanks depicted.
	Surrounding Area:	Esso Standard Oil Company Inc. continues to operate north and northeast of the Site with no change to number of buildings depicted. Vermont Structural Steel Corporation and Gulf Oil Corporation continue to operate in the eastern adjoining area.
1960	Site:	Vermont Structural Steel Corporation continues to occupy two warehouses within the Site.
	Surrounding Area:	A loading dock is depicted on the property north of the Site. Vermont Structural Steel Corporation and Gulf Oil Corporation continue to operate east of the Site. A fabrication building relating to Vermont Structural Steel Corporation is depicted in the southern portion of the east adjoining area.
1978	Site:	Conditions at the Site are the same as the 1960 map.
	Surrounding Area:	The southern adjoining area depicts two iron warehouses and a commercial building. The northern and eastern adjoining areas are the same as above.
1989	Site:	Warehouses remain within the Site. A commercial building and twenty-foot extension to the southern iron warehouse extends into the Site.
	Surrounding	Structures associated with Esso Standard Oil Company Inc. are no longer depicted. One building

Year(s)	Description
Area:	including an oil storage area remains in the northern adjoining area. Vermont Structural Steel Corporation continues to operate in the eastern adjoining area.

A copy of the Sanborn map report is provided in **Appendix D**.

4.5.2 City Directory Abstracts

The City Directory Abstracts provided by EDR were reviewed; these provide address and owner or business name information from available City Directory data for the area. City Directory reports for Ambrose Place, Briggs Street, and Flynn Avenue, were provided for the years 1941 through 2017 at approximately 5-year intervals. Notable on-site and adjacent listings from the directories have been listed below.

Address	Years	Business Name/ Use
7 Ambrose Place	1992, 2017	Not Environmentally Concerning Properties
199 Flynn Avenue	1946	Colonial Beacon Oil Co
	1963	Humble Oil & Refining Co
	2010, 2014	Flynn Avenue Self Storage
205 Flynn Avenue	2014, 2017	Metalworks
207 Flynn Avenue	1946, 1963	Vermont Structural Steel Corp & Vermont Engineering & Supply Co
	1963, 1967	United Realty Co & Industrial Properties Corp real estate
	1992	Burlington Sanitation & Perry Enterprises
	1995	Metalworks & Other Not Environmentally Concerning Properties
195 Flynn Avenue	1995	GRC Automotive
	2000	Private Owner

Copies of City Directory Abstracts are included as **Appendix E.**

4.5.3 Topographic Maps

Historical U.S. Geological Survey (USGS) topographic maps showing the Site for the years 1906, 1919, 1944, 1948, 1972, 1987, 2012, 2015, 2018 were obtained from EDR and reviewed. Relevant information obtained from these maps is summarized below.

No structures were depicted on the Site in 1906 or 1919. One structure was depicted in 1944, 1948, 1972, and 1987 in the apparent current configuration of the one on-Site building. No structures or features are depicted in the 2012, 2015, or 2018 maps.

Copies of the historical topographic maps are included as **Appendix F**.

4.5.4 Aerial Photography

Aerial photographs were obtained from EDR and Google Earth Pro for the Site and vicinity and were reviewed. Relevant information obtained from these photographs is detailed below.

Summary of Aerial Photographs

Year(s)		Description
1937-1942	Site:	Two structures (oil storage area and gasoline tanks according to Sanborns) are visible within the Site. The southern portion of the Site includes grass area and trees.
	Surrounding Area:	Oil and gas above-ground storage tanks are visible to the northwest. Two buildings are visible to the north. Several industrial buildings are visible to the east beyond the adjacent railroad.
1962	Site:	One structure (oil storage area) remains, and a large workshop building replaced the second structure.
	Surrounding Area:	Development of an oil and gas tank area to the northwest is visible. Industrial buildings to the north, and east appear to have been developed further. Land to the south appears wooded or agricultural.
1981	Site:	No major changes.
	Surrounding Area:	No major changes to the north, east, or west. A commercial building is visible south of the Site.
1986	Site:	No major changes.
	Surrounding Area:	Oil and gas tanks to the west and northwest appear to have been demolished or removed; but some structures are remaining. Development of residential buildings are visible to the southwest of the Site.
1992-1999	Site:	No major changes.
	Surrounding Area:	Oil and gas tanks west of the Site are no longer present, and the westerly adjacent property is empty. No major changes in other adjoining areas.
2008-2023	Site:	The remaining structure is visible in the 1999 arial, but not 2008.
	Surrounding Area:	Self-storage facilities have been constructed in the western adjoining area.

Copies of the aerial photographs are included as **Appendix G**.

4.6 Site History Overview

Historical records were reviewed dating back to 1894 using Sanborn Maps, 1937 using aerial imagery, and 1906 using topographic maps. The Site was apparently used in relation to the Colonial Beacon Oil Co. (1937-1942) and included two structures: an oil storage area and two gasoline tanks. In 1942, the Sanborn map depicts two gasoline tanks with a pump house, and an oil storage area operated by Cities Service Company within the Site boundaries. The 1942 Sanborn map also shows that the northern portion of the Site was owned by Colonial Beacon Oil Company Inc., though no structures occupied the Site. A railroad spur is depicted within the Site, ending at the oil storage area. Between 1942 and 1950, a warehouse building was constructed on the site in place of the southern structure, which is its present configuration. The eastern portion of the warehouse appears to be in the same footprint as the former gasoline tanks and pump house. The northern structure was removed sometime between 2004 and 2010. The Site currently operates as a woodworking facility, art studio, and music studio, and the southern portion of the property is densely vegetated and wooded.

The east adjoining land has been used for manufacturing since at least 1894 based on Sanborn map records. Several companies, including Lang and Goodhue Manufacturing Company, Stewart Hartshorn Company, Gulf Oil

Corporation, Vermont Construction Company, and most notably Vermont Structural Steel Company have occupied the buildings. Between 2016 and 2018, the manufacturing buildings were removed. The area is currently the City Market grocery store and parking lot.

An oil storage area in a warehouse building related to Colonial Beacon Oil Co. is visible in 1937 aerial imagery in the north adjoining property. There were also three above ground gasoline tanks in the north adjoining property until 1960.

The north adjoining land was used by Colonial Beacon Oil Company Inc., and Esso Standard Oil Company Inc. from at least 1937 to approximately 1986. During this occupancy, several large oil and gasoline tanks were constructed in the west adjoining area. The area was vacant until sometime between 2004 and 2006 when a self-storage area was constructed, which is the west adjoining land's current use.

The historical use of the north and west adjoining properties as oil storage facilities represents a REC, as discussed in section 4.3.2. The historical use of the east adjoining property as manufacturing facilities represents a REC, as discussed in section 4.3.2.

4.7 Evaluation of Potential Vapor Encroachment

As part of this Phase I ESA, VHB conducted an Evaluation of Potential Vapor Encroachment (EPVE) in order to determine whether or not a Vapor Encroachment Condition (VEC) exists at the Site. A VEC is the presence or likely presence of Chemical(s) of Concern (COC) vapors in the vadose zone of the Site caused by the release of vapors from contaminated soil and/or groundwater either on or near the Site. This EPVE consisted of the review of information presented in previous or subsequent sections of this document such as:

- The Site's physical setting and features that may impact vapor migration
- Documented storage and releases of volatile COCs at the Site and/or nearby properties
- Potential preferential pathways for vapor migration such as subsurface utility corridors

VHB has concluded that:

Based on documented historic land uses at the Site, including oil storage within the footprint of the existing building, and surrounding areas use as oil and gasoline storage, it is possible that volatile COCs have been released on the Site or in the vicinity of the Site and that the vadose zone is impacted by volatile COCs.

Therefore, VHB has concluded that a VEC exists at the Site in connection with REC #7 as detailed in Section 7.1.7

5

Site Reconnaissance

5.1 Methodology and Limiting Conditions

Alayna Thompson and Kevin Sheehan of VHB conducted a Site reconnaissance on May 19, 2023, for visual and reasonably identifiable indications of RECs as defined by ASTM E 1527-21. VHB was accompanied by Brian Mital, the Site Manager. Weather conditions did not limit observations during the Site reconnaissance. Some dense vegetation along the southern wall of the building limited observations made at the ground surface. Dense vegetation and a stream limited access to the southern extent of the Subject Area. All units of the one-story building were accessible and inspected during this Site reconnaissance.

VHB's Site observations and information obtained at the time of the Site reconnaissance are presented in the following sections. Photographs taken during the Site Reconnaissance visit are provided in **Appendix J**.

Observation	Observed or Suspected
Areas of petroleum or hazardous substances product storage and use / Drums / Hazardous Substance and Petroleum Products Containers	Not Observed.
Above Ground Storage Tanks (ASTs)	Not Observed.
Underground Storage Tanks (USTs)	Not Observed.
Odors	A petroleum like odor was detected in stained soil north of the Site building.
Pools of liquid	Not Observed.
Unidentified Substance Containers	Three plastic drums were observed on site. Two drums on the south exterior wall of the building were empty, and one drum off the eastern exterior wall was partially filled with what is suspected to be water.
Transformers and any identified PCB-containing equipment	Utility pole mounted transformer observed on access drive to the *Site*.
Heating/Cooling systems	The building is heated by natural gas fired furnace and/or electricity, distributed by Modine or Univent units.

Observation	Observed or Suspected
Interior stains or corrosion	The floor of the building is concrete. Some of the concrete appears to be original to construction, and some has been painted over, covered with plywood, or with carpet. The concrete, where observable, appears to be in good condition. Seams in the concrete are visible in the central unit. Potential filled-in floor drains and manhole covers were visible in the two end units. The visible concrete in all units appears to be in good condition.
Interior drains, sumps, and below grade conveyances	No current floor drains were observed. Several areas may be filled-in floor drains/manholes within the building.
Exterior pits/ponds/lagoons	There is a small stormwater retention pond south of the building that has a drainage pipe in the western end.
Pesticide use	Not Observed.
Stained soil or pavement	A small 3-foot by 3-foot area of intermittently stained soil was observed north of the building. There was a petroleum like odor to the soil, and the staining appeared to be surficial, but could not be confirmed to be limited to surface soil.
Stressed vegetation	The grass area where the 3 foot by 3-foot staining was observed appeared to be stressed.
Evidence of solid waste disposal on the Site	No evidence of solid waste disposal was observed.
Evidence of fill materials	Not Observed.
Wastewater discharges	Not Observed.
Wells	Not Observed.
Septic systems	Not Observed.
Evidence of spills/releases	Not Observed.
Hazardous waste	Spray paint cans and small quantities of varnish and stain were observed in two units on-Site. Releases were not observed from these product containers.
Non-Hazardous waste	Waste generated at the Site is related to woodworking and art projects. No dumpsters or roll-offs were observed on the Site.
Air Emissions	A self-contained air purifying unit was observed in the central unit woodworking shop. This unit was not connected to the exterior. A vent fan over the jewelry workstation in the western unit was observed in a window. No chemical storage or use was observed on the jewelry station at the time of the site reconnaissance. A section of PVC tubing was observed coming from the ground on the western end of the southern wall of the building; it is unclear what this pipe is associated with but did not appear to be related to heating systems or underground storage tanks.
Adjacent Properties	The Site is bordered by the Metalworks property to the north. Metalworks currently operates as a metal fabrication shop. Flynn Avenue Self Storage borders the Site to the west. Several storage units exist on the paved lot. A railroad borders the Site to the east and is adjacent to the City Market Grocery Store and parking lot. The Site is bordered to the south by mixed commercial use lots at 7-10 Ambrose place. A section of an unpaved parking lot extends into the Site boundary.

Observation	Observed or Suspected
Other	Tools and machinery associated with woodworking were observed on-Site. Staining or releases from this equipment were not observed.

5.2 Heating, Water, and Sewer Systems

The building is heated by natural gas and/or electricity distributed by Modine and Univent units. The building is connected to City water and City sewer. No evidence suggests that the building was connected to a private well or a septic system.

5.3 Exterior Observations and Surface Conditions

The Site is mostly flat with an area of dense vegetation in the southern portion of Lot 1. The area surrounding the building on Lot 2 is an unpaved roadway and parking area with grass separating the building from the road, and between the roadways. Both the unpaved roadway and grass areas appear to be used as storage for inert materials related to woodworking or art projects. A rail spur extending from the easterly adjacent railroad corridor remains present on the east side of Lot 2. Soil staining was observed in the grass area north of the building on Lot 2 in an approximate 3-foot by 3-foot area. A petroleum like odor was observed in the stained soil. This surficial staining represents a REC.

Dense vegetation was present on the southern portion of Lot 1 that limited accessibility and visual inspection. However, VHB believes that the visible extent of the vegetated area was representative of the southern portion of Lot 1 and therefore the dense vegetation is not a significant data gap.

5.4 Interior Observations

The building located on Lot 2 is divided into three units (west, central, and east). Former uses of the building include auto repair, service, and painting, although VHB was not able to confidently determine whether those former uses were related to specific units in the building.

The east unit is currently used as an art workshop. The eastern most section contains various supplies including paint, spray paint, and machinery. The floor in this section of the building appears to be original concrete, and in good condition. One circular patch was located near the entry way as well as several smaller circular patches which may have been former floor drains. Given the former use of the building for various auto repair and painting services, the potential presence of a floor drain represents a REC, as discussed in Section 7.1. The east unit includes a space that has floors that have been painted. This space includes a Modine heating unit. Also in the eastern unit is a small music studio. Some of the concrete is covered with rugs, preventing observations of the concrete. There is also an area where a wooden floor was installed above the concrete.

The central unit is currently used as a woodworking shop. The flooring in this unit is a mix of wood, tile, carpet (preventing visual access to the original concrete floor), and original concrete. Some spray paint was observed stored in a small closet. One circular patch of concrete was observed in this space. A seam in the concrete was observed next to a raised wooden platform. VHB observed a concrete ramp leading underneath the wooden platform. The tenant of the woodworking shop, who has been there for ten years, explained that it was his understanding an automobile shop formerly operated here, and that cars were spray-painted in that section of the space. The historical use of the Site as an automotive repair shop represents a REC, as discussed in section 4.3.1.

The west unit is currently used as a music studio and jewelry making studio. The flooring is a mix of original concrete, wood tiling, and carpet. Much of the floor is covered in area rugs. No drainage areas or basins were observed in this area, although visual observations of the original concrete floor were impeded by furniture and rugs.

6

Interviews

6.1 Interview with Owner, Site Manager, Occupants, or Knowledgeable Person

VHB Conducted the Site reconnaissance with Brian Mital, the property Supervisor for the current owner, CSWD. Mr. Mital has been the Site Supervisor for one year and stated that he has visited the site around three times. Mr. Mital indicated that there has been no dumping known to have occurred on the Site. During the Site visit, Mr. Mital introduced VHB to the tenant of the central unit who has been occupying the Site for the last ten years. The tenant informed VHB that there was previously a coffee roaster in the west unit, and the Red Cross previously used the east unit as storage. The tenant also described the unit he currently occupies, the woodworking shop, to have been an auto repair shop that featured auto body work and car painting in an assembly-line style production, with the spray-painting of cars having occurred in his unit (the middle unit). The historical use of the Site as an automotive repair shop represents a REC, as discussed in section 4.3.1.

South of the building, the pond, and a flat grassy area, there is what appears to be a man-made mound on Lot 1. There appeared to be chunks of asphalt throughout the mound, and it is heavily vegetated, indicating it has been present on-Site for some time. VHB asked for information concerning the pond and mound, but the property Supervisor did not have any information. The Assessor's Office provided information regarding the mound, which is discussed in section 4.4.4.

The information obtained during the interview has been incorporated throughout this report.

6.2 Interviews with Local Government Officials

Information obtained from Local Government Officials is described in Section 4.2. No other local government officials were contacted as part of this Phase I ESA.

7

Conclusions and Opinions

The goal of the Phase I ESA is to identify RECs as defined in Section 1.1. This section identifies known or suspected RECs, Controlled RECs, and Historical RECs, as well as additional Site considerations. During the Phase I ESA, VHB identified eight RECs in connection with the Site. VHB's opinion is limited by the conditions prevailing at the time the work was performed and the applicable regulatory requirements in effect.

7.1 RECs

To meet the requirements of Section 12.7.1 of the Standard, the statement below has been included to preface the conclusions of this report.

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527 for 195-201 Flynn Avenue, the Site. Any exceptions to, or deletions from, this practice are described in Section 8.1 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the Site except for the following:

7.1.1 REC #1 – Former Automotive Repair Shop On-site

According to the EDR Database Report, between 1987 and 1998, an auto and home supply store, carwash, and general automotive repair shop operated on the Site, in the existing building on Lot 2. An interview with a tenant of the building revealed that spray-painting of cars occurred within the building on a raised concrete platform. Circular patches in the concrete floor of the building were observed during Site reconnaissance that may be patches over former floor drains.

Opinion: It is the environmental professional's opinion that the historical use of the existing building on the Site as an automotive repair shop, and the potential presence of former floor drains within that building represents a REC.

7.1.2 REC #2 – Oil Staining on Ground Surface

A small, approximately 3 feet by 3 feet, area of intermittently stained soil was observed in the grassed area north of the existing building on Lot 2. VHB observed a petroleum like odor to the soil during Site reconnaissance. The nature and extent of potential contaminant impacts associated with this staining on a pervious surface could not be determined by visual inspection.

Opinion: It is the environmental professional's opinion that because the nature and extent of potential contaminant impacts associate with this staining on a pervious surface could not be determined, that this condition represent a REC.

7.1.3 REC #3 – Historical Oil and Gasoline Storage On-Site

Sanborn maps from 1942 identify on-Site storage of bulk oil and gasoline by Cities Service Company. No further documentation regarding this bulk oil and gasoline storage was found, including but not limited to potential storage tank removal reports or confirmatory soil samples.

Opinion: It is the environmental professional's opinion that the former use of the Site for bulk oil and gasoline storage, without record of removal, represents a REC.

7.1.4 REC #4 – Vermont Railroad

A section of abandoned railroad extends onto the Site from the active railroad corridor to the east, ending near the location of the former oil storage area.

Opinion: It is the environmental professional's opinion that the presence of railroad tracks on the Site represents a REC due to the possibility of releases of hazardous materials from locomotive cars, and metals, pesticides/herbicides, and other wood preservation chemicals that are typically used along rail corridors.

7.1.5 REC #5 – 199 and 205 Flynn Avenue, Exxon Oil Terminal Hazardous Site, SMS #87-0002

The parcels located at 199 and 205 Flynn Avenue were formerly one property (listed under 199 Flynn Avenue) and formerly associated with a bulk oil storage and distribution terminal that spanned across multiple parcels on Flynn Ave between 1940 and 1981. The bulk oil storage and distribution terminal was operated by various companies, including Colonial Beacon Oil Company, Esso Standard Oil Company, and Exxon Oil Company. 199 Flynn Avenue is currently listed as a Hazardous Site by the Department of Environmental Conservation ("DEC"). Based on environmental investigation reporting available for the Exxon Oil Terminal Hazardous Site, petroleum related volatile organic compound ("VOC") impacts to soil and groundwater have been documented at both the 199 and 205 Flynn Avenue parcels. Several detections of VOCs have been recently reported in groundwater on 205 Flynn Ave, directly north of Lot 2 of the Site, including benzene at concentrations as high 2,120 ug/L, which exceeds the Vermont Groundwater Enforcement Standard of 5 ug/L.

Opinion: It is the environmental professional's opinion that given the proximity of these known impacts to groundwater to the Site, it may be possible that concentrations of VOC compounds in groundwater are above applicable criteria in the northern portion of the Site, and therefore represent a REC.

7.1.6 REC #6 – Former Underground Storage Tanks Associated with Exxon Terminal Facility SMS #87-0002

The Vermont UST database reports that two underground storage tanks associated with the former Exxon Terminal Facility (199 and 205 Flynn Avenue) were removed from the ground at that facility in 1998. No records of tank conditions during removal were found, and it is possible the tanks could have been in poor condition and could have caused a release to soil and groundwater at 199 and/or 205 Flynn Avenue, which is presumed to be hydrologically cross-gradient, or potentially up-gradient of the Site. Based on available reporting for the Exxon Oil Terminal Hazardous Site (#87-0002), it is possible that these USTs are associated with known petroleum releases at 199 and 205 Flynn Avenue; however, VHB was not able to determine whether the above referenced USTs were or were not related to those releases.

Opinion: It is the environmental professional's opinion that because no information was provided in the UST database regarding the exact location or condition of the tanks at removal or any information pertaining to confirmation sampling, the absence of information represents a significant data gap, and represents a REC.

7.1.7 REC #7 – 75 Briggs Street Hazardous Site, SMS #2017-4731

The parcel located at 75 Briggs Street is currently listed as a Hazardous Site by the DEC. Previous environmental investigations associated with the Hazardous Site identified elevated levels of lead, PAHs, volatile organic compounds ("VOCs"), and chlorinated volatile organic compounds ("CVOCs") in soil, soil gas, and groundwater related to the industrial history of the property that included combustion sources, leaking petroleum storage tanks, and foundry and machine shop operations that included the use of cleaning solvents.

Opinion: It is the environmental professional's opinion that based on the proximity of this property to the Site, the known impacts to soil, soil vapor, and groundwater, and the potential of airborne contaminant distribution associated with certain former land uses and site operations, the contaminant impacts found in soil, groundwater, and soil vapor at 75 Briggs Street may exist at the Site, and thus represents a REC.

7.1.8 REC #8 – 207 Flynn Avenue, Vermont Structural Steel Hazardous Site, SMS #2016-4619

The parcel located at 207 Flynn Avenue is currently listed as a Hazardous Site by the DEC. According to various prior environmental investigations completed at 207 Flynn Avenue, historical industrial operations on the property, included a foundry, metal machining, vehicle storage and maintenance, fuel storage, and blast cleaning. These environmental investigations determined that soil at 207 Flynn Avenue was impacted with PAHs, arsenic, lead and to a lesser degree VOCs and CVOCs. Soil vapor and groundwater were also determined to be impacted with VOCs and CVOCs.

Opinion: It is the environmental professional's opinion that based on the proximity of this property to the Site, the known impacts to soil, soil vapor, and groundwater, and the potential of airborne contaminant distribution associated with certain former land uses and site operations, the contaminant impacts found in soil, groundwater, and soil vapor at 207 Flynn Avenue may exist at the Site, and thus represents a REC.

7.2 VEC

A VEC is the presence or likely presence of COC vapors in the vadose zone of the Site caused by the release of vapors from contaminated soil or groundwater either on or near the target property. VHB has concluded that a VEC exists at the Site**.** Based on the historic use of land at the Site, that included oil storage, and surrounding areas as oil and gasoline storage, it is possible that volatile COCs have been released in the vicinity of the Site and that the vadose zone at the Site is impacted by volatile COCs. Therefore, VHB has concluded that a VEC exists at the Site in connection with REC #1, #3, and #5.

7.3 *De Minimis* Conditions

De minimis conditions represent conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action by the appropriate regulatory agency. VHB did not identify *de minimis* conditions on the Site.

7.4 Business Environmental Risks

The following business environmental risks represent conditions at the Site that may have an environmentally driven impact on the current or planned use of the Site, but do not constitute RECs or *de minimis* conditions as defined in the Standard. However, the Environmental Professional views these as potential risks that should be considered when making decisions regarding the Site.

7.4.1 Potentially Hazardous Building Material

The potential presence of asbestos-containing building materials, lead-based paint, and/or PCB-containing building materials is beyond the scope of ASTM 1527-13. However, given the age and construction of the former buildings at the Site there is a possibility that these materials may be present.

7.4.2 Urban Fill

The Site is located in a developed urban area with a combination of former industrial and commercial land uses at and adjacent to the Site. As a result, it is possible that the Site may have been impacted via the aerial deposition of air-borne contaminants associated with prior and current industrial uses in the area. Additionally, structures and facilities at the Site, including but not limited to small buildings and rail spurs, have been constructed and demolished over the years. Thus, it is possible that fill of unknown origin and quality may have been imported to the Site to achieve the current grade. Considering no evidence of the use of impacted fill was identified during this Phase I ESA, the potential presence of urban fill alone, does not represent a REC. However, should future development involve the exportation of soil from the Site and soil is sampled and analyzed for typical urban and industrial contaminants, the possibility exists that those results could indicate the presence of impacted soil that may require special consideration for management and disposal.

8

Data Gaps and Limitations

Other than those limitations expressly provided in **Appendix A** and/or specified herein, completion of this Phase I ESA was not subject to significant assumptions, limitations, or exceptions to the Standard.

8.1 Significant Assumptions, Limitations, Exceptions and Data Gaps.

VHB identified six data gaps at the Site during the course of this Phase I ESA. The Environmental Professional's assessment as to whether these data gaps are considered significant is outlined below.

Data Gap	Assessment
No information in VT UST database regarding underground storage tank condition during removal at 199 Flynn Avenue	Tank condition was not available in listings pertaining to the removal of two underground storage tanks at the former Exxon Terminal facility. The absence of this information represents a significant data gap.
Due to rugs covering significant portions of floors in the building, not all the original concrete floor was visible.	VHB believes that observations of visible floor space was likely representative of covered portions of flooring and thus the data gap is not significant.
Dense vegetation along southern wall of building.	Some dense vegetation impeded views to the ground surface along the southern wall of the existing building on Lot 2 of the Site. VHB believes that no significant feature was missed due to dense vegetation and thus the data gap is not significant.
Dense vegetation on southern portion of Lot 1	Dense vegetation was present on the southern portion of Lot 1 that limited accessibility and visual inspection. However, VHB believes that the visible extent of the vegetated area was representative of the southern portion of Lot 1 and therefore the dense vegetation is not a significant data gap.

As described above and when appropriate, these data gaps have been conservatively incorporated into the findings of this report. Should additional data become available, the findings of this report should be reevaluated.

9

References/Informational Sources

Aerial Photographs dated 1937, 1939, 1942, 1962, 1981, 1986, 1992, 1999, 2008, 2011, 2014, and 2018. Obtained from Environmental Data Resources, Inc.

Environmental Data Resource, Inc. Radius Map Report with GeoCheck, Prepared using Field Check, dated May 5, 2023.

Environmental Data Resources, Inc. Certified Sanborn Map Report, dated May 8, 2023.

Environmental Data Resources, Inc. City Directory Image Report, dated May 12, 2023.

Topographic Maps, Burlington, Juniper Island, Quadrangles dated, 1906, 1919, 1944, 1948, 1972, 1987, 2012, 2015, 2018. Obtained from Environmental Data Resources, Inc.

The City of Burlington, Clerks Office, May 24, 2023.

Ratcliffe, N.M., Stanley, R.S, Gale, M.H., Thompson, P.J., and Walsh, G.J., 2011, Bedrock Geologic Map of Vermont: U.S. Geological Survey Scientific Investigations Map 3184, 3 sheets, scale 1:100,000.

Vermont Agency of Natural Resources, Hazardous Waste Management Site Locator and environmental database. Information obtained on-line May 2023.

Vermont Department of Environmental Conservation, Waste Management Division, Sites Management Section, Vermont Active Hazardous Sites List. Information obtained on-line May 2023.

10

Signature and Qualifications of Environmental Professional

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 C.F.R. § 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. Part 312.

Environmental Professional: 

Zack Clark
Date 7/6/2023

11

List of Acronyms

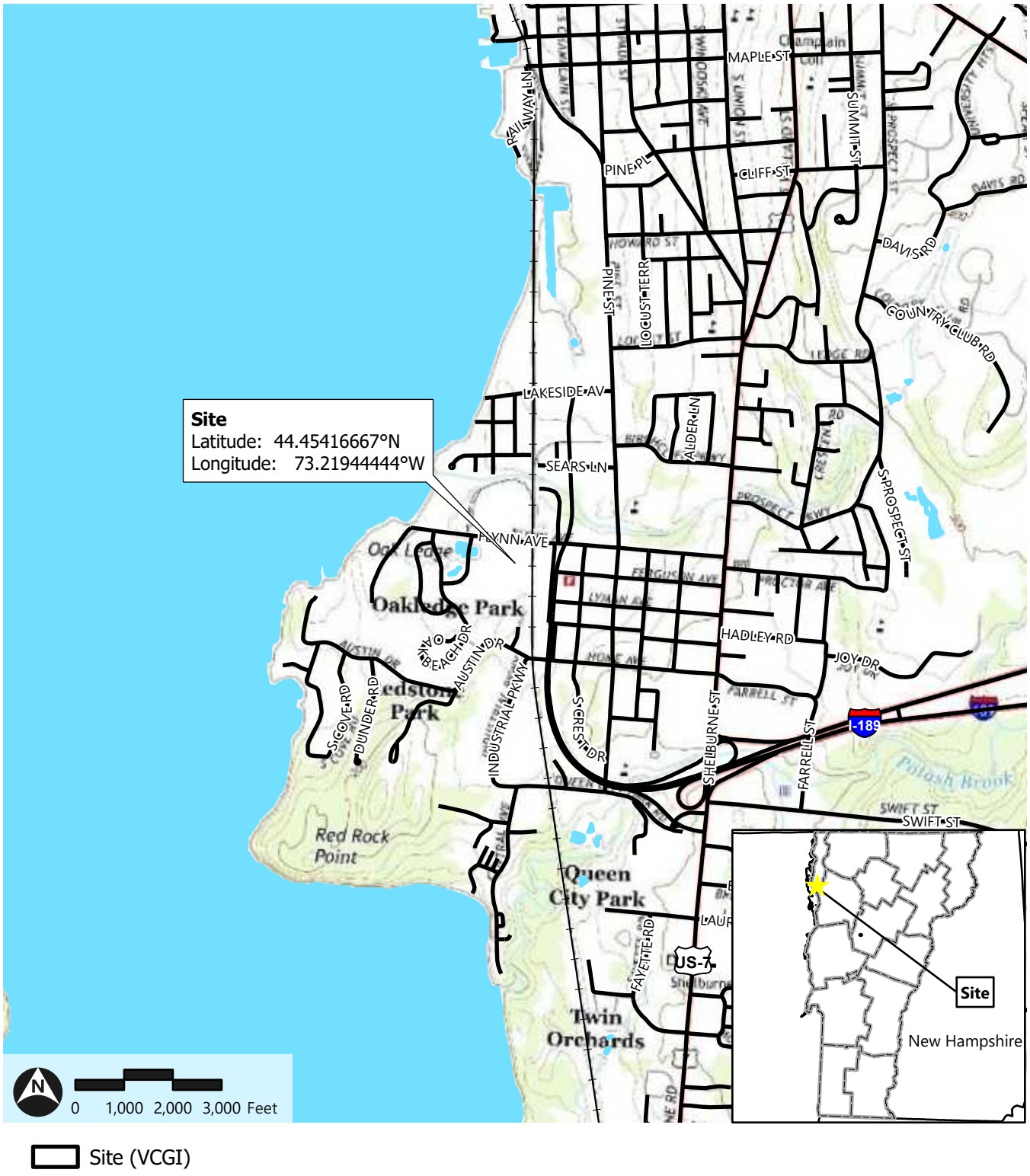
AAI	All Appropriate Inquires
AST	Aboveground Storage Tank
ASTM	American Society of Testing and Materials
COC	Contaminant of Concern
CVOC	Chlorinated Volatile Organic Compound
EDR	Environmental Data Resources
EPVE	Evaluation of Potential Vapor Encroachment
ESA	Environmental Site Assessment
FINDS	Facility Indexing System
LLP	Landowner Liability Protections
LUST	Leaking UST
NPL	National Priorities List
OHM	Oil and/or Hazardous Materials
PADS	PCB Activity Database
PCB	Polychlorinated Biphenyl
RCRA	Resource Conservation and Recovery Act
RECs	Recognized Environmental Conditions
SEMS	Superfund Enterprise Management System
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substance Controls Act
USGS	United States Geological Survey
UST	Underground Storage Tank
VEC	Vapor Encroachment Screening
VOC	Volatile Organic Compound

Figures

Figure 1: Site Location Map

195-201 Flynn Avenue - Burlington, Vermont

May 31, 2023



Path: \\vhb\gis\proj\SBurlington\58630.07 BVT DPW Flynn Ave Soil\Project\Site Location Map.aprx (ksheehan, 5/31/2023)

Sources: Basemap from ESRI/USGS Topo Map; VCGI - Vermont Center For Geographic Information; VHB (2021); VHD - Vermont Hydrography Dataset (2010); VTrans - Vermont Agency of Transportation.

Figure 2: Site Map

195-201 Flynn Avenue | Burlington, Vermont

June 08, 2023

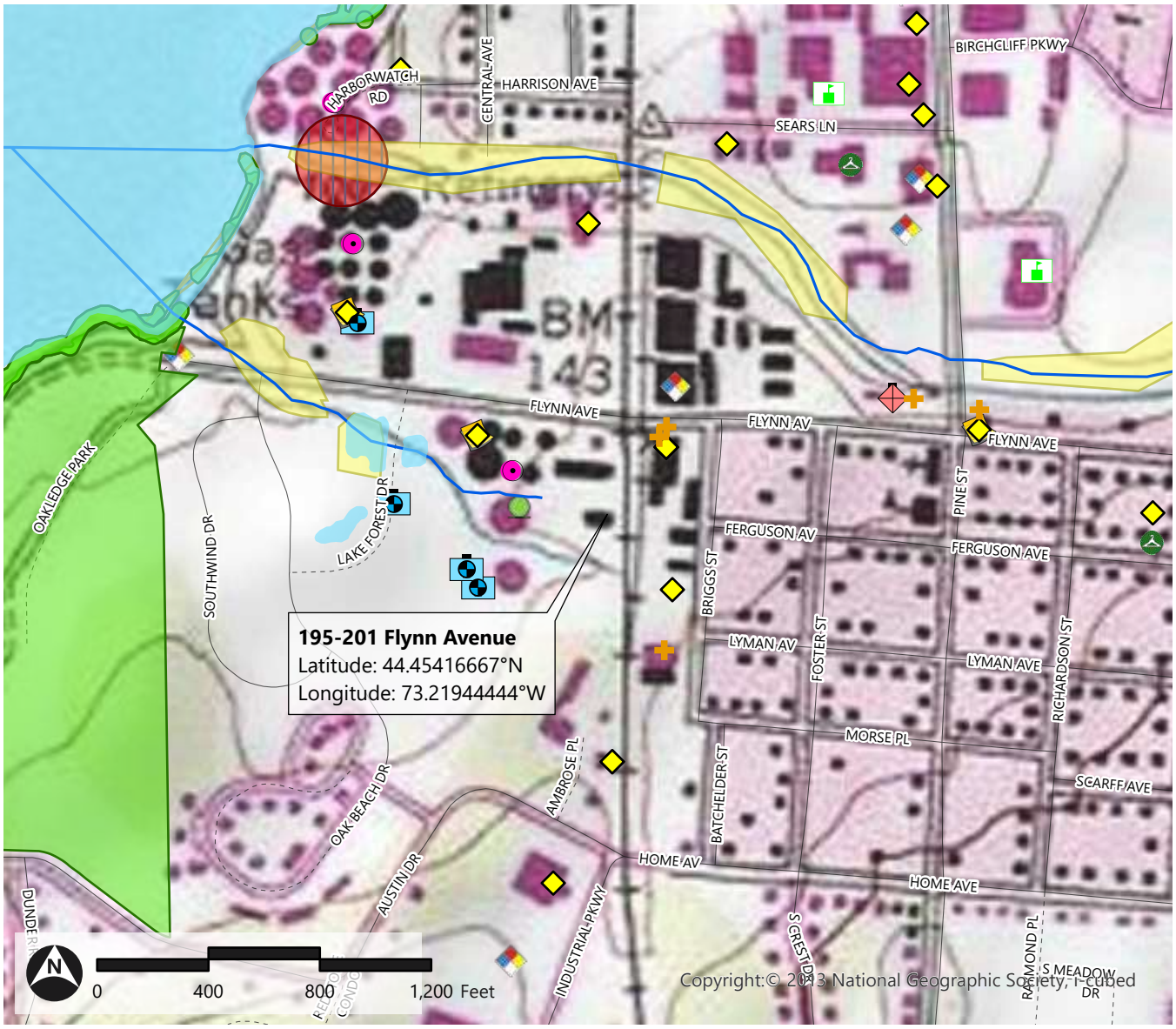
Path: \\vhbgis\proj\SBurlington\58630.07 BVT DPW Flynn Ave Soil\Project\Site Location Map.aprx (ksheehan, 6/8/2023)

Sources: Basemap from ESRI/USGS Topo Map; VCGI - Vermont Center For Geographic Information; VHB (2022); VHD - Vermont Hydrography Dataset (2010); VTrans - Vermont Agency of Transportation.

Figure 3: Site Vicinity Map

195-201 Flynn Avenue | Burlington, VT

May 31, 2023



Path: \\vhbgis\proj\SBurlington\58630.07 BVT DPW Flynn Ave Soil\Project\Site Location Mapaprx (ksheehan, 5/31/2023)

Sensitive Receptor Layers

- Stream (VHD) (9)
- Waterbody (VHD) (4)
- Class 1 Wetland (VSWI) (0)
- Class 2 Wetland (VSWI) (5)
- Advisory Wetland (VCGI) (0)
- Public Water Sources (VCGI) (0)
- Private Wells (VCGI) (4)
- Surface Water Source Protection Areas (VCGI) (0)
- Ground Water Source Protection Areas (VCGI) (0)
- Significant Natural Communities (FWD) (0)
- RTE Animal (FWD) (1)
- RTE Plant (FWD) (7)
- RTE Natural Community (FWD) (0)
- VT Uncommon Species
  - Plant (6)
  - Animal (1)
  - Natural Community (0)

Sensitive Receptors

- Educational Facilites (2)
- Public Water Supply Intake/Well (0)
- Medical Facilities (1)
- Elderly Housing (0)

ANR Atlas Waste Management Basemap Layers (VCGI)

- Hazardous Waste Sites (18)
- Hazardous Waste Generators (6)
- Operating Landfill (0)
- Closed Landfill (0)
- Underground Storage Tank (working) (0)
- Aboveground Storage Tank (1)
- Brownfields (0)
- Dry Cleaner (2)
- Salvage Yard (0)
- PSI (1980) (3)
- Land Use Restrictions (3)
- Brownfields Properties (EPA) (5)

*Site Receptor Map prepared following IRule section § 35-305.(b)(13)(A) using the Vermont Agency of Natural Resources online Natural Resource Atlas, Waste Management Theme as a base map and includes a database review of sensitive receptors using the VT E-911 and ANR Natural Resources databases.

General Basemap Layers

- Road (VTrans)
- Town Road (85)
- Private Road (11)

Sources: Basemap Imagery from VCGI (2016); EPA - Environmental Protection Agency; FWD - Vermont Fish & Wildlife Department (2022); VCGI - Vermont Center For Geographic Information; VHB (2021); VHD - Vermont Hydrography Dataset (2010); VTrans - Vermont Agency of Transportation.

NOTES TO USERS

is for use in administering the National Flood Insurance Program. It does sarily identify all areas subject to flooding, particularly from local drainage f small size. The **community map repository** should be consulted for pdated or additional flood hazard information.

more detailed information in areas where **Base Flood Elevations** (BFEs) **odways** have been determined, users are encouraged to consult the Flood nd Floodway Data and/or Summary of Stillwater Elevations tables contained Flood Insurance Study (FIS) Report that accompanies this FIRM. Users e aware that BFEs shown on the FIRM represent rounded whole-foot s. These BFEs are intended for flood insurance rating purposes only and t be used as the sole source of flood elevation information. Accordingly, ation data presented in the FIS Report should be utilized in conjunction with for purposes of construction and/or floodplain management.

es of the **floodways** were computed at cross sections and interpolated cross sections. The floodways were based on hydraulic considerations with requirements of the National Flood Insurance Program. Floodway widths pertinent floodway data are provided in the Flood Insurance Study Report isdiction.

reas not in Special Flood Hazard Areas may be protected by **flood control s**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance ort for information on flood control structures for this jurisdiction.

ction used in the preparation of this map was Vermont State Plane PS zone 4400). The **horizontal datum** was NAD 83, GRS 1980 Differences in datum, spheroid, projection or UTM zones used in the n of FIRMs for adjacent jurisdictions may result in slight positional s in map features across jurisdiction boundaries. These differences do not accuracy of this FIRM.

vations on this map are referenced to the North American Vertical Datum of ese flood elevations must be compared to structure and ground elevations d to the same **vertical datum**. For information regarding conversion the National Geodetic Vertical Datum of 1929 and the North American Datum of 1988, visit the National Geodetic Survey website at .ngs.noaa.gov or contact the National Geodetic Survey at the following

rmation Services
/NGS12
Geodetic Survey
#9202
e-West Highway
ing, Maryland 20910-3282
-3242

current elevation, description, and/or location information for **bench marks** this map, please contact the Information Services Branch of the National Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

o information shown on this FIRM was derived from digital orthophotography by the Vermont Center for Geographic Information. This information was om photography dated 1999.

le baselines depicted on this map represent the hydraulic modeling baselines n the flood profiles in the FIS report. As a result of improved topographic data, **le baseline**, in some cases, may deviate significantly from the channel or appear outside the SFHA.

n updated topographic information, this map reflects more detailed and **e stream channel configurations and floodplain delineations** than own on the previous FIRM for this jurisdiction. As a result, the Flood and Floodway Data tables for multiple streams in the Flood Study Report (which contains authoritative hydraulic data) may reflect annel distances that differ from what is shown on the map. Also, the floodplain relationships for unrevised streams may differ from what is previous maps.

e limits shown on this map are based on the best data available at the time tion. Because changes due to annexations or de-annexations may have after this map was published, map users should contact appropriate y officials to verify current corporate limit locations.

fer to the separately printed **Map Index** for an overview map of the owing the layout of map panels; community map repository addresses; ting of Communities table containing National Flood Insurance Program each community as well as a listing of the panels on which each community

ation on available products associated with this FIRM visit the **Map Service** MSC) website at http://msc.fema.gov. Available products may include issued Letters of Map Change, a Flood Insurance Study Report, and/or sions of this map. Many of these products can be ordered or obtained om the MSC website.

ve **questions about this map**, how to order products or the National Flood Program in general, please call the FEMA Map Information eXchange **1 -877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at .fema.gov/business/nfip.

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard A the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazar include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-s elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood El determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); av depths determined. For areas of alluvial fan flooding, velocities also de

ZONE AR Special Flood Hazard Areas formerly protected from the 1% annual ch flood by a flood control system that was subsequently decertified. Zo AR indicates that the former flood control system is being restored to protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations deter

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Ele determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be k encroachment so that the 1% annual chance flood can be carried without substantial incr flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood wit average depths of less than 1 foot or with drainage areas less than 1 squ mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Are

1% Annual Chance Floodplain Boundary

0.2% Annual Chance Floodplain Boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area Zones and bou dividing Special Flood Hazard Areas of different Base Flood flood depths, or flood velocities.

513 Base Flood Elevation line and value; elevation in feet*

(EL 987) Base Flood Elevation value where uniform within zone; ele feet*

*Referenced to the North American Vertical Datum of 1988

A — A Cross section line

23 — 23 Transect line

Culvert

Bridge

45° 02' 08", 93° 02' 12" Geographic coordinates referenced to the North American D 1983 (NAD 83) Western Hemisphere

4988000 M 1000-meter ticks: Vermont State Plane Zone (FIPS Zone 4400), Transverse Mercator projection

4989000 mN 1000-meter Universal Transverse Mercator grid values, zon

DX5510 Bench mark (see explanation in Notes to Users section of th panel)

M1.5 River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
July 18, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Communi Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance ag or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

NFIP

PANEL 0253D

FIRM

FLOOD INSURANCE RATE MA

CHITTENDEN COUNT VERMONT

(ALL JURISDICTIONS)

PANEL 253 OF 500

(SEE MAP INDEX FOR FIRM PANEL LA

CONTAINS:

COMMUNITY	NUMBER	PANEL
BURLINGTON, CITY OF	500032	0253
SHELBURNE, TOWN OF	500193	0253
SOUTH BURLINGTON, CITY OF	500195	0253

Notice to User: The **Map Number** show should be used when placing map or **Community Number** shown above sh used on insurance applications for the community.

MAP NU 50007C

EFFECTIVE JULY 18

Federal Emergency Management A

NATIONAL FLOOD INSURANCE PROGRAM

Appendix A
Limitations

Limitations

195-201 Flynn Avenue

Burlington, VT

This report has been prepared for the sole and exclusive use of the Client and the Users. It is subject to and issued in connection with the Agreement and the provisions thereof. Any use or reliance upon information provided in this report, without the specific written authorization of the Client and VHB, shall be at the User's sole risk. VHB assumes no liability for use of this report by any person or entity other than the Client or User(s), for which it was prepared. Any potential future user of this document would be subject to VHB approval and such user's reliance on this document would be in accordance with the terms and conditions of the original contract.

In conducting this assessment, VHB has obtained and relied upon information from multiple sources to form certain conclusions regarding potential environmental issues at and in the vicinity of the Site. Except as otherwise noted, no attempt has been made to verify the accuracy or completeness of such information.

The objectives of the assessment described in this report were to assess the physical characteristics of the Site with respect to overt evidence of past or present use, storage, and/or disposal of oil or hazardous materials, as defined in applicable state and federal environmental laws and regulations, and to gather information regarding current and past operations and environmental conditions at and in the vicinity of the Site.

Where access was denied or conditions obscured, VHB makes no report on such areas.

No attempt has been made to assess the compliance status of any past or present Owner or Operator of the property with any federal, state, or local laws or regulations.

The findings, observations, and conclusions presented in this report are limited by the scope of services outlined in our Agreement, which reflects schedule and budgetary constraints imposed, by the Client for the current phase of environmental assessment. Furthermore, the assessment has been performed in accordance with generally accepted engineering practices and standards set forth in ASTM E 1527-21. No other warranty, expressed or implied, is made.

The assessment presented in this report is based solely upon information gathered to date. Should further environmental or other relevant information be developed at a later date, the Client should bring the information to the attention of VHB as soon as possible. Based upon an evaluation, VHB may modify the report and its conclusions.

The Environmental Data Resources, Inc. (EDR) Radius Map with GeoCheck was conducted under the Notice of Disclaimer/Waiver of Liability included in the summary report.

Appendix B
Qualifications of VHB Personnel

Appendix C
Environmental Data Resources, Inc. Database Report

Appendix D
Sanborn Maps

Appendix E
City Directory Abstracts

Appendix F
Historical Topographic Maps

Appendix G
Historical Aerial Photographs

Appendix H
User-provided Information

Appendix I
Relevant Municipal Documents

Appendix J
Site Photographs

Appendix K
Owner/Key Site Manager Provided Information

MEMORANDUM:

TO: City Council

FR: Chapin Spencer, DPW Director

Lee Perry, DPW Division Director – Maintenance Division

CC: Sarah Reeves, CSWD Executive Director

RE: **195-201 Flynn Avenue 2019 Second MOU Extension**

Date: June 20, 2023

Request:

In order to improve solid waste drop off center services for Burlington residents and businesses as well as insure the City has a place to manage soils properly, the Department of Public Works (DPW) is recommending the City Council approve a three-month, no-cost extension (through 9/30/2023) of the 2019 Chittenden Solid Waste District (CSWD) / City of Burlington Second Memorandum of Understanding (expiring 6/30/2023) to provide the City and CSWD time to negotiate a Purchase and Sale Agreement for 195-201 Flynn Avenue. Although the City has been working diligently to meet this June 30, 2023 deadline, CSWD at the request of their Board of Commissioners has asked for more time resulting in a need to extend the current Memorandum of Understanding.

Purpose:

The action above will provide CSWD and the City additional time to undertake additional due diligence in advance of finalizing the terms of the Purchase and Sale Agreement. These include:

- Property appraisal
- Archeological assessment
- Deed research
- Wetlands survey
- Phase I and likely Phase II environmental assessment

Building Inspection

Background:

For over two decades, the City of Burlington's DPW and CSWD have been attempting to resolve a protracted effort to construct a modern, safe, full-service drop off center (DOC) in the City. CSWD has operated a space-constrained and service-constrained DOC at 339 Pine Street for many years as a stop

gap measure. In 2001, CSWD purchased 195-201 Flynn Avenue (two adjoining parcels) for the purpose of developing a modern, full-service DOC at that location. Due to uncertainty with the Champlain Parkway and other issues, the DOC development did not advance.

CSWD's policy is to have the host municipality own the DOC property and have the municipality lease the site to CSWD for DOC development and operations. As such, Burlington DPW and CSWD Management have worked hard over the last few years to find a feasible, pragmatic path to transfer the 195-201 Flynn Avenue parcels to the City and provide options for the long-term full service drop off center in the City of Burlington. Below is a brief history.

History:

- CSWD purchased 195-201 Flynn Avenue for ~$510,000 with the intent of setting up an expanded DOC. CSWD's expectation was, and continues to be, that the City purchase the property and lease a portion back to CSWD for the DOC.

- 2015: CSWD told City they were planning to sell the parcels on the open market given the lack of progress on a DOC.

- 2016: City and CSWD agreed on a 3-year Memorandum of Understanding offering the City an option to purchase 195-201 Flynn Avenue with an annual $16,667 option payment counted towards the ultimate purchase price.

- 2019: City and CSWD agreed on a 2 year extension of the 2016 MOU.

- 2020: CSWD closed the Burlington DOC during the pandemic, and reopened just for organics due to the limited space and significant safety concerns

- 2021-2022: City and CSWD negotiated 2 MOU extensions to allow for negotiations for a lease purchase agreement (the current one expiring June 30, 2023). The City has currently made $100,001.32 in option payments that will count toward the purchase price.

- 2023: DPW and CSWD have continued productive discussions regarding the development of an expanded service DOC in the City of Burlington, as well as a site for City soils relocation for 339 Pine St., and the Intervale

Summary:

Completing the purchase and sale agreement and acquiring 195-201 Flynn Avenue will fill needs DPW and CSWD both currently have. These are listed below:

1. Provide a space for a permanent, well-designed location for City soil management

2. Enable CSWD to expand their DOC operations at 339 Pine Street in the short term by removing City soil management from 339 Pine Street. This will give CSWD the ability to add trash, recycling, metal, and leaf and yard waste to their DOC services

3. Free up space to better accommodate the future Railyard Enterprise Project at 339 Pine Street. One of the options shows a path going through a portion of what currently houses the Street Maintenance Divisions construction materials, and soil storage area. These materials will be displaced by the project, and need an area to relocate.

4. Give the City and CSWD the option, long-term, to locate an expanded service, modern DOC at 339 Pine Street or Flynn Avenue. If the current 339 Pine Street location is no longer viable for CSWD to operate a DOC from, then the back parcel on 195-201 Flynn Avenue, or another suitable location within the City could be used as an alternate location

5. Secure additional "enterprise" land for current and future municipal operational needs. Other than soil management, other construction materials, and equipment could be stored on site. Recent growth at our 645 Pine Street location has decrease parking as a result. Some equipment is stored off site out in the elements during winter months.

6. Accommodate interests in the Intervale to repurpose Water Distributions' existing soils management area by relocating to 195-201 Flynn Avenue. The current location is not optimal considering it is in a flood plain.

Risks of Not Acting:

1. City will lose $100,001.32 in option payments

2. The current Burlington Drop Off Center services may not expand beyond organics

3. City will continue to struggle with adequately managing urban soils at suboptimal facilities

4. City will continue to store various municipal equipment outdoors in the elements

5. City will be more constrained in accommodating the Railyard Enterprise Project at 339 Pine Street

6. Without additional municipal property, the City will not be able to consider future expansion of Municipal services such as consolidated collection as 645 Pine Street is fully utilized.

Funding:

The City has budgeted limited funds for the acquisition in FY'24. These funds would cover debt service payments in the fiscal year under a proposed master lease coordinated with the Clerk/Treasurer's Office. The City is actively working on funding approaches to continue funding debt service payments throughout the repayment period and cover fit-up costs. Our preferred funding approach at this time is to cover the debt service payments and fit-up costs with annual contributions from:

1. The City's Solid Waste Generation Tax that funds the City's Recycling Program through a charge on trash hauler's monthly bills to residential customers
2. The DPW Water Resources' budget to cover the utility's pro-rata share of the soil management facility
3. Any grants or other sources that can be secured

DPW recommends the Ordinance Committee review existing language and consider an ordinance change to clarify the Solid Waste Generation Tax can be used for the City's soil recycling activities in addition to residential recycling activities. Given this direction, DPW is seeking Council approval to refer this matter to the Ordinance Committee for study.

We aim to have a funding plan in place by the time we return seeking approval to execute the Purchase & Sale Agreement.

Next Steps:

If the City Council and the CSWD Board approve this recommended additional three (3) month extension of the Second MOU to September 30, 2023 to give both parties time to undertake additional due diligence, as well as negotiate the terms of the 195-201 Flynn Avenue purchase and sale agreement, we would expect to take the following next steps:

- Late Summer / Early Fall – Bring Purchase and Sale Agreement to BOF
- Late Summer / Early Fall – Bring Purchase and Sale Agreement to CC
- Fall 2023 – Execute Purchase and Sale Agreement
- Winter 2023-2024 – Complete property acquisition
- Spring 2024 – Undertake site work improvements at 195-201 Flynn Avenue and 339 Pine Street
- Spring 2024 – Open expanded DOC for public service at 339 Pine Street and City soil management activities begin at 195-201 Flynn Avenue

Board of Finance Motion:

1. Move to approve, and recommend the City Council approve a three-month, term-only, no cost extension of the Second 2019 Chittenden Solid Waste District – City of Burlington Memorandum of Understanding through September 30, 2023, and authorize the Mayor to execute said agreement subject to the review and approval of the City Attorney's Office; and

City Council Motion:

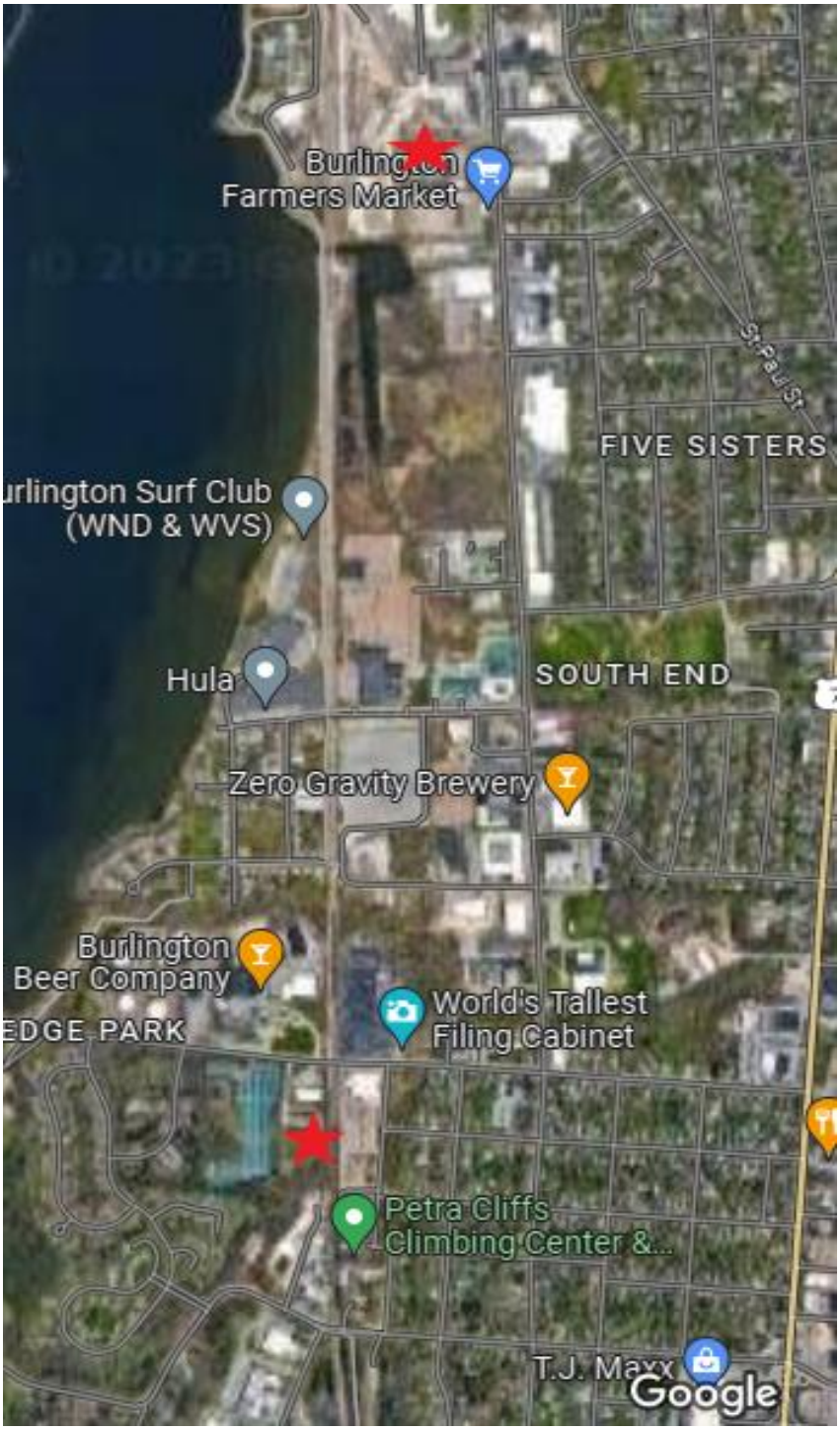
1. Move to approve a three-month, term-only, no cost extension of the Second 2019 Chittenden Solid Waste District – City of Burlington Memorandum of Understanding through September 30, 2023, and authorize the Mayor to execute said agreement subject to the review and approval of the City Attorney's Office; and

2. Move to request that the Ordinance Committee study the feasibility of an ordinance update to expand the use of the solid waste generation tax to include soil recycling as imposed through Burlington City Ordinance Chapter 14 and report back to the Council, to include a draft amendment to such ordinance if determined feasible, no later than September 2023.

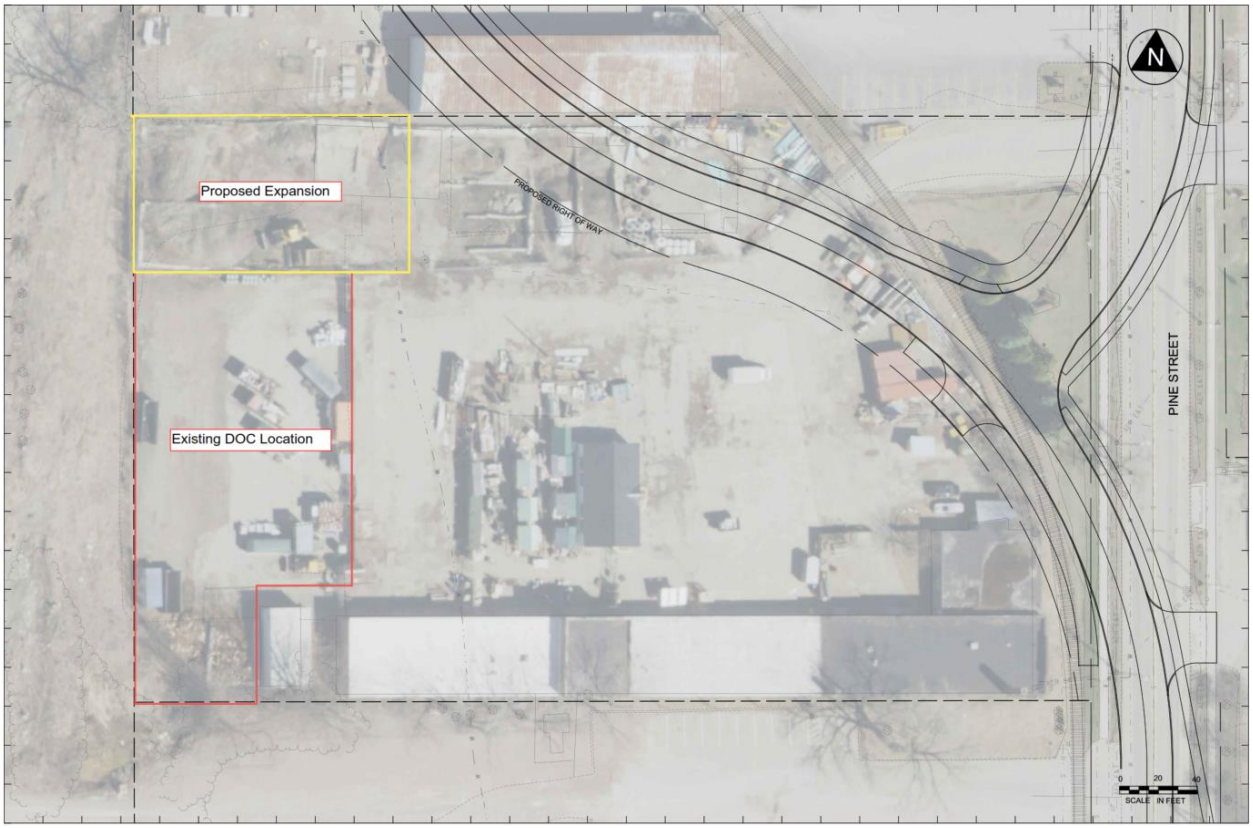
Attachments: See maps below, and previous MOU provided in packet.

South End Map – 339 Pine Street Red Star To The North

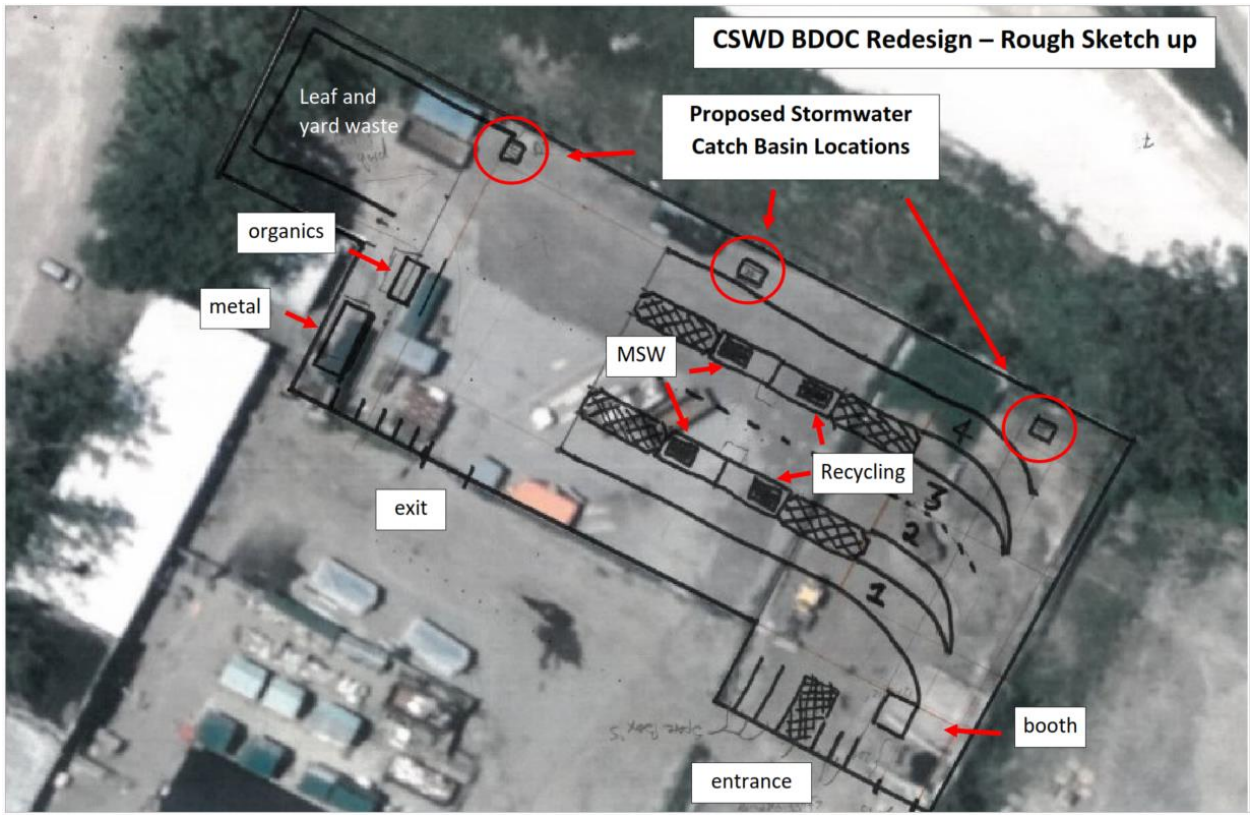
195-201 Flynn Avenue Red Star To The South



339 Pine Street Proposed DOC Expansion & REP Proposed Path



339 Pine Street DOC Conceptual Design – Will start services with single lane, and possibly expand depending on throughput. Open Tuesday through Saturday.



195-201 Flynn Avenue