Site Plans

Cambrian Rise

PROPOSED
SITE PLAN

NORTH

1″=80′

0 80 160 240

Note: The official name of the public street is Cambrian Way as shown in this drawing. On all other drawings, exhibits, and narratives, the street is split into three sections and referred to as or labeled: "North Road", "West Road, and "South Road". These labels are used solely for the purposes of being able to distinguish between the different sections of road during design, permitting, and construction.

T.J. BOYLE ASSOCIATES
LANDSCAPE ARCHITECTURE & PLANNING

Cambrian Rise

NEW PUBLIC PARK
12 ACRES

ADA PATH TO WATERFRONT

CITY OF BURLINGTON

REC PATH

TRAIL

CITY OF BURLINGTON

LAKE VIEW CEMETERY

CENTRAL GREEN

CAMBRIAN WAY

CAMBRIAN WAY

CAMBRIAN WAY

STONE HOUSE & COMMUNITY GARDEN

GARAGE

STONE HOUSE

P

Q

R

M

L

C

D

E

F

K

G

B

A

NORTH

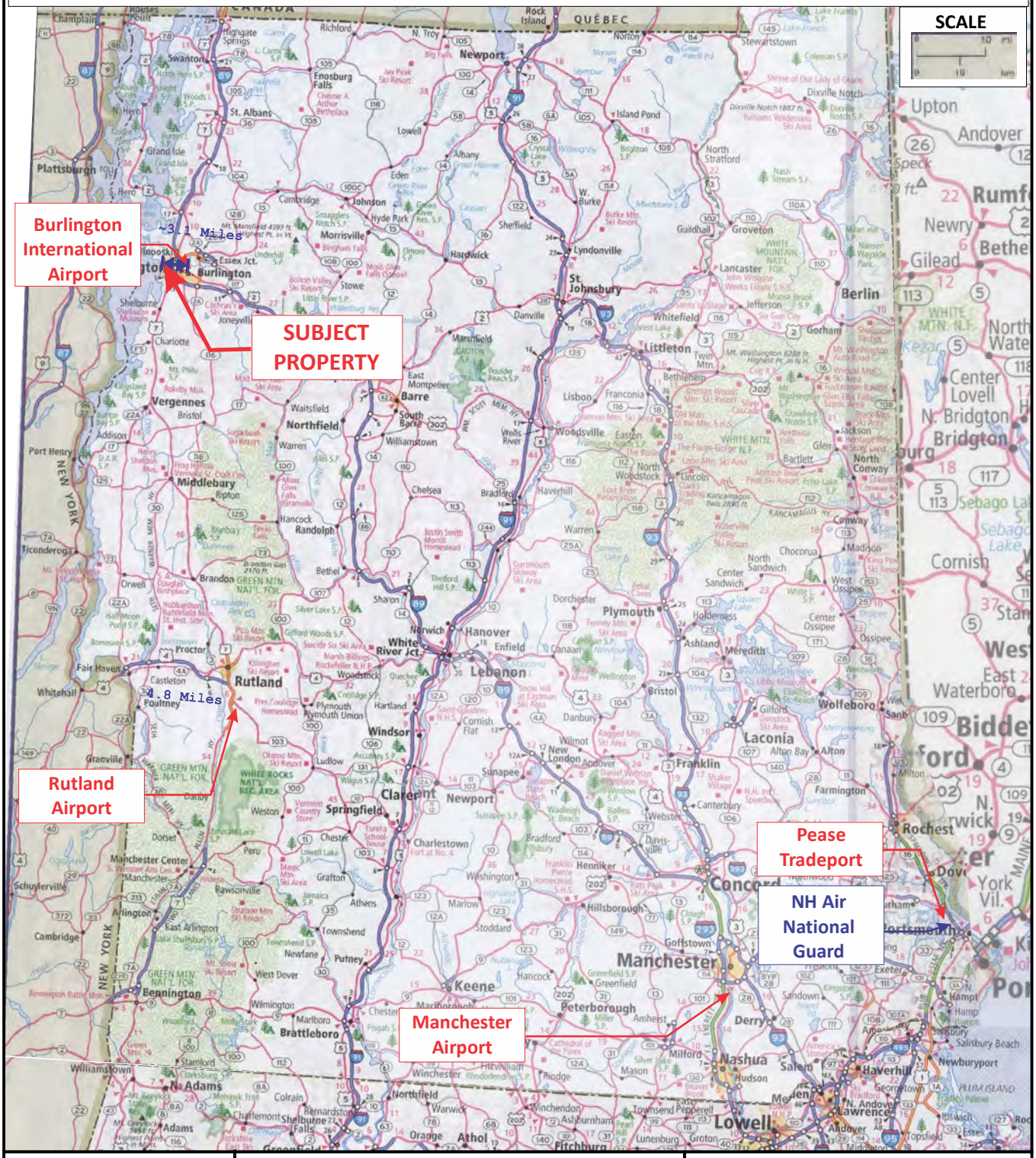
0 50 100 150

1″=50′

T.J. BOYLE ASSOCIATES
LANDSCAPE ARCHITECTURE & PLANNING

Airport Hazards

Clear Zone Search Threshold = 15,000 feet for military airfields and 2,500 feet for civil airports
Noise Threshold for military airfields and civil airports is 15 miles



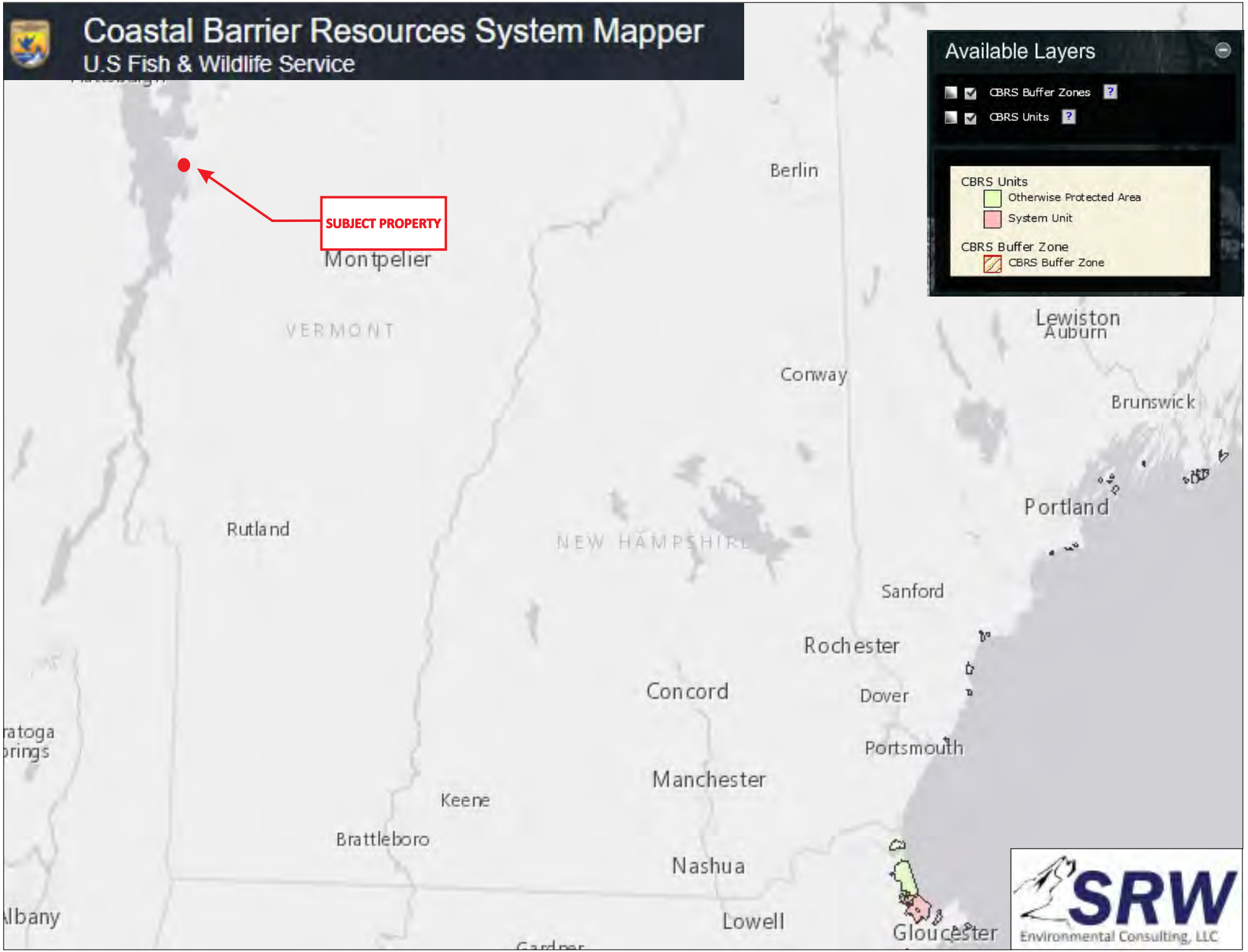
N

SRW
Environmental Consulting, LLC

Airport Clear Zones
Part 139 Airports

Airport Clear Zones
Military Airfields

Coastal Barrier Resources


Coastal Barrier Resources System Mapper
U.S Fish & Wildlife Service
Available Layers
CBRS Buffer Zones
CBRS Units
CBRS Units
Otherwise Protected Area
System Unit
CBRS Buffer Zone
CBRS Buffer Zone
SUBJECT PROPERTY
Montpelier
Berlin
VERMONT
Lewiston
Auburn
Conway
Brunswick
Portland
Rutland
NEW HAMPSHIRE
Sanford
Rochester
Concord
Dover
Portsmouth
Manchester
Keene
Brattleboro
Nashua
Lowell
Gloucester
Albany
SRW
Environmental Consulting, LLC

Flood Insurance
And
Floodplain Management

National Flood Hazard Layer FIRMette

FEMA

73°14'3"W 44°29'36"N

SRW Environmental Consulting, LLC

0 250 500 1,000 1,500 2,000 Feet

1:6,000

73°13'26"W 44°29'10"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

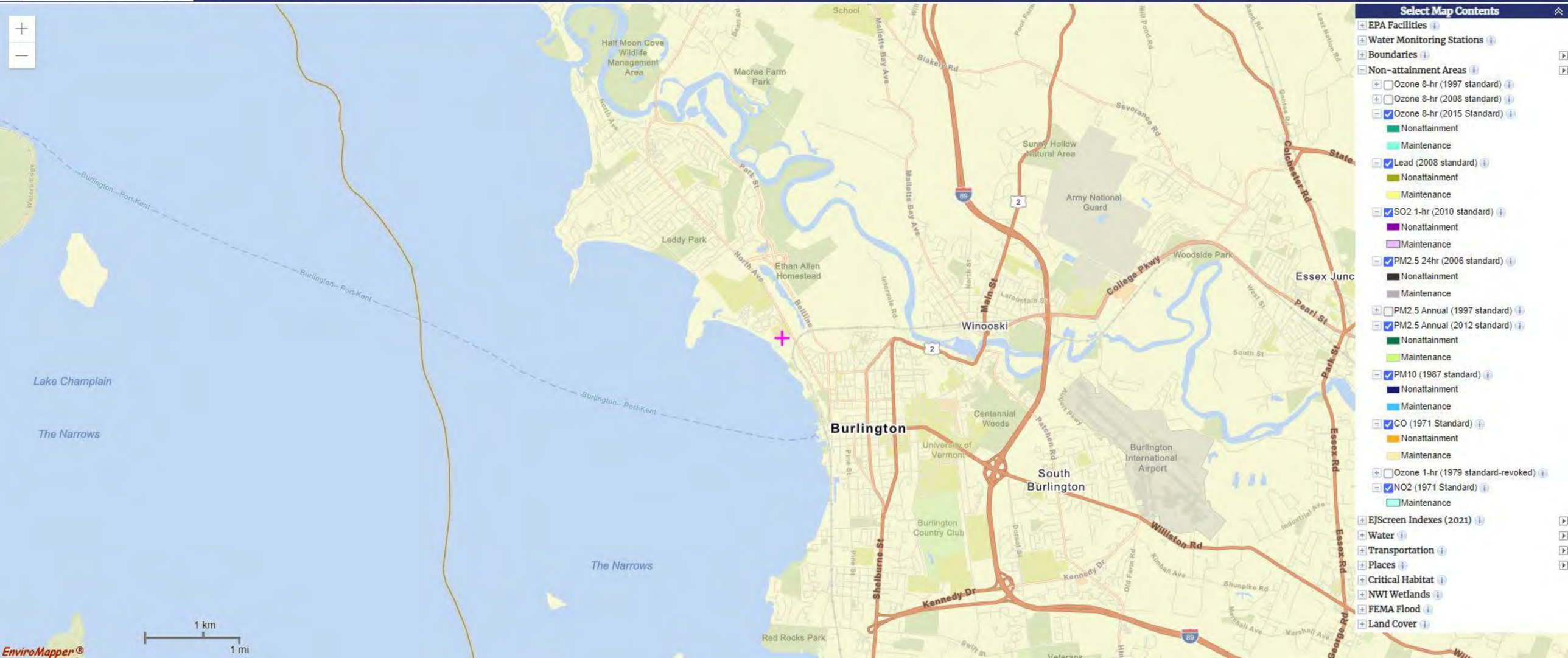
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/1/2024 at 12:51 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Clean Air

Find address or place | Basemap | Imagery | Draw | Erase | Save Session | Tools | More Data



EnviroMapper®

Coastal Zone Management

Coastal Zones

Legend

Coastal Zone Management Act Boundary

Approximate Property Location

SRW
Environmental Consulting, LLC

Map Scale
1: 6,036,985

Map Generated: 2/1/2024

Notes

Contamination and Toxic Substances

(Phase I under separate attachment)

Endangered Species

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To:
Project Code: 2024-0043877
Project Name: Cambrian Way

February 01, 2024

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the "**New England Field Office Endangered Species Project Review and Consultation**" website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (**Updated 4/12/2023**) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act
Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/service/section-7-consultations

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

https://www.fws.gov/program/migratory-bird-permit

https://www.fws.gov/library/collections/bald-and-golden-eagle-management

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

PROJECT SUMMARY

Project Code: 2024-0043877
Project Name: Cambrian Way
Project Type: Federal Grant / Loan Related
Project Description: The proposed project includes the new construction of Lot 8 Building H of a Master Development known as the Cambrian Rise Project at the former Burlington College. The building will provide affordable housing and the project includes utility connections, landscaping, and parking. Additional funding will include HOME-ARP.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.4901838,-73.22930912878599,14z

Counties: Chittenden County, Vermont

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Department of Housing and Urban Development
Name: Kate Fournier
Address: 65 Collamer Court
City: Shelburne
State: VT
Zip: 05482
Email kate@srwnh.com
Phone: 6037818651

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To:
Project code: 2024-0043877
Project Name: Cambrian Way

February 01, 2024

Federal Action Agency (if applicable): Department of Housing and Urban Development

Subject: Record of project representative's no effect determination for 'Cambrian Way'

Dear Kate Fournier:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on February 01, 2024, for 'Cambrian Way' (here forward, Project). This project has been assigned Project Code 2024-0043877 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A

consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of “No Effect” on the northern long-eared bat. If there are no updates on listed species, no further consultation/ coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the New England Ecological Services Field Office and reference Project Code 2024-0043877 associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Cambrian Way

2. Description

The following description was provided for the project 'Cambrian Way':

> The proposed project includes the new construction of Lot 8 Building H of a Master Development known as the Cambrian Rise Project at the former Burlington College. The building will provide affordable housing and the project includes utility connections, landscaping, and parking. Additional funding will include HOME-ARP.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.4901838,-73.22930912878599,14z

DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (Myotis septentrionalis). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

   Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

   No

2. The proposed action does not intersect an area where the northern long-eared bat is likely to occur, based on the information available to U.S. Fish and Wildlife Service as of the most recent update of this key. If you have data that indicates that northern long-eared bats <u>are</u> likely to be present in the action area, answer "NO" and continue through the key.

   Do you want to make a no effect determination?

   Yes

PROJECT QUESTIONNAIRE

IPAC USER CONTACT INFORMATION

Agency: Department of Housing and Urban Development
Name: Kate Fournier
Address: 65 Collamer Court
City: Shelburne
State: VT
Zip: 05482
Email kate@srwnh.com
Phone: 6037818651

RE: 100 Cambrian Way, Burlington

4 messages

Shippee, Jodi <Jodi.Shippee@vermont.gov> Thu, Feb 1, 2024 at 3:59 PM
To: Kate Fournier <kate@srwnh.com>, "Bennett, Alyssa" <Alyssa.Bennett@vermont.gov>
Cc: Todd - SRW <todd@srwnh.com>

Nothing I know of. But, just for the record, in case it comes up, we do have a record for a plant there that may or may not have come up in previous reviews. It was recorded as Carex umbellata, a rare species, at least at that time and possibly still. The taxonomy has since changed, and we no longer recognize that definition of Carex umbellata. We now recognize, as being in Vermont:

Carex umbellata Schkuhr ex Willdenow.-SU (apparently rare, but more info needed to rank) species of clayplains.

Carex tonsa (Fernald) Bicknell var. rugosperma (MacKenzie) Crins-S4S5 (not rare). Sandplain species.

It is thought, based on the sandplain habitat, that the plant documented there was what would now be called Carex tonsa var. rugosperma, which again is not rare.

This is nothing you need to act on, or even include in your documentation. I just wanted to note it in case it comes up; these things can linger a while and it can get confusing.

Thanks, as always,

Jodi

VERMONT

Jodi Shippee (pronouns: she/her or they/them Why?) | Assistant Natural Heritage Data Manager

Vermont Department of Fish & Wildlife | Vermont Natural Heritage Inventory

1 National Life Dr, Davis 2 | Montpelier, VT 05620-3208

802.272.2855

Jodi.Shippee@vermont.gov

The Agency of Natural Resources supports telework. I work from home where I can readily be reached by email or phone. Internet meetings can be arranged.

From: Kate Fournier <kate@srwnh.com>
Sent: Thursday, February 1, 2024 1:06 PM
To: Shippee, Jodi <Jodi.Shippee@vermont.gov>; Bennett, Alyssa <Alyssa.Bennett@vermont.gov>
Cc: Todd - SRW <todd@srwnh.com>
Subject: 100 Cambrian Way, Burlington

Hi Jodi and Alyssa,

We have a fast-tracked project located at the above address that has already been cleared, as it is part of a larger master development. The project activities include new construction of affordable housing, sidewalks, landscaping, parking, and connections. Here is a screenshot of current conditions.

Do you have any concerns for species?

Best,
Kate

--

Kate Fournier, Senior Project Manager

SRW Environmental Consulting, LLC

65 Collamer Court

Shelburne, VT 05482

www.srwnh.com

Kate Fournier <kate@srwnh.com> Thu, Feb 1, 2024 at 4:01 PM
To: "Shippee, Jodi" <jodi.shippee@vermont.gov>
Cc: "Bennett, Alyssa" <Alyssa.Bennett@vermont.gov>, Todd - SRW <todd@srwnh.com>

Thanks, Jodi!

Kate Fournier, Senior Project Manager
SRW Environmental Consulting, LLC
65 Collamer Court
Shelburne, VT 05482
www.srwnh.com
[Quoted text hidden]

Bennett, Alyssa <Alyssa.Bennett@vermont.gov> Fri, Feb 2, 2024 at 8:25 AM
To: Kate Fournier <kate@srwnh.com>, "Shippee, Jodi" <Jodi.Shippee@vermont.gov>
Cc: Todd - SRW <todd@srwnh.com>

Hi Kate,

That doesn't look or sound like good bat roosting habitat or even great foraging habitat due to lack of cover nearby. So I do not see any concerns for bats. If this is for Act 250 please let me know so I can make sure our coordinators get my comments.

Alyssa

VERMONT

Alyssa Bennett, MS (she/her) | Small Mammals Biologist

Vermont Agency of Natural Resources | Department of Fish and Wildlife

111 West Street | Essex Jct, VT 05452

802-353-4818 | alyssa.bennett@vermont.gov

Connect with us on our website at https://vtfishandwildlife.com/

The Agency of Natural Resources supports telework, and there are times when I may be working from another office location. I am available to connect by phone and email. I am also available to connect in-person upon request.

From: Kate Fournier <kate@srwnh.com>
Sent: Thursday, February 1, 2024 4:02 PM
To: Shippee, Jodi <Jodi.Shippee@vermont.gov>
Cc: Bennett, Alyssa <Alyssa.Bennett@vermont.gov>; Todd - SRW <todd@srwnh.com>
Subject: Re: 100 Cambrian Way, Burlington

Thanks, Jodi!

Kate Fournier, Senior Project Manager

SRW Environmental Consulting, LLC

65 Collamer Court

Shelburne, VT 05482

www.srwnh.com

[Quoted text hidden]

Kate Fournier <kate@srwnh.com> Fri, Feb 2, 2024 at 8:57 AM
To: "Bennett, Alyssa" <Alyssa.Bennett@vermont.gov>
Cc: "Shippee, Jodi" <Jodi.Shippee@vermont.gov>, Todd - SRW <todd@srwnh.com>

Thanks, Alyssa. It's my understanding that it's already been evaluated for Act 250. For my purposes, it's for the HUD ER.

Thanks!
[Quoted text hidden]

Explosive and Flammable Hazards


EXPLOSIVE AND FLAMMABLE ABOVEGROUND STORAGE TANKS
Leddy Park
North Ave
Burlington High School
127
Lakeview Cemetery
North Beach Park
Winooski River
SUBJECT PROPERTY
OLD NORTH END
Champlain St
Park St
North Ave
N Willard St
Pearl St
Waterfront Park
Hilton Burlington Lake Champlain
ECHO, Leahy Center for Lake Champlain
Burlington Bay
Lang House
Burlington
St Paul St
SRW
Environmental Consulting, LLC

Farmlands Protection

SRW
Environmental Consulting, LLC

Urban Areas

February 1, 2024

Counties 2020 Urban Areas Counties

States 2020 Urban Areas States

1:2,257

0 0.02 0.04 0.08 mi

0 0.03 0.06 0.12 km

Source: U.S. Census Bureau, VCGI, Maxar, Microsoft

Created with: TIGERweb

Historic Preservation

Vermont Community Development Program &
Vermont Housing and Community Development Board
Section 106 Preliminary Review Form

Community Development Block Grant (CDBG), HOME Investment Partnerships Program (HOME), and National Housing Trust Fund (HTF) funding comes from the Federal Department of Housing and Urban Development (HUD). Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires that federal agencies such as HUD take into account the effect of their projects on any historic property, including historic buildings and archaeological sites. To start the review process, please complete this form and submit it, with the information requested below, to the Division for Historic Preservation at ACCD.projectreview@vermont.gov.

For questions on architectural resources or archaeology and below-ground resources, please contact the Division for Historic Preservation at 802-461-6191 or ACCD.projectreview@vermont.gov. For general questions on Environmental Review, please contact Grace Vinson at (802) 622-4236 or grace.vinson@vermont.gov.

1. Applicant Contact information:
    a. Name: Kate Fournier
    b. Organization: SRW Environmental Consulting
    c. Email address: kate@srwnh.com
    d. Phone number: 802-363-8515

2. Program (check all that apply):
    ☐ Community Development Block Grant
        VCDP Environmental (ENV) Review Number:
    ☒ HOME Investment Partnerships Program
    ☒ National Housing Trust Fund**

3. Building / Site information:
    a. Building name/ property owner: Lot 8, Building H
    b. Physical address: 100 Cambrian Way, Burlington, VT (1.22 acres)
    c. GIS Coordinates (when available):
    d. Date(s) of original construction and any major alterations of buildings involved:
        ☒ N/A Dates:
    e. ☐ Project sites are currently unknown (please explain):

4. Please provide a short summary description of the project (must include statement of project scope here for review; attachment of summary is not sufficient):
    The proposed project includes the new construction of Lot 8 Building H of a Master Development known as the Cambrian Rise Project at the former Burlington College. The building will provide affordable housing and the project includes utility connections, landscaping, and parking. Additional funding will include HOME-ARP. An archaeological study was previously completed. Previous historic reviews for another part of the Master Devleopment, the Laurentide, received a No Adverse Effect by the DHP.

5. Project information:

a. Project involves ground disturbance: Yes ☒ No ☐
b. Building is more than fifty (50) years old: Yes ☐ No ☒
c. Building is listed in the National Register of Historic Places: Yes ☐ No ☒ Unknown ☐
d. Property is located in a Historic District: Yes ☐ No ☐ Unknown ☒
e. Property is located in a Designated Downtown or Village Center: Yes ☐ No ☐ Unknown ☒
f. This project is a scattered sites/revolving loan fund: Yes ☐ No ☒
g. Will the project utilize Rehabilitation Investment Tax Credits (RITC): Yes ☐ No ☒ Uncertain ☐

h. This project qualifies as Affordable Housing under the ACHP Policy Statement on Affordable Housing & Historic Preservation: Yes ☒ No ☐ Unknown ☐
   i. If you answered yes to 5(h), is the Project limited to exemptions in the ACHP Policy Statement on Affordable Housing & Historic Preservation: Yes ☐ No ☒ Unknown ☐
   ii. Which exemptions apply:

i. Project requires Act 250 or Section 248 review: Yes ☒ No ☐ Unknown ☐

j. Does the Project consist solely of exempt activities listed in Appendix A of the PA**: Yes ☐ No ☒

6. Please submit
   a. photographs of the front façade and side view of the property and areas that will be altered
   b. project location map (can be annotated google map or similar)
   c. site map that shows the proposed ground disturbance if there is any involved with the project.

Please email this form and supporting materials to
ACCD.ProjectReview@vermont.gov**

Exempt Activities:
If you answered "No" to question 5(a), (b), (c), ***and*** (d), **OR** you answered "Yes" to question 5(h) or 5(j), your property and/or activities are exempt from Section 106 Review. The VCDP Environmental Officer will review your intake form and the documents submitted to confirm that no further action is required on your part as indicated below.

**** Please send forms seeking *Exempt Activities* or *only National Housing Trust Funds* directly to grace.vinson@vermont.gov**

FOR INTERNAL USE ONLY:

☐ EXEMPT ACTIVITIES - Concurrence with Exempt Properties or Activities
- ☐ Exempt Properties
  - ☐ building is less than 50 years old
  - ☐ building is not listed in NRHP or within a historic district
  - ☐ project does not involve ground disturbance
- ☐ Exempt Activities

Comments:

☒ No Historic Properties Affected

☐ No Historic Resource Present

☒ No Effect on Historic Resource

Comments:

☐ No Adverse Effect

Comments:

☐ Historic Properties Affected

☐ Potential for Historic Architectural Properties to be affected – A Qualified Architectural Historian* will be required (*[*please see* VCDP pre-approved list of consultants])

☐ Determination of Eligibility required

Comments:

☐ Potential for Archeological Historic Properties to be affected – a Qualified Archeological Consultant* will be required (*[*please see* VCDP pre-approved list of consultants])

☐ Archeological Resource Assessment (ARA) required

☐ Phase 1 archeological investigation required

Comments:

DocuSigned by:

X Scott Dillon B920F8A4E1B1464... 2/6/2024

For: Vermont Division for Historic Preservation Revised – 04/04/2022

Cambrian Rise

PROPOSED
SITE PLAN

NORTH

1″=80′

0 80 160 240

Note: The official name of the public street is Cambrian Way as shown in this drawing. On all other drawings, exhibits, and narratives, the street is split into three sections and referred to as or labeled: "North Road", "West Road, and "South Road". These labels are used solely for the purposes of being able to distinguish between the different sections of road during design, permitting, and construction.

T.J. BOYLE ASSOCIATES
LANDSCAPE ARCHITECTURE & PLANNING

Cambrian Rise

CITY OF BURLINGTON

ADA PATH TO WATERFRONT

NEW PUBLIC PARK
12 ACRES

REC PATH

TRAIL

CITY OF BURLINGTON

CENTRAL GREEN

LAKE VIEW CEMETERY

CAMBRIAN WAY

CAMBRIAN WAY

CAMBRIAN WAY

STONE HOUSE & COMMUNITY GARDEN

GARAGE

STONE HOUSE

NORTH

0 50 100 150

1″=50′

T.J. BOYLE ASSOCIATES
LANDSCAPE ARCHITECTURE & PLANNING

USGS - 2013

Cambrian Rise Lot 8
100 Cambrian Way
Burlington, VT 05401

December 13, 2023
Map produced by: w.shellito
U:\PROJECTS - WHEM\Cambrian Rise\CHT Work\CHT Cambrian Rise Lot 8\Lot 8 Cambrian Rise.mxd

Subject Area

Site Coordinates:

VT State Plane Meters:

Northing: 221366
Easting: 441987

WAITE HEINDEL
Environmental Management

References:

United States Geological Survey xxxx Vermont Quadrangle. Computer file, USGS. Distributed 2014 through Vermont Center for Geographic Information,
Town boundary, best sources. Computer file, bndhash, Vermont Center for Geographic Information, Waterbury, VT. Distributed through Vermont Center for Geographic Information, Inc. 2007.

Orthophoto - 2022

Cambrian Rise Lot 8
100 Cambrian Way
Burlington, VT 05401

December 13, 2023
Map produced by: w.shellito
U:\PROJECTS - WHEM\Cambrian Rise\CHT Work\CHT Cambrian Rise Lot 8\Lot 8 Cambrian Rise.mxd

Subject Area

Site Coordinates:

VT State Plane Meters:

Northing: 221366
Easting: 441987

WAITE HEINDEL
Environmental Management

References:

State of Vermont Orthophotography. Computer file, Distributed through VT Center for Geographic Information, Waterbury, VT.
Town boundary, best sources. Computer file, bndhash, Vermont Center for Geographic Information, Waterbury, VT. Distributed through Vermont Center for Geographic Information, Inc. 2007.

Photo 1: Gravel Lot 8.

Photo 2: New apartment building south of Lot 8.

Photo 3: Lot 8 from South end.

Photo 4: New apartment building east of Lot 8.

Photo 5: Lot 8 from southeast corner.

Photo 6: Temporary construction offices.

U:\PROJECTS - WHEM\Cambrian Rise\Lot 8 Ph 1\Photos\Cambrian Rise Lot 8 Site Inspection Photo Log.docx

The University of Vermont

June 27, 2016

Owiso Makuku
Farrell Real Estate
875 Roosevelt Highway
Colchester, VT 05446

RE: End-of-field letter for the Phase I Site Identification for the Proposed Burlington College 329-351-375 North Avenue Development Project, Burlington, Chittenden County, Vermont

Dear Owiso,

Attached, please find an End-of-field letter for the Phase I Site Identification Survey for the Proposed Burlington College 329-351-375 North Avenue Development Project, Burlington, Chittenden County, Vermont.

A total of 181, 50 x 50 cm test pits were excavated within the limits of the archaeologically sensitive portions of the proposed project parcel. No precontact Native American sites or Euroamerican sites were identified. As a result, no additional archaeological work is recommended.

Thank you for your interest in working with us on this project. Please feel free to contact me if you have any questions.

Sincerely,

Charles Knight, Ph.D.
Assistant Director

CONSULTING ARCHAEOLOGY PROGRAM
111 Delehanty Hall, 180 Colchester Avenue, Burlington, VT 05405
(802) 656-4310 • fax: (802) 656-8033

END OF FIELD LETTER REPORT FOR ARCHAEOLOGICAL PHASE I SITE IDENTIFICATION SURVEY FOR THE PROPOSED BURLINGTON COLLEGE 329-351-375 NORTH AVENUE DEVELOPMENT PROJECT, BURLINGTON, CHITTENDEN COUNTY, VERMONT

University of Vermont
Consulting Archaeology Program
180 Colchester Avenue
111 Delehanty Hall
Burlington, VT 05405

Report No. 990

June, 2016

END OF FIELD LETTER REPORT FOR ARCHAEOLOGICAL PHASE I SITE IDENTIFICATION SURVEY FOR THE PROPOSED BURLINGTON COLLEGE 329-351-375 NORTH AVENUE DEVELOPMENT PROJECT, BURLINGTON, CHITTENDEN COUNTY, VERMONT

Prepared by:

Geoffrey A. Mandel
Kate M. Kenny
&
Charles Knight, Ph.D.

Prepared for:

Owiso Makuku
Farrell Real Estate
875 Roosevelt Highway
Colchester, VT 05446

University of Vermont
Consulting Archaeology Program
180 Colchester Avenue
111 Delehanty Hall
Burlington, VT 05405

Report No. 990

June, 2016

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INTRODUCTION

Farrell Real Estate proposes the Burlington College Development at 329-351-375 North Avenue, Burlington, Chittenden County, Vermont (Figure 1). The proposed project will develop sections of the parcel that once contained the Lakeview Sanitarium and all its associated buildings, such as the Redstone cottage, a farm and associated stables, and various cottage annexes. The sanitarium complex was located in the south third of the proposed project parcel. To the north, but within the same project parcel, was housed the Catholic Diocese and orphanage and more recently, Burlington College.

Scott Dillon, field archaeologist for the Vermont Division for Historic Preservation (VDHP) visited the project area and identified many areas of archaeological sensitivity for pre-Contact Native American sites, as well as historic period Euroamerican sites. He recommended a Phase I site identification survey as part of the ACT 250 permitting process. Specifically, he recommended 180 standard archaeological test pits be excavated within the sensitive portions of the property (Figure 2). These include a large block to the south which encompasses the sanitarium and its associated farm, and undeveloped area to the north and northwest of the existing Diocese/orphanage buildings. A rectilinear feature identified in an early 1937 orthographic photo represents the smallest red block and this will be investigated, as well as light testing east of this block in areas of known historic disturbances in order to evaluate the degree of this disturbance.

ENVIRONMENTAL CONTEXT

The proposed project parcel is located on a prominent ridge located between the Winooski River and its intervale to the east and Lake Champlain to the west. The surficial geology is derived from glaciofluvial deposits of sand that formed as part of the Winooski River delta complex in the early Holocene period. The soils found across the project area are classified by the USDA SCS (2016) as Adams and Windsor Loamy sands, 0-30% slope. These soils are excessively drained and subject to moderate erosion if left unvegetated. Once used as farmland, the project area is currently partially wooded, covered in lawn or is fallow field covered with grasses. The project parcel ranges in elevation from 63-70 m (207-230 ft), with the highest point being in the northeast corner along North Avenue.

PROJECT AREA PRE-CONTACT ERA NATIVE AMERICAN CONTEXT

Numerous archaeological sites are known within the Winooski River Intervale. These sites range in size and function form small short-term encampments to large semi-permanent sites where a variety of activities occurred over millennia. Several sites are known along the ridge separating the Intervale from Lake Champlain, although none have received extensive archaeological study. One site, VT-CH-264, is poorly documented in the Vermont Archaeological Inventory (VAI) but it is reported in close proximity to North Beach, located just to the northwest of the project parcel. For obvious environmental and topographic reasons, the proposed project parcel is ideally located and sensitive for containing pre-Contact era Native American archaeological sites.

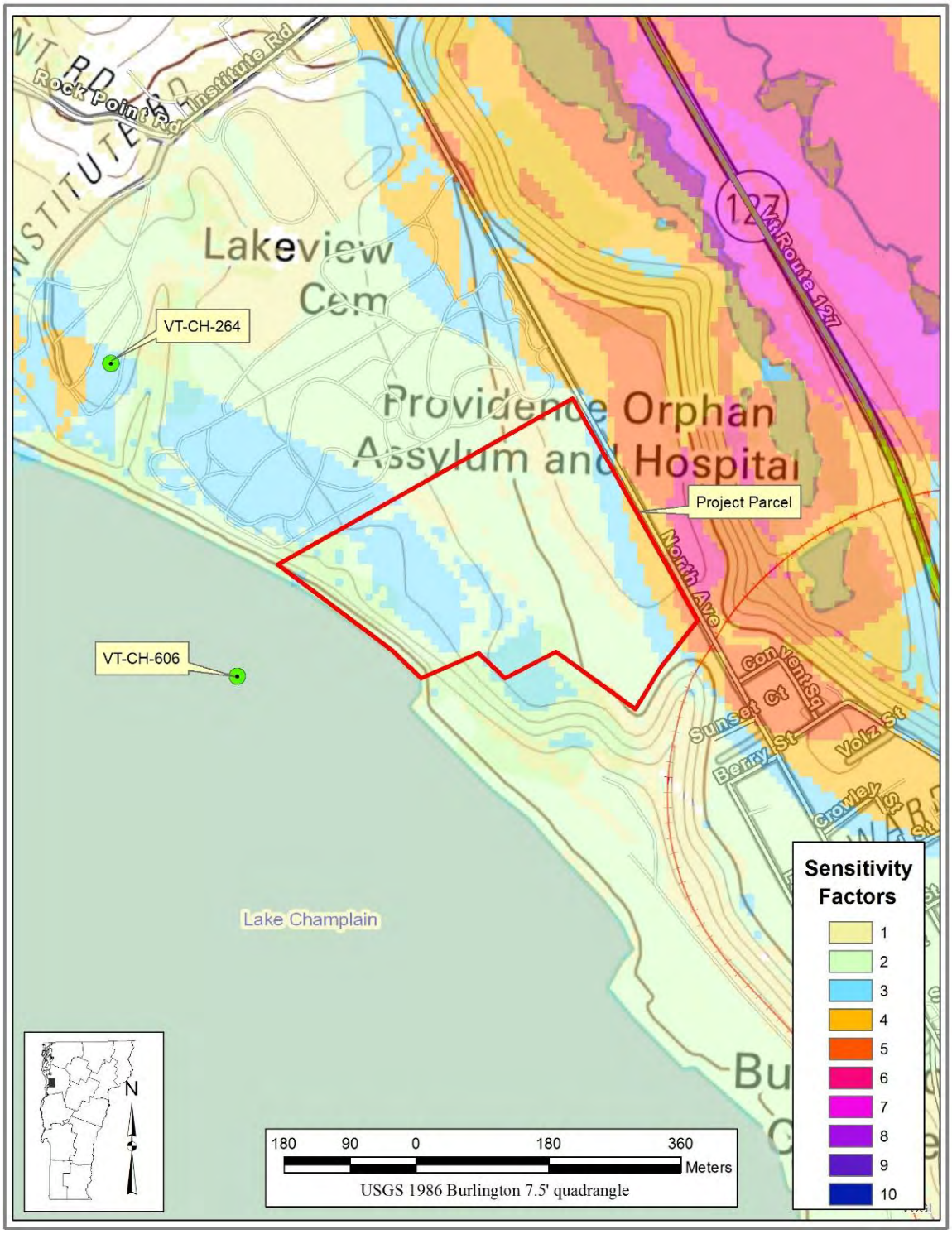

Figure 1. Map showing the location of the proposed Burlington College Development 329-351-375 North Avenue project, in relation to archaeological sensitivity factors, Burlington, Chittenden County, Vermont.

Figure 2. Map showing the archaeologically sensitive areas within the proposed Burlington College Development 329-351-375 North Avenue project, Burlington, Chittenden County, Vermont.

PROJECT AREA HISTORIC CONTEXT

Although the proposed project area appears to have been part of, what was termed "Lot 14", there is yet no evidence of development/occupation of the property prior to ca. 1846.

Henry B. Stacy's Farm

In the mid-1800s this property belonged to Henry Baldwin Stacy (1804-1869), one of twelve children of John (1760-1846) and Mary (Baldwin) Stacy of Orange, Vermont (*Bennington Banner* July 29, 1869; State of Vermont, Vermont Vital Records 1720-1908). "At the age of 16" Henry Stacy "went to Bennington to learn the printer's trade in the office of the *Vermont Gazette*. He subsequently worked at his trade in Middlebury and Montreal" (*Bennington Banner* July 29, 1869). He moved to Burlington in 1827 and took a job with Luman Foote, who had just established the *Burlington Free Press* (*Bennington Banner* July 29, 1869). "In January 1833, Mr. Stacy bought out Mr. Foote and became sole editor and proprietor of the paper" (*Bennington Banner* July 29, 1869). "He conducted the paper till 1846," when he sold the *Free Press* to Gen. DeWitt Clinton Clarke of Brandon, Vermont (*Bennington Banner* July 29, 1869; *St. Albans Messenger* July 15, 1846). "Having purchased some land, north of Burlington, on the Lake Shore, he afterwards turned his attention to agricultural pursuits" (Figure 3) (*Bennington Banner* July 29, 1869). H.B. Stacy also once owned the old fairgrounds (Presdee and Edwards 1853). He was also a representative and selectman for Burlington.

Henry Stacy ran into financial difficulties in the 1850s. "Long litigation and some unfortunate investments involved the loss of property, and in 1861 he accepted an appointment as U.S. Consul at Revel," Russia (*Bennington Banner* July 29, 1869). "He remained abroad till November 1868, when he returned on leave of absence to visit his family and his home" (*Bennington Banner* July 29, 1869). In May 1869, he again left for Russia to close out his duties there "intending to return home again in August and to spend his days here in his old homestead north of the city, which he repurchased just before his last departure" (Figure 4) (*Bennington Banner* July 29, 1869). Henry Stacy died suddenly of 'inflammation of lungs' in Revel on June 18, 1869, aged 65, leaving a wife and four grown children (*Bennington Banner* July 29, 1869; Vermont Secretary of State, Vermont Vital Records 1720-1908). In his estate inventory, this property was listed as a "lot on North Avenue" valued at $2000—he also owned a house on the corner of Champlain Street and North Bend valued at $450 and a few other small lots on Battery and Lake Streets (Chittenden County Probate Court Records 1869). His property passed jointly to his widow, Maria (Corning) Stacy, and his children: Helen Stacy (d. 1894); Jennie Stacy (d. 1911); Amanda Stacy (d. 1910); and William C. Stacy (1836-1919) (Figure 5) (Chittenden County Probate Court Records 1869).

St. Joseph's Providence Orphan Asylum and Hospital

In October of 1872, Henry Stacy's heirs sold/donated an initial 14 acres to the Roman Catholic Church (Figure 6) (Allen 1905:12; Hopkins 1890). This appears to have been augmented with a later purchase that extended all the way down to the lake. The Church operated an orphanage / old age home here from 1883 to 1982(?) (Blow 1991:13). The St. Joseph's Providence Orphan Asylum and Hospital was operated by the Sisters of Providence

from Montreal (Blow 1991:13). This site was actually the second home of this institution. The 'Asylum' had been founded by Bishop DeGoesbriand on May 3, 1854, at which time the institution occupied a former tavern located at the southwest corner of Pearl and South Prospect Streets formerly known as the 'Pearl Street House' (Allen 1905:12).

The large brick building located in the northern part of the project area was designed by the Rev. Cyril Beaudry of Joliette, Quebec, and built under the direction of the Rev. Michaud of Winooski, Vermont (*Argus and Patriot* March 5, 1884; Blow 1991:13). The foundation were laid in the spring and summer of 1879, but there was a "delay of two years" before the construction resumed (*Argus and Patriot* March 5, 1884). The cornerstone was placed in May of 1882. The contract for the stone work was given to G.N. Willard, that of the brickwork to Cummings & Son of Rutland, and that for the framing and interior work to James Ross (*Argus and Patriot* March 5, 1884). The building was completed in 1883 and officially opened on December 10, 1883 (Allen 1905:12).

Several outbuildings including a barn (possibly left over from Stacy's days), carriage house, ice house, hen house, work shop & etc. were located west of the main structure (Sanborn Mapping and Publishing Company 1889, 1894, 1900, 1906, 1912, 1919. 1926, 1938, 1926/1942, 1942/1950, 1942/1960). The large southern addition, containing a school and auditorium & etc., was built in 1940 (Blow 1991:14). As the number of children in residence declined, the building was converted into administrative offices for the diocese beginning ca. 1978(?) (Blow 1991:13-14).

Lake View Retreat

The southern section of the current project area encompasses a property formerly known as the Lake View Retreat. This area may have been part of the Henry Stacy Farm in the 1840s and 1850s, but was sold off to Sion E. Howard before Stacy managed to repurchase his farm. Sion E. Howard (1800-1866), a prominent local hotel keeper/businessman, began construction of a "substantial brick" mansion on the property ca. 1865, but died before the structure was completed (*Burlington Free Press* September 24, 1858; Rann 1886:255).

This property appears to have been owned/occupied by G. C. Appleton ca. 1869 (see Figure 6) (Beers 1869). This was probably George Cleaves Appleton (1836-1895), a railroad agent/conductor, who also may helped with the construction of the nearby railroad tunnel. (Gravestone, Lake View Cemetery, Burlington, Vermont; U.S. Census 1870).

In about 1882, the property was acquired by Dr. John M. Clarke (1846-1931), who converted the house into a 'private institution for the treatment and care of mental and nervous diseases' being mostly 'mild cases' (e.g. exhaustion, over-work, insomnia & etc.) (*Argus and Patriot* October 7, 1885; Gravestone, Lakeview Cemetery, Burlington, Vermont; Rann 1886:255; Vermont Secretary of State, Vermont Death Records 1909-2008). This private hospital was opened "for the reception of patients October 1, 1882" (Rann 1886:256). In the summer of 1898, "Dr. Clark built an addition 40 x 40 feet, three stories high of solid brick walls. The inside is finished in hard wood and will be fitted with new dining-rooms, bath rooms, steam heat and electric lights" (Figure 7) (Supervisors of the Insane of the State of Vermont 1898:7). A

description of the institution from 1886 noted that the 10-15 acre property was "made up of lawns, groves, gardens and orchards, and are traversed by pleasant driveways and walks" (Rann 1886:255). The same source noted that "the main building" was "situated upon the highest portion of the grounds, . . . set back from the street, and has in the foreground a large, handsome lawn, dotted with ornamental shade trees and clumps of flowing shrubs" (Rann 1886:255) (Figure 8). The building remained a private sanitarium for many years. However, it appears that the property was sold in the early 1940s to the Catholic Church. In 1945, Bishop Ryan founded the Don Bosco (boarding) High School for (delinquent?) Boys at this location (Sanborn Mapping and Publishing Company 1942/1950). It is likely that this old house was torn down/lost before the 1990s.

Figure 3. Location of the proposed project area within a detail of H.F. Walling's *Map of Chittenden County, Vermont* (1857).

Figure 4. Detail of the "Plan of City of Burlington and Town of South Burlington" in F.W. Beers' *Atlas of Chittenden County, Vermont* (1869). Lake View Cemetery land bought by city in 1867 probably from John A. Arthur (Blow 1991:14-15). Note: the Central Vermont Railroad built the tunnel under North Avenue in 1862.

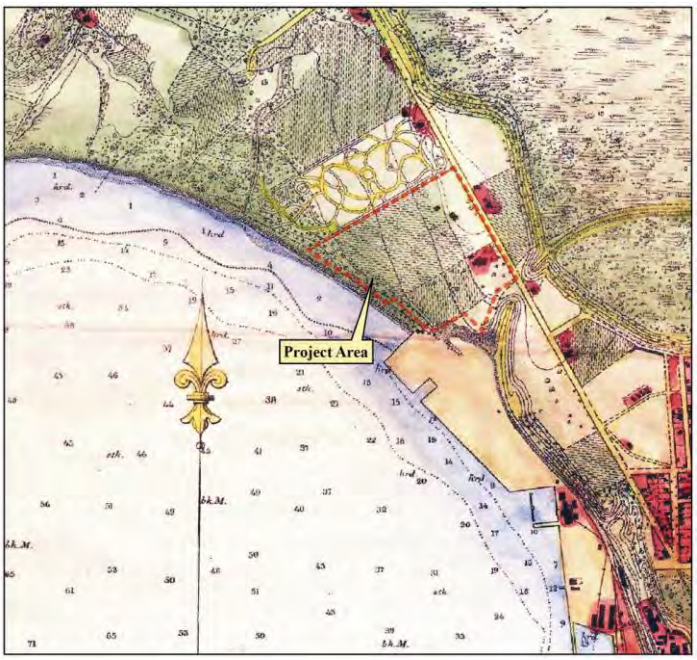

Figure 5. Detail of H.G. Ogden and F.D. Granger's *U.S. Coast Guard Survey, Burlington, Vermont* (1872).

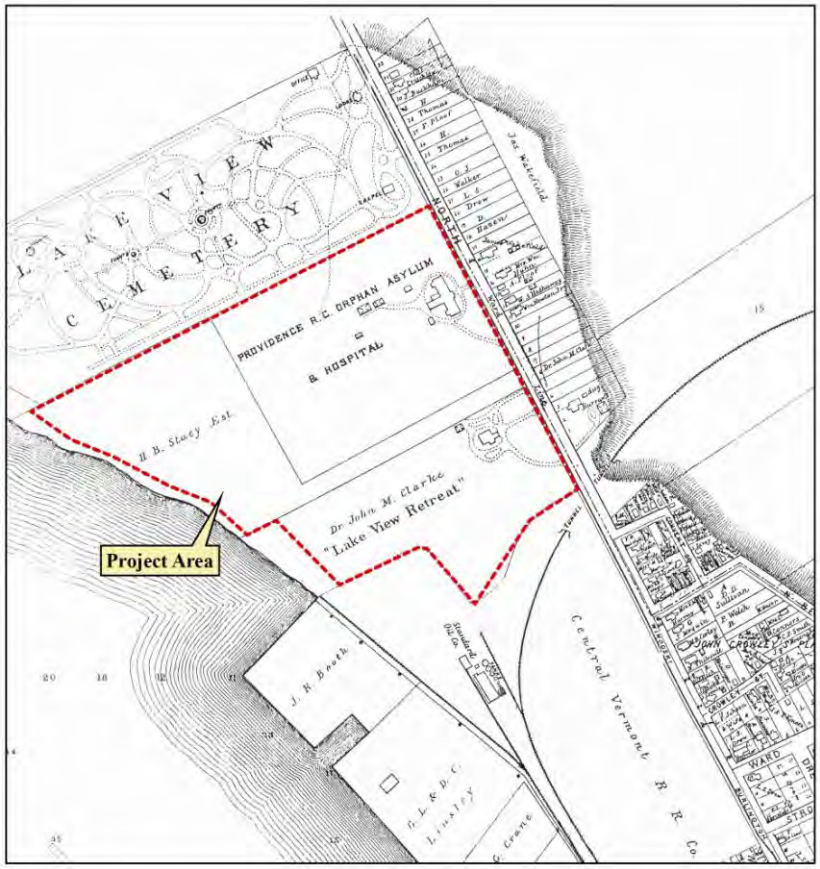

Figure 6. Detail of G.M. Hopkins' *Map of the City of Burlington, Vermont* (1890).

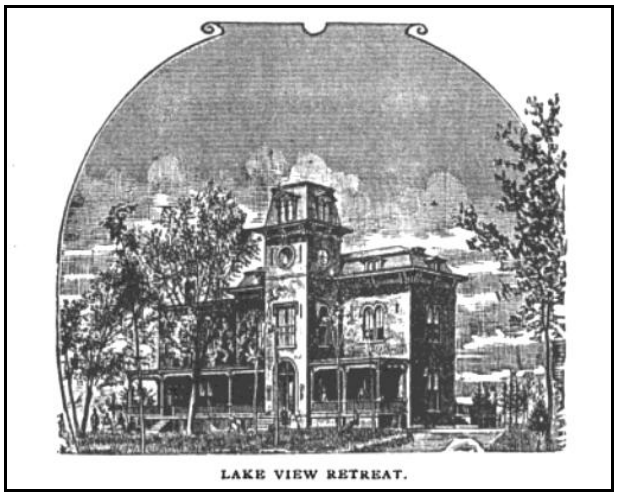

Figure 7. View of the Sion E. Howard House/Lake View Retreat (Burlington Board of Trade 1889).

Figure 8. Detail of a 1937 aerial photograph showing the project area (Aerial Explorations Inc., 1937).

Figure 9. Areas of possible historic disturbance (Base map: Google Maps 2004; image data: Aerial Explorations Inc. 1937; Geotechnics & Resources Inc., 1962; Hopkins 1890; Ogden and Granger 1872; and Stanley 1933; with additional information on building use/purpose from Sanborn Mapping and Publishing Company 1889, 1894, 1900, 1906, 1912, 1919. 1926, 1938, 1926/1942, 1942/1950, and 1942/1960).

FIELD METHODS

Given the large scale of the proposed project's Area of Potential Effects, the Phase I site identification survey excavated standard-sized 50 x 50 cm (20 x 20 in) test pits along linear transects within each of the defined archaeologically sensitive areas. The number of test pits and transects and their alignment was determined by the VHDP, but their placement was determined by the size of each archaeologically sensitive area, local topography, visible ground disturbance

and local soil conditions. The transects were emplaced using a metric tape and Brunton compass. In addition, a handheld Global Positioning System (GPS) would also be used to record the locations of the transects to allow for accurate plotting on appropriate maps. Each test pit was be excavated in arbitrary 10 cm (4 in) vertical levels with respect to the local soil stratigraphy. A schematic stratigraphic soil profile was recorded for each test pit and representative samples appear in Appendix 1 of this report. All soils were screened through 0.64 cm (1/4 in) mesh screens. The Phase I survey was recorded in digital camera format.

PHASE I RESULTS

The Phase I study included the excavation of a total of 181 test pits aligned along 33 linear transects (Figure 10). Transects 1-6, 17-29 were located in the large wooded area in the southern portion of the APE. Transects 7-13 were located in the northwestern sensitive area and Transect 14-16 in the central sensitive area. Transects 30-33 were emplaced in the northeastern sensitive area.

Transects 1 and 2 were located in the eastern strip of lawn along the eastern side of the southern parking lot (see Figure 10). The ground surface in this area was visibly higher in elevation than the parking lot to the west and sidewalk located to the east, suggesting that some degree of filling has occurred in this area. Only four test pits, Transect 1, Test Pits 5-8, were excavated in this area as indeed, thick, compact fill was encountered in this area to an average depth of 50 cm (20 in) below the ground surface. Intact "B" subsoil was identified in three of the test pits beneath the fill. In two of the excavated test pits, evidence for the original ground surface, and/or plowzone stratum had been entirely removed, but it was present in the other two test pits along this transect. Because of this variability in soil stratigraphy, this area was considered to not be archaeologically sensitive and no further testing was undertaken in this area.

Transects 3-5 were located across a section of broad lawn south of the southern parking lot and north of the former Burlington College Residence Hall (see Figure 10). These transects were oriented parallel to a prominent terrace edge that formed the lawn's western side. The transects were spaced 10 m (33 ft) apart with the test pits spaced at 10 m (33 ft) intervals. Test pits in adjacent transects were offset by 5 m (16 ft). Transect 3 was located closest to the terrace edge and contained three test pits. The soils encountered in these test pits included an uppermost plowzone(s) stratum which was underlain by intact subsoil. Except for historic era plowing, this portion of the APE does not appear to have been otherwise disturbed. The test pits along Transect 3 were excavated to depths from 40-50 cm (14-20 in).

Transect 4 contained a total of eight test pits and the soil stratigraphy encountered along this transect was highly variable with multiple fill layers encountered in Test Pits 1-5, and no fill in Test Pits 6-8. Transect 4, Test Pit 1 was located along the southern limits of the APE and along the margins of a terrace edge that now appears to have been artificially formed by depositing fill to expand the terrace in this direction. In Test Pits 1 and 2, a buried plowzone

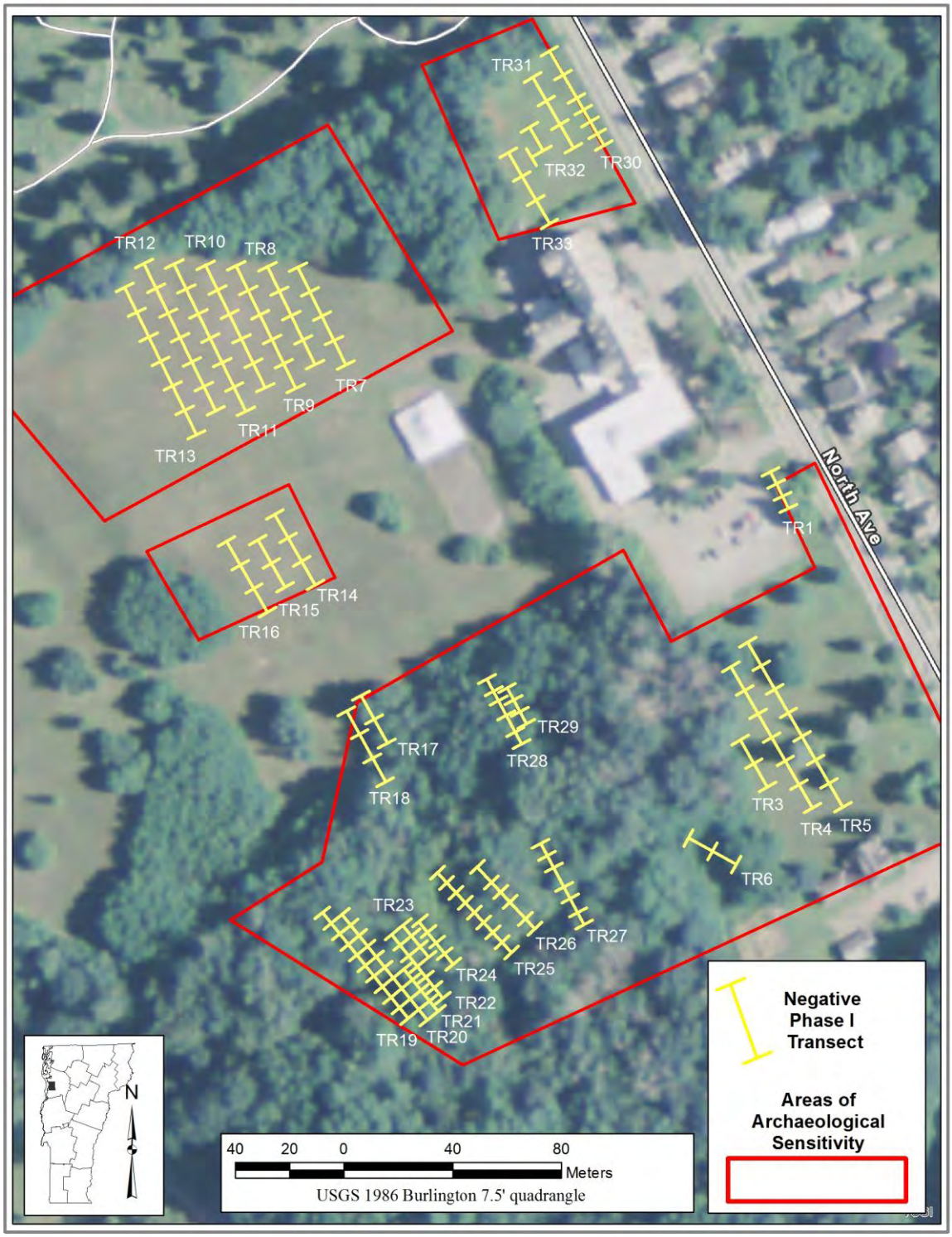

Figure 10. Location of all Phase I transects and test pits for the proposed Burlington College 329-351-375 North avenue Development Project, Burlington, Chittenden County, Vermont.

stratum was encountered beneath the fill, at depths from 62 and 30 cm (24 and 12 in), respectively, below the ground surface. Intact subsoil was encountered beneath the buried plowzone. In Test Pits 3-5, compact fill of cinder, asphalt, brick and rock was encountered to varying depths. It appears that either the Lake View Retreat or one of its associated paths/parking lots was once located in this area (see Figure 9). Test Pits 6-8 included only an uppermost plowzone stratum and underlying intact subsoil similar to that identified along Transect 3 to the west.

Transect 5 contained a total of 7 test pits (see Figure 10). In all test pits, fill was incorporated into the plowzone(s). The fill, at an average depth of 30 cm (12 in) became impenetrable in Test Pits 4-7 as asphalt was present. In Test Pits 1-3, intact subsoil was encountered beneath the fill. In this area, the fill was laden with fragments of brick, mortar and cinder. The fill identified in in this portion of the APE is likely related to the Lake View Retreat (see Figure 9).

Transect 6 was located on the lower terrace beneath Transect 3 (see Figure 10). Transect 6 contained three test pits spaced at 10 m (33 ft) intervals. At the time of the Phase I survey, the area was vegetated with sumac, suggesting some type of disturbance had recently occurred there. Test Pits 1 and 2 were not disturbed beyond historic era plowing. In these test pits, the plowzone extended to a depth of 25 cm (10 in) where intact subsoil was encountered. In Test Pit 3, loose fill was excavated to a depth of 45 cm (18 in) below the ground surface. The fill contained brick fragments, coal, cinder and nails. Hand soil coring indicated that this fill continued for at least another 20 cm (8 in). Based on the fill, we concluded that various dumping activities had disturbed the area in the past.

Transects 7-13 were located in the northwestern sensitive area, between Lakeview Cemetery and the previous farm access road (see Figure 10). The eastern limits of the area were defined by a temporary chain link fence erected during renovations to the former Burlington College Building. The transects were oriented south-north across the gentle west sloping field, with Test Pit 1 of each transect located adjacent to the former farm access road. Transects 7-13 were spaced 10 m (33 ft) with the test pits spaced at 10 m (33 ft) intervals. The test pits in adjacent transects were offset by 5 m (16 ft). Transect 7 was located along the eastern limits of the area and contained a total of five test pits. This transect was located across the western half of a slightly elevated terrace. The soils encountered along Transect 7 included an historic era plowzone containing a variety of historic era structural debris such as mortar, bricks, rock and nails, and in several test pits, intact subsoil beneath the plowzone/fill stratum. The debris may be related to the former carriage and ice houses (see Figure 9).

Transect 8 was located to the west of Transect 7 and it traversed the gradual face of the terrace. Like Transect 7, the test pits along Transect 8 included a plowzone containing structural debris. In many test pits, impenetrable rock was found at the base of the plowzone/fill stratum. The debris is likely associated with the former barn (see Figure 9). The debris decreased to the

north and in Test Pits 4 and 5, was no longer present. In these test pits, a plowzone underlain by intact subsoil was identified.

Transects 9 and 10 were located to the west of Transect 8 (see Figure 10). Based on the soils encountered in this portion of the sensitive area, it appears that localized grading had occurred as the remnant plowzone varied from 9-22 cm (3.5-8.6 in) in thickness, with the shallower depths found closer to the former farm access road. Transects 11-13 were located to the west of Transect 10. In this area, the grading appears to have abated as the plowzone averaged from 17-26 cm (6.6-10.2 in) in thickness. In all test pits excavated along Transects 9-13, intact subsoil was encountered beneath the plowzone stratum.

Transects 14-16 were located in the west-central archaeologically sensitive area (see Figure 10). Transects 14 and 16 contained four test pits each, and Transect 15, three test pits. The transects were spaced 10 m (33 ft) apart and test pits excavated at 10 m (33 ft) intervals. The test pits in adjacent transects were offset by 5 m (16 ft). In all but one test pit Transect 16, Test Pit 4, the soil stratigraphy was comprised of an uppermost historic era plowzone underlain by intact subsoil. In Transect 16, Test Pit 4, two distinct plowzone strata were identified, the lowest of which contained nails and fragments of brick. The second plowzone extended to a depth of 57 cm (22 in).The location of this test pit suggests that it intersected either the work shop or hen house (see Figure 9).

Transects 17 and 18 were located along the northern side of the southern archaeologically sensitive area (see Figure 10). Both transects began in the wooded area and extended north into the grassy area and were oriented parallel to a prominent terrace edge, which may have been modified by past quarrying activities. Transect 17 contained three test pits and Transect 18, four test pits. The transects were spaced 10 m (33 ft) apart and test pits within adjacent transects were offset by 5 m (16 ft). The soils encountered along these two transects included an uppermost historic plowzone that was underlain by intact subsoil.

Transects 19-29 were located within the wooded southern archaeologically sensitive area (see Figure 10). In this area, given its sensitivity for pre-Contact era Native American sites, the test pits along each transect were spaced at 5 m (16 ft) intervals, and adjusted to accommodate trees and areas inaccessible due to tree blowdowns. For transects 19-24, the transects were spaced 5 m (16 ft) apart with test pits in adjacent transects offset by 2.5 m (8 ft). For Transects 25-27, the distance separating them was predicated upon trees and disturbed areas. Transects 28 and 29 were located in the northern portion of the area where the understory was less dense. The soil stratigraphy in all test pits included one or two successive historic plowzones that were underlain by intact subsoil. In particular, the test pits excavated along Transect 24 included two successive plowzones, which cumulatively were much thicker than those identified elsewhere within the wooded area. The reason for this unknown, but it appears that some infilling may occurred in the historic past to accommodate agriculture.

Transects 30-33 were located in the northeast archaeologically sensitive area (see Figure 10). The areas is bounded by Lakeview Cemetery to the north and the former Burlington College building to the south. The eastern limits of the area are defined by a sidewalk along North Avenue, and the western side by a terrace edge and slope that is vegetated with thick lilac bushes and locust trees. At the time of the Phase I study, portions of this area were being used for parking, trailers and limited storage related to the renovation of the building. The transects were spaced 10 m (33 ft) with test pits emplaced at 10 m (33 ft) intervals. The test pits in adjacent transects were offset by 5 m (16 ft) intervals.

Transect 30 was located closest to and parallel to the North Avenue sidewalk. Transect 30 originally contained five test pits. Two additional test pits were excavated 5 m to the north of Test Pits 1 and 2, for a total of seven along this transect. All test pits included varying levels of historic fill, beginning at the ground surface and extending to depths ranging from 35-75 cm (14-30 in). In some test pits, at the base of the fill, a buried plowzone was encountered, which was underlain by intact subsoil. In other test pits, the buried plowzone was absent and only subsoil was present. The fill included fragments of brick and cinder, as well as small quantities of nails, marbles, ceramic fragments and modern era plastic.

The soils encountered in the test pits excavated along Transect 31 were similar to those identified along Transect 30. The artifact type and quantity was also similar. In Transect 32, which originally contained two test pits with a third added later 5 m (16 ft) to the west of Test Pit 2, the fill layers were greatly compressed in Test Pit 1, had been incorporated into the upper and only plowzone of Test Pit 2, and not present in the test pit excavated 5 m (16 ft) to the west of Test Pit 1. Intact subsoil was identified beneath the fill/plowzone of each test pit. Transect 33 was located along the western terrace edge and originally contained five test pits. Two additional test pits were excavated along this transect, one each 5 m (16 ft) to the north and south of Test Pit 3 (see Figure 10). Two layers of plow incorporated fill were identified in Test Pit 1, to a depth of 49 cm (19 in) below the ground surface. Intact subsoil was found below. In Test Pits 2-4, the fill was absent. These test pits were situated on a slightly elevated portion of the terrace and their soil profiles included a single plowzone stratum underlain by intact subsoil. Artifacts recovered included nails, marbles, and glass and brick fragments. None of which are significant cultural artifacts.

CONCLUSIONS AND RECOMMENDATIONS

The UVM CAP conducted an extensive Phase I site identification survey within four previously determined archaeologically sensitive portions of the proposed Burlington College Development project parcel located in Burlington, Chittenden County, Vermont. As a result of the study, no pre-Contact era Native American archaeological sites were identified. Although the primary goal of the Phase I study was to locate pre-Contact era Native American sites, evidence of the parcel's past historic use was encountered in many areas. The historic period artifacts that were recovered reflected the mixed-use of the parcel over time, such as children's toys (jacks and marbles) from when it housed an orphanage. However, none of these archaeological deposits were determined to be significant. Therefore, the UVM CAP recommends that no further

archaeological study is warranted for this project as its construction will have no effect on potentially significant cultural resources. Please let us know if you would like us to send a copy of this report to Scott Dillon of the Vermont Division for Historic Preservation (VDHP) for his review and concurrence.

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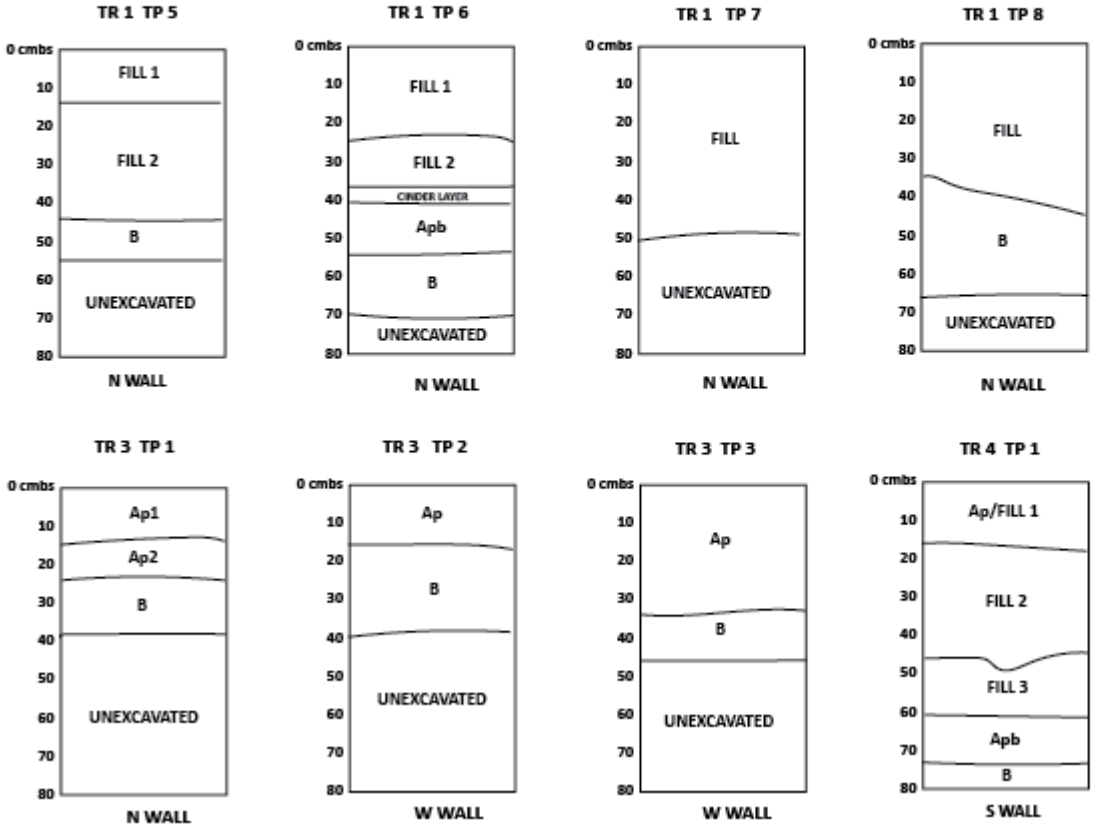
Appendix 1: Soil Profiles
Key to Soil Profiles

OA	Undisturbed organic horizon
A	Organic horizon
Al	Alluvial horizon
Ap	Plow zone or disturbed layer
B	Horizon which has been physically And chemically weathered
b	Buried horizon
C	Subsoil horizon; parent material From which soil forms
E	Pale gray to gray mineral horizon Containing predominantly quartz And lacking clay, iron, and aluminum
cl	Clay
g	Gravel
l	Loam
s	Sand
si	Silt
c	Coarse
dk	Dark
f	Fine
lt	Light
m	Medium
v	Very
blk	Black
brn	Brown
brwnsh	Brownish
gry	Gray
olv	Olive
pl	Pale
yllw	Yellow
yllwsh	Yellowish

BURLINGTON COLLEGE DEVELOPMENT
PHASE I, JUNE 2016
SCHEMATIC STRATIGRAPHIC SOIL PROFILES
TRANSECTS 1, 3 AND 4



KEY:

FILL and FILL 1 Dark brownish gray (10YR 4/2) fine sandy loam with gravel and rocks

FILL2 Very dark grayish brown (10YR 3/2) fien sandy loam with gravel

Apb Dark brown (10YR 3/8) fien sandy loam

B Light Olive brown (2.5Y 5/6) fien to coarse sand

KEY:

Ap1 Dark brown (10YR 3/3) fine sandy loam

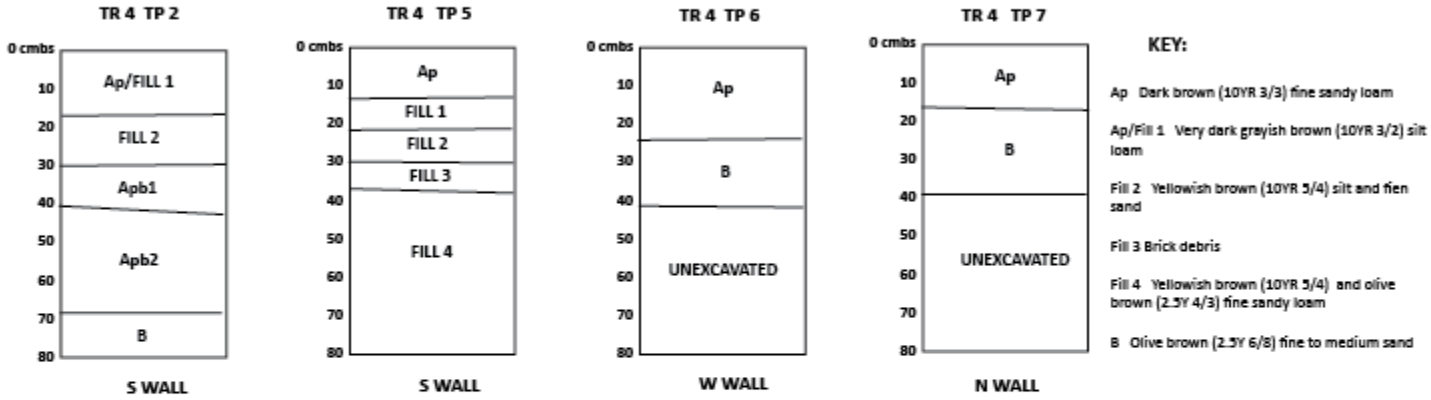
Ap2 Light olive brown (2.5Y 5/3) fine sand with light gravel

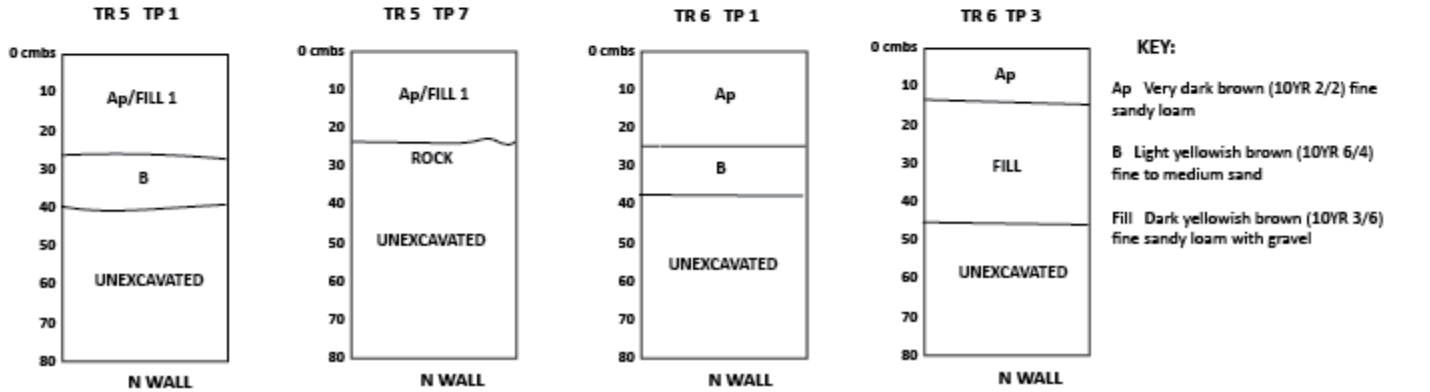
Ap/Fill 1 Very dark grayi9sh brown (10 YR 3/2) fien sandy loam

Fill 2 dark brown and yellowish brown (10YR 3/3 and 10YR 5/6) fine sandy loam

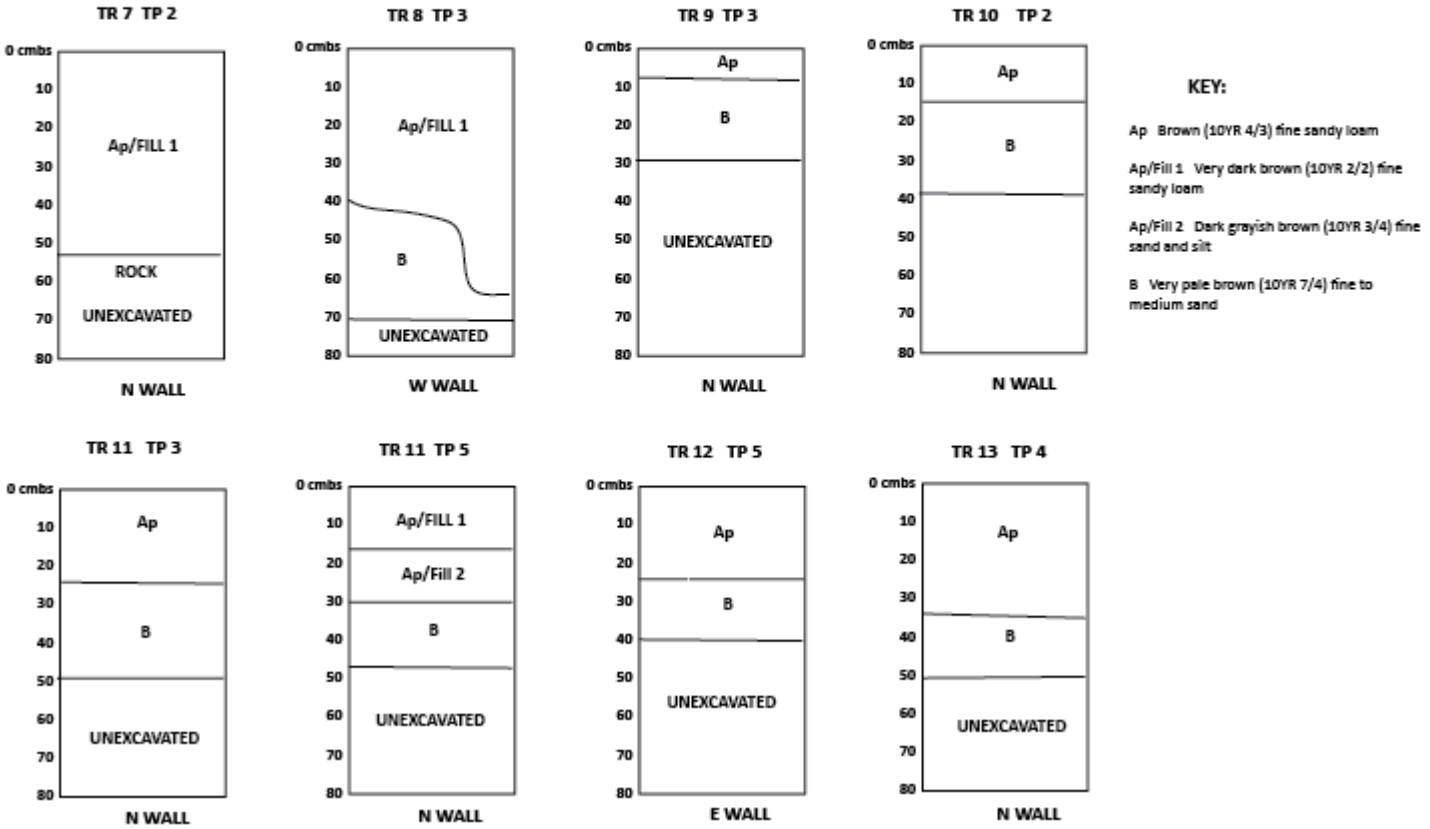
Fill 3 Pale brown (10YR 6/3) fien sand

BURLINGTON COLLEGE DEVELOPMENT
PHASE I, JUNE 2016
SCHEMATIC STRATIGRAPHIC SOIL PROFILES
TRANSECTS 4, 5 AND 6





BURLINGTON COLLEGE DEVELOPMENT
PHASE I, JUNE 2016
SCHEMATIC STRATIGRAPHIC SOIL PROFILES
TRANSECTS 7-13



KEY:

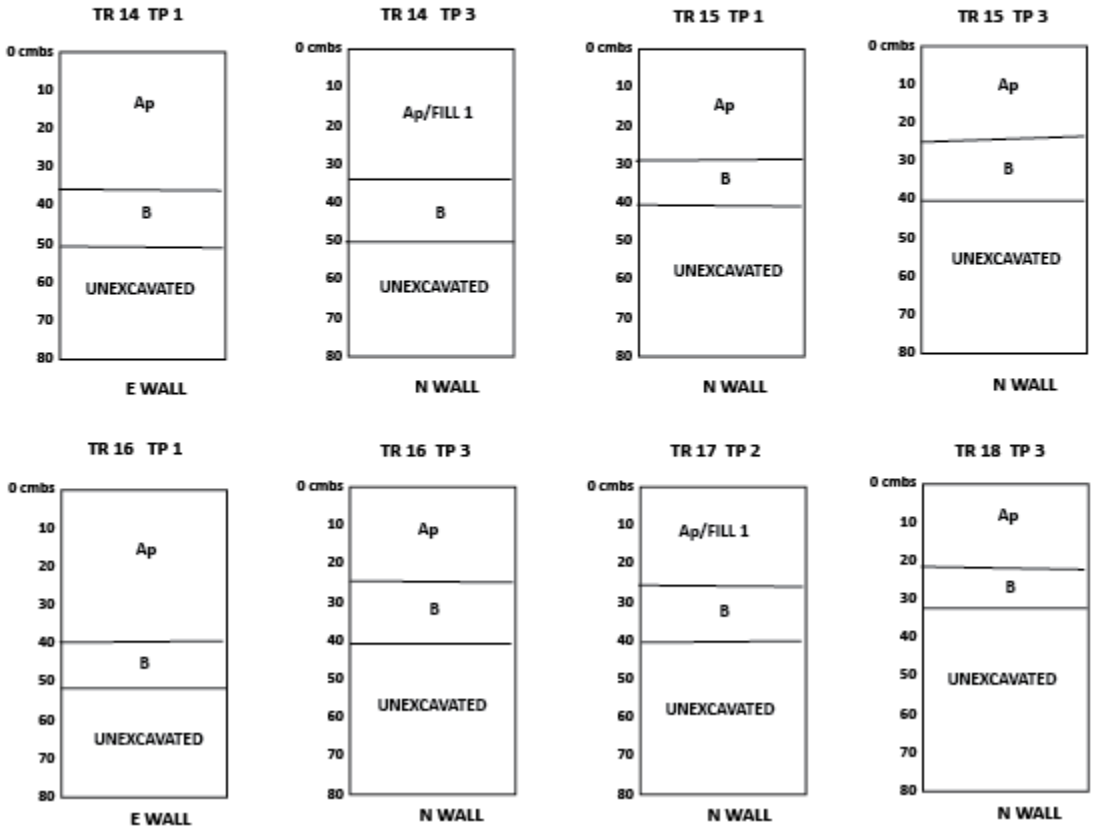
Ap Brown (10YR 4/3) fine sandy loam

Ap/Fill 1 Very dark brown (10YR 2/2) fine sandy loam

Ap/Fill 2 Dark grayish brown (10YR 3/4) fine sand and silt

B Very pale brown (10YR 7/4) fine to medium sand

BURLINGTON COLLEGE DEVELOPMENT
PJASE I, JUNE 2016
SCHEMATIC STRATIGRAPHIC PROFILES
TRNSECTA 14-18



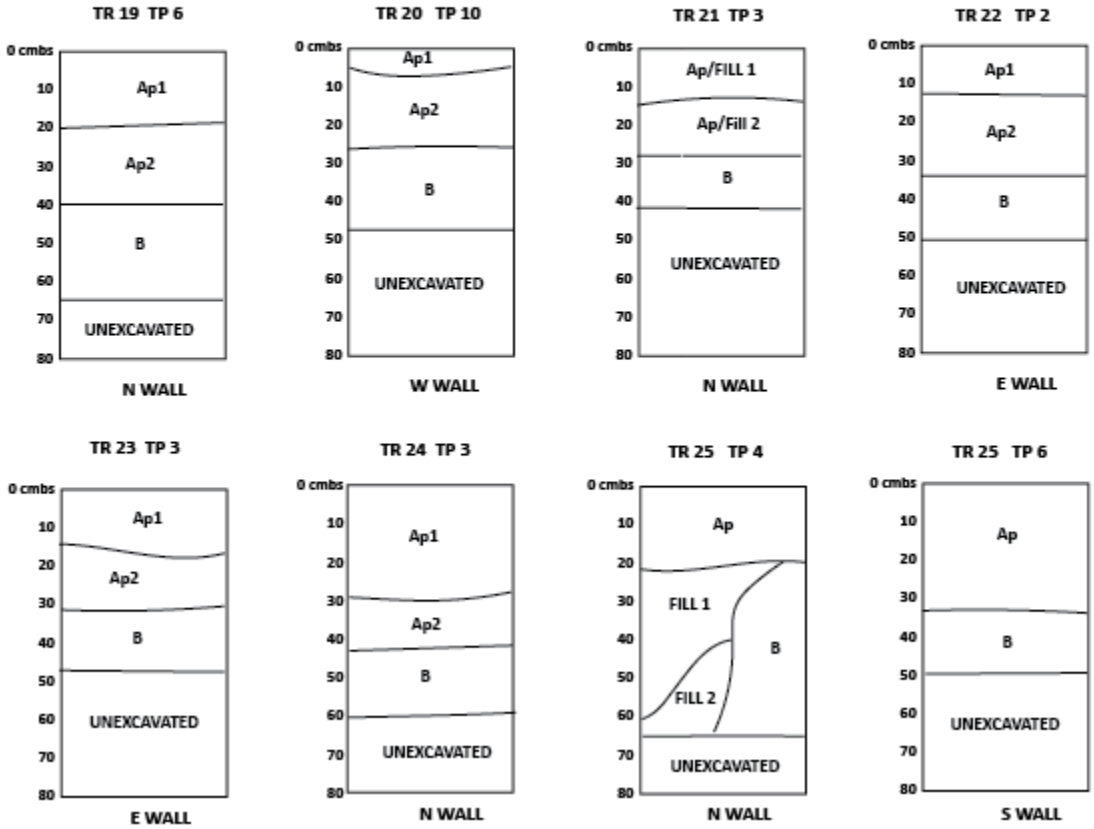
KEY:

Ap Brown (10YR 4/3) fine sandy loam

Ap/Fill1 Very dark brown (10YR 3/3) fine sandy loam

B Yellowish Brown (10YR 5/8) fien to medium sand

BURLINGTON COLLEGE DEVELOPMENT
PHASE I, JUNE 2016
SCHEMATIC STRATIGRAPHIC SOIL PROFILES
TRANSECTS 19-25



KEY:

Ap Very dark brown (10YR 2/2) fien sandy loam

Ap1 Very dark grayish brown (10YR 3/2) fine sandy loam

Ap2 Brown to dark yellowish brown (10YR 4/3 to 4/4) fine sand

Ap/Fill 1 Black (10YR 2/1) fine sandy loam

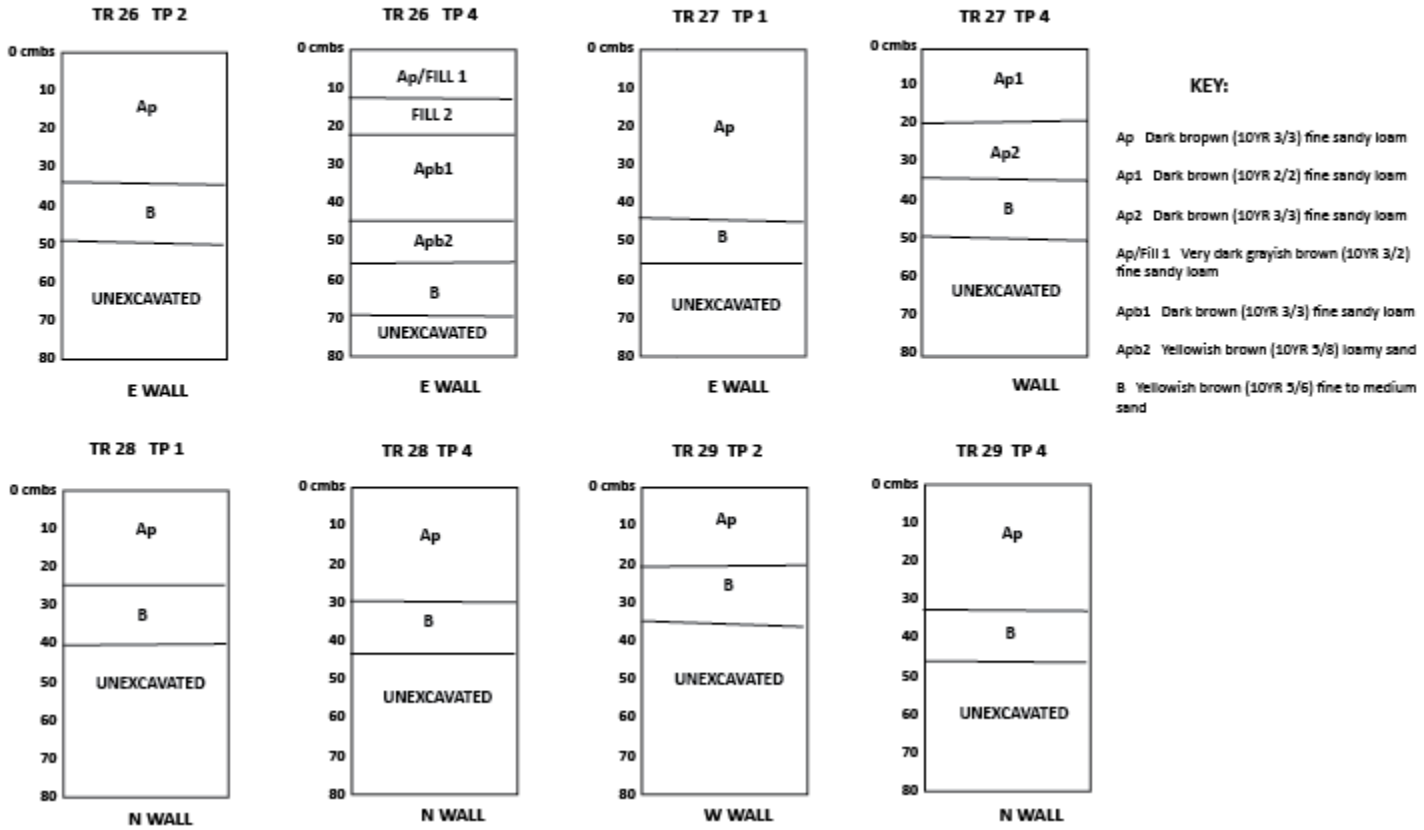
Ap/Fill 2 Yellowish Brown (10YR 5/8) fine sand

Fill 1 Dark grayish brown (2.5Y 4/2) silt loam

Fill 2 Very dark brown (10YR 2/2) fine sandy loam

B Yellowish brown (10YR 5/6) fine to medium sand

BURLINGTON COLLEGE DEVELOPMENT
PHASE I, JUNE 2016
SCHEMATIC STRATIGRAPHIC SOIL PROFILES
TRANSECTS 26-29



KEY:

Ap Dark bropwn (10YR 3/3) fine sandy loam

Ap1 Dark brown (10YR 2/2) fine sandy loam

Ap2 Dark brown (10YR 3/3) fine sandy loam

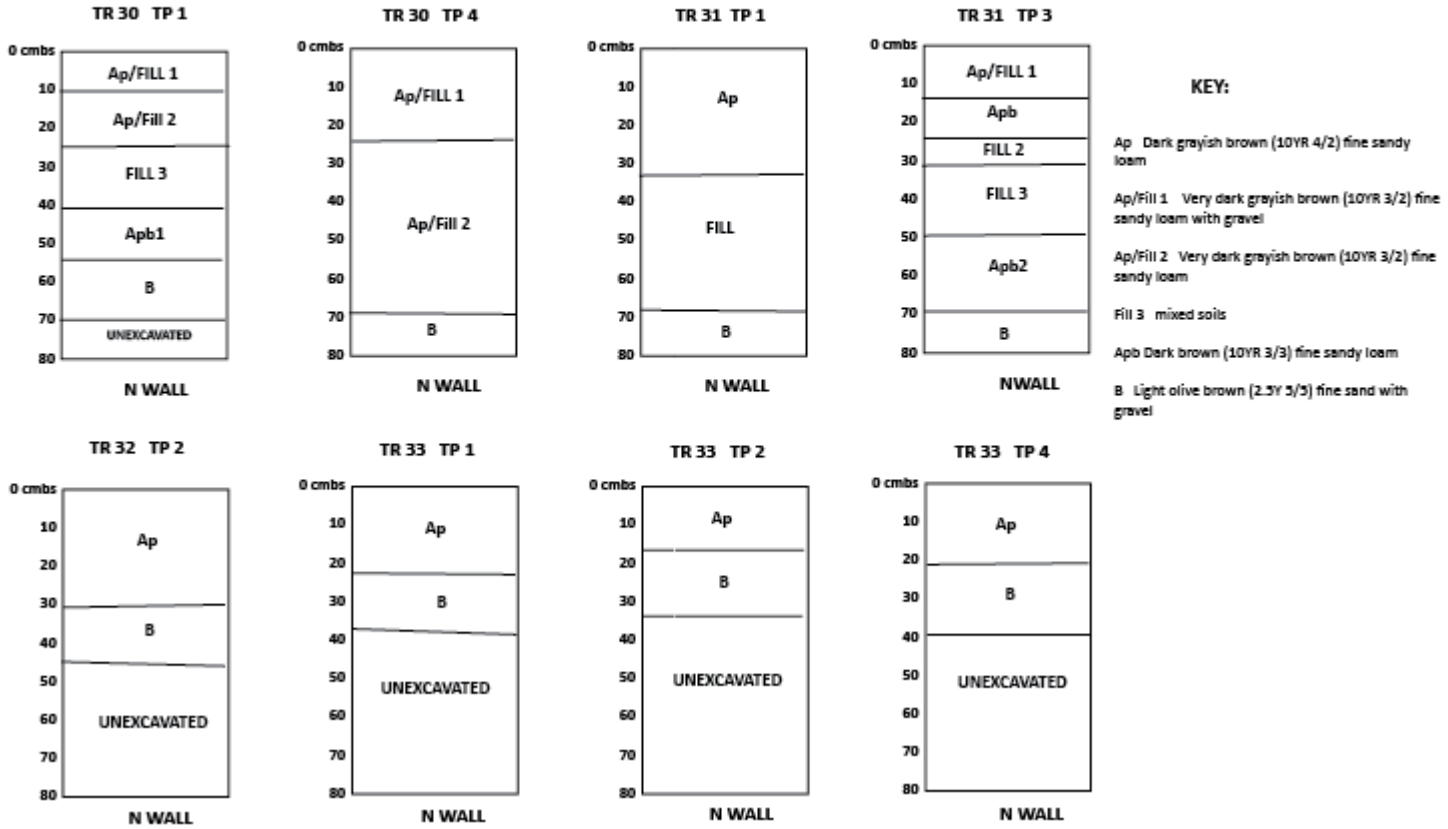
Ap/Fill 1 Very dark grayish brown (10YR 3/2) fine sandy loam

Apb1 Dark brown (10YR 3/3) fine sandy loam

Apb2 Yellowish brown (10YR 5/8) loamy sand

B Yellowish brown (10YR 5/6) fine to medium sand

BURLINGTON COLLEGE DEVELOPMENT
PHASE I, JUNE 2016
SCHEMATIC STRATIGRAPHIC SOIL PROFILES
TRANSECTS 30-33



KEY:

Ap Dark grayish brown (10YR 4/2) fine sandy loam

Ap/Fill 1 Very dark grayish brown (10YR 3/2) fine sandy loam with gravel

Ap/Fill 2 Very dark grayish brown (10YR 3/2) fine sandy loam

Fill 3 mixed soils

Apb Dark brown (10YR 3/3) fine sandy loam

B Light olive brown (2.5Y 5/3) fine sand with gravel

VERMONT

State of Vermont
Division for Historic Preservation
Deane C. Davis Building, 6th Floor
One National Life Drive, Montpelier, VT 05620-0501
www.accd.vermont.gov/historic-preservation

[phone] 802-828-3540

Agency of Commerce and Community Development

July 10, 2017

Stephanie H. Monaghan
District Coordinator
District 4 Environmental Commission
111 West Street
Essex Junction, Vermont 05452

Re: BC Community Housing, 311-375 North Avenue, Burlington, Vermont.
Act 250 Land Use Permit Application # 4C1301

Dear Ms. Monaghan:

Thank you for the opportunity to comment on the proposed subdivision, site work, new construction and rehabilitation of the existing structure at 311-375 North Avenue, Burlington, Vermont involving BC Community Housing c/o Eric Farrell. (DHP #CH16-040). This letter is in response to materials submitted for the Land Use Permit application #4C1301.

The Vermont Division for Historic Preservation (VDHP) has conducted a review of this proposed undertaking for purposes of Criterion 8 of Act 250. Project review consists of evaluating the project's potential impacts to historic buildings and structures, historic districts, historic landscapes and settings, and known or potential archeological resources. The purpose of VDHP's review under Act 250 is to provide the Environmental District Commission with the information necessary for them to make a positive finding under the "historic sites" aspect of Criterion 8.

It is our understanding that the proposed project includes the creation of a 10-lot subdivision, along with construction of 12 new buildings with 739 residential units, 18,000 square feet of non-residential support/amenity space, 49,000 square feet of neighborhood oriented commercial space, 42-room hotel, 1,084 off-street parking spaces, and 2,250 linear feet of public roadway with supporting landscaping and utility infrastructure. The project is also known as "Cambrian Rise."

The Area of Potential Effect (APE) for this project includes direct effects to the former St. Joseph's Orphanage building and the undeveloped lands on the project parcel. The area of indirect effects includes a potential historic district on North Avenue between 311 North Avenue and the northern end of Lake View Cemetery. Within the APE, six properties are listed on the State Register of Historic Places (SRHP) and the surrounding neighborhood is an historic district that is potentially eligible for the State and National Registers. In particular, the c. 1884 St. Joseph's Orphanage is individually listed in the SRHP. Therefore, VDHP has reviewed the project for potential effects to historic sites.

During the summer of 2016, an Archaeological Phase 1 Site Identification Survey for the proposed development was completed by the University of Vermont Consulting Archaeology Program. The UVM CAP End of Field Letter Report concludes the subject area is not considered archaeologically sensitive and therefore does not have the potential to effect archaeological resources. VDHP concurred with these recommendations on July 29, 2016.

VDHP has also reviewed the Project's direct and indirect effects on historic structures, districts, and landscapes. VDHP staff have visited the site with the Applicant, designers and consultants, as well as reviewed project submittals and an Act 250 Review report authored by historic preservation consultant Suzanne Jamele, dated June 5, 2017. VDHP concurs with Ms. Jamele's recommendation the proposed project does not create any undue adverse effects.

Therefore, based on the information provided and above considerations, it is our opinion and recommendation to the District 4 Environmental Commission the proposed project will have an **Adverse Effect not Undue** to any historic sites.

Thank you for your cooperation in documenting and protecting Vermont's irreplaceable historic and archaeological heritage. If you have any questions, please do not hesitate to contact James P. Duggan, Senior Historic Preservation Review Coordinator at james.duggan@vermont.gov or 802-477-2288. Mr. Duggan reviewed this project and prepared this letter. I concur with the findings and conclusions described above.

Sincerely:
VERMONT DIVISION FOR HISTORIC PRESERVATION

e-Signed by Laura Trieschmann
on 2017-07-10 19:34:42 GMT

Laura V. Trieschmann
State Historic Preservation Officer

Cc: Service List

CERTIFICATE OF SERVICE

I, James P. Duggan, hereby certify that I sent a copy of the foregoing comment letter from the Division for Historic Preservation for Act 250 Application #4C1301 (BC Community Housing, Burlington, VT) by U.S. Mail, postage prepaid, on this 10th day of July 2017, to the individuals without email addresses and by electronic mail, to the following email addresses:

Stephanie Monaghan, District 4 Coordinator
District 4 Environmental Commission
111 West Street
Essex Junction, VT 05452
stephanie.monaghan@vermont.gov
NRB.Act250Essex@vermont.gov

Owiso Makuku
Farrell Real Estate
875 Roosevelt Highway
Colchester, VT 05446
omakuku@farrellrealestatevt.com

Bob Rusten, City Clerk
Chair, City Council/Chair, City Planning Commission
City of Burlington
149 Church Street
Burlington, VT 05401
brusten@burlingtonvt.gov

Chittenden County Regional Planning Commission
110 West Canal Street, Suite 202
Winooski, VT 05404
cbaker@ccrpcvt.org

Elizabeth Lord, Esq./Land Use Attorney
ANR Office of Planning & Legal Affairs
anr.act250@vermont.gov
elizabeth.lord@vermont.gov

FOR YOUR INFORMATION

Barry Murphy/Vt. Dept. of Public Service
112 State Street, Drawer 20
Montpelier, VT 05620-2601
barry.murphy@vermont.gov

Craig Keller/John Gruchacz/Jeff Ramsey
VTrans Policy, Planning & Research Bureau
One National Life Drive, Drawer 33
Montpelier, VT 05633
craig.keller@vermont.gov;
john.gruchacz@vermont.gov
jeff.ramsey@vermont.gov;

Vt. Agency of Agriculture, Food & Markets
116 State Street, Drawer 20
Montpelier, VT 05620-2901
AGR.Act250@vermont.gov

NRCS, District Conservationist
Natural Resources Conservation Service
68 Catamount Park, Ste. B
Middlebury, VT 05753
marybeth.whitten@vt.usda.gov

Winooski NRCD Office
617 Comstock Road, Suite 1
Berlin, VT 05602
whiterivernrcd@gmail.com

Ethan Tapper, County Forester/FPR
111 West Street
Essex Junction, VT 05452
ethan.tapper@vermont.gov

Noel Dodge/ANR, Dept. of Fish & Wildlife
5 Perry Street, Suite 40
Barre, VT 05641-4266
noel.dodge@vermont.gov

John Gobeille, Wildlife Biologist
ANR, Dept. of Fish & Wildlife
111 West Street
Essex Jct., VT 05452
john.gobeille@vermont.gov

Green Mountain Power Corporation
c/o Pam Allen & Kim Jones
163 Acorn Lane
Colchester, VT 05446
allen@greenmountainpower.com
kim.jones@greenmountainpower.com

Brian Gray/Vermont Gas Systems
PO Box 467
Burlington, VT 05402
bgray@vermontgas.com

Michael Barsotti, Water Quality Director
Champlain Water District
403 Queen City Park Road
South Burlington, VT 05403
mike.barsotti@champlainwater.org

Dated at Montpelier, Vermont this 10th day of July 2017

e-Signed by James Duggan
on 2017-07-10 19:39:46 GMT

James P. Duggan
Senior Historic Preservation Review Coordinator

Noise Abatement and Control

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the **Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/)**.

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	Cambrian Rise
Record Date	02/02/2024
User's Name	Kate Fournier

Road # 1 Name:	**North Ave**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	440	440	440
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	8887	490	82
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	46	44	49
Calculate Road #1 DNL	52	Reset	

Railroad #1 Track Identifier:	NECR

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		738
Average Train Speed		10
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		2
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL	0	59
Calculate Rail #1 DNL	59	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○**Yes** ○**No**

Combined DNL for all Road and Rail sources	**59**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate | Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
    - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
    - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
    - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
    - Incorporate natural or man-made barriers. See ***The Noise Guidebook (/resource/313/hud-noise-guidebook/)***
    - Construct noise barrier. See the **Barrier Performance Module (/programs/environmental-review/bpm-calculator/)**

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

Definitions

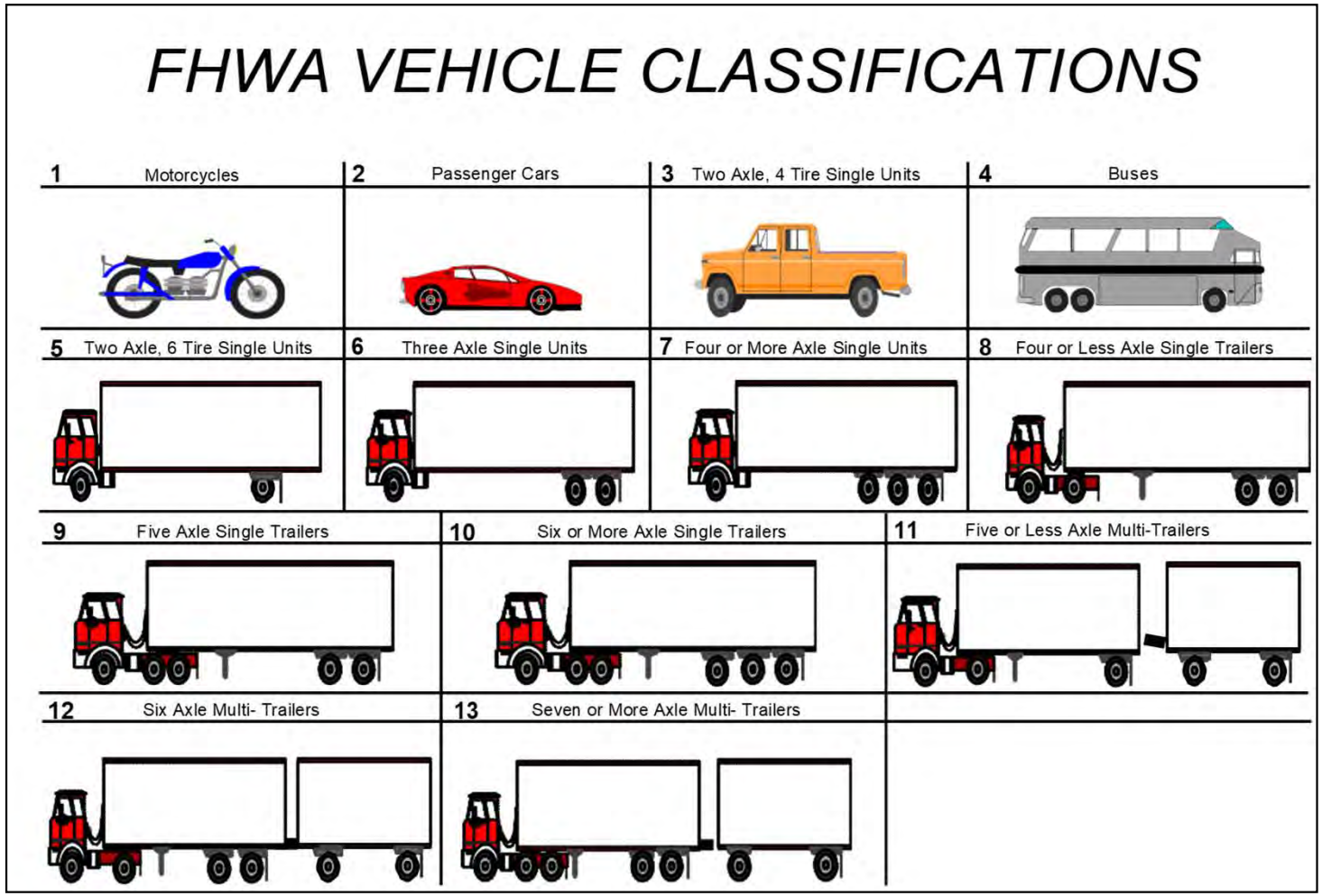
Location: Automatic Traffic Recorder Station ID assigned by VTrans
FC: Functional Classification (designates road use characteristics)
1 = Interstate
2 = Principal Arterial - Other Freeways & Expressways
3 = Principal Arterial - Other
4 = Minor Arterial
5 = Major Collector
6 = Minor Collector
7 = Local
MM: Mile Marker
R/U: U (urban) designates a location within the Federal Aid Urban Area Boundary
R (rural) designates a location outside the Federal Aid Urban Area Boundary
AADT: Annual Average Daily Traffic for the Year shown

FHWA Vehicle Classes

Class	Heading	Description
1	MC	Motorcycle
2	Car	Passenger car
3	Pickup	Pickup truck/sports utility
4	Bus	Full size school and transit busses
5	2A SU	2 axle six tire, delivery type van or heavy duty pick up
6	3A SU	3 axle single unit, short haul delivery truck, dump truck
7	>3A SU	4 axle single unit, short haul delivery truck, concrete truck
8	<5A 2U	<5 axle tractor/single trailer, medium haul delivery
9	5A 2U	5 axle tractor/single trailer, "18 Wheeler"
10	>5A 2U	> 5 axle tractor/single trailer, tanker truck, logging truck
11	<6A >2U	<6 axle multi trailer truck
12	6A >2U	6 axle multi trailer truck
13	>6A >2U	>6 axle multi trailer truck

TRUCK: FHWA Vehicle Class 4-13
MED: Single Unit truck (FHWA Vehicle Class 4-7)
HEAVY: Tractor-trailer truck (FHWA Vehicle Class 8-13)

FHWA VEHICLE CLASSIFICATIONS



2019 FUNCTIONAL CLASS AVERAGES

DAILY

TOTAL CARS	RURAL	Class 1 MC	Class 2 Car	Class 3 Pickup	Class 4 Bus	Class 5 2A SU	Class 6 3A SU	Class 7 >3A SU	Class 8 <5A 2U	Class 9 5A 2U	Class 10 >5A 2U	Class 11 <6A >2U	Class 12 6A >2U	Class 13 >6A >2U	TRUCKS TOTAL	TRUCKS MED	TRUCKS HEAVY
87.61	FC1 AVG	1.33%	70.53%	17.08%	0.96%	3.76%	1.36%	0.21%	1.10%	2.65%	0.90%	0.06%	0.02%	0.05%	11.06%	6.28%	4.78%
90.78	FC2 AVG	1.27%	71.74%	19.04%	1.06%	3.58%	1.14%	0.38%	0.84%	0.92%	0.01%	0.01%	0.00%	0.01%	7.95%	6.16%	1.79%
89.02	FC3 AVG	1.62%	70.19%	18.83%	0.81%	3.45%	0.97%	0.19%	1.08%	2.32%	0.51%	0.01%	0.00%	0.02%	9.36%	5.41%	3.95%
90.06	FC4 AVG	2.12%	69.51%	20.55%	0.71%	3.76%	0.96%	0.13%	0.88%	1.04%	0.34%	0.00%	0.00%	0.01%	7.82%	5.55%	2.27%
91.54	FC5 AVG	1.95%	69.46%	22.08%	0.53%	3.74%	0.91%	0.13%	0.61%	0.38%	0.19%	0.00%	0.00%	0.00%	6.50%	5.31%	1.19%
91.68	FC6 AVG	1.65%	69.70%	21.98%	0.49%	4.21%	1.01%	0.09%	0.51%	0.11%	0.24%	0.00%	0.00%	0.00%	6.67%	5.81%	0.86%
92.23	FC7 AVG	1.35%	70.23%	22.00%	0.43%	4.30%	0.81%	0.07%	0.52%	0.20%	0.05%	0.00%	0.04%	0.00%	6.42%	5.60%	0.81%

	URBAN	Class 1 MC	Class 2 Car	Class 3 Pickup	Class 4 Bus	Class 5 2A SU	Class 6 3A SU	Class 7 >3A SU	Class 8 <5A 2U	Class 9 5A 2U	Class 10 >5A 2U	Class 11 <6A >2U	Class 12 6A >2U	Class 13 >6A >2U	TRUCKS TOTAL	TRUCKS MED	TRUCKS HEAVY
89.97	FC1 AVG	0.94%	73.87%	16.10%	1.03%	3.65%	1.07%	0.23%	0.90%	1.72%	0.30%	0.07%	0.04%	0.08%	9.09%	5.97%	3.12%
92.19	FC2 AVG	1.07%	75.64%	16.55%	0.70%	3.45%	0.63%	0.14%	0.69%	0.93%	0.18%	0.01%	0.00%	0.01%	6.74%	4.92%	1.82%
91.14	FC3 AVG	1.55%	74.21%	16.93%	0.78%	3.71%	0.78%	0.12%	0.66%	1.00%	0.24%	0.00%	0.00%	0.01%	7.31%	5.39%	1.92%
92.63	FC4 AVG	1.41%	74.54%	18.09%	0.64%	3.70%	0.68%	0.10%	0.43%	0.31%	0.10%	0.00%	0.00%	0.00%	5.96%	5.11%	0.85%
93.10	FC5 AVG	1.39%	74.75%	18.95%	0.37%	3.53%	0.46%	0.05%	0.34%	0.12%	0.03%	0.00%	0.00%	0.00%	4.91%	4.41%	0.50%
93.40	FC6 AVG	1.25%	74.66%	18.74%	0.58%	3.50%	0.63%	0.17%	0.34%	0.06%	0.01%	0.00%	0.06%	0.00%	5.34%	4.87%	0.47%
91.30	FC7 AVG	1.68%	73.88%	17.42%	1.11%	4.74%	0.55%	0.03%	0.30%	0.25%	0.04%	0.00%	0.00%	0.00%	7.02%	6.43%	0.59%

PEAK HOUR

RURAL	Class 1 MC	Class 2 Car	Class 3 Pickup	Class 4 Bus	Class 5 2A SU	Class 6 3A SU	Class 7 >3A SU	Class 8 <5A 2U	Class 9 5A 2U	Class 10 >5A 2U	Class 11 <6A >2U	Class 12 6A >2U	Class 13 >6A >2U	TRUCKS TOTAL	TRUCKS MED	TRUCKS HEAVY
FC1 AVG	1.03%	73.41%	16.87%	0.68%	3.21%	1.03%	0.16%	0.78%	2.10%	0.69%	0.01%	0.00%	0.04%	8.68%	5.08%	3.61%
FC2 AVG	0.94%	74.21%	19.21%	0.60%	2.92%	0.91%	0.14%	0.46%	0.60%	0.00%	0.00%	0.00%	0.00%	5.63%	4.57%	1.06%
FC3 AVG	1.43%	71.31%	19.11%	0.69%	3.36%	0.90%	0.16%	0.98%	1.74%	0.30%	0.00%	0.00%	0.02%	8.15%	5.11%	3.04%
FC4 AVG	1.82%	69.90%	21.19%	0.64%	3.70%	0.86%	0.11%	0.74%	0.80%	0.22%	0.00%	0.00%	0.01%	7.09%	5.32%	1.78%
FC5 AVG	1.67%	69.65%	22.22%	0.68%	3.76%	0.90%	0.11%	0.56%	0.31%	0.14%	0.00%	0.00%	0.00%	6.46%	5.45%	1.01%
FC6 AVG	1.68%	70.42%	21.51%	0.44%	4.24%	0.86%	0.09%	0.50%	0.09%	0.16%	0.00%	0.00%	0.00%	6.39%	5.63%	0.75%
FC7 AVG	1.38%	70.62%	21.75%	0.42%	4.23%	0.77%	0.13%	0.39%	0.21%	0.05%	0.00%	0.05%	0.00%	6.25%	5.55%	0.70%

URBAN	Class 1 MC	Class 2 Car	Class 3 Pickup	Class 4 Bus	Class 5 2A SU	Class 6 3A SU	Class 7 >3A SU	Class 8 <5A 2U	Class 9 5A 2U	Class 10 >5A 2U	Class 11 <6A >2U	Class 12 6A >2U	Class 13 >6A >2U	TRUCKS TOTAL	TRUCKS MED	TRUCKS HEAVY
FC1 AVG	0.76%	77.35%	15.41%	0.74%	2.86%	0.77%	0.12%	0.57%	1.06%	0.17%	0.02%	0.10%	0.07%	6.48%	4.49%	2.00%
FC2 AVG	1.01%	77.56%	16.06%	0.45%	3.10%	0.38%	0.08%	0.62%	0.61%	0.11%	0.01%	0.00%	0.01%	5.37%	4.02%	1.35%
FC3 AVG	1.50%	75.83%	16.51%	0.60%	3.43%	0.65%	0.10%	0.57%	0.66%	0.12%	0.00%	0.00%	0.02%	6.16%	4.79%	1.38%
FC4 AVG	1.40%	75.86%	17.54%	0.57%	3.30%	0.61%	0.07%	0.35%	0.22%	0.06%	0.00%	0.00%	0.00%	5.20%	4.56%	0.64%
FC5 AVG	1.45%	75.72%	18.17%	0.39%	3.36%	0.43%	0.04%	0.31%	0.10%	0.02%	0.00%	0.00%	0.01%	4.66%	4.22%	0.44%
FC6 AVG	1.23%	75.38%	18.61%	0.50%	3.13%	0.53%	0.21%	0.31%	0.03%	0.00%	0.00%	0.06%	0.00%	4.78%	4.38%	0.40%
FC7 AVG	2.05%	75.73%	16.41%	0.78%	4.30%	0.34%	0.03%	0.26%	0.08%	0.02%	0.00%	0.00%	0.00%	5.81%	5.45%	0.35%

VERMONT
AGENCY OF TRANSPORTATION

TCDS Help MS2
Transportation Data Management System

Home | Login | Locate | Locate All | Email This

Auto-Locate OFF

List View | All DIRs

Record 1 of 1 Goto Record go

Location ID	D045	MPO ID	
Type	SPOT	HPMS ID	
On NHS	No	On HPMS	No
LRS ID	S5026	LRS Loc Pt.	1.043
SF Group	3	Route Type	
AF Group	U4	Route	FAU5026
GF Group	2	Active	Yes
Class Dist Grp	U456	Category	CC 4
Seas Clss Grp	ALL2022		
WIM Group			
QC Group	Default		
Fnct'l Class	Minor Arterial	Milepost	
Located On	NORTH AVE		
Loc On Alias	TH3		
BETWEEN	CAMBRIAN WAY AND INSTITUTE RD		
More Detail			

STATION DATA

Directions: 2-WAY | NB | SB

AADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2022	9,594[3]		10	56	9,104 (95%)	490 (5%)	Grown from 2021
2021	9,508	965	10	56	8,922 (94%)	586 (6%)	
2020	8,979[3]		9	65	8,590 (96%)	388 (4%)	Grown from 2019
2019	10,910[3]		9	65	10,437 (96%)	472 (4%)	Grown from 2018
2018	10,998[3]		9	65	10,521 (96%)	476 (4%)	Grown from 2017

<< < > >>| 1-5 of 17

Travel Demand Model

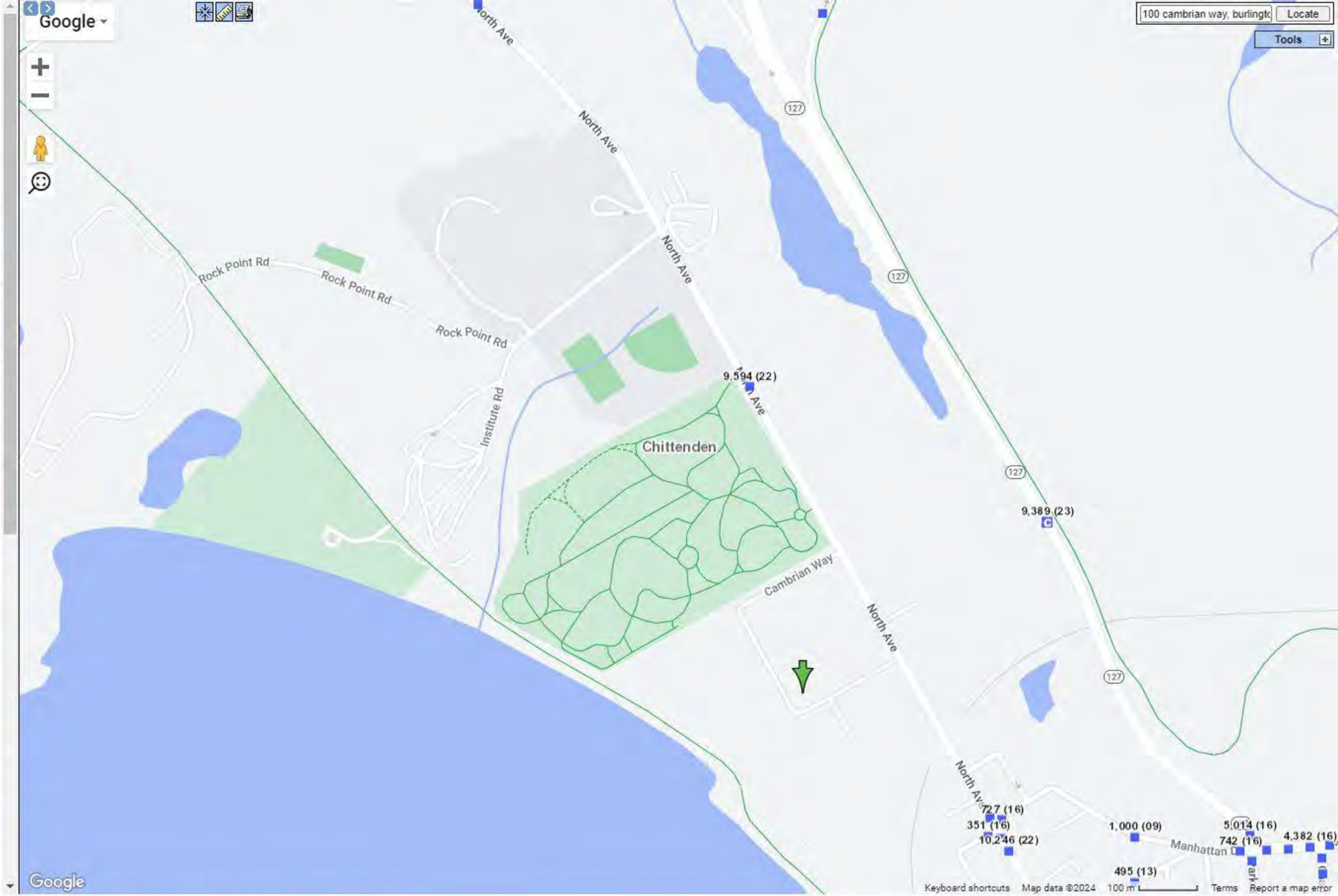
Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV

VOLUME COUNT

Date	Int	Total
Tue 8/10/2021	15	10,884
Mon 8/9/2021	15	10,120
Sun 8/8/2021	15	8,831
Sat 8/7/2021	15	9,311

VOLUME TREND

Year	Annual Growth
2022	1%
2021	6%
2020	-18%
2019	-1%



U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 09 / 2023	☐ Railroad ☐ Transit ☒ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	247708W

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
New England Central Railroad [NECR]	VERMONT	CHITTENDEN

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near BURLINGTON	PENNY LN (Street/Road Name) | * (Block Number)	TH

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None NORTHEAST	☐ None BURLINGTON	☒ None	(prefix) | 0000.50 | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
	burlington	☒ N/A	☒ N/A

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☐ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☒ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 44.4809120	(WGS84 std: -nnn.nnnnnnn) -73.2219530	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use *
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-800-3490	800-800-3490	802-828-1331

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
1	1	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2017	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 1 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☐ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☒ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/09/2023		247708W

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
3	0	2	☒ W10-1 1 ☒ W10-3 0 ☒ W10-11 0 ☒ W10-2 0 ☒ W10-4 0 ☒ W10-12 0

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count* 0 *)* ☒ No	☐ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
☐ Yes ☒ No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 0	3.E. Total Count of Flashing Light Pairs
Roadway 0 Pedestrian 0	☐ 2 Quad ☐ 3 Quad ☐ 4 Quad ☐ Full *(Barrier)* Resistance ☐ Median Gates	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☐ LED ☐ Back Lights Included ☐ Side Lights Included	0

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☐ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	0

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☒ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * 0 Stop Line Distance * 0	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☒ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * 13 Length * 54

☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☒ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 35	☒ 0° – 29° ☐ 30° – 59° ☐ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☐ (03) Federal AID, Not NHS ☒ (08) Non-Federal Aid	☒ (0) Rural ☐ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☒ (7) Local	☐ Yes ☒ No	25 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 1987 AADT 2200	9 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☒ No

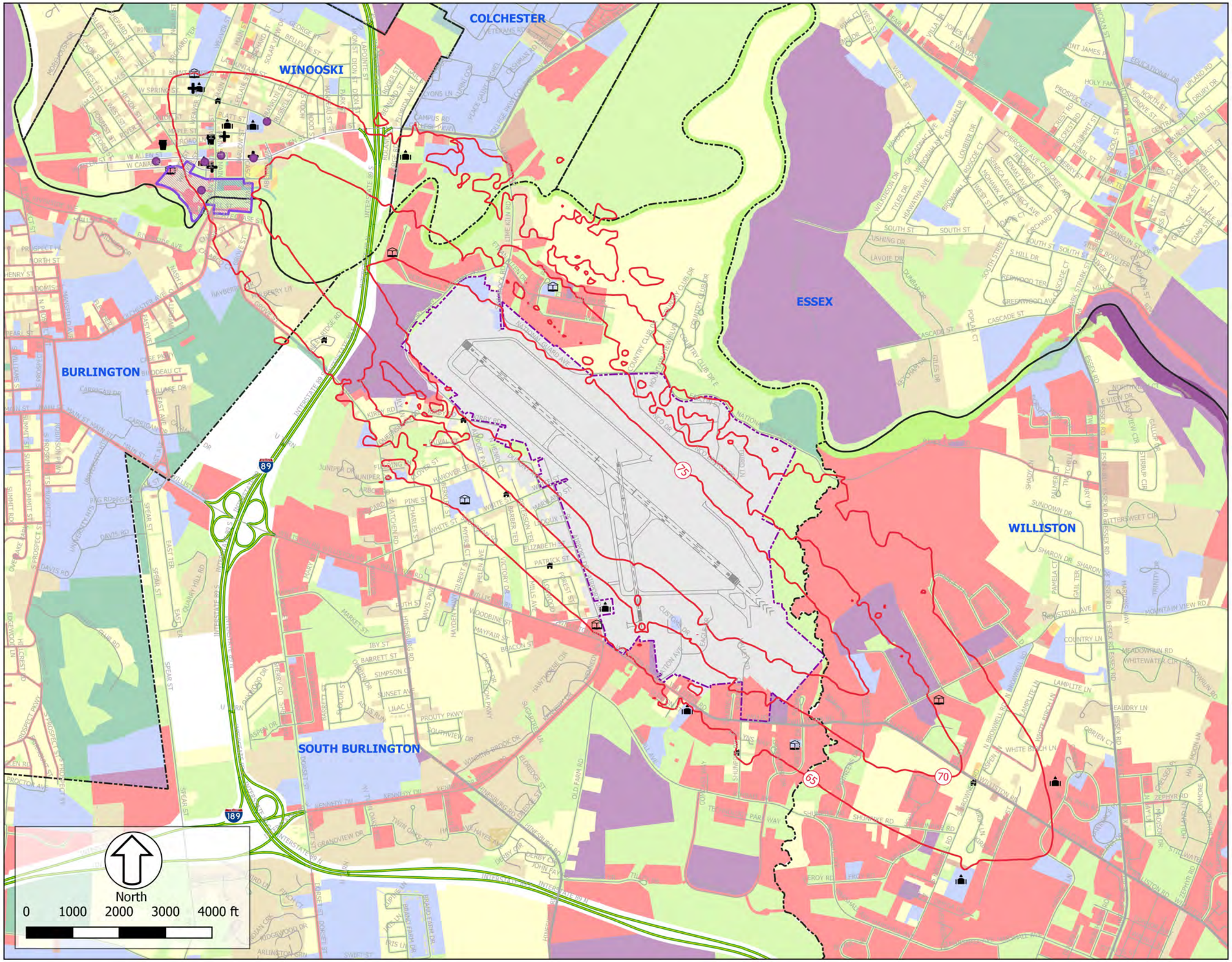
Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

BURLINGTON INTERNATIONAL AIRPORT

PART 150 - NOISE EXPOSURE MAP UPDATE

Figure 13
2023 Forecast Conditions Noise Exposure Map



2023 DNL Contour

- Town Boundary
- Airport Property Boundary
- Historic Districts
- Historic Sites
- Local Roads
- Major Roads
- Highways
- Education
- Health Care
- Place of Worship
- Public Gathering
- Residential

2018 Land Use

- Single Family Residential (1)
- Multi Family Residential (1)
- Other Residential (1)
- Mixed Use (1)
- Public Use (1)

*Possible sound insulation areas

- Airport
- Transportation (2)
- Commercial (2)
- Manufacturing & Production (2)
- Recreational (2)
- Open Space

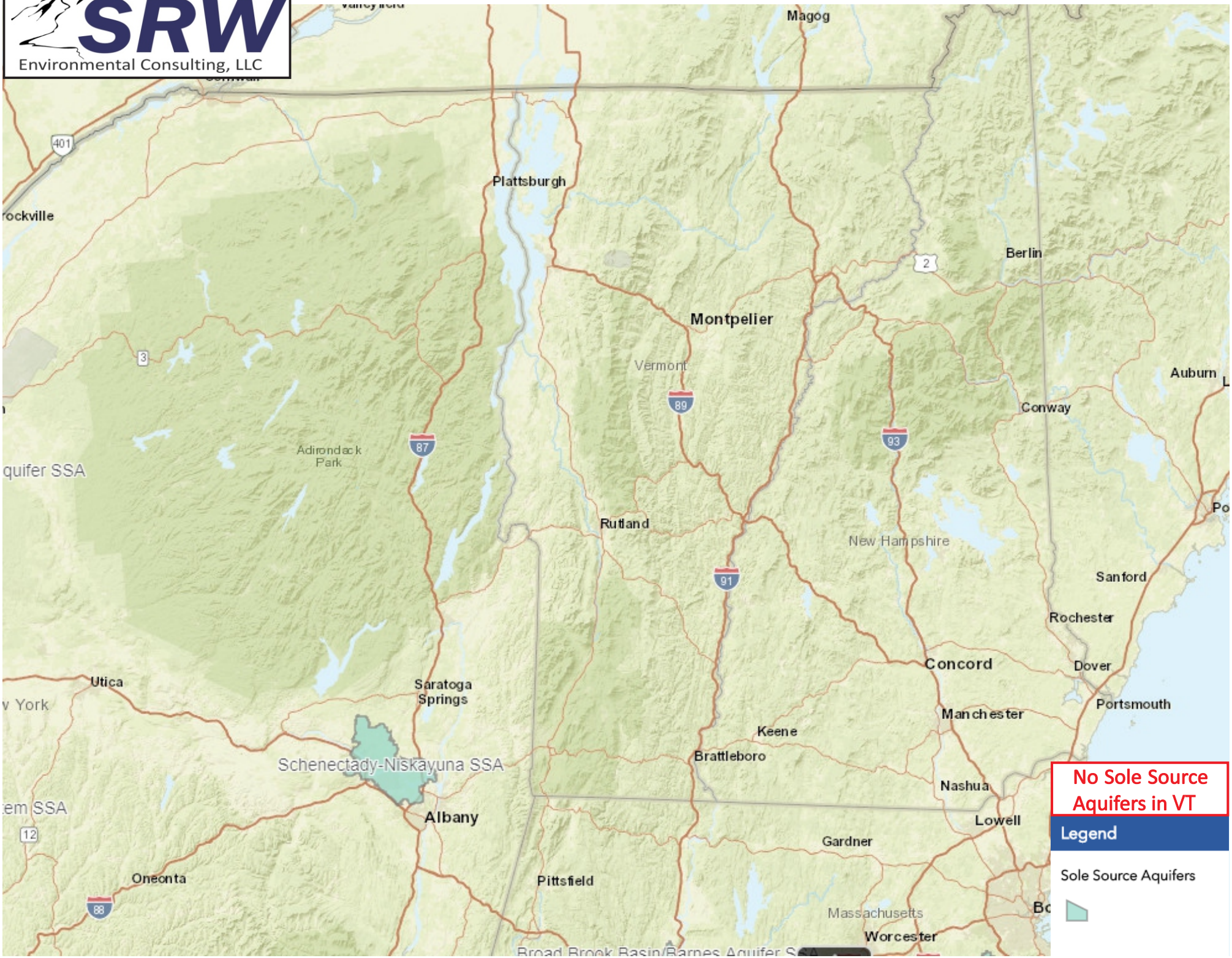
(1) Potentially non-compatible within 65 dB DNL contour as discussed in Section 3.4.
(2) Potentially non-compatible within 70 dB DNL contour as discussed in Section 3.4.

Data Source:
Vermont Center for Geographic Information Inc. (VCGI), United States Census Bureau, National Register of Historic Places, Burlington Internationa Airport, Harris Miller Miller & Hanson Inc.

The Jones Payne Group, Inc.

Sole Source Aquifers

SRW
Environmental Consulting, LLC



Wetlands Protection

U.S. Fish and Wildlife Service

National Wetlands Inventory

SRW Environmental Consulting, LLC

February 1, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

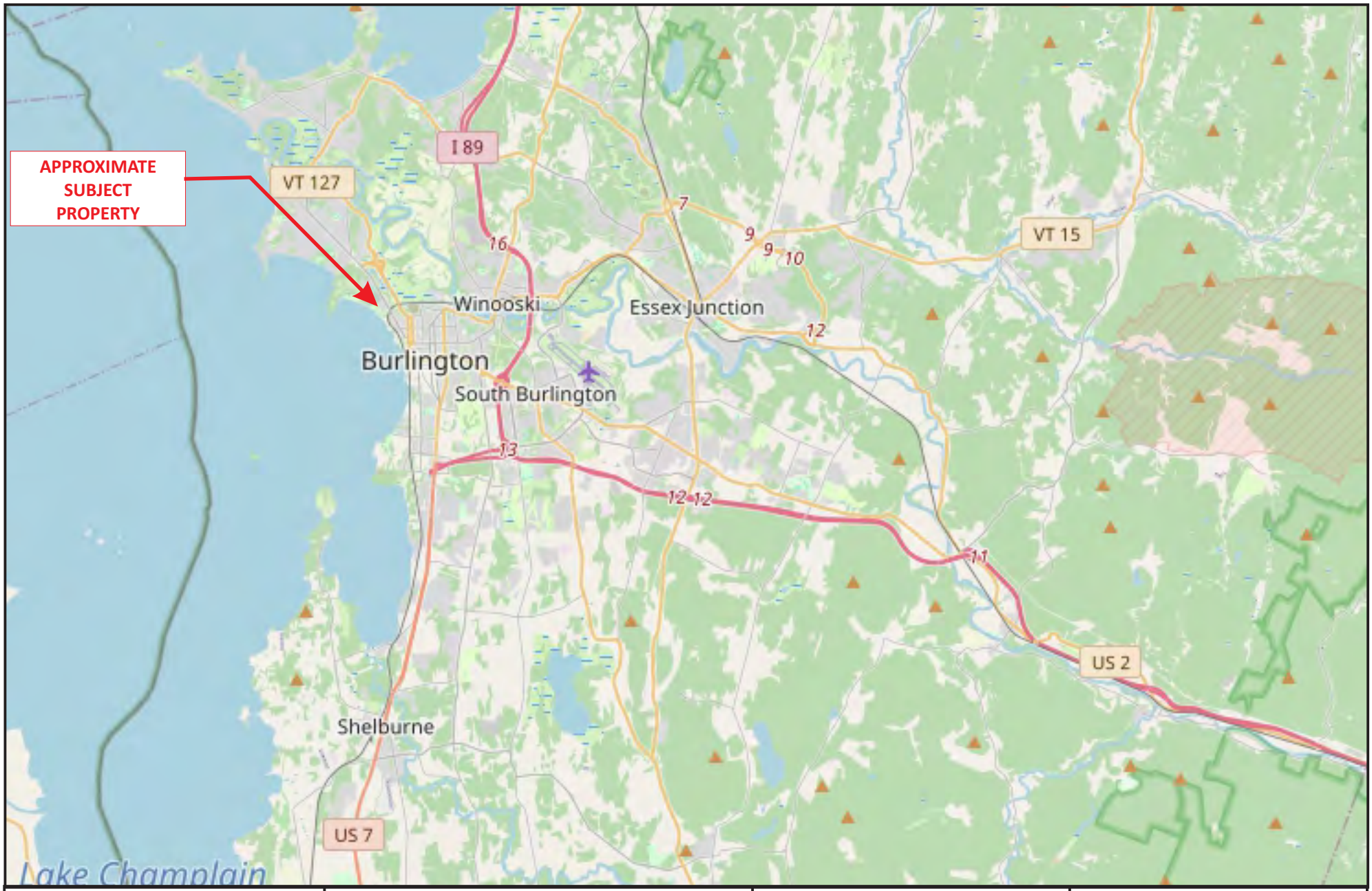
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Wild and Scenic Rivers

And

Nationwide Rivers Inventory



N

SRW Environmental Consulting, LLC

Legend:

Wild and Scenic River

National Wild and Scenic Rivers Map

N

SRW Environmental Consulting, LLC

Legend:

Nationwide Rivers Inventory

Nationwide Rivers Inventory Map

WILD & SCENIC RIVER STUDIES

Wild & Scenic River Studies

There are two study provisions in the Act — Section 5(a), through which Congress directs the study of select rivers, and Section 5(d)(1), which directs federal agencies to identify potential additions to the National Wild and Scenic Rivers System (National System) through federal agency plans. A brief explanation is provided in the following respective sections.

Choose A State Go
Choose A River Go

While progress should never come to a halt, there are many places it should never come to at all. — Paul Newman

Current Active Studies

Currently, there are three rivers or river systems under "authorized" study—two under Section 5(a) of the Wild & Scenic Rivers Act and one under Section 2(a)(ii). This does not include those that might be under assessment as part of normal agency land-planning processes.

Rivers Currently Under Study

- **Cave, Lake, No Name and Panther Creeks, Oregon** (Public Law 113-291, December 19, 2014) – Under study by the National Park Service.
- **Housatonic River, Connecticut** (Governor Malloy Request for Section 2(a)(ii) Designation, November 16, 2016) – Under study by the National Park Service.
- **York River, Maine**. (Public Law 113-291, December 19, 2014) – Under study by the National Park Service.

Section 2(a)(ii) Studies

Under Section 2(a)(ii) of the Act, a governor (or governors for a river in multiple states) of a state can request that a river be designated, provided certain conditions are met (refer to the **Council White Paper on Section 2(a)(ii)** for specifics). The NPS then conducts a study to determine of certain conditions are met. Here are some of the studis conducted under Section 2(a)(ii). Again, if you don't see a study listed, we do not have a copy.

Section 2(a)(ii) Studies Available for Download

Section 5(d)(1), Agency-Identified Studies

In recent years, hundreds of rivers have been identified for study through Section 5(d)(1) of the Act. This provision directs federal agencies to identify potential addition to the National System through their respective resource and management plans. Its application has resulted in numerous individual river designations, statewide legislation (e.g., Omnibus Oregon Wild and Scenic Rivers Act, P.L. 100-557; Michigan Scenic Rivers Act, P.L. 102-249) and multi-state legislation (e.g., Omnibus Public Land Management Act of 2009, P.L. 111-11). Here are examples of agency-identified studies and transmittal documents (if available).

Section 5(d)(1) Studies Available for Download

Congressionally Authorized Study Reports

We have collected a few of the study reports prepared at the direction of Congress (see next section, "Section 5(a), Congressionally Authorized Studies," for the complete list of congressionally authorized studies). If you do not see a report here, we do not have it, and you will have to contact the study agency at the local level for a copy.

Congressionally Authorized Study Reports Available for Download

Section 5(a), Congressionally Authorized Studies

Through Section 5(a), Congress authorizes the study of select rivers and directs one of the four federal river-administering agencies to conduct the study, as outlined in Sections 4(a) and 5(c) of the Wild & Scenic Rivers Act. The enabling legislation of 1968, P.L. 90-542, authorized 27 rivers for study as potential components of the National System. Amendments to the law have increased the number of studies authorized by Congress to 144.

These studies have lead to 48 designations by either Congress or the Secretary of the Interior. One study led to the establishment of a National Recreation Area.

The number of rivers included in the National System differs from the number of rivers authorized for study by Congress for the following reasons:

- Not all rivers studied are found eligible or suitable for designation—many study rivers will not be included in the National System.
- Some rivers are designated by Congress or the Secretary of the Interior without a pre-authorization or 5(a) study (e.g., Niobrara River).
- Some rivers are designated as a result of recommendation in federal agency plans (e.g., 49 rivers designated in Oregon in 1988).

The 144 rivers below have been authorized for study. The agency leading the study is indicated as National Park Service (NPS), Bureau of Outdoor Recreation (BOR), Heritage Conservation and Recreation Service (HCRS), Bureau of Land Management (BLM), or U.S. Forest Service (USFS). Within the Department of the Interior, the study function was transferred from the HCRS (formerly the BOR) to the NPS by Secretarial Order Number 3017, January 25, 1978. All studies indicated as BOR or HCRS were completed by these agencies before the program was transferred to the NPS. The BLM was delegated responsibility for conducting studies on Public Lands on October 11, 1988. The USFS (Department of Agriculture) has always conducted studies on National Forest System Lands and as directed by Congress.

For each study river, the number in parentheses is the approximate number of miles to be studied. If river segments were designated, the total designated mileage appears in the text.

Section 5(a), Congressionally Authorized Studies

Environmental Justice

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Burlington, VT

1 mile Ring Centered at 44.489809,-73.228984
Population: 7,502
Area in square miles: 3.14

A3 Landscape

COMMUNITY INFORMATION

Low income: 46 percent	People of color: 27 percent	Less than high school education: 10 percent	Limited English households: 1 percent
Unemployment: 4 percent	Persons with disabilities: 12 percent	Male: 47 percent	Female: 53 percent
78 years Average life expectancy	$38,189 Per capita income	Number of households: 3,679	Owner occupied: 24 percent

BREAKDOWN BY RACE

White: 73%	Black: 8%	American Indian: 0%	Asian: 9%
Hawaiian/Pacific Islander: 0%	Other race: 0%	Two or more races: 3%	Hispanic: 7%

BREAKDOWN BY AGE

From Ages 1 to 4	7%
From Ages 1 to 18	16%
From Ages 18 and up	84%
From Ages 65 and up	10%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	0%
Speak Other Indo-European Languages	68%
Speak Asian-Pacific Island Languages	25%
Speak Other Languages	7%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	88%
Spanish	2%
French, Haitian, or Cajun	4%
Russian, Polish, or Other Slavic	1%
Other Indo-European	3%
Chinese (including Mandarin, Cantonese)	1%
Vietnamese	1%
Total Non-English	12%

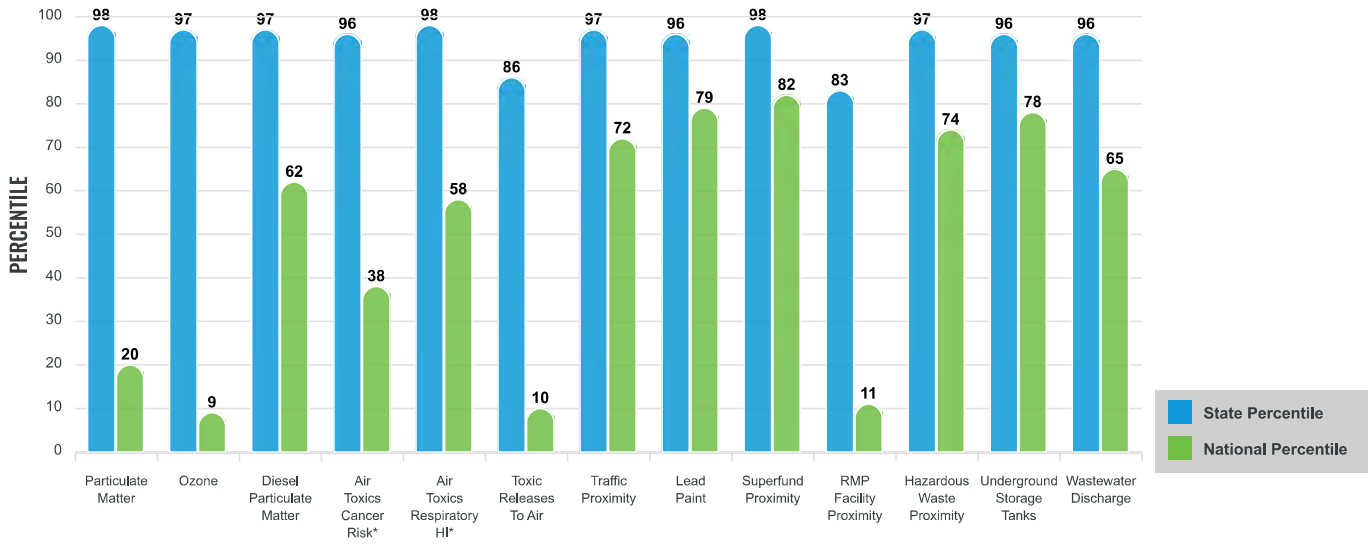
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

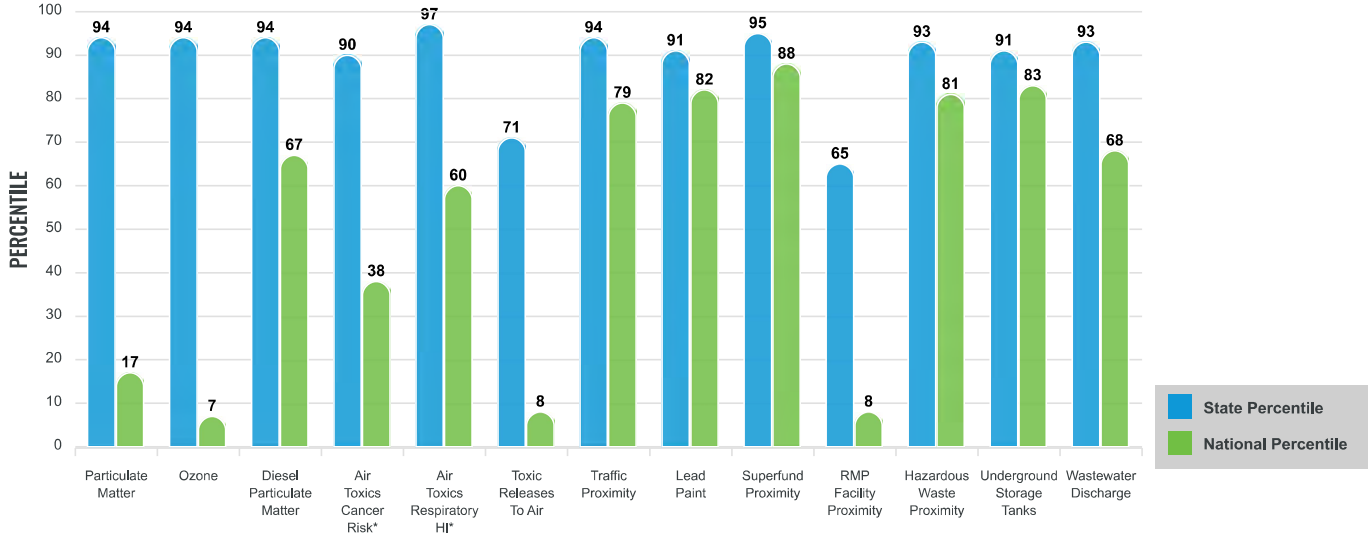
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 1 mile Ring Centered at 44.489809,-73.228984

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	6.22	5.7	87	8.08	10
Ozone (ppb)	52.5	51.8	87	61.6	4
Diesel Particulate Matter (µg/m^3)	0.216	0.0795	92	0.261	50
Air Toxics Cancer Risk* (lifetime risk per million)	20	18	23	25	5
Air Toxics Respiratory HI*	0.29	0.19	20	0.31	4
Toxic Releases to Air	2.2	15	46	4,600	5
Traffic Proximity (daily traffic count/distance to road)	240	46	95	210	79
Lead Paint (% Pre-1960 Housing)	0.65	0.37	86	0.3	83
Superfund Proximity (site count/km distance)	0.48	0.14	92	0.13	94
RMP Facility Proximity (facility count/km distance)	0.034	0.12	38	0.43	5
Hazardous Waste Proximity (facility count/km distance)	2.6	0.72	89	1.9	79
Underground Storage Tanks (count/km^2)	12	4	87	3.9	91
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0017	0.054	79	22	53
SOCIOECONOMIC INDICATORS					
Demographic Index	37%	17%	96	35%	60
Supplemental Demographic Index	16%	11%	89	14%	66
People of Color	27%	8%	97	39%	47
Low Income	46%	26%	89	31%	76
Unemployment Rate	4%	4%	62	6%	50
Limited English Speaking Households	1%	1%	86	5%	59
Less Than High School Education	10%	6%	83	12%	59
Under Age 5	7%	4%	84	6%	69
Over Age 64	10%	21%	10	17%	27
Low Life Expectancy	20%	17%	84	20%	58

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	4
Air Pollution	4
Brownfields	21
Toxic Release Inventory	0

Other community features within defined area:

Schools	4
Hospitals	0
Places of Worship	5

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for 1 mile Ring Centered at 44.489809,-73.228984

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	20%	17%	84	20%	58
Heart Disease	4	6.1	5	6.1	10
Asthma	11	10.2	87	10	79
Cancer	4	6.9	3	6.1	10
Persons with Disabilities	11.8%	14.5%	34	13.4%	45

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	3%	15%	9	12%	26
Wildfire Risk	0%	0%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	19%	16%	68	14%	72
Lack of Health Insurance	4%	4%	52	9%	28
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	No	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for 1 mile Ring Centered at 44.489809,-73.228984