

Burlington Design Advisory Board

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Design Advisory Board

Tuesday, January 9, 2024, 3:00 PM

Remote and In Person (at 645 Pine Street) Meeting

Please click the link below to join the webinar:

Zoom: <https://us02web.zoom.us/j/87155655137?pwd=ZEdGaGhxeFpRNDJQcFJrNWkvb1Vudz09>

Webinar ID: 871 5565 5137

Passcode: 796731

Telephone: US: +1 312 626 6799 or +1 929 205 6099 or +1 301 715 8592 or +1 346 248 7799 or +1 669 900 6833 or +1 253 215 8782

1. Agenda

1.1. Session I - 3:00 pm - 3:30 pm

**Historic Preservation Review Committee
Section 106 Review of Intervale Road path.**

1.2. Session II - 3:30 pm - 4:00 pm

**Historic Preservation Review Committee
Section 106 Review of Winooski bridge and intersection project.**

2. Informational and Non-Discrimination Statements

2.1.

The programs and services of the City of Burlington are accessible to people with disabilities. Individuals who require special arrangements to participate are encouraged to contact the Department of Permitting & Inspections at least 72 hours in advance so that proper accommodations can be arranged. For information call 865-7188.

Non-Discrimination

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Section 106

Section 106 of the National Historic Preservation Act requires Federal agencies to consider the effects of their actions on historic properties and seek comments from an independent reviewing agency, the Advisory Council on Historic Preservation. The purpose of Section 106 is to avoid unnecessary harm to historic properties from Federal Actions.

While Section 106 of NHPA tells agencies they must take the effects of their undertakings into account afford the Council an opportunity to comment, it does not tell them how.

The Section 106 review process includes steps for [identifying and evaluating](#) historic properties, [assessing the effects](#) of the agency's proposed action on the historic properties, and, if there is a harmful (adverse) effect, consultation about ways to [avoid, reduce, or mitigate](#) that harm.

Consultation always involves the agency and the State Historic Preservation Officer (SHPO) unless the SHPO declines to participate; often the Council and other interested parties.

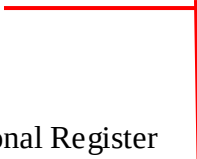
[A Certified Local Government is a consulting party to Section 106 projects.](#)

Inherent in the philosophy underlying Section 106 is the belief that a built environment in which old and new blend harmoniously is the best in which to live and work. At the same time, this philosophy recognizes that pure preservation of every historic property is unrealistic and not in the public interest. Hence, the 106 process does not require preservation in every case. Nor does it give the Council veto power over an agency's actions. What it does require is full consideration of preservation values by Federal agencies. Section 106 "solutions" resulting from the process can range from the purest preservation to unmitigated loss of a property. However, Section 106 does ensure that an agency's decision about how to treat historic properties results from meaningful consideration of historic values and of options available to protect the properties.

The 106 Process

1. Undertaking?
2. Area of Potential Effect
3. Identify Historic Property
4. Evaluate Historic Significance according to National Register
5. Determination of effect:
 - a. No Historic Property affected
 - b. Historic Property affected. [CLG may comment.](#)
 - c. Assessment of Adverse Effect
6. Apply Criteria of Adverse Effect

"An undertaking is considered to have an adverse effect when the effect on a historic property may diminish the integrity of setting, location, association, materials, design, workmanship or feeling"
7. Finding:
 - a. No effect
 - b. No adverse effect.
 - c. Adverse effect.



This analysis is done by
a qualified consultant.

Section 4(f)

(a) (1) The Administration may not approve the **use** of land from a significant publicly owned public park, recreation area, or wildlife and waterfowl refuge, or any significant historic site unless a determination is made that:

- (i) There is no feasible and prudent alternative to the use of land from the property; and
- (ii) The action includes all possible planning to minimize harm to the property resulting from such use.

Definition of “use”:

- 1. When land is permanently incorporated into a transportation facility.
- 2. When there is a temporary occupancy of land that is adverse in terms of the statutes’ preservation purposes.
- 3. When there is a constructive use of land.

Constructive Use:

- 1. Noise
- 2. Proximity
- 3. Restriction on access
- 4. Vibration
- 5. Ecological intrusion



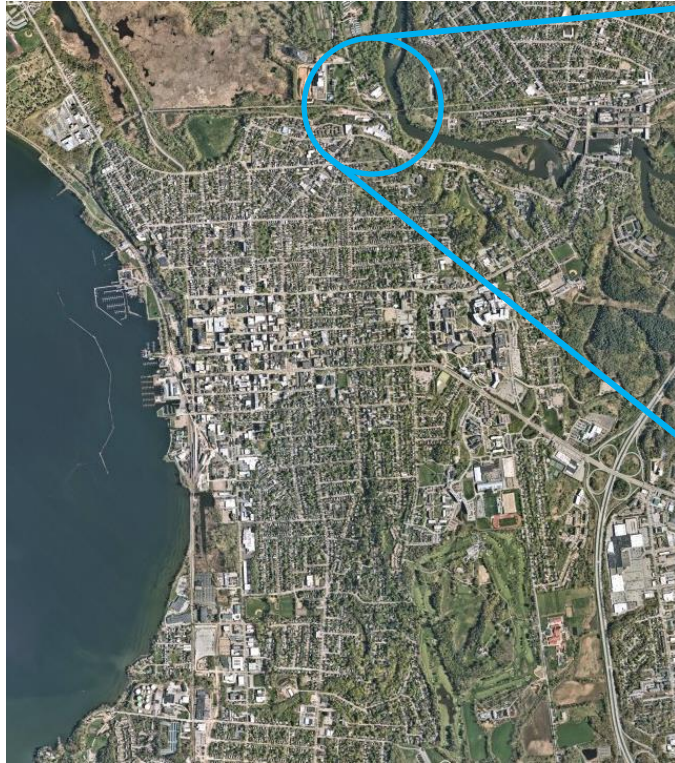
Intervale Road Shared-Use Path Project

Historic Preservation Review Committee

Burlington DPW, Burlington, VT – January 9, 2024



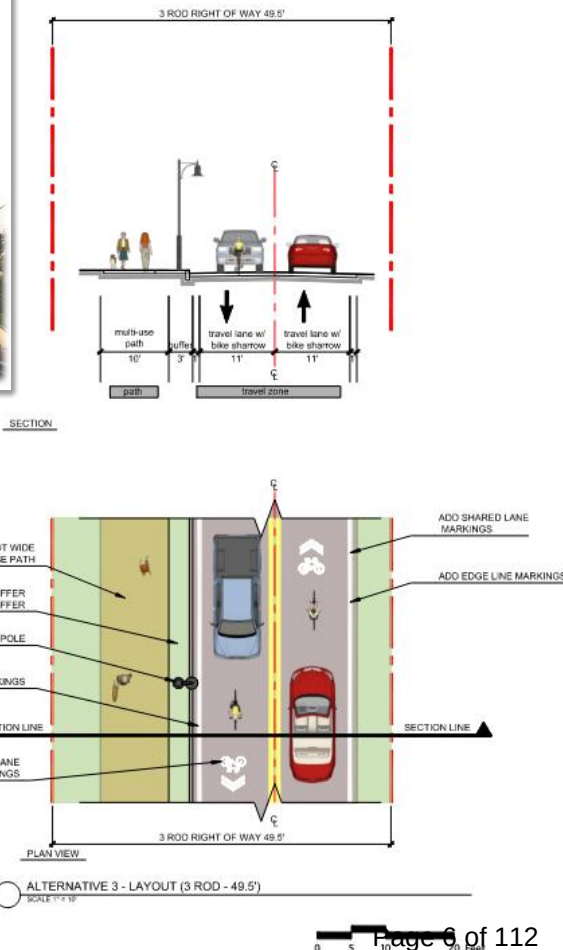
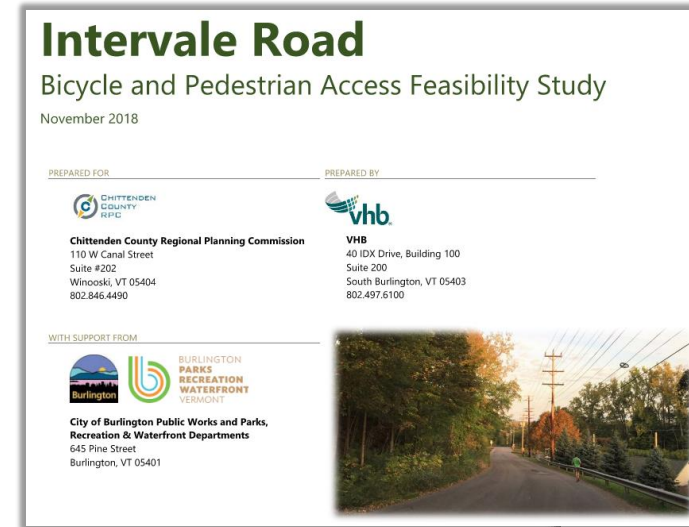
Project Background – Project Area



"The purpose of this project is to improve safety and access for those walking and bicycling along Intervale Road, traveling to/from its many destinations and amenities."

Project Background – Past/Concurrent Projects

- Intervale Road Bicycle and Pedestrian Access Feasibility Study (2018)
 - Evaluated alternatives for safe and accessible walking & biking access to the Intervale
 - Local Concerns Meeting – January 1, 2018
 - Alternatives Presentation – June 18, 2018
 - Preferred Alternative: Shared-Use Path
 - Public Information Meeting – September 28, 2023
- Adjacent / Concurrent Projects
 - NECR Railroad Crossing – VTrans
 - 2024 Construction
 - McNeil Plan Steam Line – Evergreen
 - 2024 Construction



Project Background – Existing Conditions



Lack of Adequate Walking / Biking Facilities



Steep side slopes / embankments



Railroad Crossing Safety Improvements



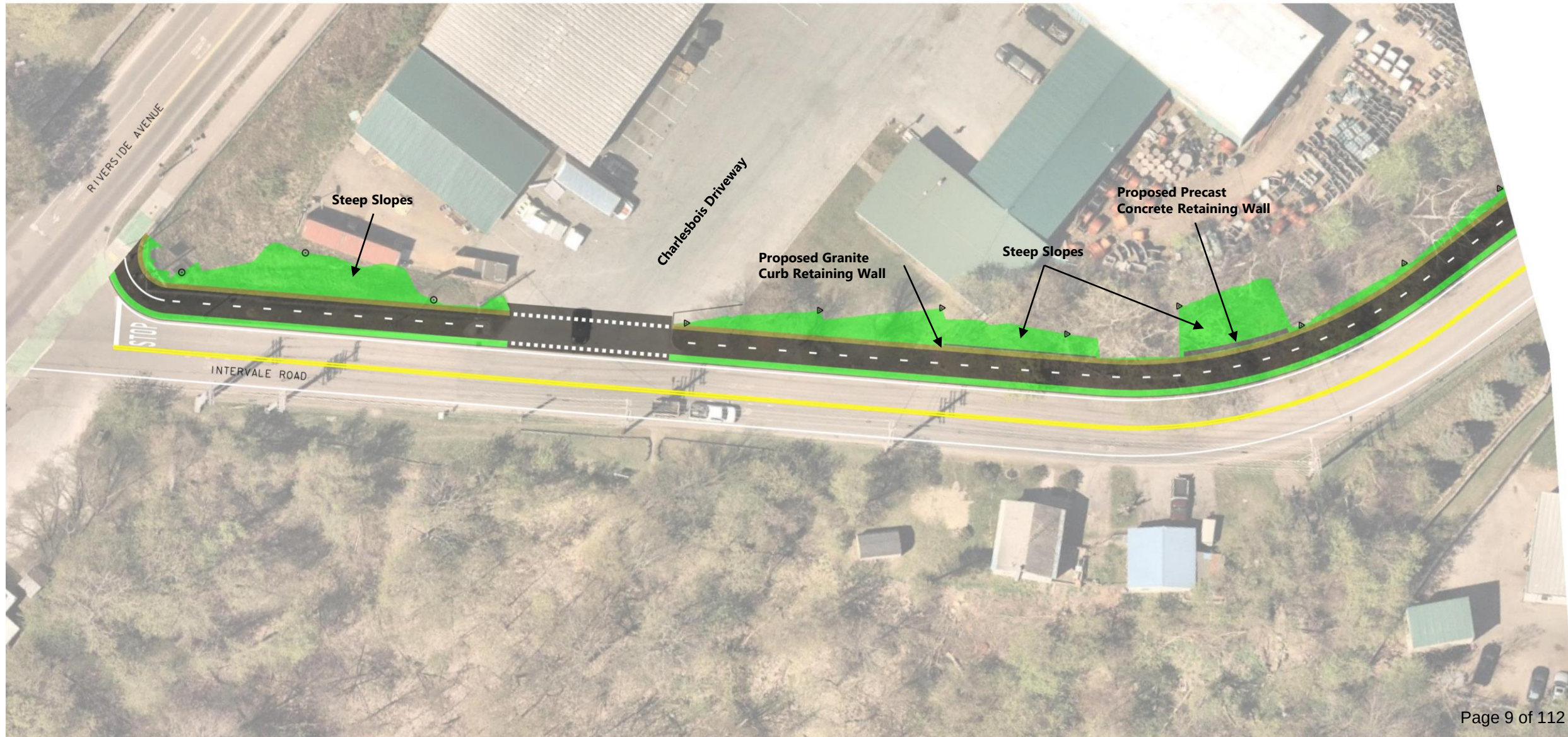
Drainage / Utility Relocation and Improvements

Project Considerations

- Walking and Biking Safety & Access
- Compliance with ADA Standards
- Stormwater Management
- Railroad Crossing
- Registered Archaeology Site
- Sustainability and Maintenance
- Constructability and Cost

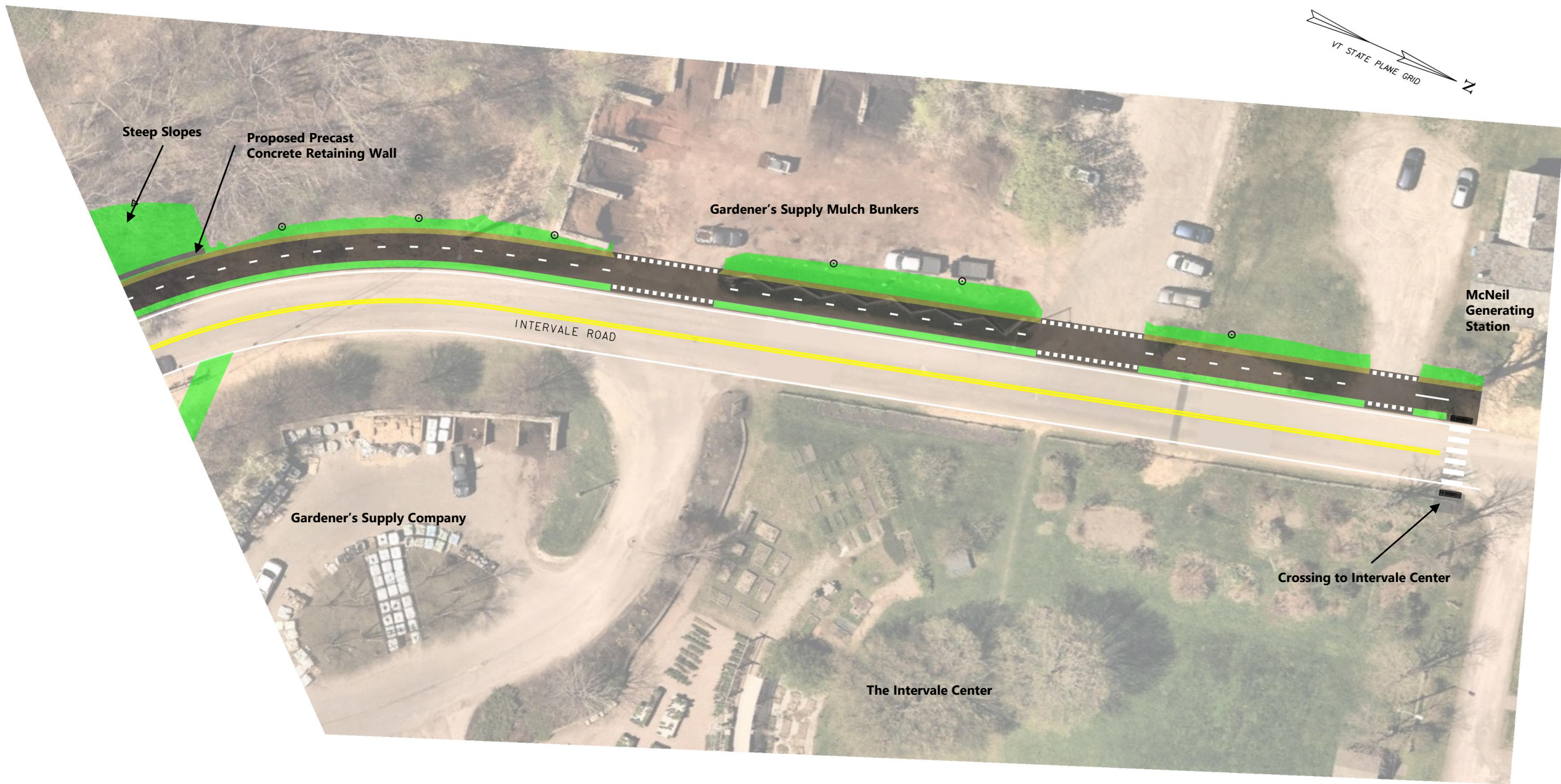


Shared-Use Path Conceptual Layout



Shared-Use Path Conceptual Layout





Shared-Use Path Conceptual Layout



- | | | |
|---|--|---|
| Direct Area of Potential Effect (APE; VHB) | A Eligible APE Property (VHB) | VHD Stream (ANR) |
| Indirect Area of Potential Effect (APE; VHB) | A Ineligible APE Property (VHB) | Parcel Boundary (VCGI) |
| | A Section 4(f) Parks Property (VHB) | Railroad (VTrans) |

Historic Resources In APE

#2 – Cemetery

#12 – NECR

#13 – NECR Bridge

#14 – 60 Intervale Rd

Section 4(f) Recreation Resource

#4 – Winooski Valley
Parks Trailhead





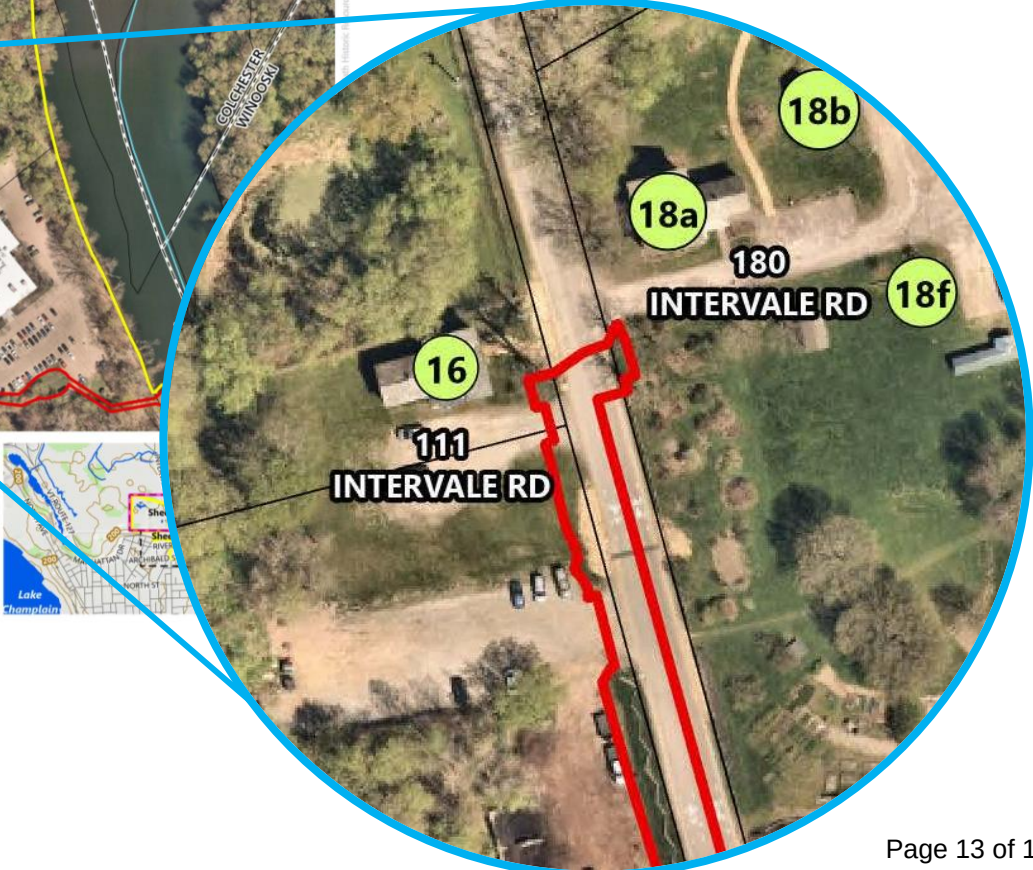
- Direct Area of Potential Effect (APE; VHB)
- Indirect Area of Potential Effect (APE; VHB)
- Eligible APE Property (VHB)
- Ineligible APE Property (VHB)
- Section 4(f) Parks Property (VHB)
- VHD Stream (ANR)
- Parcel Boundary (VCGI)
- Railroad (VTrans)

Sources: Background imagery by Nearmap - Collected on May 8, 2022; VCGI (Vermont Center for Geographic Information Hosted Feature Service); VTrans (Vermont Agency of Transportation Hosted Feature Service); VHB - 2022

Historic Resources In APE

#16 – 111 Intervale Rd

#18 – 180 Intervale Rd



Archaeological Resources



Section 106 Recommendation of Effect

Section 4(f) Determination



Section 106: No Adverse Effect

Section 4(f): Historic de minimis



Project Schedule

Public Information Meeting

NEPA Process

Preliminary Plans

Right-of-Way Phase

Final Plans and Bid Advertisement

Construction

Tonight

September 2023 – April 2024

September 2023 – May 2024

May 2024 – January 2025

January - September 2025

Spring – Fall 2026



Please Share Your Thoughts With Us



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Intervale Road Path Burlington STP BP21(11)

Burlington, VT

PREPARED FOR



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October 12, 2023 - revised

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1

Introduction

The Intervale Road Path Project ["Project," Federal aid project Burlington STP BP21(11)] will improve pedestrian and bicycle access to the Intervale Center along Intervale Road in the north end of the City of Burlington ("City"). On behalf of the City, VHB is completing the design and assisting with permitting for the Project, which includes the construction of approximately 1,700' of curb separated shared use-path and 150 linear feet of sidewalk along Intervale Road.

The Project is the preferred alternative, which was identified by the November 2018 *Intervale Road Bicycle and Pedestrian Access Feasibility*, completed by VHB and the City for the Chittenden County Regional Planning Commission ("CCRPC"). The 2018 study advanced recommendations from the Intervale Master Plan, assessed conditions and evaluated a set of alternatives and determined the preferred design for the length of Intervale Road from Riverside Avenue to north of the Tommy Thompson Community Gardens.

The preferred alternative includes a 10' wide shared-use path on the west side of Intervale Road separated from the travel lane by a 3'0" curb and grass buffer. A crosswalk at the north end of the shared-use path will connect to the Intervale Center. The preferred alternative includes line striping, pavement markings, signage, and lighting. North of the Intervale Center, the road will have shared roadway markings. **See Appendix A – Preferred Alternative.**

This resource identification will assist planning efforts by identifying historic buildings and features and potential permitting concerns during the design phase. This report follows the Vermont Agency of Transportation ("VTrans") Municipal Assistance Section ("MAS") guidelines set forth in the MAS Consultant Contract provisions, MAS Guidebook, and MAS Project Development process. In addition, this report can support review pursuant to Section

106 of the National Historic Preservation Act ("Section 106" and "NHPA", 16 U.S.C. 470) and Section 4(f) of the Department of Transportation Act ["Section 4(f)"], as well as local and state historic preservation review processes.

This report includes a discussion of methodology, a discussion of the Study Area, a brief historic context, brief descriptions of properties, indication as to whether the properties have been surveyed or listed in the Vermont Historic Sites and Structures Survey ("VHSS"), the Vermont State Register of Historic Places ("State Register"), or the National Register of Historic Places ("National Register"), recommendation of eligibility for listing in the National Register, a photograph of each property, and identification of known Section 4(f) resources.



2

Methodology

The work required to complete this report was undertaken by Kaitlin O'Shea, a Senior Preservation Planner and 36 CFR 61 qualified architectural historian with VHB. Prior to fieldwork, Kaitlin reviewed existing survey and register files available through the Vermont Division for Historic Preservation's ("VDHP") Online Resource Center.¹ The reports and files reviewed for this report include the VHSSS, the National Register listings, and relevant City of Burlington environmental review files. The purpose of reviewing this literature was to identify previously inventoried historic resources within the Project Area and to establish which sites had not been surveyed. In addition, historic maps such as United States Geological Survey ("USGS") Topographic Maps, the Sanborn Fire Insurance Company maps, and historic aerial imagery, available via various online repositories, were reviewed in order to determine which buildings were over 50 years old and therefore potentially historic.²

Following the literature and historic map review, VHB visited the Project Area to survey and photograph historic resources. Fieldwork included a site walkover and photography for each property located within the Project Area. After conducting research and fieldwork, each of the surveyed properties were evaluated for their historic integrity and eligibility for listing on the National Register, whether to remain as eligible or as eligible for inclusion in a historic district or an expanded historic district.

¹ www.orc.vermont.gov

² www.historicaerials.com; www.old-maps.com



3

Area of Potential Effect

The Area of Potential Effect ("APE") is defined by 36 CFR 800.16(d), revised August 5, 2004, as: *"the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties if such properties exist. The area of potential effects is influenced by the scale and undertaking and may be different for different kinds of effects caused by the undertaking."*

Determining the APE consists of a consideration of the nature and full extent of the project, including, but not limited to, the project description, the proposed project's use, all locations of ground disturbance, project setting, existing infrastructure, all locations from which the project may be visible, and all locations where the project may change traffic patterns. The APE consists of all direct and reasonably foreseeable indirect effects based on the nature of the project.

The precise Project limits have not been defined yet; however, the preferred alternative has been developed and it assumes work will be completed with the 3-rod right-of-way ("ROW"). Based on that information, the APE can be defined in this report

Based on the criteria above and field visits conducted in October 2022, the direct APE associated with this project includes the conceptual project footprint, the full 49.5-ft right-of-way and outside the ROW where required. The direct APE is shown on the APE maps in red. See **Appendix B – Sheets 1-2**.

Based on the nature and scope of this undertaking there is potential for visual impacts and additional, reasonably foreseeable impacts associated with this project that could be indirect and/or occur later in time, be farther removed in distance, or be cumulative due to the proximity of numerous buildings to the direct project APE. Consequently, an indirect APE extends to those properties abutting the project footprint. The indirect APE is shown on the APE Maps in yellow. See **Appendix B - Sheets 1-2**.



4

Above-Ground Historic Resource Identification

Section 106 requires all federal agencies to consider the effects of federal undertakings on historic properties and to afford the Advisory Council on Historic Preservation ("ACHP") an opportunity to comment on such projects prior to the expenditure of any federal funds. A federal undertaking is defined as a project, activity, or program either funded, permitted, licensed, or approved by a federal agency. Undertakings may take place either on or off federally controlled property and may include new and continuing projects, activities, or programs and any of their elements, whether or not they have been previously considered under Section 106.

A historic property is any property that is listed in or eligible for listing in the National Register. These properties can be buildings, structures, sites, objects, or districts and include above ground and below ground (*i.e.*, archaeological) resources. If a property has not been previously determined eligible or ineligible for the National Register, then, as part of the Section 106 process, it should be evaluated by the federal agency in consultation with the State Historic Preservation Officer ("SHPO") in order to determine if it meets eligibility.

Based on the Methodology of Chapter 2 and the APE discussed in Chapter 3, and the understanding of Section 106 regulations, VHB surveyed 18 parcels in the APE along the preferred alignment on Intervale Road. Some of the properties have multiple structures, bringing the total number of surveyed resources to 25. The E-911 addresses and Map ID numbers in Table 1 correspond to **Appendix B – Sheets 1-2**. Photograph numbers in Table 1 correspond to **Appendix C – Photographs**.

4.1 Historic Overview

Burlington's Intervale area is approximately 870 acres of cultivated floodplain located north Burlington's downtown and Riverside Avenue and west of the Winooski River. Small sections of the Intervale stretch into Winooski and Colchester. The Intervale land consists of wetlands, agricultural fields, wooded areas, McKenzie Park, and various buildings in the southern portion, which represent historic and modern farming and community gardening. The McNeil Generating Station, Burlington's wood-fired power plant, is located in the southern portion of the Intervale. Intervale Road runs from the south to the north, connecting Riverside Avenue with the historic and contemporary farmsteads and the trails throughout the Intervale.

There are two prominent historic brick farmhouses located across the road from each other at the bottom of the hill – 111 Intervale road and 180 Intervale Road. Both date to the mid-1800s and are discussed below as part of the historic overview.³ In addition to the historic brick homes, associated agricultural buildings and the former recreation areas of the Intervale – Athletic Park and Riverside Park – are discussed below.

111 Intervale Road – Riverside Farm / Lorenzo Howe Farm - McNeil Project Office

The brick farmhouse was originally part of a ca. 1850 farm known as Riverside Farm. This farm was also commonly referred to as the "Pomeroy Farm" because it was owned by two generations of the renowned Pomeroy family. John Pomeroy, Burlington's first practicing physician, owned the property from about 1802 to 1844, at which time it transferred to his son John N. Pomeroy, a wealthy landowner and gentleman farmer who owned much of the land from North Prospect Street down to the Intervale. Pomeroy built the farmhouse at 111 Intervale Road in about 1850. By the 1870s, Pomeroy began to sell off his real estate, and his farm transferred to Frederick Van Sicklen who, in turn, sold the 400-acre farm to Obadiah J. Walker in 1884 (Walker and Van Sicklen were business partners). By 1907, the farm was passed down to Obadiah J. Walker's daughter Frances Walker Brown and her husband George Brown. Coinciding with the brown's acquisition of the property, the Calkins family first moved here as tenant farmers in 1907 where they remained until they moved to Danville in 1918. After the Calkins family moved, a number of different farmers owned and occupied the farm, including Oliver Phoenix in the 1920s, Thomas Parizo from the 1930s through the 1950s and Lorenzo Howe from the 1950s through the 1970s, when the property was purchased by the City of Burlington for the McNeil Generating Plant.

What is known as the Community Barn at the Intervale Center was originally located on the side of the road with 111 Intervale Road. It was relocated across the road to its current location in 2003. Additional barns at the Howe Farm were removed in the latter decades of the 20th century.

180 Intervale Road – Calkins-Reynolds Farmstead – Intervale Center

The existing Intervale Center farmstead was first developed in about 1860 when George Reynolds, a resident of Elmwood Avenue in Burlington, purchased 50 acres of land at the Intervale on the east side of the road. Reynolds purchased another 50 acres in 1863,

³ The majority of the historic resources discussion is from the previously completed (2017) research report, *Historic Resources of the Intervale*, by architectural historian, Britta Tonn. The report is listed in the References section.

although he continued to live on Elmwood Avenue in Burlington until the farmhouse was constructed in 1868. This area of the Intervale had already been the location of at least one former farm prior to Reynold's purchase of the property; since at least the late-18th century, the Intervale generated lumber, potash, corn, flax, and various grains. The Reynolds farm was likely developed at the location of an earlier Intervale farm, suggested by the fact that the English hay barn was constructed ca. 1830.

Throughout its history the farm was owned and operated by the Reynolds family until about 1930, when the Calkins family purchased the property. The Calkins family employed tenant farmers who lived on the property. The last Calkins family member to own and operate the farm on the property, Rena Calkins, rented the land to the Intervale Foundation and donated 60 acres to the Foundation in the early 2000s.

The Intervale Foundation was established in 1988 with large support from Will Raap, the founder of Gardener's Supply Company, with the goal of restoring the Intervale land and farmsteads to a community agricultural, business development and recreational resource. After renting the farmstead to the Intervale Foundation for several years once the dairy farm was closed, Paul Calkins and his aunt Rena donated seven acres of land and buildings comprising of the farmstead to the Intervale Foundation in 2002 and, later, donated an additional 53 acres to the Intervale Center in 2005. When the Intervale Foundation first occupied the farmstead and was formulating its plan for the development of the property, there was uncertainty as to whether or not the barns or the ell of the house could be restored as they were in such a deteriorated state. However, utilizing grants and an easement from the Vermont Housing and Conservation Board, the Preservation Trust of Vermont and the VDHP as well as money from a number of generous donors throughout the years, the Intervale Center has engaged in a successful restoration of the historic farmstead. Today the Intervale Center is comprised of many of the agricultural buildings that existed during the Calkins era, though some have been altered over the years. In addition to the farmhouse, they are the English barn, the dairy barn, the community, the corn crib, the silo, and the milk house.

The Intervale Center property has continuously operated as a farm for at least 190 years, based on the ca. 1843 construction of the English barn. The Calkins dairy farm was owned and operated by two generations of women (Ella Calkins and her daughter Rena Calkins), which was unique as agriculture was historically a male-dominated industry. In 1992, the VDHP, stated "As the last remaining farmstead in Burlington, it is a rare surviving historic resource that preserves a collection of buildings and an agricultural landscape that were once common even with the boundaries of Vermont's largest city" (August 6, 1992).

Athletic Park

The Intervale area was popular for recreation, as the Athletic Park was home of the University of Vermont's baseball, football, and track and field events from 1887 until 1906 when UVM's Centennial Field opened. Athletic Park was located at the northwest quadrant of the Intervale Road and Riverside Avenue intersection, set below Riverside Avenue due to the difference in grade. See Figure 1, below. An 1887 *Burlington Free Press* article reported that the park was 500' long by 300' wide, surrounded by a close board fence seven feet high. The surface was graded and filled with soil and a quarter mile track 12' wide was constructed in addition to a baseball diamond, set below the slope from Riverside Avenue. A grandstand fit 300

spectators. The work on the park was directed by J.W. Roberts and the park was managed by C.L. Woodbury.

In the winter of 1907-1908, the lower diamond at Athletic Park was transformed into an outdoor skating rink 280' long by 200' wide, lit by electrical lights. The effort was led by Burlington resident, George D. Jarvis.

With the popularity of UVM Centennial Field, Athletic Park fell into disuse by 1912. Henry D. Sales purchased the buildings from J.D. Jarvis. Sales planned to dismantle the buildings. In 1924, Thomas Reeves and Son opened a concrete brick and block manufacturing operation on the old Athletic Park grounds. Since then, the area has been used for commercial or industrial purposes.



Figure 1: Athletic Park shown north of Riverside Avenue (then called Winooski Avenue). Excerpt from the 1890 Hopkins Map of Burlington.

60 Intervale Road

After research, the small brick and stone building located at 60 Intervale Road continues to be a mystery. The State Register listing identifies the building as a former railroad depot. The book, *Historic Guide to Burlington Neighborhoods Vol. III*, notes that the building was mistakenly called a depot, but it was more likely washrooms constructed for Athletic Park in 1897 or 1904. However, there is no source for this information. Newspaper articles that

discuss the construction of both facilities do not mention a restroom. The only reference to a building near these recreation fields can be found in a *Burlington Free Press* article on December 5, 1907, which discussed the winter conversion of Athletic Park to a skating rink. The article states "A rink 280 feet long and 200 feet wide is being made and a house, in which the skaters may get warm, is also being erected." However, a warming hut would have been of lighter construction. Related to the 1924 Thomas Reeves and Son concrete brick and block manufacturing facility, it is possible that the building was a model building or advertisement for the company, though it has not yet been confirmed.

An oral history project interviewed the owner of the Stray Cat Farm, which used the building for its business.⁴ The owner noted that the "depot" was used as a coal and milk platform for the railroad. While there is a platform behind the building, the railroad tracks are not adjacent to the rear of the building. The oral history statement cannot be verified.

Thus, the original use and construction of this building remains unknown. For the purposes of this Historic Resources Assessment, VHB recommends that the building be considered historic until its history and origin can be confirmed.

Riverside Park

In 1909, a driving park was constructed north of Riverside Avenue (approximately where the McNeil Generating Station is located today) by the Burlington Driving Club, which was formed for the sole purpose of establishing this riding park, which was essentially a racing track for horse-drawn carriages known as sulkies. According to Burlington Land Records, in 1909, the Driving Club leased several acres of land from Fayette Calkins (who was leasing Riverside Farm) for the establishment of a half-acre driving track. The lease was for five years, with the opportunity to renew. The track was constructed by J.E. Cashman.

According to numerous short newspaper articles about the races at Riverside Park dating from 1909-1910 through the early 1910s, the races regularly drew crowds of 1,000 to 2,000 spectators. The new driving park was very popular and hosted numerous events during the Lake Champlain Tercentenary celebration in June of 1909. The "speed craze" satisfied by the establishment of these driving parks was short-lived, however, due to the rising popularity of the automobile in the 1910s and 1920s. Mentions in local newspapers of horse racing at Riverside Park occurs through the mid-1920s. Though the end date is unclear at this time, in the 1937 aerial imagery, there is no evidence of Riverside Park.

Other Properties in the APE

The majority of the commercial properties date to the latter half of the twentieth century. The development of these parcels demonstrates a change from recreational use (Riverside Park, Athletic Park) to commercial use (Queen City Steel, Charlebois, the McNeil Generating Station, etc.) in the southern half of the project area.

⁴ <https://scholarworks.uvm.edu/cgi/viewcontent.cgi?article=1001&context=rsmpp>, pg. 125.

St. Joseph's Cemetery – 253 Archibald Avenue

What is known today as St. Joseph's Cemetery is a large, two-level cemetery, located at the southwest quadrant of the Riverside Avenue/Intervale Road/North Prospect Street intersection. The lower portion can be accessed through a gate and stone perimeter wall. The stone retaining wall extends along Riverside Avenue. The lower portion of the cemetery is set into the hillside, and concrete steps lead up to the larger portion of the cemetery, which is accessed from Archibald Avenue.

Shown in Figure 1 as St. Mary's R.C. [Roman Catholic] Cemetery, the 1853 cemetery is affiliated with the former St. Joseph's School on N. Prospect Street. The cemetery represents part of the Roman Catholic Church's first landholdings in the City of Burlington. It is a large cemetery with stone wall on N Prospect and Riverside boundaries with mature trees, lower level, and upper level.

4.2 Previous Surveys, State Register Listings, National Register Listings

Four (4) of the properties have been surveyed in the VHSSS and were subsequently listed in the State Register:

- NECR Bridge – Map ID 13
- 60 Intervale Rd – Map ID 14
- 111 Intervale Rd – Map ID 16
- 180 Intervale Rd (Intervale Center) – Map ID 18

None of the properties have been listed in the National Register; however, a draft nomination for the Intervale Center (180 Intervale Rd, Map ID 18) has been completed by University of Vermont Historic Preservation Program students.

4.3 Surveyed Properties Summary

VHB surveyed 18 parcels with structures (some with multiple structures, for a total of 25 resources) in the APE. A total of 10 resources are recommended as historic resources (*i.e.*, eligible for listing in the National Register). The following information is included for each property:

- Map ID # (see **Appendix B, Sheets 1-2**);
- E-911 Address and Business Name (where applicable),
- Photograph # (see **Appendix C, Photographs**);
- Business Name / Building Name, if applicable
- Type of Building (Commercial, Residential, Civic, Institutional);
- Date of Construction;

- Brief Description;
- Integrity/Eligibility Recommendation (properties highlighted in green are recommended as eligible for listing in the National Register). Note that historic properties are also Section 4(f) historic resources. Properties highlighted in blue are considered Section 4(f) recreation resources.

There are two less common types of properties included in this survey: reconstructed and relocated. To aid in the evaluation of integrity, VHB relied on the following two documents (which are referenced in the NR Eligibility column): the *National Register Bulletin: How to Apply the National Register Criteria for Evaluation* ("NR Bulletin") and the *Agricultural Resources of Vermont Multiple Property Documentation Form* ("Agricultural MDPF"). Per the NR Bulletin a reconstructed property is eligible when it is accurately executed in a suitable environment *and* presented in a dignified manner as part of restoration master plan *and* when no other building or structure with the same association has survived. All three of these requirements must be met. Per the NR Bulletin, a moved property (one that is removed from its original or historically significant location) can be eligible if it is significant primarily for architectural value or it is the surviving property most importantly associated with a historic person or event. Per the Agricultural MDPF, the additions, new construction, and relocation of buildings will not necessarily detract from a farmstead's eligibility. Moving buildings is a traditional part of farm operations.

Table 1: Summary of Surveyed Properties in APE

Map ID	Address	Photo No.	Date of Construction	Brief Description	NR Eligibility Rec. (2022)
1	500 Riverside Ave, Shell Station	1	1995	1-story, rectangular convenience store with shallow gable and flat roof, with 3-pump, gas station canopy and parking between building and the roadway.	Ineligible due to age
2	St. Joseph Cemetery, 253 Archibald St	2	Ca. 1850	Large cemetery with stone wall on N Prospect and Riverside boundaries with mature trees, lower level and upper level. Associated with the St. Joseph's School on N. Prospect Street, representing part of the Roman Catholic Church's first landholdings in the City of Burlington.	Eligible for listing in the NR under Criterion A – Religion – Roman Catholic Church in Burlington, VT.

Map ID	Address	Photo No.	Date of Construction	Brief Description	NR Eligibility Rec. (2022)
3	Kismayo Kitchen, 505 Riverside Ave	3	1945 (?)	1-story, wood-frame, 3 bay commercial building with neo mansard roof with small 1-story wing on the east elevation. A glass storefront door is set at the right side with two large windows with 1/1 vertical panes.	The roof and fenestration appear to have been altered. Ineligible due to alterations
4	Winooski Valley Parks Trailhead, Intervale Rd, no address #	4		Green space with benches, fencing, and trail sign for RiverWalk to Salmon Hole.	Not a historic property, but a Section 4(f) property – significant public park.
5	Sleep Well Recycling, 525 Riverside Ave	5	1970	1-story, rectangular, commercial building with shallow gable front, 4 bays across, glass windows above half brick walls, large garage bay, pedestrian glass storefront door, vertical metal siding.	Not a significant example of 1970s architectural style. Does not rise to level of individual significance. Ineligible.
6a	Johnston Building Supply, 557 Riverside Ave	5, 6	1970/2006	Large, 1-story commercial warehouse with shallow shed roof and metal siding. Windows have been added to the elevations.	Not a significant style of architecture. Does not rise to the level of individual significance. Ineligible.
6b	Johnston Building Supply, 557 Riverside Ave	7	1970	Large, 1-story commercial building with oversized shallow gable roof main block with 3 tall garage bays, a rear oversized 1-story flat roof addition, and a 1-story shed roof wing, all clad in vertical metal siding.	Not a significant style of architecture. Does not rise to the level of individual significance. Ineligible.

Map ID	Address	Photo No.	Date of Construction	Brief Description	NR Eligibility Rec. (2022)
7	Charlebois Rigging & Hardware, 29 Intervale Rd	6, 9	1960	Oversized 1-story commercial building with shallow gable front, tall garage bay, clad in metal siding with long rectangular 1-story eastern ell with garage bays of varying sizes.	Not a significant style of architecture. Does not rise to the level of individual significance. Ineligible.
8	Curate & Design, 29 Intervale Rd	6, 9	1960	1-story, shallow shed roof commercial building with heavy modern cornice extending over wall planes. Glass wall planes are obscured the bottom $\frac{3}{4}$ by corrugated metal siding.	Not a significant style of architecture. Does not rise to the level of individual significance. Ineligible.
9	Queen City Steel, 35 Intervale Rd	10	1979	Commercial complex of buildings, with large 1-story buildings clad in metal with shallow rooflines, garage bays, set back from the road accessed via driveway from Intervale Rd.	Ineligible due to age
10	Duncan's Auto Services, 40 Intervale Rd	11, 12	1990	Complex of three buildings including 1-story, gable roof, eaves front 4x1 bay office/garage building. A narrow 1-story, gable roof, modular home sits to its east. A large oversized 1-story garage building with a shallow shed roof and large garage bays sits to the east of the modular home.	Ineligible due to age

Map ID	Address	Photo No.	Date of Construction	Brief Description	NR Eligibility Rec. (2022)
11	44 Intervale Rd	13	Ca. 1860	2.5 story, wood frame, gable front, 2x2 bay house with covered front entrance, varying window styles (3/1, fixed, 1/1) clad in vinyl siding with vinyl shutters, and asphalt shingle roof. A 2-bay, gable front garage sits to the north of the house.	The house has been altered with vinyl siding and replacement windows. The fixed sash window and small portico are later alterations. The house no longer retains its 1860 appearance. Ineligible due to alterations.
12	New England Central Railroad ("NECR")	14, 15	Ca. 1850	NECR is a successor to the Central Vermont Railroad. This is the Burlington Branch, which is an active line that carries freight to/from Burlington, VT to Essex VT.	Eligible as a linear history district under Criterion A – Transportation – development of railroads in VT and New England.
13	NECR Bridge	16	1928	Camelback Polygonal Warren with verticals through metal truss bridge, fabricated by the American Bridge Company.	Eligible under Criterion C – example of metal truss bridge and eligible as contributing to RR linear historic district.

Map ID	Address	Photo No.	Date of Construction	Brief Description	NR Eligibility Rec. (2022)
14	60 Intervale Rd	17	Ca. 1907	1-story built into hill with exposed basement level, brick veneer façade with rusticated concrete accents, 3 bay façade, hipped roof with shallow gable roof dormer. Doors flank the central window bay on the façade. The north elevation has 2 windows on the main floor and basement floor. South elevation has 3 windows on the first story and a garage bay and pedestrian entrance in the basement level. Details include rusticated concrete elevations, overhanging eaves, brick lintels/sills.	Unknown at this time, as discussed above, but considered eligible for the purposes of this report.
15	Gardener's Supply, 128 Intervale Rd	18, 19	1985	Large, 2-story metal frame, metal clad building with shallow roof and attached greenhouses.	Ineligible due to age
16	111 Intervale Rd, brick building	20, 21, 22	Ca. 1851	"Project Office: Joseph C. McNeil Generating Station" 2.5 story brick Greek Revival, 3x2 bay, slate clad gable roof on redstone foundation. Details include central entrance with $\frac{3}{4}$ sidelights, stone transom, replacement 6/6 windows, brick jack arches, rear 1.5 story brick ell.	Eligible under Criterion C as an example of a brick Greek Revival farmhouse.

Map ID	Address	Photo No.	Date of Construction	Brief Description	NR Eligibility Rec. (2022)
17	McNeil Generating Station - Plant, 111 Intervale Rd	21, 23, 24, 25	1981-1984	Large industrial building, metal frame, flat roof, multi-stories with tall concrete smokestack, multiple buildings, water tanks, retention ponds.	Ineligible due to age
18a	Reynolds-Calkins Farmstead, Farmhouse, Intervale Center, 180 Intervale Rd	26, 27	Ca. 1865	Reynolds Farm. 2.5 story, gable roof, brick construction, Italianate style farmhouse with 3x2 main block. Details include cornice brackets, peaked wooden window lintels, projecting wood sills, 2/2 windows, paired interior chimneys, and a 1-story, 1-bay open central entrance porch with chamfered posts. The house has a slate roof and sits on a redstone foundation. A 1.5 story, gable roof brick wing with similar details extends at rear.	NR Eligible under Criterion C as example of Italianate style farmhouse and as contributing resource to Reynolds-Calkins Farmstead.
18b	Corn crib Reynolds-Calkins Farmstead, Intervale Center, 180 Intervale Rd	28, 29	Ca. 1870/2004	Rehabilitated in 2004. 1-story, wood frame, gable roof, with vertical wood siding, metal roof, and central entrance door on gable end.	NR Eligible as example of corn crib, as contributing resource to Reynolds-Calkins Farmstead.

Map ID	Address	Photo No.	Date of Construction	Brief Description	NR Eligibility Rec. (2022)
18c	English Barn (Hay Barn) Reynolds-Calkins Farmstead, Intervale Center, 180 Intervale Rd	28, 29	Ca. 1830, reconstructed 2008	1-story, wood-frame, gable roof barn on concrete foundation with vertical wood siding and central entrance bay on eaves front.	Reconstruction included 2/3 of the salvaged timber and is based on architectural and historic data of the resource, and part of master plan, per NR Bulletin. NR Eligible as contributing resource to Reynolds-Calkins Farmstead.
18d	Dairy Barn Reynolds-Calkins Farmstead, Intervale Center, 180 Intervale Rd	28, 29, 30	2011	2.5 story, timber-frame, wood sided gable roof dairy barn was deconstructed in 2005 and rebuilt in 2011 on a new concrete foundation using 75% of the ca. 1890 barn materials. The fenestration is similar but altered and the interior does not resemble a historic barn.	Ineligible due to age. Reconstruction is sympathetic to historic buildings but not compliant with Secretary of Interior's standards for reconstruction and not based on architectural record per the NR bulletin.

Map ID	Address	Photo No.	Date of Construction	Brief Description	NR Eligibility Rec. (2022)
18e	Community Barn Reynolds-Calkins Farmstead, Intervale Center, 180 Intervale Rd	28, 30, 31	ca. 1885 / 2005	1.5 story, timber frame, wood clad horse barn with overhanging eaves, monitor, and sliding doors. Originally located across the road at Riverside Farm (though associated with the Calkins Farm), it was relocated in 2003 and rehabilitated in 2005. An assessment states that it is constructed of recycled timbers from a late 18 th century barn and a ca. 1830s barn.	Eligible even though it has been relocated because, per NR Bulletin and Agricultural MPDF, it is within the local area and similar setting. It retains design, materials, workmanship, feeling. NR Eligible as contributing resource to the Reynolds-Calkins Farmstead.
18f	Milk house Reynolds-Calkins Farmstead, Intervale Center, 180 Intervale Rd	28, 31	Ca. 1920	Small, one-story, 2x1 bay, wood frame, gable front building clad in novelty siding with a metal roof, overhanging eaves, cornerboards, and a concrete foundation. A small window is in the gable peak and the door is constructed of vertical wood slats.	NR Eligible as contributing resource to the Reynolds-Calkins Farmstead.

Map ID	Address	Photo No.	Date of Construction	Brief Description	NR Eligibility Rec. (2022)
18g	Silo Reynolds-Calkins Farmstead, Intervale Center, 180 Intervale Rd	31	Ca. 1890 / relocated ca. 2020	Wooden stave silo, which is identified by its vertically oriented boards held together with redwood bands/hoops. It is unique in its interior tongue and groove construction. This one was likely ordered a kit from a western manufacturer, constructed in tandem with the dairy barn, one of two silos that were located on the east side of the barn.	Though relocated, it retains its setting. The Agricultural MPDF allows for farm structures to be moved. Slightly altered by the added windows, but does not affect overall integrity. NR Eligible under Criterion C as an example of wood stave silo built from a mail order kit. Also eligible as contributing resource to the Reynolds-Calkins Farmstead.

In summary, the properties recommended as eligible for listing in the National Register include:

- Map ID 2 – St. Joseph’s Cemetery
- Map ID 12 - NECR
- Map ID 13 – NECR Bridge
- Map ID 14 – 60 Intervale Road
- Map ID 16 – 111 Intervale Road (brick farmhouse)
- Map ID 18 – Intervale Center (Reynolds-Calkins Farm) with contributing resources:
 - Map ID 18a – Farmhouse
 - Map ID 18b – Corn crib
 - Map ID 18c – English Barn
 - Map ID 18e – Community Barn
 - Map ID 18f – Milk house
 - Map ID 18g – Silo



5

Section 4(f) Resources

Section 4(f) protects significant publicly owned parks, recreation areas, and wildlife and waterfowl refuges as well as significant historic sites, whether they are publicly or privately owned. Section 4(f) is codified as 49 U.S.C. 303 and 23 U.S.C. 138. Section 4(f) and applies to all agencies within the United States Department of Transportation, including FHWA. FHWA regulations 23 C.F.R 774 implement the law.

For the purposes of this Historic Resources Identification Report, the Section 4(f) resources in the APE include those historic resources eligible for or listed in the National Register of Historic Places, which are described in Chapter 4 of this report and shaded in green in Table 1 in Section 4.3.

There is one Section 4(f) recreation research – the Riverwalk to Salmon Hole trailhead (Map ID 4). It is shaded in blue in Table 1. There are no wildlife or waterfowl refuges in the Project Area (or APE).

A Section 4(f) evaluation will be required for any adverse effects to (or “use” of) historic sites or parks or for any easements/acquisitions of historic sites or parks. A Section 4(f) de minimis determination may be used for historic sites and recreation resources when the “use” of the resource will not cause an adverse effect to the resource.



6

Recommendations

Of the 18 properties (25 resources) surveyed in the APE, 10 are considered eligible for listing in the National Register. With this information and the understanding of the Project, the following considerations/recommendations are provided:

- This project will require review under Section 106 of the National Historic Preservation Act.
- Because Federal transportation funding will be used and easements will be required, the Project will need to be evaluated for applicability to Section 4(f) of the Department of Transportation Act. Easements from historic properties will likely result in a Section 4(f) historic de minimis finding.
- Based on the current plans, wherein the project remains in the ROW and on the existing pavement, restriping the lanes, and adding a shared-use path separated by a buffer, the Project is not anticipated to cause any adverse effects to historic resources. Where the project extends outside of the ROW, the Project is not anticipated to adversely affect character defining features of historic properties.



7

References and Resources

Allen, Danielle; Henderson, Timothy Henderson; McCoy, Maureen; Telesca, Andrew; and Tolstoi, Alexander. *Reynolds-Calkins Farmstead National Register Nomination Draft*. Prepared as part of the University of Vermont Historic Preservation Program, 2018.

Blofson, Katharan M., "Master's Project: Intervale Out Loud: A Place-based Oral History Project" (2014). Rubenstein School Masters Project Publications. 1.
<https://scholarworks.uvm.edu/rsmpp/1>.

Burlington Daily News. Burlington, Vermont. May 3, 1909, p. 8.

"City and Vicinity" *Burlington Free Press*, Thursday December 5, 1907, p. 12.

Jamele, Suzanne; Gilbertson, Elsa. *Agricultural Resources of Vermont: National Register of Historic Places Multiple Property Documentation Form*, 1991.

National Register Bulletin: How to Apply the National Register Criteria for Evaluation. U.S. Department of the Interior, National Park Service, 1995.

"Promise to Cut Cost of Building," *Burlington Free Press* Burlington, Vermont. February 19, 1924, p. 6.

Tonn, Britta. *Historic Resources of The Intervale Center*. Prepared for the Intervale Center, January 2017.

Tonn, Britta. *Historic Resources of The Intervale Center – Addendum Report on the History of 282 Intervale Road and 111 Intervale Road*. Prepared for the Intervale Center, April 2017.

Vermont Center for Geographic Information. 1962 aerial imagery.

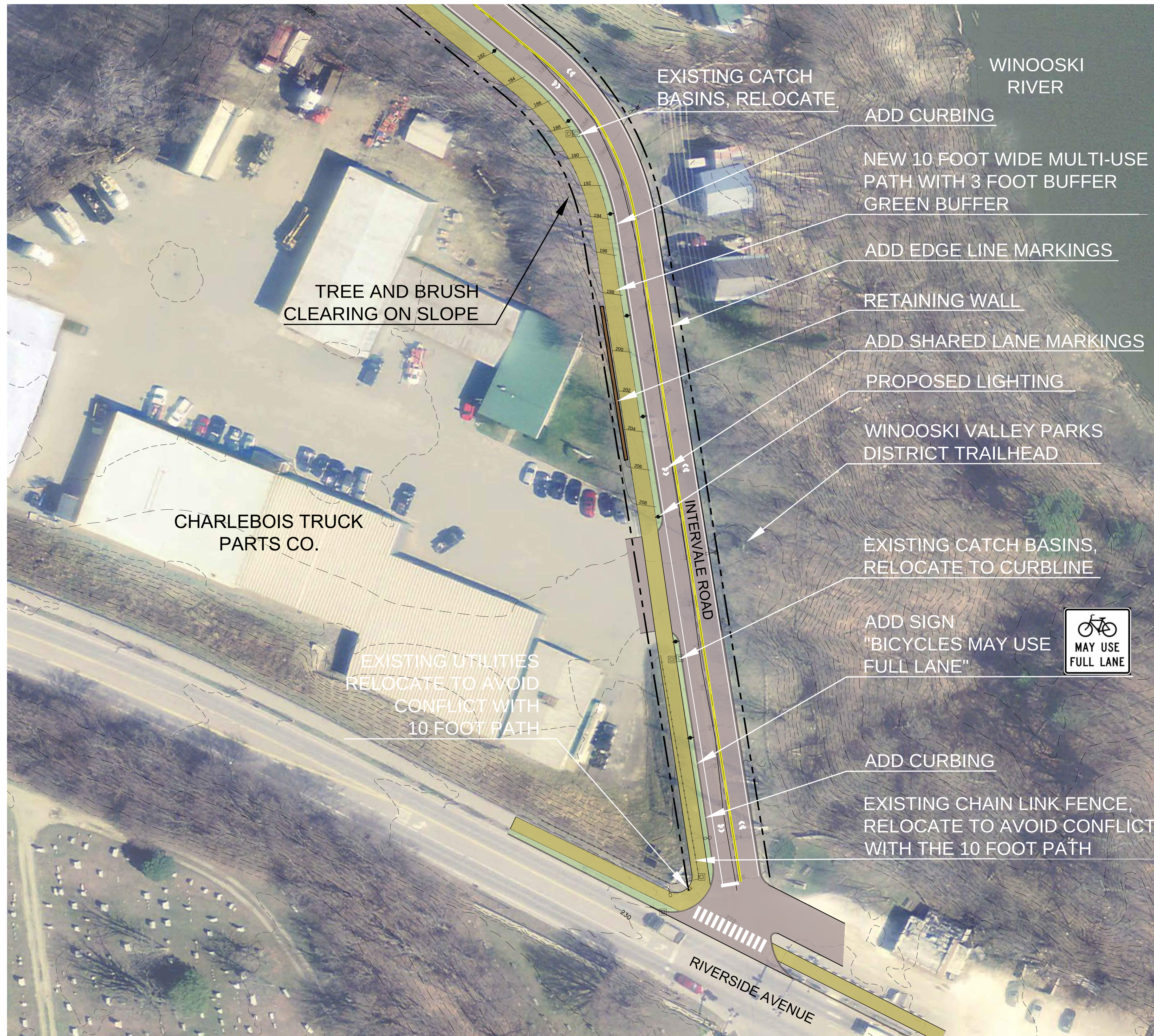
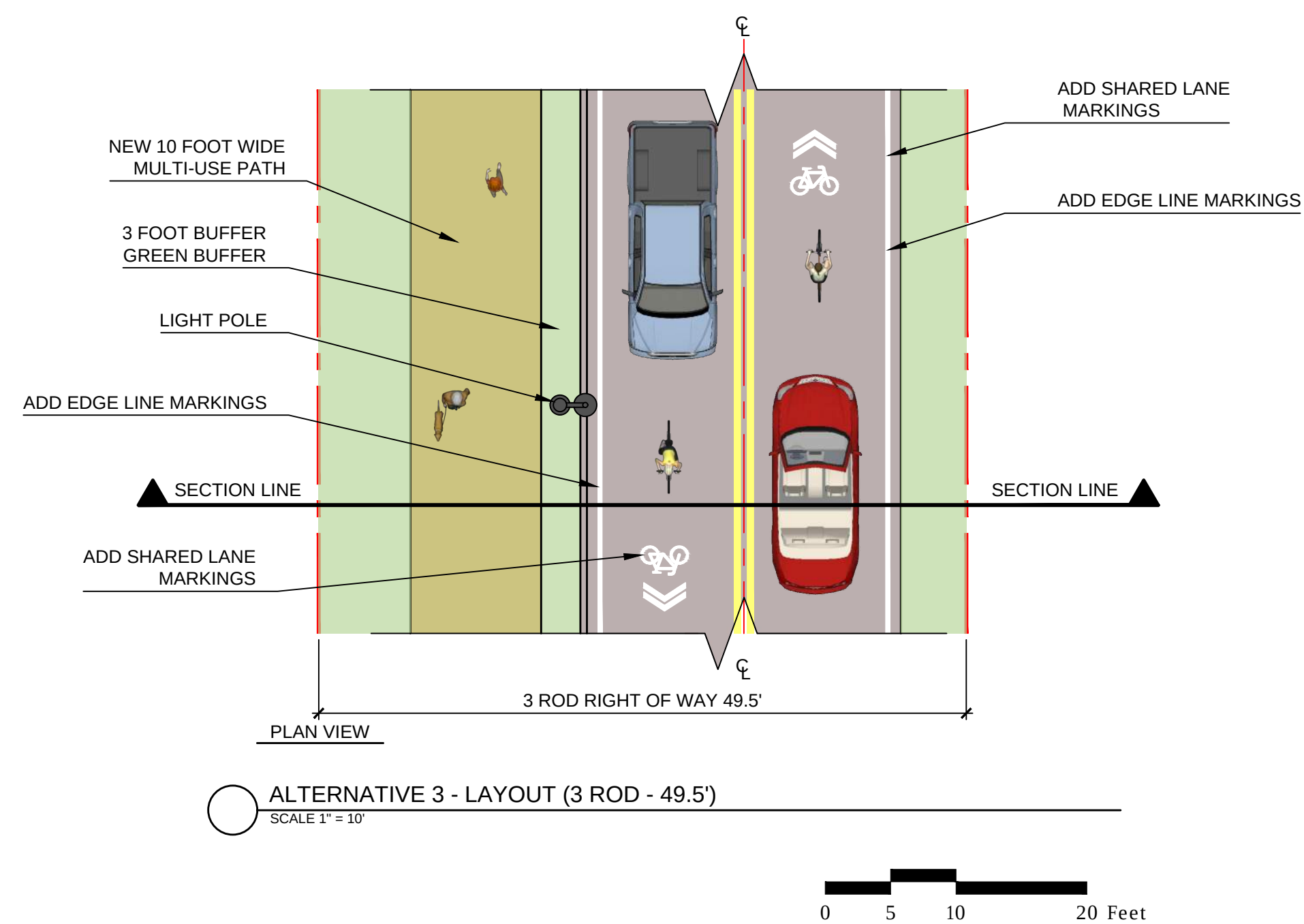
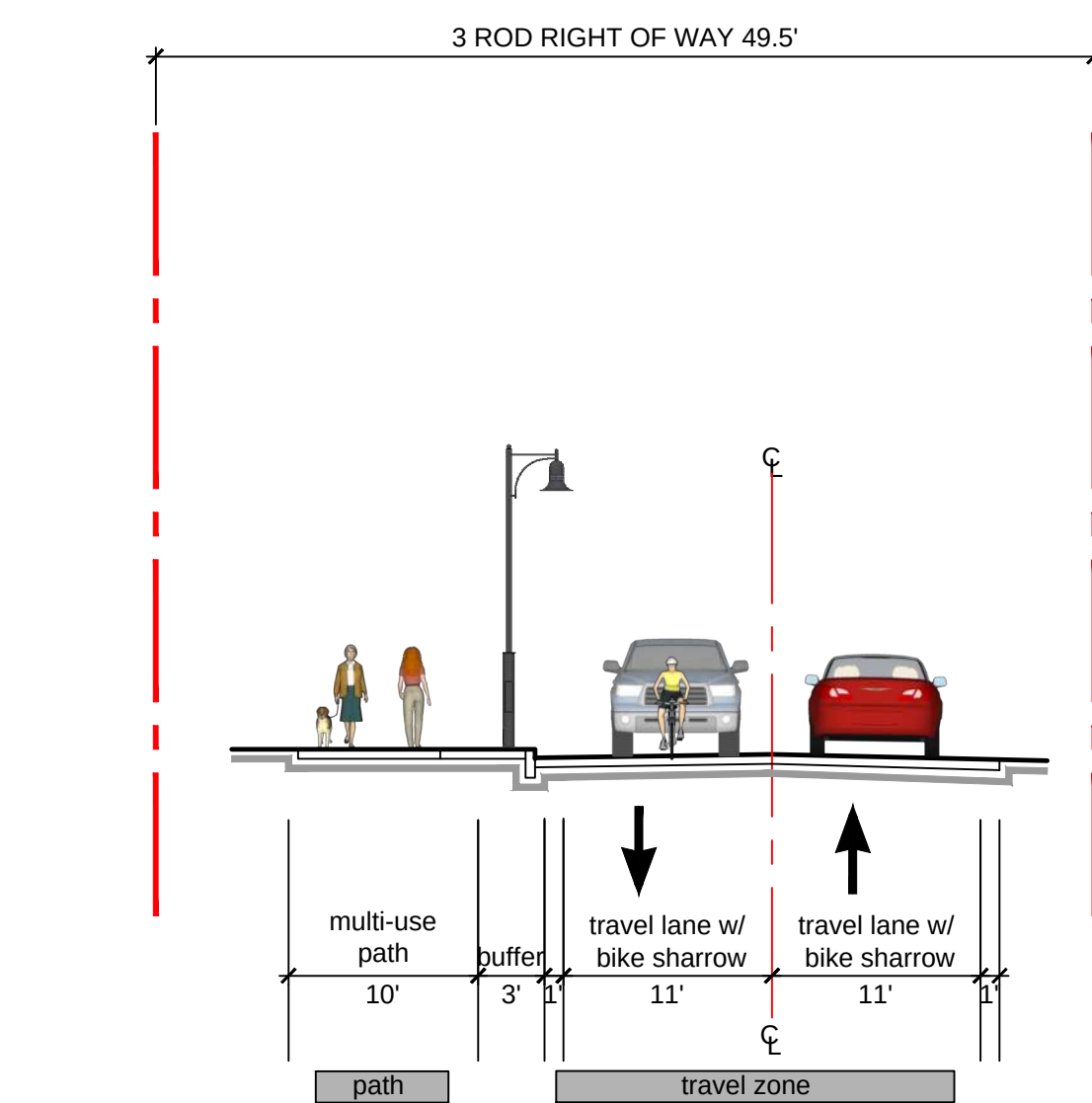
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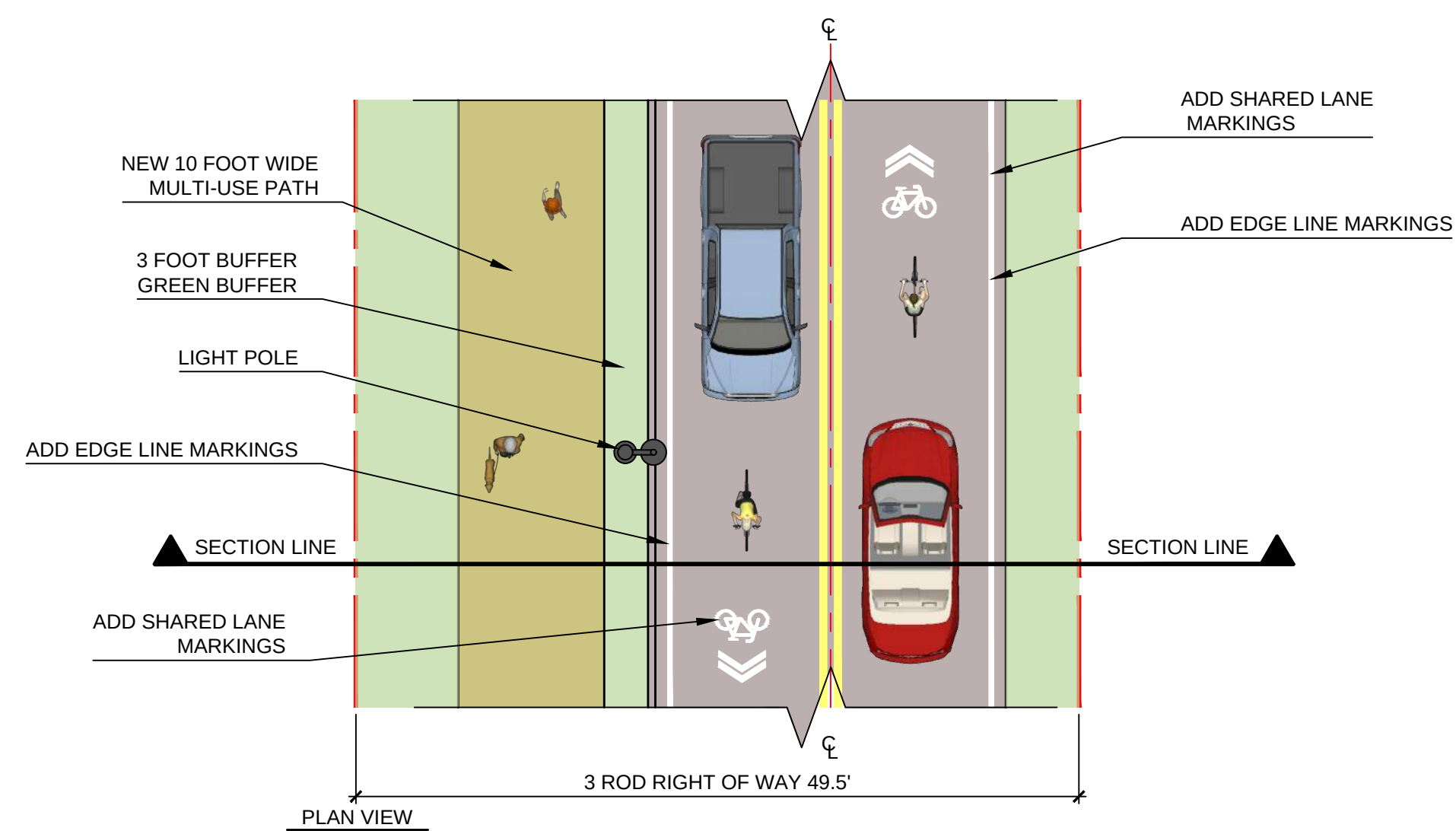
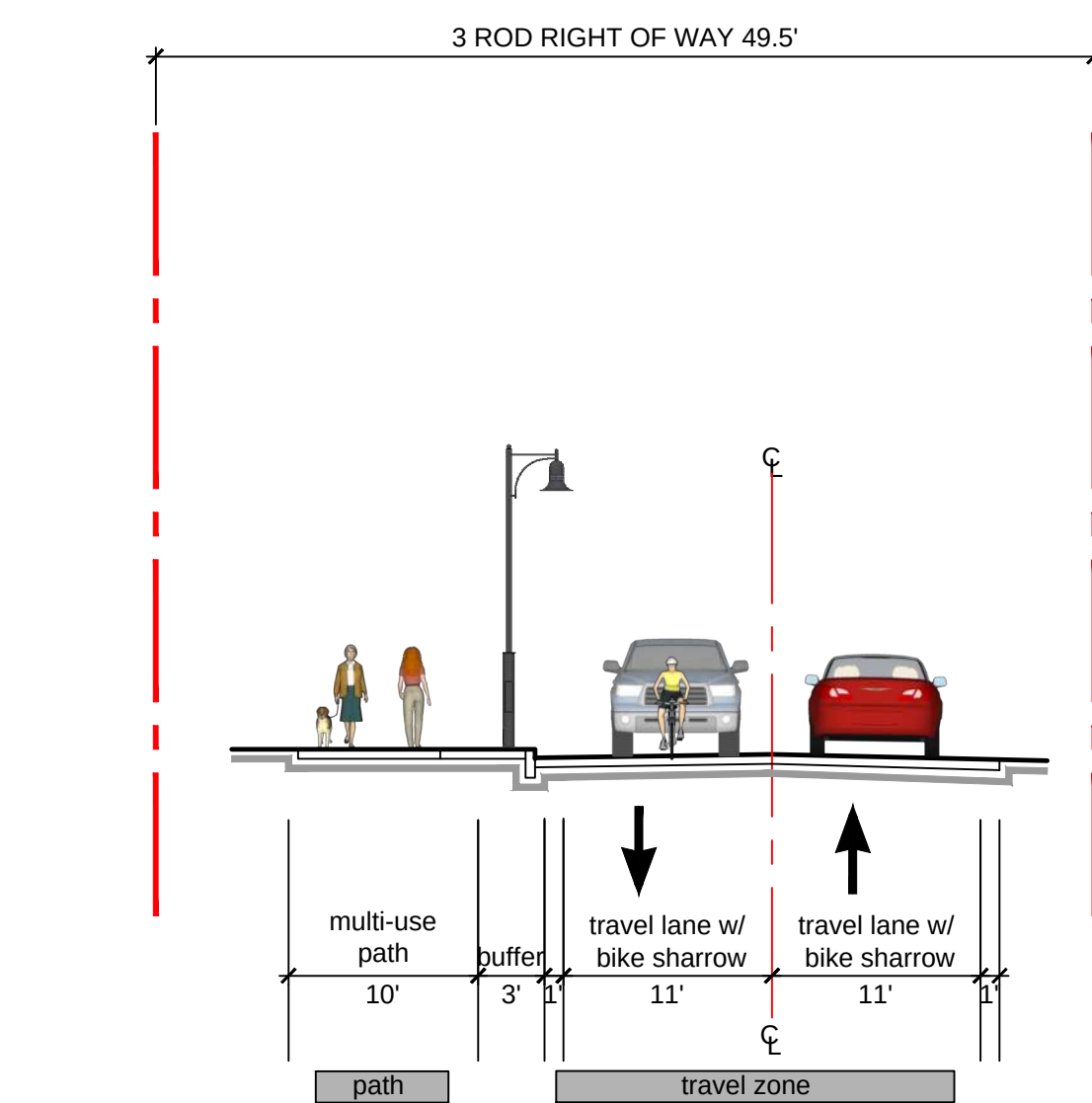
Vermont Division for Historic Preservation. 1978. Burlington Historic Sites and Structures Survey – Intervale Road, North Prospect Street. Montpelier: Vermont Division for Historic Preservation.

\\vhb\gb\proj\SBurlington\58842.00 Intervale Road Path\Reports\Historic Resources Assessment\SS\2023_10_12_Intervale Road Path- Historic Resources Assessment_rev.docx

Appendices

Appendix A: Preferred Alternative

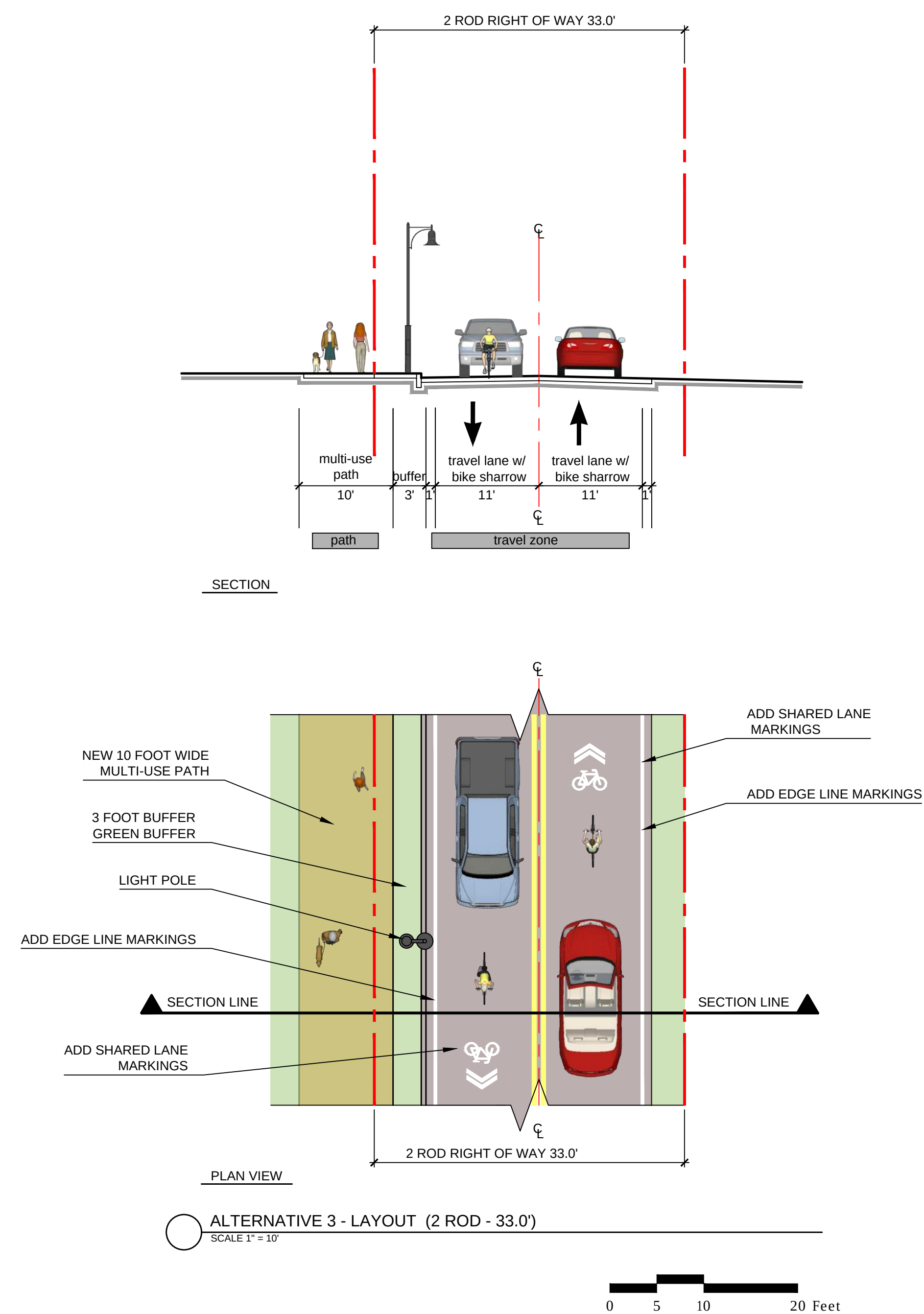


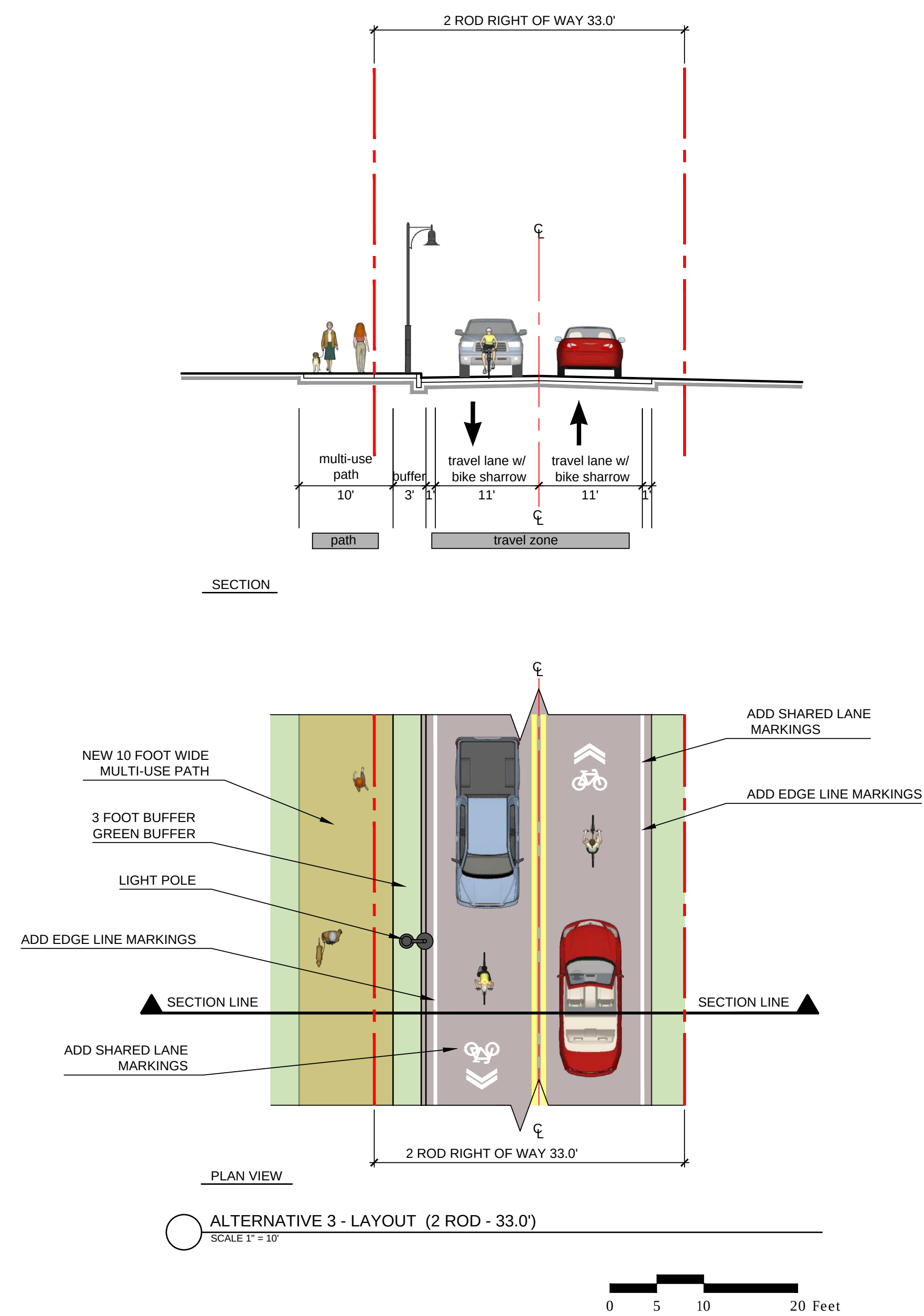


ALTERNATIVE 3 - LAYOUT (3 ROD - 49.5')
SCALE 1" = 10'

0 5 10 20 Feet



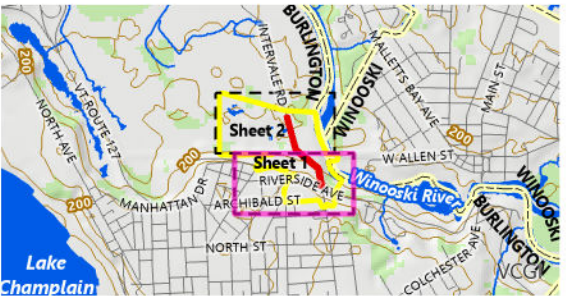




Appendix B: Area of Potential Effect Maps



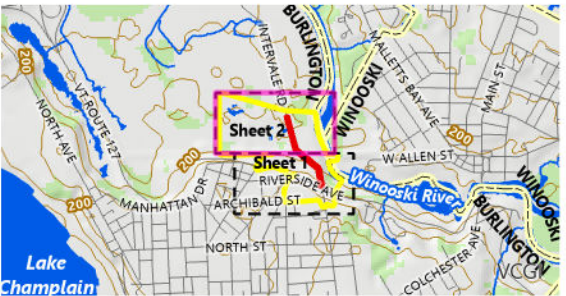
- | | | |
|---|--|--|
| Direct Area of Potential Effect (APE; VHB) | A Eligible APE Property (VHB) | VHD Stream (ANR) |
| Indirect Area of Potential Effect (APE; VHB) | A Ineligible APE Property (VHB) | Parcel Boundary (VCGI) |
| | A Section 4(f) Parks Property (VHB) | Railroad (VTrans) |



Sources: Background imagery by Nearmap - Collected on May 8, 2022; VCGI (Vermont Center for Geographic Information Hosted Feature Service); VTrans (Vermont Agency of Transportation Hosted Feature Service); VHB - 2022



- | | | |
|--|-------------------------------|------------------------|
| Direct Area of Potential Effect (APE; VHB) | Eligible APE Property (VHB) | VHD Stream (ANR) |
| Indirect Area of Potential Effect (APE; VHB) | Ineligible APE Property (VHB) | Parcel Boundary (VCGI) |
| Section 4(f) Parks Property (VHB) | Railroad (VTrans) | |



Sources: Background imagery by Nearmap - Collected on May 8, 2022; VCGI (Vermont Center for Geographic Information Hosted Feature Service); VTrans (Vermont Agency of Transportation Hosted Feature Service); VHB - 2022

Appendix C: Photographs

All photographs taken by VHB on October 11, 2022, unless otherwise noted.



Photograph 1: Shell Station, 500 Riverside Ave, Map ID 1.



Photograph 2: St. Joseph Cemetery, 253 Archibald St, Map ID 2.



Photograph 3: Kismayo Kitchen, 505 Riverside Ave, Map ID 3.



Photograph 4: Winooski Salmon Hole trail, Intervale Rd, Map ID 4.



Photograph 5: Sleep Well Recycling, 525 Riverside Ave, Map ID 5 and Johnston Building Supply, 557 Riverside Ave, Map ID 6.



Photograph 6: Johnston Building Supply (left), 557 Riverside Ave, Map ID 6a; Charlebois Rigging & Hardware (right), 29 Intervale Rd, Map ID 7; and, Curate & Design (right), 29 Intervale Rd, Map ID 8.



Photograph 7: Johnston Building Supply, 557 Riverside Ave, Map ID 6b.



Photograph 8: Charlebois Rigging & Hardware, 29 Intervale Road, Map ID 7.



Photograph 9: Charlebois Rigging & Hardware (left), 29 Intervale Rd, Map ID 7; Curate & Design, 29 Intervale Rd, Map ID 8.



Photograph 10: Queen City Steel, 35 Intervale Rd, Map ID 9.



Photograph 11: Duncan's Auto Services, 40 Intervale Rd, Map ID 10.



Photograph 12: Duncan's Auto Services, 40 Intervale Rd, Map ID 10.



Photograph 13: 44 Intervale Rd, Map ID 11.



Photograph 14: NECR, Map ID 12.



Photograph 15: NECR, Map ID 12



Photograph 16: NECR bridge, Map ID 14



Photograph 17: 60 Intervale Rd, Map ID 14.



Photograph 18: Gardeners Supply, 128 Intervale Rd, Map ID 15.



Photograph 19: no address, Gardeners Supply, Map ID 15



Photograph 20: Burlington Electric Offices, 111 Intervale Rd, Map ID 16.



Photograph 21: Burlington Electric Offices, 111 Intervale Rd, Map ID 16 (left). Looking north on Intervale Rd.



Photograph 22: Burlington Electric Offices, 111 Intervale Rd, Map ID 16.



Photograph 23: Looking north on Intervale Rd, McNeil Generating Plant at left, Map ID 17. Intervale Center at right.



Photograph 24: McNeil Generating Plant, Map ID 17.



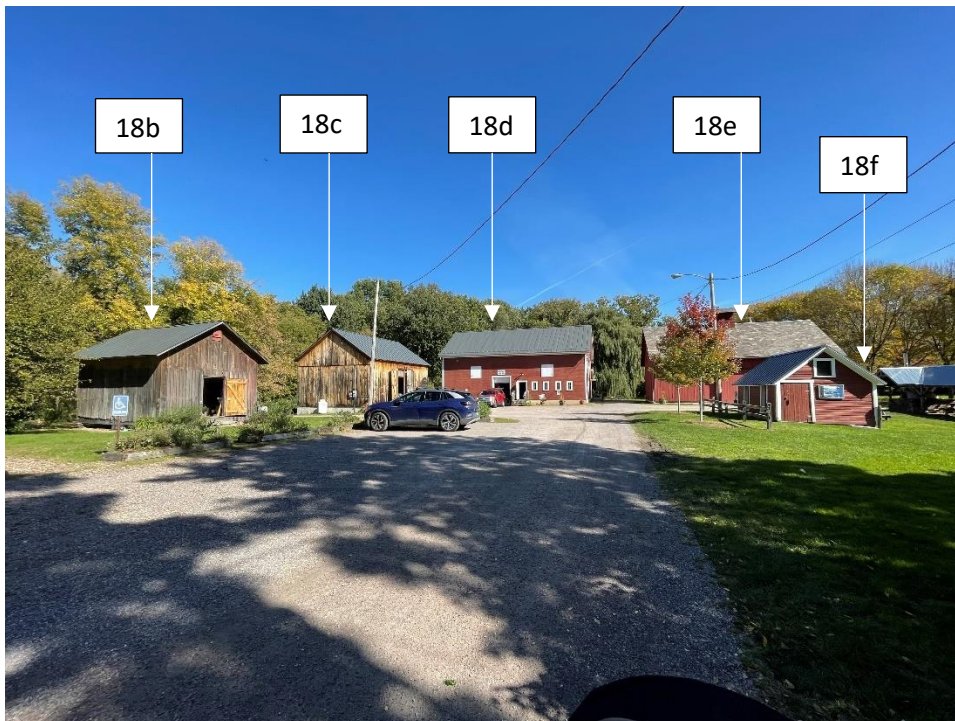
Photograph 25: McNeil Generating Plant entrance, Map ID 17.



Photograph 26: Intervale Center, 180 Intervale Rd, Map ID 18.



Photograph 27: Intervale Center, 180 Intervale Rd, Map ID 18a.



Photograph 28: Intervale Center, 180 Intervale Rd, Map ID 18b, 18c, 18d, 18e, 18f. Map ID 18g is the silo behind the barn 18e.



Photograph 29: Intervale Center, 180 Intervale Rd, Map ID 18b, 18c, 18d (left to right).



Photograph 30: Intervale Center, 180 Intervale Rd, Map ID 18g (silo, left), 18e (barn, left), and 18d (right).



Photograph 31: Intervale Center, 180 Intervale Rd, Map ID 18f with 18e in background.

Burlington DAB/HPRC Meeting

Burlington-Winooski BF RAIZ(2)
Burlington STP 5000(29)

January 9, 2023



**BURLINGTON
WINOOSKI
BRIDGE**



**THE CITY
OF BURLINGTON**



Introductions

- **Bob Klinefelter** – VTrans Structures Project Manager
- **Mike LaCroix** – VTrans Traffic Project Manager
- **Josh Olund** – HNTB Structures Project Manager
- **Steve Spear** – HNTB Roadway Project Manager
- **Judith Ehrlich** – VTrans Historic Preservation Officer
- **Britta Tonn** – VHB Director of Cultural Resources

Agenda



Project Location



Past Efforts



Current Efforts



Future Efforts

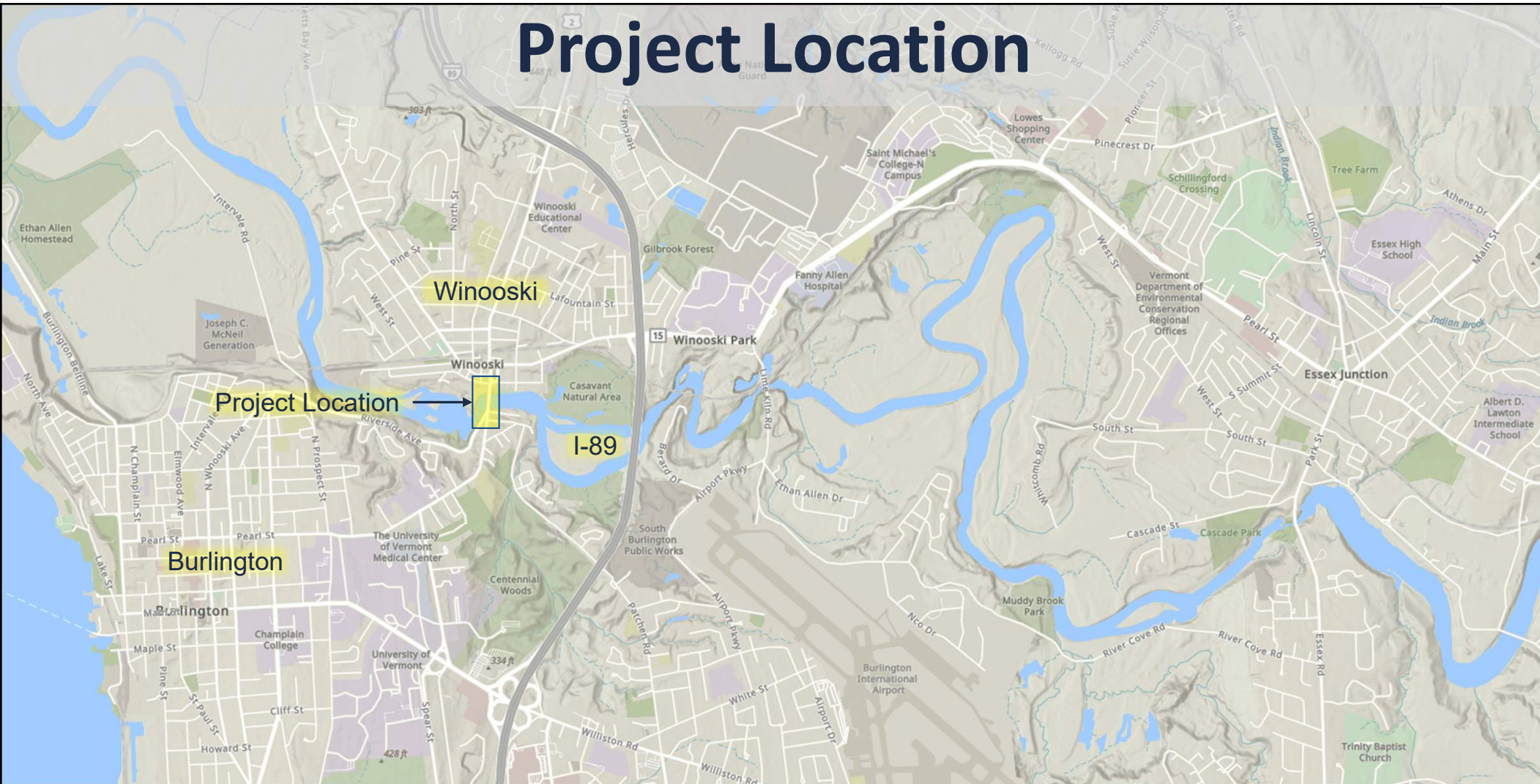


Project Delivery

Project Location



Project Location



Project Site



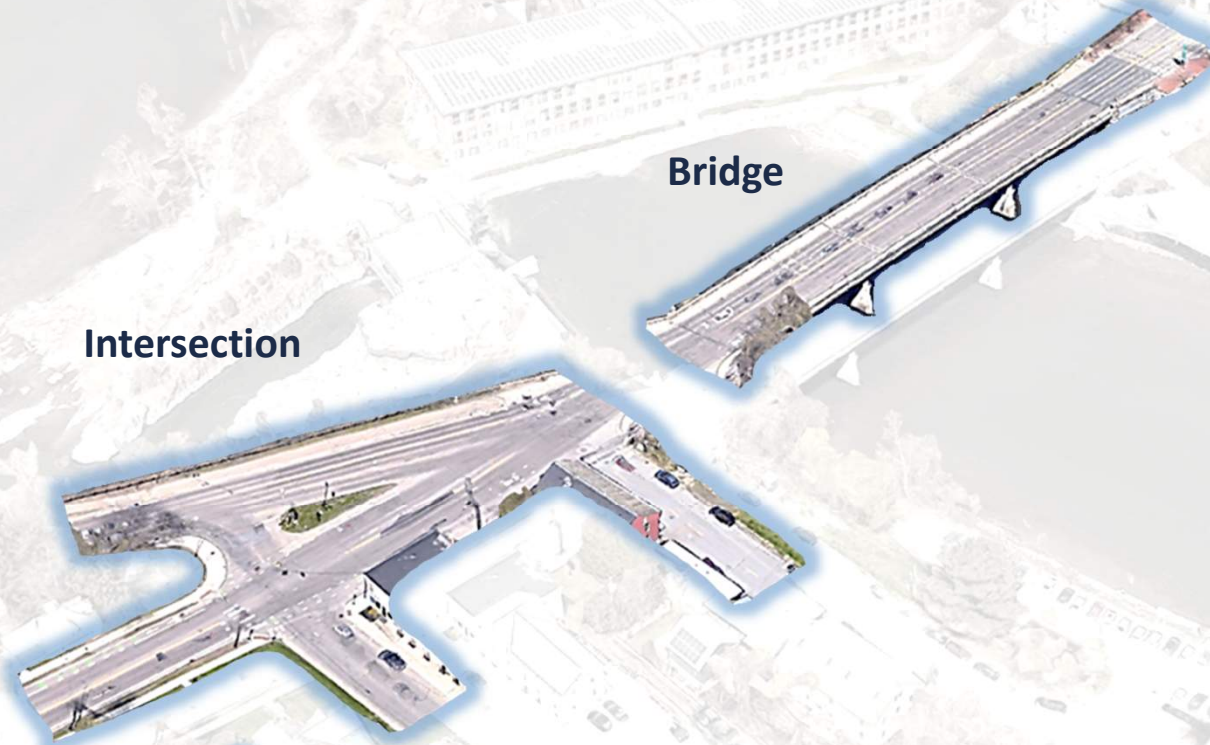
Image Landsat / Copernicus



Project Area



Project Focal Points



Past Efforts



Project Definition

April 2017 – May 2019

- Purpose and Need Established
- Public Meetings
- Project Advisory Committee Meetings
- City Council Meetings
- Traffic Study
- Alternatives Evaluation
- Preferred Alternative Defined

Project Reports

- Bridge Scoping Report
- Intersection Scoping Report
- Bridge Grant Application



CHITTENDEN COUNTY REGIONAL PLANNING COMMISSION

SCOPING REPORT

FOR

MAIN STREET BRIDGE (US ROUTES 2 & 7) OVER THE
WINOOSKI RIVER

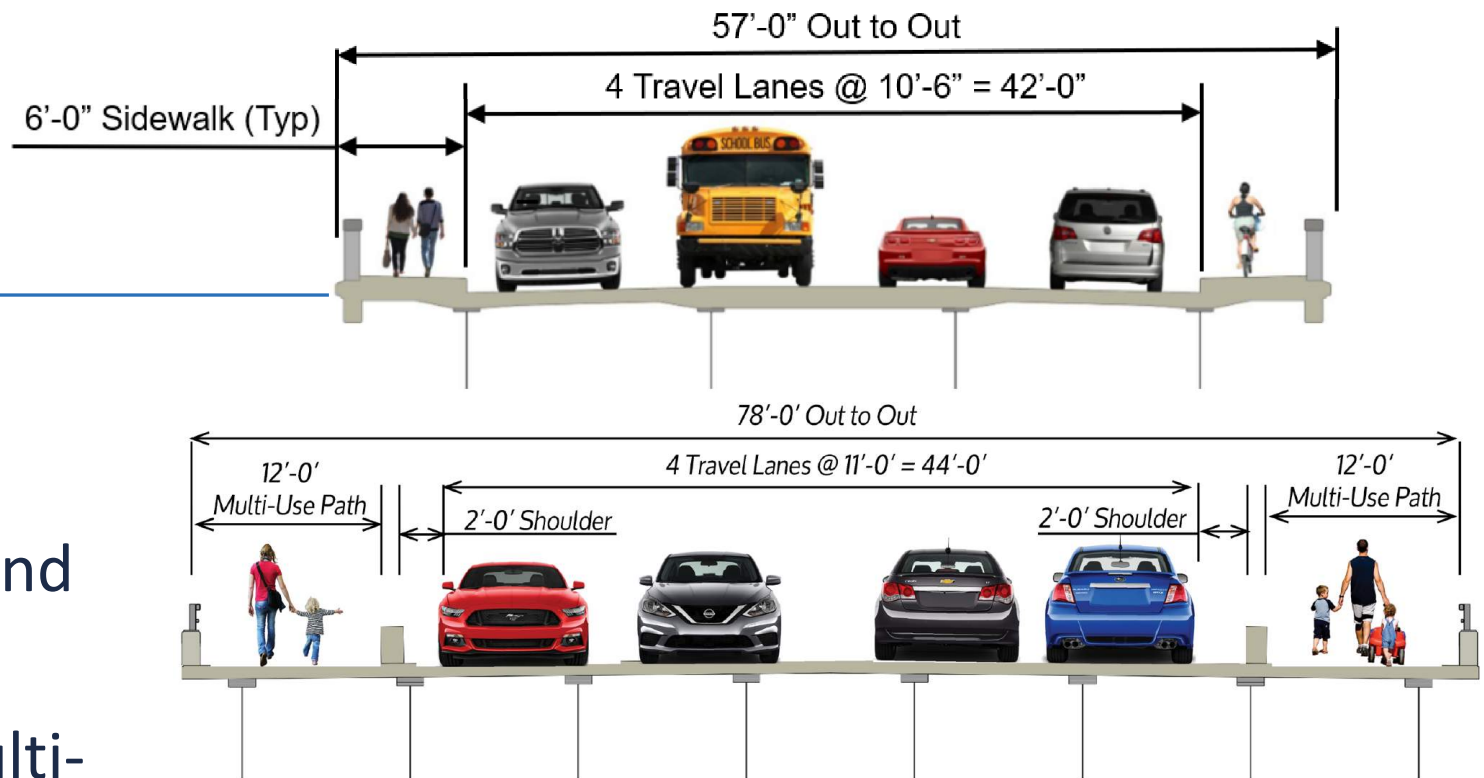
Bridge Scoping Report (2019)

- Recommended replacement
- Focus on bike/pedestrian accommodations
- Conceptual construction methods



Bridge Features

- Complete replacement
- Wider lanes and shoulders
- Separated multi-use paths



Intersection Scoping Report (2019)

- Recommended 4-Way intersection
- Focus on bike/pedestrian accommodations, mobility, and safety

COLCHESTER AVENUE/RIVERSIDE AVENUE
Burlington, Vermont

Final Scoping Report



Prepared by:

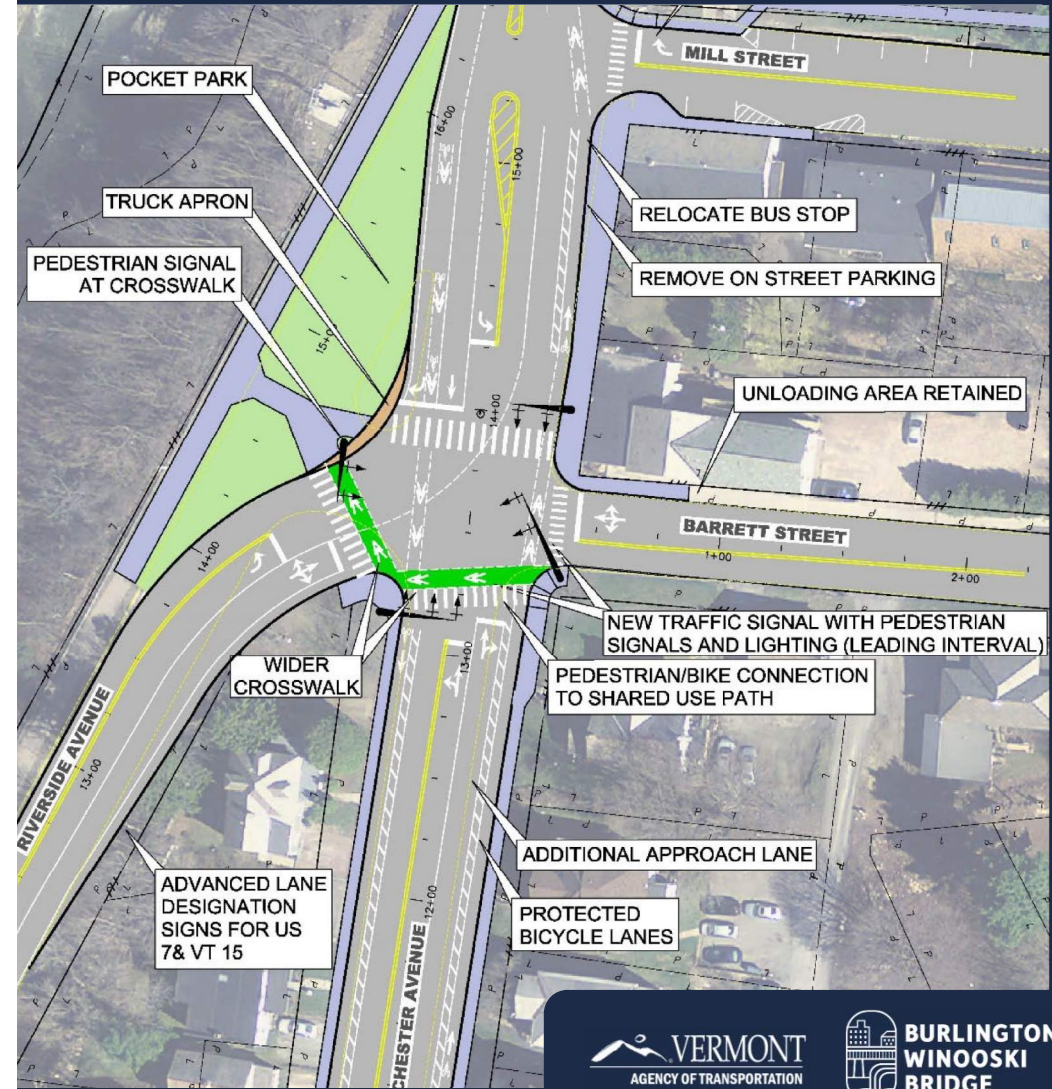


Prepared for:



Intersection Features

- Consolidated intersection
→ Improved safety and mobility
- Emphasis on Bike/Pedestrian improvements



Bridge Grant Application (2022)

- Obligated to:
 - Improve safety
 - Address bike/pedestrian accommodations
 - Complement the natural and cultural environment
 - Provide appealing bridge



Project Compilation

- Concept Plans complete
- Need to combine recommendations of intersection and bridge project



Current Efforts



Project Design

Feb 2023 – June 2026 *(est)*

- Preferred Alternative Refinement
- Preliminary Design
- Traffic Control
- ROW Process
- Utility Relocation
- Environmental Permitting
- RFQ and RFP Development
(Design-Build Contracting)



Project Design

Feb 2023 – June 2026 *(est)*

- Preferred Alternative Refinement
- Preliminary Design
- Traffic Control
- ROW Process
- Utility Relocation
- Environmental Permitting
- RFQ and RFP Development
(Design-Build Contracting)



Preferred Alternative Refinement

- Public Outreach
- Stakeholder Engagement
- Property Owner Meetings
- Initial Utility Coordination
- Initial Environmental Coordination

Traffic Calming

Aesthetics

Construction Congestion

Bike/Ped Safety

Mobility

Construction Costs

Business Impacts

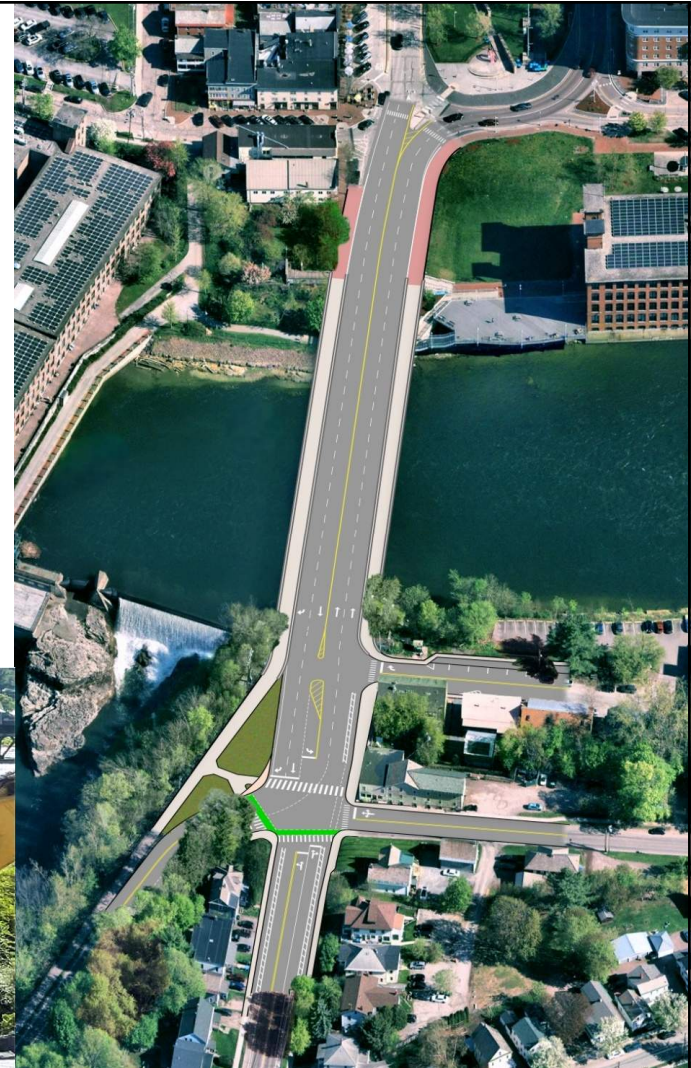
Contaminated Soils

Historic Significance



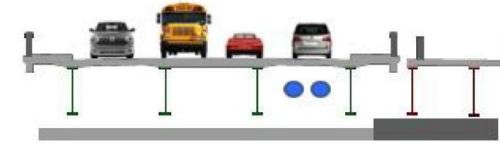
Preliminary Design

- Ground Survey
- Combining Bridge and Intersection
- Reviewing Constructability

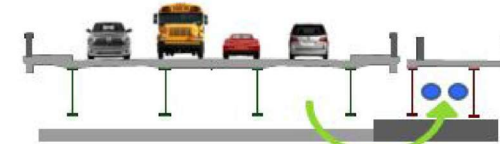


Bridge Phasing

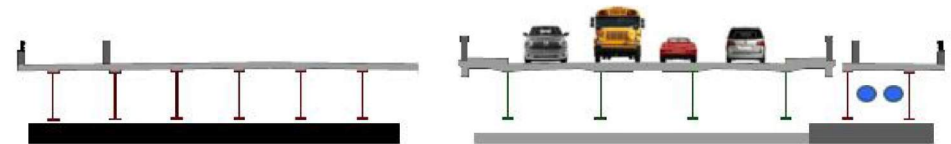
- Build new bridge, next to existing bridge
- Transfer Pedestrians and utilities
- Temporary 4 to 6 week closure for demolition and sliding new bridge together



Phase 1 – Widened Portion of Substructure Units and Superstructure Constructed



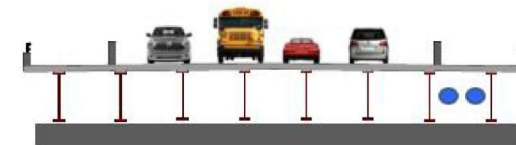
Phase 1a – Utilities Relocated



Phase 2 – New Bridge Superstructure Built Adjacent to Existing Bridge on Temporary Supports



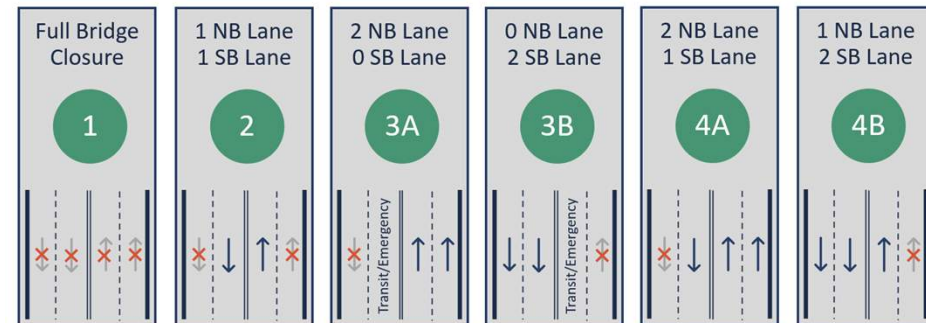
Phase 3 – Bridge Closed to Traffic, Existing Bridge Superstructure Removed, and New Bridge Superstructure Slid to Final Location



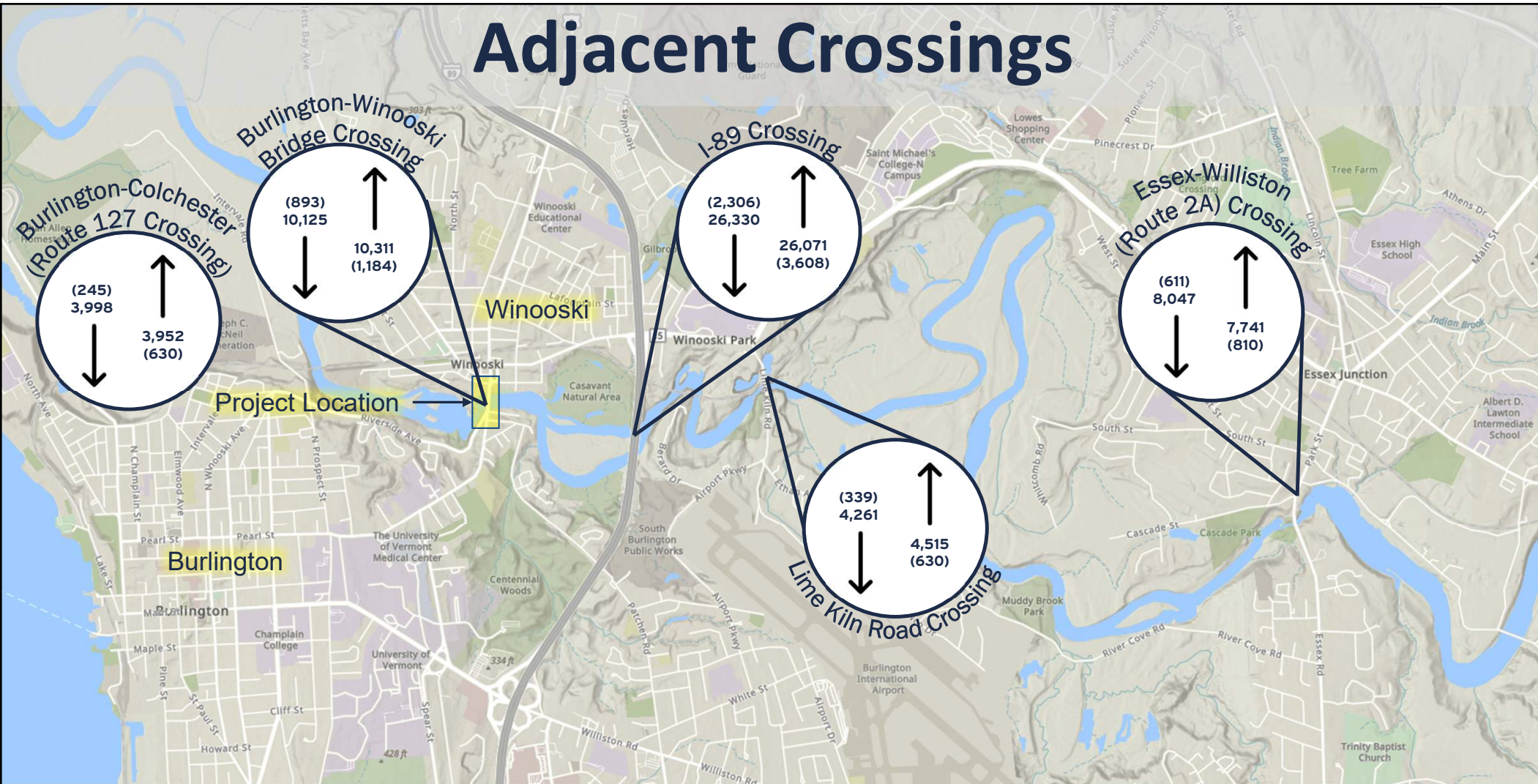
Phase 4 - New Bridge Opened to Traffic

Maintenance of Traffic

- 25,000 Vehicles & 300 Pedestrians per day
- Need to balance:
 - Minimize impact to traveling public, and
 - Safe, sufficient construction site
- Utilize combination of:
 - Temporary lane closures
 - Temporary bridge closure



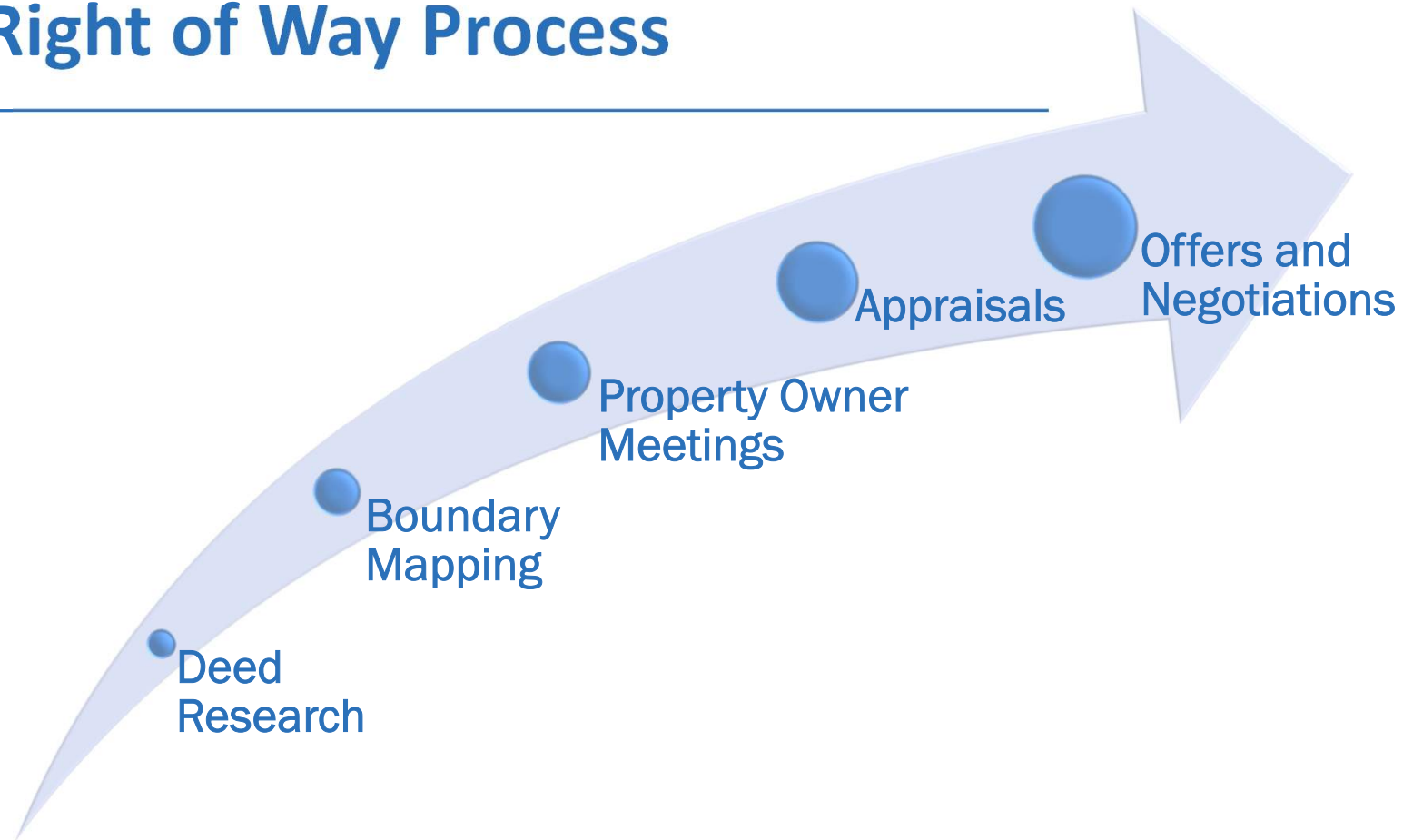
Adjacent Crossings



Temporary Detour

- Shortest vehicular detour
- Effects on adjacent roads and intersections
- **All Pedestrians Maintained On Site!**

Right of Way Process



Future Efforts



Project Design

Feb 2023 – June 2026 *(est)*

- Preferred Alternative Refinement
- Preliminary Design
- Traffic Control
- ROW Process
- Utility Relocation
- Environmental Permitting
- RFQ and RFP Development
(Design-Build Contracting)



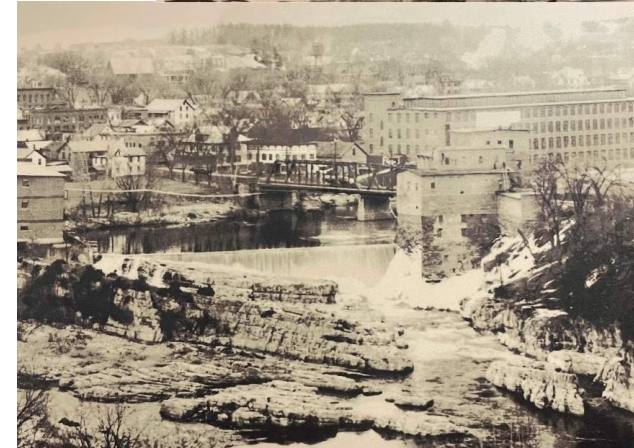
Utility Relocation

- Test Pits
- Relocation Plans and Construction Sequencing
- Utility Agreements
- *Municipal Utility Relocations are Project Reimbursable*



Environmental Permitting

- Permitting Restriction Commitments
- Historic Process (Section 106)
 - Bridge is listed on National Historic Register
 - Replacement will be an Adverse Effect
 - Consultation process for mitigation
 - Winooski Falls Historic District
 - Multiple Historic Properties



[illegible]

What is Design-Build Contracting?

Project delivery method that:

- Incorporates final design and construction into a single contract.
- Places increased responsibilities on the Contractor in an attempt to reduce risks and costs to the State.

Why Use Design-Build Contracting?



Promotes Innovation



Improves Design/Construction Efficiencies



Reduces Construction Costs



Reduces Construction Schedule

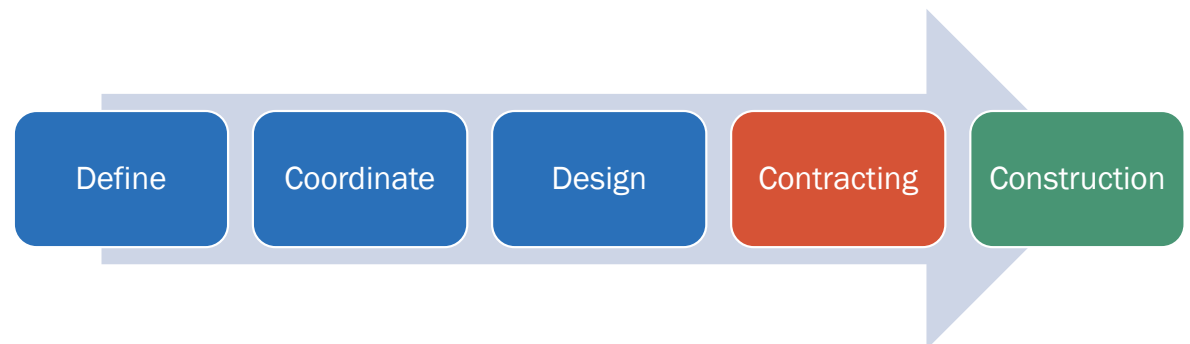
Design-Bid-Build (Traditional) Contracting

VTrans

- Preliminary Design
- Environmental Coordination
- Final Design
- Right of Way Process
- Permitting
- Utility Relocation
- Construction Contracting
- Public Outreach
- Construction Inspection
- Construction Oversight

Contractor

- Construction



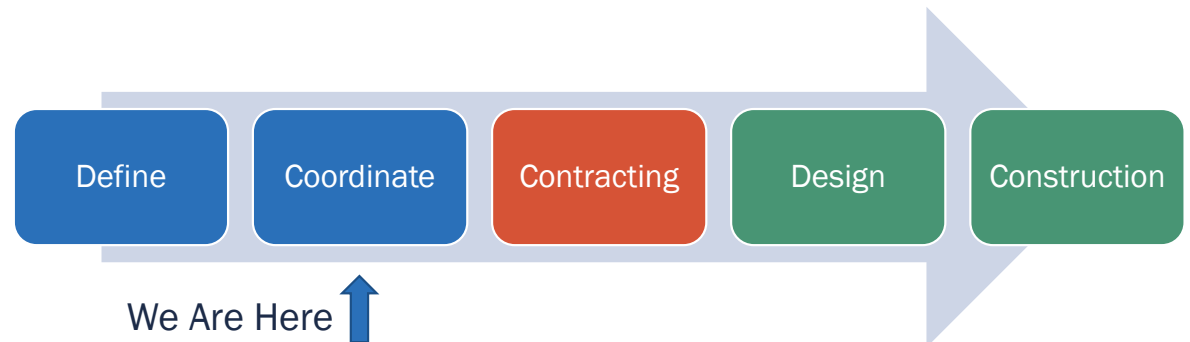
Design-Build Contracting

VTrans

- Preliminary Design
- Environmental Coordination
- ~~Final Design~~
- Right of Way Process
- ~~Permitting~~
- Utility Coordination
- Construction Contracting
- Public Outreach
- Construction Inspection
- Construction Oversight

Contractor

- Final Design
- Utility Relocation
- Permitting
- Public Outreach
- Construction



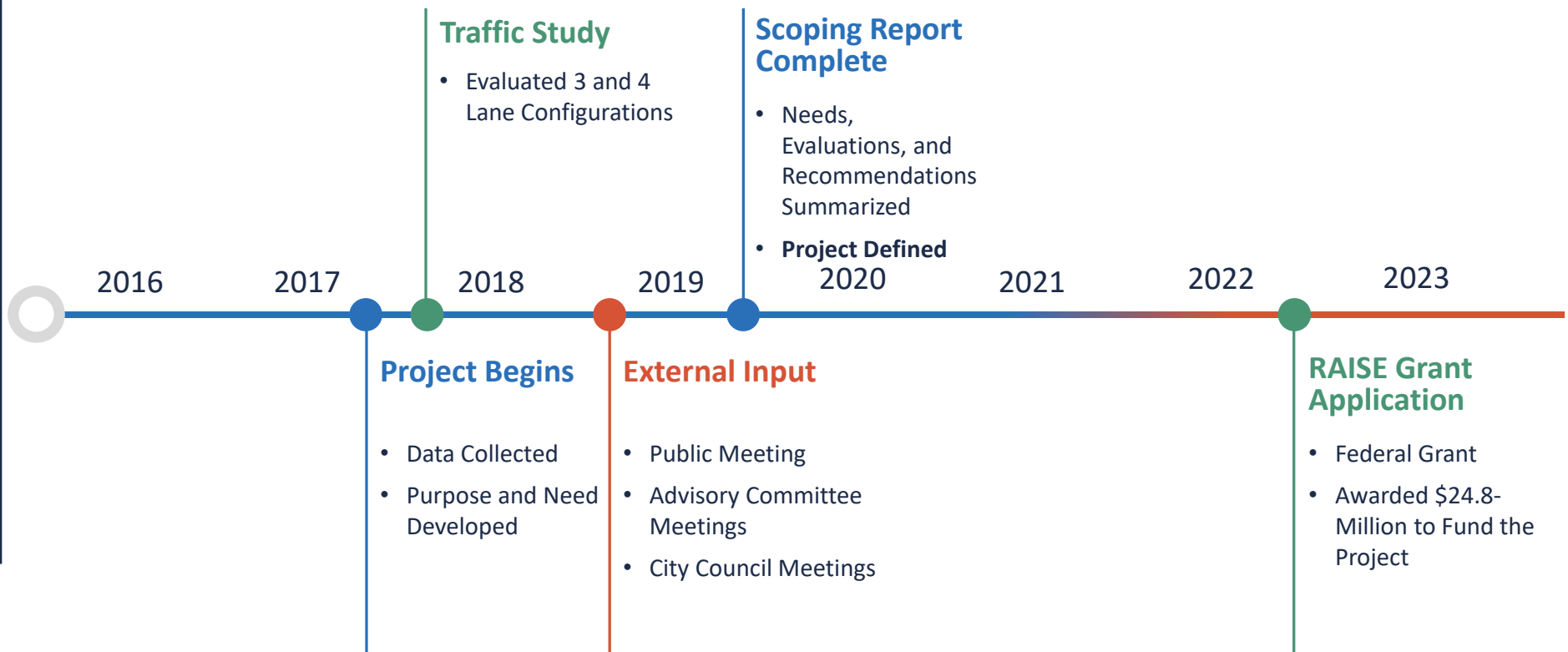
What Does This Mean?

- VTrans will develop design and construction guidelines – need to provide leeway for innovation to occur
- Final features (number of bridge girders, site restoration, etc) may be the decision of the Contractor
- Checks and balances with VTrans maintained

Project Delivery



Schedule – Past

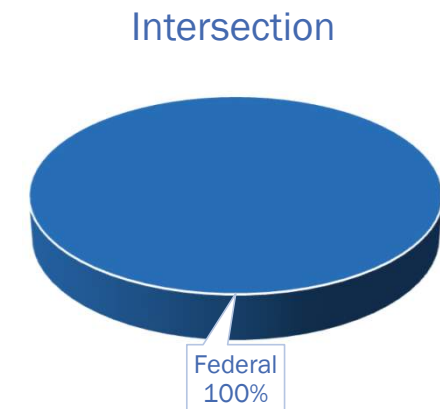
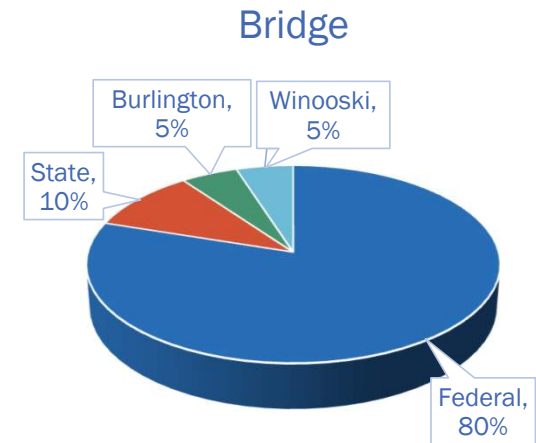


Schedule – Current and Future



Project Costs and Funding

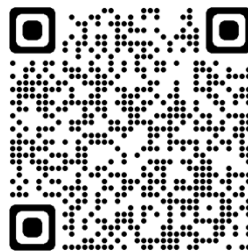
- Project Received a Federal RAISE Grant worth approximately \$24.8-million
- Total Project costs are *conceptually* estimated to be approximately \$60-\$80-million



Questions?



**BURLINGTON
WINOOSKI
BRIDGE**



<https://burlingtonwinooskibrige.vtransprojects.vermont.gov/>



THE **CITY**
OF **BURLINGTON**



13. The Winooski Bridge, 1928

The poured concrete and steel bridge rises thirty-four feet above the Winooski River near its lower falls and connects the cities of Burlington and Winooski. The approximately 345 foot span of the bridge is supported by two concrete piers, which carry four plate girders connected by horizontal and vertical cross-braces. The bridge's deck is fifty-three feet wide and is supported by open, steel brackets where the deck extends past the outer girders. Obelisk-like, concrete forms rise approximately thirteen feet above the deck at each corner and mark the beginning of the bridge's span across the river. Stretching along the edge of the deck between these forms are three foot high concrete barriers divided into thirty-four sections by unelaborated piers, each of which frames a series of seven semicircular-arched openings. At both the east and west ends of the bridge, the barriers continue past the obelisk-like forms and angle outward, with the exception of the south corner on the Burlington side, which curves outward. The bridge is lighted by four cobra-head street lamps, two atop the forms marking its entrance and two on its south side.

The Winooski Bridge was constructed in 1928 after the flood of November 4, 1927, had washed out the iron truss bridge connecting the two cities. J. R. Worcester and Company served as the engineers for the project and Jason E. Cashman

was the contractor. Although the surface of the road has been periodically changed since its construction, the bridge itself has remained relatively unaltered with the exception of the cobra-head lamps, which replaced the original lantern-shaped lights.