

PROCTOR SOUTH STREET SIDEWALKS PROJECT LOCATION MAP

ATTACHMENT 2



SOUTH STREET SIDEWALK REPLACEMENT
EXISTING CONDITION PHOTOS
PROCTOR, VERMONT

Existing Sidewalk at Grove Street (looking north):



Existing Sidewalk Approaching Reynolds Street (looking north):



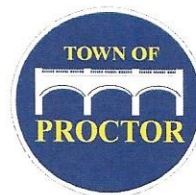
Existing Sidewalk at Reynolds Street (looking north):



Existing Sidewalk in front of Church (looking north):



Town of Proctor



45 Main Street
Proctor, VT 05765

Phone: 802-459-3333
Fax: 802-4592356

November 30, 2023

Scott Robertson (Scott.robertson@vermont.gov)
Ross Gouin (Ross.gouin@vermont.gov)
VTrans Municipal Assistance Bureau
Vermont Agency of Transportation
219 North Main Street
Barre, VT 05641

Re: VTrans Fall 2023 TAP and MHSMP Combined Application

Dear Mr. Robertson and Mr. Gouin,

The Town of Proctor will be submitting a VTrans Municipal Assistance Section (MAS) grant application for additional funding for the Proctor TAP TA20(5) project in order to cover the anticipated deficit amount to construct this project. This need exists due to the current projected project costs being anticipated to exceed the current grant amount for this project (including both federal and local match). This project includes replacing 885-feet of existing narrow sidewalk along the west side of South Street between Grove Street and the northern driveway St. Dominic's Church.

This letter is on behalf of the Town of Proctor Selectboard in support of the project. In addition, the Town of Proctor acknowledges a local match of 20% is required as part of this project. The Town of Proctor also acknowledges that maintenance of the proposed project is the responsibility of the Town upon completion of construction. Therefore, the Town understands that any future repairs of the sidewalk constructed as part of this project, plowing of the sidewalk during winter months, and any other maintenance needs associated with this sidewalk are the responsibility of the Town.

Very truly yours,

A handwritten signature in black ink, appearing to read "Judy Frazier", is written over a circular embossed seal. The seal is partially visible and contains some illegible text.

Judy Frazier, Town Manager



RUTLAND REGIONAL PLANNING COMMISSION

November 20, 2019

Stan Wilbur, Town Manager
Town of Proctor
45 Main Street
Proctor, Vermont 05765

RE: Letter of Support for Town of Proctor – South Street Sidewalk Project – VTrans Transportation Alternatives Program Grant.

Dear Mr. Wilbur:

The Rutland Regional Planning Commission (RRPC) is pleased to provide support for the Town of Proctor Transportation Alternatives Program Grant application for the South Street Sidewalk Project. The reconstruction of approximately 890 feet of ADA-compliant sidewalk along South Street from St. Dominic Catholic Church to Grove Street would be an excellent project to improve connectivity within the Town and improve accessibility for all to village center facilities.

The project is a portion of the Preferred Alternative – South Street Sidewalk presented in the 2017 Bicycle and Pedestrian Scoping Study. The project is consistent with the Rutland Regional Plan, which identifies the need for additional pedestrian facilities – particularly in the vicinity of village centers and schools – making walking and cycling safer and more viable modes of transportation. In addition, it is a significant part of the Proctor Town Plan to increase village accessibility and walkability.

The Rutland Regional Planning Commission is committed to promoting alternative modes of transportation, community health, and equal access for all. Proctor's South Street Sidewalk Project will serve to promote all these regional goals. We strongly encourage the VTrans Transportation Alternatives Program selection committee to support funding this project.

Sincerely,

Devon Neary
Transportation Planner

The Opera House | 67 Merchants Row | Rutland, Vermont

P.O. Box 965 | Rutland, Vermont 05701

RutlandRPC.org | (802) 775-0871

Cooperative planning in the region



RUTLAND REGIONAL PLANNING COMMISSION

November 21, 2019

Stan Wilbur, Town Manager
Town of Proctor
45 Main Street
Proctor, Vermont 05765

RE: Letter of Support for Town of Proctor – South Street Sidewalk Project – VTrans Transportation Alternatives Program.

Dear Mr. Wilbur:

The Rutland Regional Transportation Advisory Committee (RRTAC), during the November 21, 2019 meeting, voted unanimously to support the Town of Proctor – South Street Sidewalk Project application for VTrans Transportation Alternatives Program. The RRTAC believes the proposed project will greatly improve the transportation network in the Rutland Region. The RRTC is committed to supporting the needs of member municipalities and multi-modal transportation for all in the Rutland Region.

If you have any questions, please feel free to contact us. Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink that reads "Sean Barrows". The signature is fluid and cursive, with the first name "Sean" and last name "Barrows" clearly distinguishable.

Sean Barrows, Chair
Rutland Regional Transportation Council

Scoping Study Report

BICYCLE AND PEDESTRIAN SCOPING STUDY

PROCTOR, VERMONT

February 17, 2017



Submitted to:
Stan Wilbur, Town Manager
Town of Proctor
45 Main Street
Proctor, VT 05765



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February 17, 2017

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PROCTOR, VERMONT
February 17, 2017

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SECTION 1
SUMMARY
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT
February 17, 2017

The objective of this project is to create a safe and accessible route for pedestrians and cyclists to travel through Proctor to key points of interest including the Pine Hill Carriage Trail, the Town Green and Town Center, and Beaver Pond. The study area extends from the end of the Pine Hill Carriage Trail to Beaver Pond.

Characteristics of the project area were reviewed including right-of-way width, roadway features, traffic data, historic/archeological features, natural resources and other environmental characteristics. There were only minor environmental impacts identified for some of the alternative routes in the study area. The VTtrans Bicycle Corridor Priority Map was also reviewed and it was found that South Street (Route 3) in Proctor is considered Moderate Use/Priority as of March 2016.

An Archeological Resource and Historic Preservation Assessment was completed, which indicated that the project area has moderate potential for precontact and historic archeological deposits in areas outside of existing disturbance. The report recommends that ground disturbance be kept close to the existing roadside to limit potential effects on these deposits. In areas where existing sidewalks may be utilized as the basis for alignment, there is a low potential for intact archeological deposits due to previous disturbance. The report also recommends refurbishment of marble sidewalks, which are present along Olympus Road and a portion of South Street.

The project was discussed at a Local Concerns meeting. As a result of this meeting, the following Purpose and Need Statement was developed:

Purpose: To provide a safe and connected route for bicyclists of all abilities, pedestrians and other outdoor enthusiasts to travel between key points of interest.

Need: The existing cycling conditions discourage beginner cyclists and families as there are no dedicated bicycle facilities and cyclists must ride with traffic on the road. Traffic volumes along South Street (Route 3) and Main Street are among the highest in Proctor, which can make cycling difficult for families and beginner cyclists. Pedestrian activity is also discouraged by the deteriorated sidewalks that are narrow, uneven and generally not in compliance with ADA requirements. There are several destinations in Proctor that are currently disconnected due to the existing condition of sidewalks and lack of bicycle facilities, including the Pine Hill Carriage Trail, the High School, the Library, the Downtown area, the Marble Museum and Beaver Pond.

This project is necessary to improve and expand existing pedestrian and bicycle facilities to increase safety and accessibility for all users and provide connectivity throughout Proctor.

After the Local Concerns meeting, alternatives were developed based on design criteria and local input. The alternatives focused on utilizing existing sidewalks and maximizing the road shoulder for bicycles where possible, as well as using signage and pavement markings to increase driver awareness. The alternatives were compared on the basis of cost, impacts to historic and archeological features, permitting requirements and locally identified critical elements.

The alternatives were discussed at an Alternatives Presentation. The alternatives included different routes for portions of the alignment from the Pine Hill Carriage Trail to Beaver Pond, as well as various bicycle and pedestrian facilities along the length of the alignment. The discussions focused on improving safety for cyclists and the type of materials to be used for construction. The participants showed support for the proposed improvements, especially the off-road shared use path to Beaver Pond. A preferred alternative was not chosen during the public meeting as the committee wanted to explore the alternatives further before deciding on a preferred alternative. A follow-up committee meeting was held to discuss the alternatives further, including a route along the railroad tracks. After two additional committee meetings, the preferred alternative was chosen by the committee and included the following:

- Olympus Street –610 feet of Sidewalk Replacement and Shared Lanes
- Grove Street –370 feet of Sidewalk Replacement and Shared Lanes
- South Street – 1,690 feet of Sidewalk Replacement and Wide Shoulders
- Main Street (South Street to Railroad Bridge) – 400 feet of Sidewalk Replacement (between the bridges) and Shared Lanes
- Main Street (Railroad Bridge to Marble Museum) –1,000 feet of Sidewalk Replacement and Bicycle Lanes
- Main Street (Marble Museum to North Street) – 1,100 feet of Shared Use Path
- North Street to Beaver Pond Road – 1,500 feet of Shared Use Path
- North Street – Shared Lanes
- Florence Road – Shared Lanes
- Beaver Pond Road – Shared Lanes

The total improvements include approximately 4,070 feet of sidewalk replacement, 2,600 feet of new shared use path and pavement markings and signage for bicycle lanes, wide shoulders and shared lanes.

The estimated total project cost for these improvements is \$1,795,000 based on a 2021 construction cost estimate of \$1,250,000.

We recommend that the Town apply to the VTrans Bicycle and Pedestrian Program for design and construction funds to implement Phase 1 of the project after local endorsement of this study and public consensus at a Town Meeting.

**SECTION 2
EXISTING CONDITIONS
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VT
February 17, 2017**

Project Study Area

The study area for the project was defined by the Steering Committee, which includes three residents from the Town of Proctor, the Proctor Town Manager, and a representative from the Rutland Regional Planning Commission. As shown in Figure 2-1, the study area extends from the end of the Pine Hill Carriage Trail to Beaver Pond. The study area includes Route 3, Main Street, Florence Road and several other local roads.

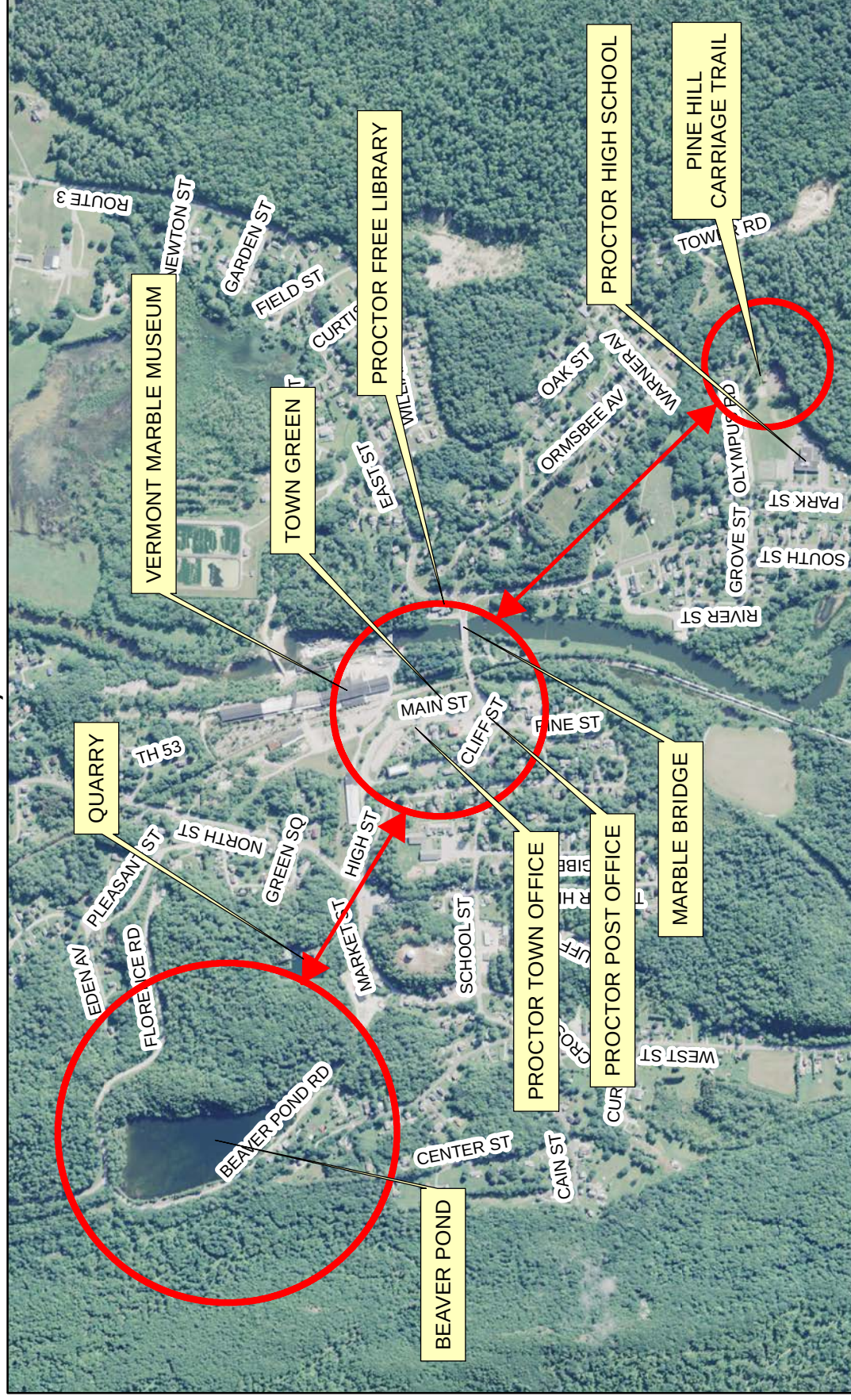
Land Uses

The study area includes residential, commercial, industrial and recreational uses as shown in Figure 2-2. The areas from the end of the Pine Hill Carriage Trail to the Town Center, a portion of Florence Road and a portion of North Street are zoned Residential. The areas along the south side of Main Street and along Market Street are zoned Commercial. The areas north of Main Street and north of Proctor Gas are zoned Industrial. The area surrounding Beaver Pond is classified as Recreational. These zoning districts are characterized as follows:

- Commercial: Development should be compatible with the rural nature of Proctor and the adjacent structures.
- Industrial: Development should be low impact commercial and industrial activities.
- Recreational: Permitted uses include public outdoor recreation, wildlife refuges and natural areas.
- Residential: Development is compact and consists of many historic homes served by municipal infrastructure. This district is suitable for future development where space is available.

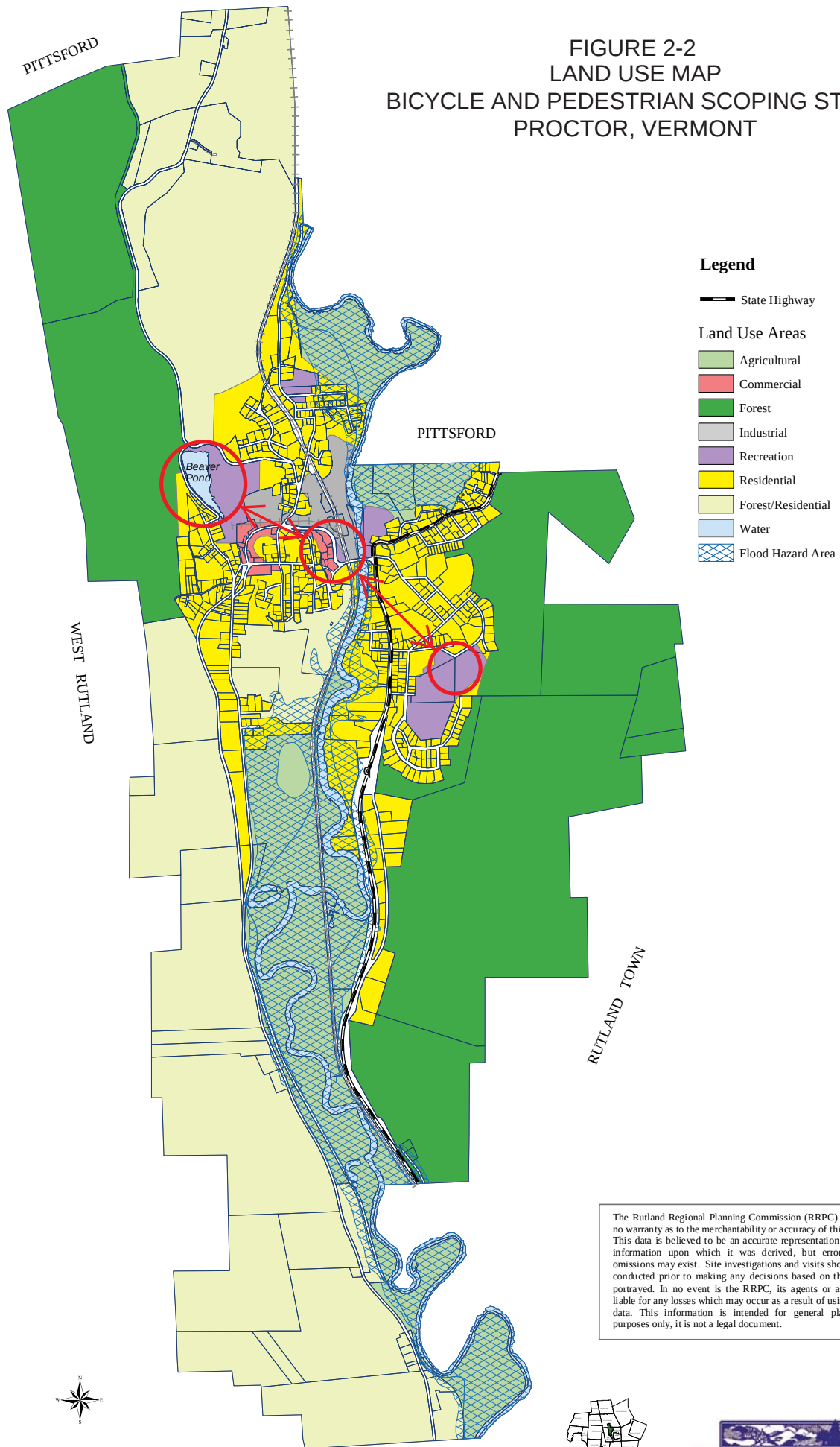
The Town recently completed the Proctor Prosperity Plan with Breadloaf, which is an economic development and land use planning document. This plan includes a proposed development plan for the Village Center, as shown in Figure 2-3. The proposed plan includes utilizing existing vacant or partially vacant buildings for mixed use commercial and light industrial use, as well as the construction of new buildings for mixed use and public safety. The plan also includes creation of more greenspace areas in front of the Marble Museum. The Proctor Prosperity Plan should be considered in the development of alternatives to coordinate the planned development.

FIGURE 2-1
PROJECT STUDY AREA
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT



0 500 1,000 2,000 Feet

FIGURE 2-2
LAND USE MAP
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT



The Rutland Regional Planning Commission (RRPC) makes no warranty as to the merchantability or accuracy of this data. This data is believed to be an accurate representation of the information upon which it was derived, but errors and omissions may exist. Site investigations and visits should be conducted prior to making any decisions based on the data portrayed. In no event is the RRPC, its agents or assigns, liable for any losses which may occur as a result of using this data. This information is intended for general planning purposes only, it is not a legal document.



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This map (D:\RRPC\PROCTOR\FLU_11.mxd)
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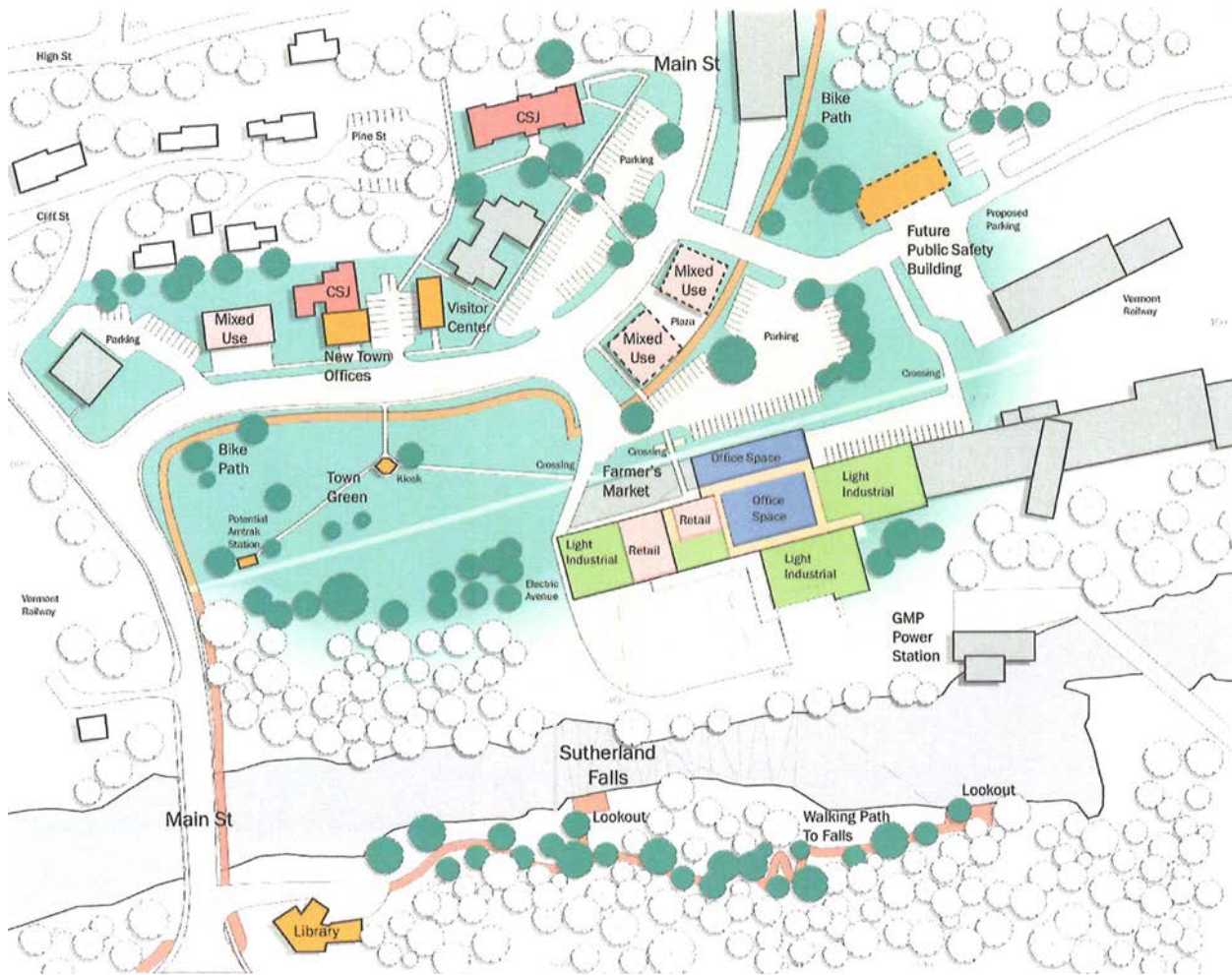


Figure 2-3: Proctor Prosperity Plan

Existing Transportation Facilities

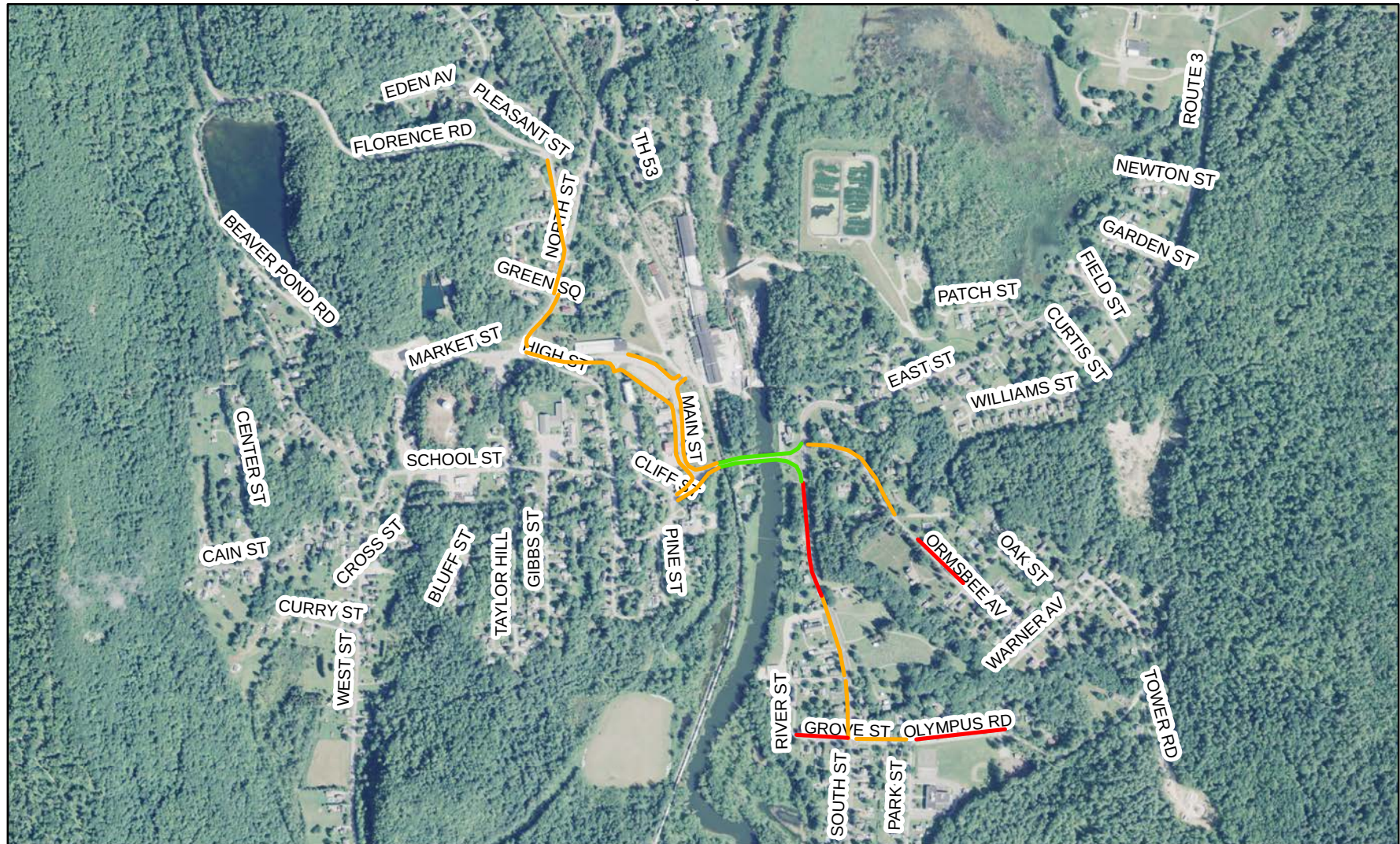
The study area is centered on three key destination areas: Pine Hill Carriage Trail, Main Street Commercial District and Beaver Pond. The main roads connecting these areas include Olympus Road, Grove Street, South Street (Route 3), Main Street, Market Street, North Street, Florence Road, and Beaver Pond Road. Several of these roads are currently utilized by local cyclists and pedestrians.

The main roads within the study area have a speed limit of 25 mph, though Olympus Road, Grove Street, and North Street have no speed limit signage along the sections within the study area. The characteristics of each road and associated pedestrian facilities are described in Table 2-1. The existing sidewalks are also shown in Figure 2-4. There are several additional local roads that intersect the study area; however, these were not evaluated as part of this study.

**TABLE 2-1
EXISTING ROAD CHARACTERISTICS
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT**

Road Name	Travel Lane Width (ft)	Shoulder Width (ft)	Center Line	Edge Lines	On-Street Parking	Sidewalk Material	Sidewalk Width (ft)	Edge Zone	Curb	Sidewalk Condition
Beaver Pond Road	10	0	No	No	Partial (Gravel)	None	N/A	N/A	None	N/A
Florence Road (North St. to Pleasant St.)	11	0	Yes	No	No	Asphalt	7	No	None	Poor
Florence Road (west of Pleasant St.)	12	0	Yes	No	No	None	N/A	N/A	None	N/A
Grove Street	12	0	No	No	No	Asphalt	4	No	None	Fair
Main Street (South St. to Marble Bridge)	11	2	Yes	Yes	No	Concrete	5	No	Granite	Good
Main Street (Marble Bridge)	12	0	Yes	No	No	Concrete	5	No	Granite/Concrete	Good
Main Street (Railroad Bridge)	12	0	Yes	No	No	Concrete & Asphalt	4	No	Concrete	Poor
Main Street (Town Green Area)	11	0	Yes	No	Both Sides	Asphalt	4	Grass (West)	Granite	Good
Main Street (Western End)	18	0	Yes	No	No	Asphalt (South only)	4.5	No	Granite	Fair
Market Street	11	0	Yes	No	No	None	N/A	N/A	None	N/A
North Street	12	0	Yes	No	No	Asphalt	4-6	No	Asphalt	Fair
Olympus Road	11	0	No	No	No	Marble (North only)	3	No	None	Poor
Ormsbee Avenue	11	0	No	No	No	Marble (partial)	3	No	None	Poor
River Street	9	0	No	No	No	Marble (partial)	3	Grass	None	Poor
South Street (Grove St. to Reynolds St.)	11	1	Yes	Yes	No	Asphalt (West only)	4	Grass	Concrete	Fair
South Street (Reynolds St. to Cemetery)	11	West – 3 East – 5	Yes	West only	No	Asphalt (West only)	4	Grass	None	Poor
South Street (Cemetery to Main St.)	11	2	Yes	Yes	No	Marble (West only)	4	Grass	None	Poor
Warner Avenue	10	0	No	No	No	None	N/A	N/A	None	N/A

FIGURE 2-4
EXISTING SIDEWALK FACILITIES
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT



Legend

- Concrete Sidewalk
- Asphalt Sidewalk
- Marble Sidewalk

0 500 1,000 2,000 Feet



The existing road classifications within the study area are as follows:

Minor Arterial	Urban Collector	Local
Florence Road	Beaver Pond Road	Grove Street
Main Street		Market Street
North Street		Olympus Road
South Street		Ormsbee Avenue
		River Street
		Warner Avenue

Arterial roads are intended to primarily carry through traffic from one community to another. The arterial roads within the study area are located in an urban area and therefore have a lower level of access restriction and also have lower speeds. Collector roads are intended to collect and carry traffic to arterial roads. Local roads provide access to adjoining properties.

Although Proctor has an extensive sidewalk network, as noted in the Rutland Regional Transportation Plan, there are no existing bicycle facilities in the project area. However, South Street, West Proctor Road, and Florence Road are all identified as popular cycling routes by the general public. A member of the Steering Committee and a local cyclist both noted that there are several people who utilize these roads regularly for walking, running and cycling. Additionally, South Street is considered a Moderate Use/Priority on the VTrans Bicycle Corridor Priority Map as of March 2016.

Traffic Data

The Annual Average Daily Traffic (AADT) counts, as published by the Vermont Agency of Transportation (VTrans) are as shown in Table 2-2 below for each street identified as a potential route in the project area. The traffic count for Route 3 was logged in 2012. The traffic counts for all other streets were logged in 2013. South Street (Route 3) is the most heavily traveled road in the study area. This is a State Route, which is locally maintained through the study area. The remainder of the roads see mostly local traffic.

**TABLE 2-2
ANNUAL AVERAGE DAILY TRAFFIC COUNTS
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT**

Street Name	Beginning Reference	Ending Reference	AADT
Route 3	South Street	Main Street	3,000
Beaver Pond Road	West Street	Florence Road	120
Florence Road	Beaver Pond Road	Pleasant Street	240
Florence Road	North Street	Pleasant Street	310
Main Street	North Street	Church Street	1,400
Main Street	Church Street	South Street	2,100
North Street	Main Street	Florence Road	1,100

Data was obtained from VTrans for high crash locations compiled for the 2008-2012 period. There are no high crash locations within the project area.

Natural and Cultural Resources

The Vermont Natural Resource Atlas was used to identify natural resources within and adjacent to the study area. These natural resources are presented in Figure 2-5. The Atlas does not provide accurate locations for all natural resources; however, it does provide a guide as to what natural resources will require further review during final design. A summary of the natural resources present in the study area is provided below.

Wetlands:

There is an existing Class 2 wetland located to the west of Proctor Gas on Market Street. An existing trail from the south end of Beaver Pond to Market Street may be considered as an alternative route to Beaver Pond and is near the wetland. Potential impacts from alternatives will be discussed in Section 4.

Surface Waters:

There are two bodies of water within the study area. Otter Creek flows south to north through the center of the project area. There is an existing bridge over Otter Creek on Main Street, known as the Marble Bridge. There are sidewalks on both sides of the bridge and the bridge appears to be in good condition, therefore no additional crossings are required over Otter Creek.

Beaver Pond is one of the key points of interest in the study area. It is in the northwest corner of the study area. One of the goals of this project is to connect Beaver Pond with various other key points of interest in Proctor. There will be no impact to Beaver Pond.

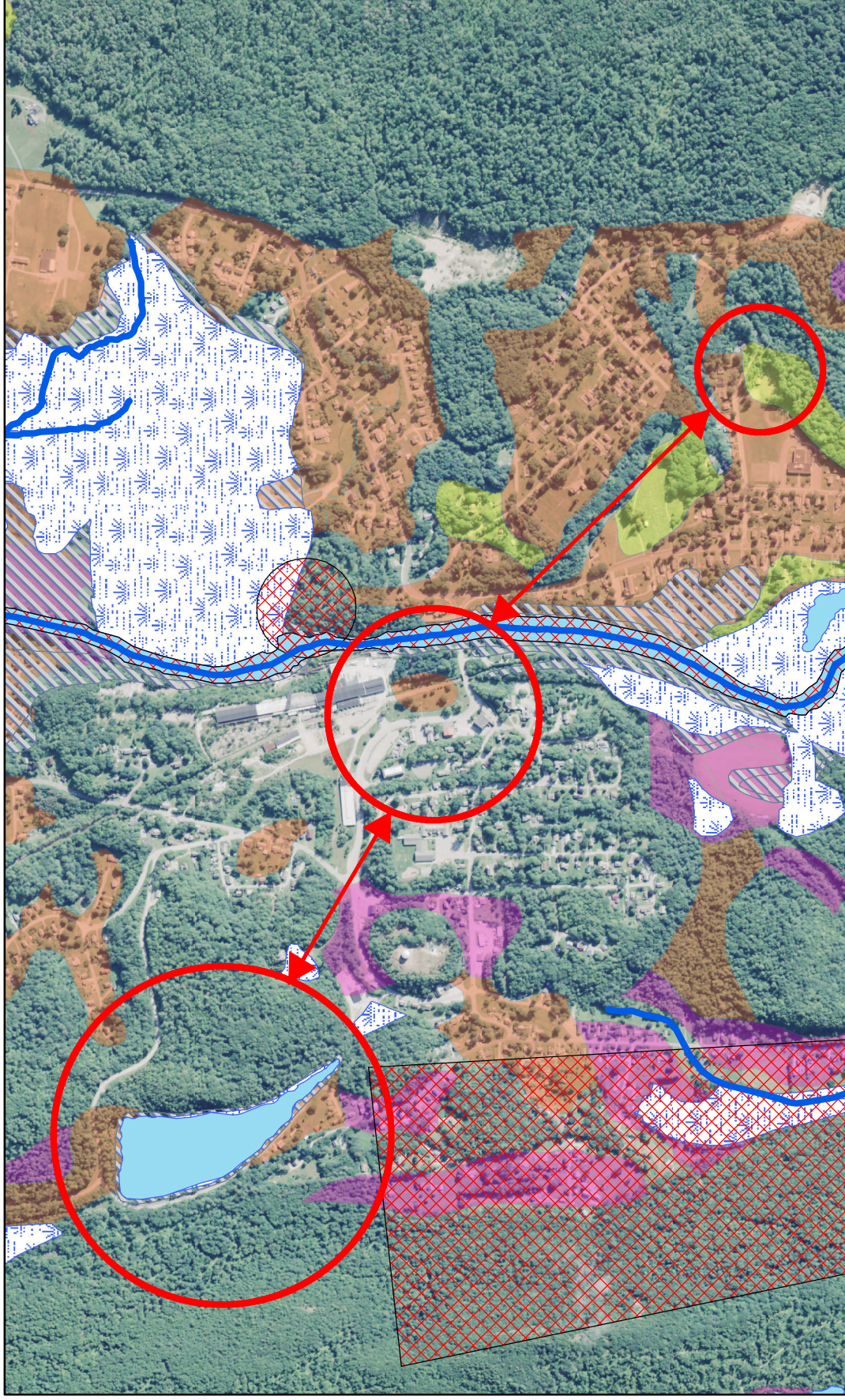
Floodplains:

There are two areas of floodplain within the study area. One is the flood plain for Otter Creek and the second is the floodplain for Beaver Pond. The floodplain for Beaver Pond will not be impacted. Potential impacts from alternatives for the floodplain for Otter Creek will be discussed in Section 4.

Stormwater:

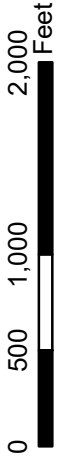
There are no impaired rivers, streams, lakes or ponds within the study area. The study area is located within an impaired watershed for Lower Otter Creek. The impaired watershed is caused by E.coli pollution downstream of the Vergennes WWTF and it will not be impacted by this project. Stormwater permit requirements will be discussed in Section 4.

FIGURE 2-5
NATURAL RESOURCES AND ENVIRONMENTAL FEATURES
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT



Legend

- Study Area
- Stream
- X RTE Species
- Waterbody
- Wetland
- Flood Plain
- Local Ag Soil
- Prime Ag Soil
- Statewide Ag Soil



Rare, Threatened and Endangered Species:

There is a threatened fern species located to the southwest of Beaver Pond. The existing trail from the south end of Beaver Pond to Market Street may be considered as an alternative route to Beaver Pond. Potential impacts from alternatives will be discussed in Section 4.

The study also falls within the known ranges of the federally threatened northern long-eared bat. The project will need to be reviewed further for impact to this species during the final design phase.

Hazardous Material Sites:

There are several hazardous waste sites in or adjacent to the study area. Table 2-3 summarizes each location, its proximity to the study area and the status of the site.

**TABLE 2-3
HAZARDOUS WASTE SITES
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT**

Site Number	Site Location	Proximity to Study Area	Contaminant	Status
770067	Sutherland Falls Quarry Dump	Approximately 240 feet north of existing trail to Beaver Pond	Industrial Waste	SMAC
931373	Proctor High School	Approximately 200 feet south of Olympus Road	Petroleum	Voluntary Action
20053322	OMYA (49 Main Street)	Approximately 75 feet west of Main Street	Heating Oil	SMAC
20053323	OMYA (61 Main Street)	Approximately 130 feet south of Main Street	Heating Oil	SMAC
20114161	OMYA (Parcel 5B)	In study area	Petroleum, PCB	Brownfield
20124323	CVPS Proctor Upper Substation	Approximately 360 feet east of Main Street at the Town Green	PCB, Petroleum, Metals	SMAC
20134378	Former Vermont Marble (52 Main Street)	Approximately 425 feet east of Main Street	Chlorinated Solvents, PAH	Brownfield

Note: SMAC means Site Management Activities Closed.

The Rutland Regional Planning Commission is currently providing environmental site assessment work for three brownfields located in the Village Center, including the two brownfields listed in Table 2-3, through their Brownfields Reuse Program.

The one hazardous waste site, known as Parcel 5B, that is located within the study area has undergone Phase I and Phase II Environmental Site Assessments. The Phase II ESA Report, prepared by Waite Environmental Management and dated December 9, 2011, focuses mainly on the northern end of the property, which is outside of the study area. The report states the following regarding the southern end of the property, where there is an abandoned rail spur that may be considered as an alignment for bicycle and pedestrian facilities:

The soil next to the rail spurs has visible evidence of coal and charred wood and has moderate levels of petroleum VOCs, PAHs, the creosote derivatives carbazole and dibenzofuran, and the metals lead and arsenic. Neither the wood preservative pentachlorophenol nor herbicides were detected at any location, eliminating them as contaminants of concern. The PAHs, which are likely combustion by-products from the former rail use, are above the EPA Regional Screening Levels (RSLs) for residential soil.

No further assessment is necessary in the southern or central portions of the Site. While soil quality has been somewhat impacted by former rail use, the contaminant concentrations (PAHs, petroleum compounds, creosote derivatives, lead and arsenic) are not of a magnitude that would require hazardous classification or the need for offsite treatment or disposal. Rather, the soil can be handled onsite during any planned redevelopment of this portion of the property as long as risk management is considered during construction activities including cutting/filling of soils, final soil placement, and final surface treatments (clean soil barriers, impervious barriers, etc.). If a future redevelopment plan includes open space or recreation areas in the zones where the rail spurs were located, a clean soil cap will likely be required.

The remediation activities that may be required for recreational development along the rail spurs are discussed in Section 4.

Agricultural Land:

There are several areas of Prime and Statewide agricultural soil. As bicycle and pedestrian improvements would mostly be located within proximity to the edge of the road and within the Town right-of-way, the soils impacted would likely be previously disturbed soils. Based on previous discussions with the Vermont Agency of Agriculture, there is typically no impact to the agricultural soils if the project is located directly adjacent to an existing road.

Historic, Archeological and Architectural Resources:

An Archeological Resource and Historic Preservation Assessment was completed in May 2016 by Hartgen Archeological Associates, Inc. The report indicates there is moderate potential for precontact and historic archeological deposits in areas outside of existing disturbance, especially in lawn areas between existing sidewalks and historic structures. The report recommends that ground disturbance be kept close to the existing roadside to limit disturbances to previously undisturbed areas of archeological potential. In areas where existing sidewalks may be utilized as the basis for alignment, there is a low potential for intact archeological deposits due to previous disturbance.

The report also notes that features and landscape elements associated with structures listed or eligible for listing on the State or National Registers should be avoided. This includes marble sidewalks, which are present along Olympus Road and South Street. The report recommends refurbishment of marble sidewalks that are in disrepair. The existing marble sidewalks are generally in poor condition and will likely need to be repaired or replaced. The potential archeological impacts are discussed in Section 4. The complete report is included as Appendix A.

Right-of-Way

The public road right-of-way (ROW) was determined by a licensed land surveyor reviewing this project. The right-of-way widths are shown in Table 2-4. It is important to note that property corners in Proctor are marked with marble monuments and are difficult to locate. Vermont Marble sold all the parcels in Proctor and performed their own surveying. Additionally, the older parcels tend to have poor descriptions of the parcel lines.

**TABLE 2-4
EXISTING PUBLIC RIGHT-OF-WAY WIDTHS
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT**

Street Name	Right-of-Way Width (ft)
Beaver Pond Road	50
Florence Road	47-49
Grove Street	49.5
Main Street (South Street to Church Street)	48-58
Main Street (Church Street to North Street)	66
Market Street	49.5
North Street	49.5
Olympus Road	49.5
Ormsbee Avenue	49.5
River Street	49.5
South Street	49.5
Warner Avenue	49.5

Most of the proposed improvements will be within the existing right-of-way, with the exception of temporary construction easements. The only areas where permanent improvements may extend outside the existing right-of-way are along the existing trail from North Street to Beaver Pond and along the abandoned rail spur from the Town Green to North Street. The property adjacent to and containing Beaver Pond is owned by the Town of Proctor. The right-of-way impacts will be further discussed in Section 4.

Utilities

There are multiple utilities within the study area including overhead electric and phone, and underground water, sewer and storm drains. Typically, the underground utilities will not be impacted by the proposed improvements. Water service curb stop boxes may require height adjustment if they are located within a proposed sidewalk. Drainage structures may require minor rehabilitation to accommodate curbing and in some areas additional structures may be required. Drainage impacts will be further discussed in Section 4.

The above ground features, such as utility poles and fire hydrants, appear to be set back far enough from the existing sidewalks to allow for the increased sidewalk width. Utility relocation for above ground features is not anticipated for the proposed improvements.

**SECTION 3
PUBLIC INVOLVEMENT
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VT
February 17, 2017**

Developing a Purpose and Need Statement requires obtaining input from multiple sources, reviewing the existing characteristics of the area and reviewing local and regional plans to identify the relationship of the planned improvements to these plans.

A Project Kick-off Meeting was held with the Steering Committee to discuss the project, identify goals and brainstorm possible alternatives. The information obtained at this meeting was used to prepare for the public meetings. The discussions focused mostly on bicycle use and the concept of developing a bicycle route through Town that was safe for all abilities and ages of cyclists, as well as accommodating to pedestrians. The committee also decided to perform a public survey relating to bicycle use in and around town. The results of the survey are discussed later in this section.

Local Concerns Meeting

A Local Concerns Meeting was conducted on August 19, 2015 to discuss the project and obtain input from the public regarding the purpose and need for the project. A copy of the meeting minutes is included as Appendix B.

The meeting was attended by approximately 5 local residents. The participants and committee discussed the following major topics:

- Need to educate for cyclists and drivers;
- Increasing accessibility and bicycle facilities to bring more visitors to Town;
- Route 3 as an existing popular bicycle route, although shoulders are too narrow north of Grove Street;
- West Proctor Road cycling route advantages and disadvantages;
- Route to Beaver Pond, including discussion on cross country routes; and
- Utilization of existing sidewalks and discussion on marble sidewalks.

There was good support for pedestrian and bicycle improvements among the meeting attendees. Many attendees were concerned with safety on Route 3 and the bridges on Main Street. There was also a discussion on safety concerns with marble sidewalks due to the hazards associated with the smooth surface. There was a consensus among attendees that Proctor is a great place for cycling, although safety and education could be improved so that drivers and cyclists better understand how to share the road. There was significant discussion on educating cyclists and motorists on how to share the road. While much of the discussion focused on bicycle facilities, there was some discussion regarding children walking to school. It was noted that the Proctor school has a "Walk to School" program where students meet one day a week to walk to school.

Purpose and Need Statement

After the Local Concerns Meeting, the following Purpose and Need Statement was developed based on input from the Steering Committee and the public:

Purpose: To provide a safe and connected route for bicyclists of all abilities, pedestrians and other outdoor enthusiasts to travel between key points of interest.

Need: The existing cycling conditions discourage beginner cyclists and families as there are no dedicated bicycle facilities and cyclists must ride with traffic on the road. Traffic volumes along South Street (Route 3) and Main Street are among the highest in Proctor, which can make cycling difficult for families and beginner cyclists. Pedestrian activity is also discouraged by the deteriorated sidewalks that are narrow, uneven and generally not in compliance with ADA requirements. There are several destinations in Proctor that are currently disconnected due to the existing condition of sidewalks and lack of bicycle facilities, including the Pine Hill Carriage Trail, the high school, the Library, the Downtown area, the Marble Museum and Beaver Pond.

This project is necessary to improve and expand existing pedestrian and bicycle facilities to increase safety and accessibility for all users and provide connectivity throughout Proctor.

Public Survey

A public survey was conducted after the Local Concerns meeting. The survey focused on bicycle use in and around Proctor. The questions and results are summarized below, with the full survey results included as Appendix C.

The survey respondents covered a wide variety of bicycle experience, with 30% having never ridden a bicycle and 30% riding a few times a week and 14% riding every day. Additionally, 48% of respondents indicated that they ride more than 30 miles per week. Most of the respondents indicated that they ride for exercise or pleasure. There were very few respondents that commuted to work or school on a bike. Many of the respondents indicated that they prefer to ride on backroads and to recreation or scenic areas. Route 3, West Proctor Road, Florence Road and Main Street were all noted as popular cycling roads.

More than half of respondents indicated that the main concern when cycling was vehicular traffic. When asked about drivers, 39% of respondents indicated that drivers are mostly considerate and 37% of respondents indicated that some drivers could be more courteous. Only 22% of non-riders indicated that they feel it is too dangerous to ride, while a majority of the non-riders do not ride because of lack of time or not owning a bicycle. When drivers were asked about cyclists, 36% felt comfortable sharing the road and 28% worried that there was not enough space on most roads. Only 9% of drivers felt that bicycles and vehicles should not share the road.

When asked how to improve cycling in Proctor, respondents requested more bike paths and bike lanes, with a close second being better road surfaces. It was also noted that training and education for both cyclists and drivers would make it easier to share the road.

Alternatives Presentation

An Alternatives Presentation was conducted on March 16, 2016 to present the alternatives, obtain input from the public regarding the proposed alternatives, and select an alternative. A copy of the meeting minutes is included as Appendix D.

The meeting participants generally supported the proposed alternatives, especially the shared use paths. There was some discussion regarding bicycle lanes on Main Street and elimination of one parking lane, with one participant noting that cars may park in the bicycle lane during events. There was also discussion of future parking requirements if the college has students begin attending classes in Proctor. In response, it was noted that the college presented to the Planning Commission and showed that the parking needs could be met with parking lots.

Public Informational Meeting

A Public Informational Meeting was held on February 8, 2017 to present the draft report and solicit input from the public. A copy of the meeting minutes is included as Appendix E.

Relationship to Local and Regional Plans

The Proctor Town Plan, the Rutland Regional Plan and the Rutland Region Transportation Plan all contain goals, policies and recommendations in support of the proposed improvements. The Proctor Town Plan contains goals in the sections titled "Transportation" and "Energy, as follows:

- *Transportation Goal: The Town shall provide a safe, efficient, multi-modal transportation system for residents and businesses in the community.*
 - o *Encourage mixed-use development in the village center to support higher density and efficiency in modes of travel such as pedestrian and bicycle.*
 - o *Work to incorporate "Complete Streets" practices in all development projects.*
- *Transportation Goal: Work in cooperation with the state to improve roads to incorporate the Complete Streets policy as well as explore options for recreational trails.*
 - o *Adopt the complete streets policy so that all modes are improved and accommodated when upgrading existing roads and new developments occur.*
- *Energy Goal: Promote energy efficient land use and transportation patterns.*
 - o *Design roadways to accommodate all forms of transportation: pedestrian, bicycle, bus and automobile.*

The Rutland Regional Plan contains the following goals in the sections titled “Health and Wellness” and “Recreation and Open Space”:

- *Health/Wellness Goal: Recreation programs for children and adults.*
- *Health/Wellness Goal: Focus on promoting methods of transportation other than the personal automobile. This includes mass transit, walking and biking.*
- *Recreation Goal: Support connectivity between trails throughout the Region.*

The Rutland Region Transportation Plan contains the following goals in the section titled “Bicycles and Pedestrians”:

- *Bike/Pedestrian Goal: Include Complete Streets as part of town transportation projects, to accommodate all users.*
- *Bike/Pedestrian Goal: Provide bicycle and pedestrian accessibility to new developments and redevelopments.*
- *Bike/Pedestrian Goal: Educate local officials about the economic, health and transportation benefits of bike/pedestrian facilities.*

SECTION 4
EVALUATION OF ALTERNATIVES
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VT
February 17, 2017

There are several factors that influence the development of alternatives, including public input, current and future uses, and existing conditions. The critical design elements defined by the review of existing conditions, uses and local input are as follows:

- Maximize the use of existing facilities.
- Design bicycle facilities for all abilities (families and avid cyclists).
- Identify cost effective solutions.
- Maintain the character of the marble sidewalks.

Alternatives Development

The first step in the evaluation was to identify a preferred route for the bicycle and pedestrian facilities that link the Pine Hill Carriage Trail to Beaver Pond and create a facility for both families and avid cyclists. Several streets were reviewed for inclusion in the preferred route. The alternative routes and nearby destination points are shown in Figure 4-1. The alternatives are generally described as follows:

Southern Alignment

- Alternative 1A – Olympus Road to Grove Street to South Street
- Alternative 1B – Olympus Road to Grove Street to River Street to Shared Use Path along Otter Creek
- Alternative 1C – Olympus Road to Warner Avenue to Ormsbee Avenue

Town Green Alignment

- Alternative 2A – Main Street (from South Street to north end of Town Green)
- Alternative 2B – Main Street (from South Street to south end of Town Green) to meandering path through Town Green
- Alternative 2C – Main Street (from South Street to Railroad Bridge) to path along railroad tracks
- Alternative 2D – New pedestrian bridge over Otter Creek, combined into Alternatives 2A, 2B or 2C

Middle Alignment

- Alternative 3A – Shared Use Path from Town Green to North Street
- Alternative 3B – Main Street from Town Green to North Street

PROCTOR, VERMONT



Northern Alignment

- Alternative 4A – Shared Use Path along existing trail from North Street to Beaver Pond
- Alternative 4B – North Road to Florence Road to Beaver Pond Road
- Alternative 4C – Market Street to existing trail to Beaver Pond

Several alternatives were considered for bicycle and pedestrian facilities, including sidewalks, shared use path, bicycle lanes, wide shoulders and shared lanes. A critical element in the consideration of these facilities was that the committee felt widening the roads or encroaching onto lawns in residential areas would negatively impact local support for the project. As such, the proposed facilities would need to be constructed approximately within the limits of the existing roadway and sidewalk areas, with a few exceptions in the commercial and industrial areas.

- Sidewalks: Since most of the roads in these alternatives have existing sidewalks in poor condition, it would be beneficial to replace the deteriorating sidewalks with new 5-foot wide sidewalks to improve the pedestrian facilities. The additional 1 or 2 feet required for a 5-foot sidewalk on these roads would not negatively impact the adjacent property owners.
- Shared Use Path: A shared use path would significantly and negatively affect the character and aesthetics in the residential areas, as well as require several easements. As such, the committee did not pursue a shared use path through residential areas. However, a shared use path was considered as an option along Otter Creek and from the Town Green to Beaver Pond.
- Bicycle Lanes: In all areas except a portion of Main Street this alternative would require widening the road, as the existing roads do not have sufficient space for 4-foot wide (minimum) bicycle lanes on both sides. As such, bicycle lanes were not pursued by the committee in any area except Main Street near the Town Green.
- Wide Shoulders: Some areas along South Street could accommodate wide shoulders without widening the road, although a reduction in travel lane width would be required. Therefore, this is an acceptable alternative to consider for South Street. In all other areas, the roads would need to be widened and therefore wide shoulders were not considered in any other location.
- Shared Lanes: According to the VTrans Pedestrian and Bicycle Facility Design Manual, “many existing neighborhood village and downtown streets and local roads can adequately accommodate bicycle and motor vehicles without special provisions for either mode”. All of the roads within the study area meet the guidelines for shared lanes as described in the VTrans Pedestrian and Bicycle Facility Planning and Design Manual:
 - o *Less experienced bicyclists including children when traveling on low-volume neighborhood streets where fast moving vehicles or through traffic is not a factor.*

- o *All levels of bicyclists on short segments of highway in village and downtown centers with constrained right-of-way, where pedestrians may be expected in higher numbers, traffic speeds are no higher than 25 mph and short blocks allow bicyclists to share the road despite high traffic volumes.*

Southern Alignment Alternatives Evaluation

The existing conditions were presented in Section 2 and are briefly summarized as follows:

- Olympus Road, Grove Street, South Street, River Street, Warner Avenue and Ormsbee Avenue are characterized by moderately heavy residential development.
- Olympus Road, Grove Street, South Street and parts of River Street and Ormsbee Avenue have existing sidewalks on one side of the road and curbing in some areas. All the existing sidewalks are in poor condition and do not comply with ADA guidelines.
- Warner Avenue does not have any pedestrian facilities.
- None of these roads have dedicated bicycle facilities.
- Olympus Road, Grove Street, River Street, Warner Avenue and Ormsbee Avenue all appear to have low traffic volumes. South Street has a significant traffic volume.

Alternative 1A – Olympus to Grove to South

Alternative 1A provides the most direct route to Main Street. There are no major challenges as there are no steep slopes, utility constraints or right-of-way concerns. The buildings, utility poles, hydrants, landscaping and trees are set back from the edge of the road, therefore there are no utility or landscaping conflicts associated with widening the existing sidewalks. Since there are existing sidewalks along the entire route, there would be no change in character or aesthetics.



The wide shoulder alternative would require reducing the travel lanes to 10 feet to create the wide shoulders. Reductions in travel lane width are being utilized in heavily developed and downtown areas throughout the state to provide space for bicycles and pedestrians. The narrower travel lane does impact vehicular traffic, especially large trucks and buses, by reducing the available space for driving; however, the impact will encourage drivers to reduce their speed, which provides an additional benefit to pedestrians and cyclists.

The existing road width varies along South Street, with the section from Grove Street to Reynolds Street being the narrowest at 24 feet. This width does not allow for a striped wide shoulder, as the shoulder would only be 2 feet with a reduced travel lane. Therefore, the section of South Street from Grove Street to Reynolds Street is limited to shared lanes as this section meets the guidelines for shared lanes provided above. The remainder of South Street allows for a 3-foot wide shoulder with a travel lane reduction to 10 feet. Olympus Road and Grove Street do not have sufficient space for a wide shoulder without widening the road. As these roads have lower traffic volumes, they are well suited for shared lanes.

The proposed facilities for this alternative include replacement sidewalks on Olympus Road, Grove Street and South Street, shared lanes for bicycles on Olympus Road and Grove Street, and a combination of shared lanes and wide shoulders for bicycles on South Street.

Alternative 1B – Olympus to Grove to River to Shared Use Path

Alternative 1B would require a new sidewalk on a portion of River Street and a new shared use path along Otter Creek from Reynolds Street to Main Street. There is an existing cleared path through this area; however, it is privately owned and would involve property acquisition from several properties along the shared use path. The path along the river would require consultation with Watershed Management Division for stream and floodplain permitting requirements. At Main Street, there is an extremely steep slope from the path along the river to Main Street. It would be very difficult to comply with ADA slope requirements at this point.



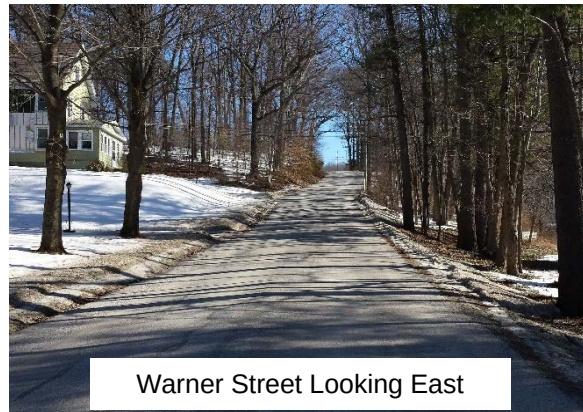
Existing Path Along Otter Creek

As previously noted, Olympus Road and Grove Street are well suited for shared lanes. River Street is similar in character to Olympus Road and Grove Street and would also be well suited for shared lanes.

The proposed facilities for this alternative include replacement sidewalk on Olympus Road and Grove Street, new and replacement sidewalk on River Street, shared lanes for bicycles on Olympus Road, Grove Street and River Street, and a shared use path from River Street to Main Street.

Alternative 1C – Olympus to Warner to Ormsbee

Alternative 1C would take users over a steep hill through a residential area. The route would not be direct for most users and would take longer than the other alternatives. Additionally, Ormsbee Avenue at the intersection with South Street and Main Street is steep and could be difficult for some cyclists to get up the hill from a stop on Main Street. Lastly, this route would require new sidewalks, which would moderately impact the character of this area.



Olympus Road, Warner Avenue and Ormsbee Avenue do not have sufficient space for a wide shoulder without widening the road. As these roads have lower traffic volumes, they are well suited for shared lanes.

The proposed facilities for this alternative include replacement sidewalk on Olympus Road, new sidewalk on Warner Avenue, new and replacement sidewalk on Ormsbee Avenue and shared lanes for bicycles on all streets.

Town Green Alignment Alternatives Evaluation

The existing conditions were presented in Section 2 and are briefly summarized as follows:

- Main Street is characterized by moderately heavy commercial and industrial development.
- Main Street has existing sidewalks with curbing on both sides of the road from South Street to the OMYA office. All the existing sidewalks are in poor condition and do not comply with ADA guidelines.
- Main Street does not have dedicated bicycle facilities.
- Main Street has parking along both sides of the road along the Town Green.
- Main Street has a high traffic volume.

Alternative 2A – Main Street (from South Street to north end of Town Green)

Alternative 2A utilizes the existing sidewalk alignments from South Street to the north end of the Town Green. There are no major challenges as there are no steep slopes, utility constraints or right-of-way concerns. The buildings, utility poles, hydrants, landscaping and trees are set back from the edge of the road, therefore there are no utility or



landscaping conflicts associated with widening the existing sidewalks. Since there are existing sidewalks along the entire route, there would be no change in character or aesthetics.

The existing sidewalks on the Marble Bridge and the railroad bridge will not be replaced. The Marble Bridge sidewalk is already 5 feet wide and in good condition. The railroad bridge sidewalk is narrow and in poor condition; however, it is not feasible to replace the sidewalk without significant modification to the existing bridge structure, which would be costly. Additionally, the two bridges limit the available space in the roadway for bicycles. Without replacing the bridges, it would not be possible to add bicycle lanes on this section of Main Street. The railroad bridge is currently listed as satisfactory in the VTrans structure report; however, it is on the VTrans list as a candidate for replacement or rehabilitation. When this work occurs, it would be beneficial to the Town for the bridge to be replaced with 5-foot wide sidewalks and bicycle lanes.

Continuing north along Main Street from the railroad bridge, the road widens to approximately 42 feet. The road section in this area includes 11-foot wide travel lanes and two 10-foot wide parking lanes. It would be possible to add bicycle lanes to this portion of Main Street if one of the parking lanes were eliminated. There was significant discussion by the committee on the elimination of a parking lane on Main Street as the parking is useful at certain times of the year and may be beneficial in the future based on proposed development. The other alternative briefly considered was a shared lane; however, the committee decided that the bicycle lanes were important enough to warrant the elimination of a parking lane.

The proposed facilities for this alternative include replacement sidewalks on Main Street, except for the sidewalks on the bridges, shared lanes for bicycles from South Street to the west side of the railroad bridge, and bicycle lanes from the railroad bridge to the north end of the Town Green.

Alternative 2B – Main Street (from South Street to south end of Town Green) to Meandering Path Through Town Green

Alternative 2B utilizes the existing sidewalk alignments and shared lanes from South Street to the west side of the railroad bridge, as described previously in Alternative 2A. From the west side of the railroad bridge, this alternative includes a shared use path meandering through the Town Green.



There is a significant slope from the railroad bridge down to the Town Green. This steep slope would require the path to switchback between the bridge and the Town Green to maintain ADA compliant slopes. Typically, when pedestrians are presented with switchbacks, they tend to walk straight down the hill if it is possible to do so. This

causes dirt footpaths to form between the switchbacks, which deters from the aesthetics. Additionally, cyclists are more likely to stay on the road than they are to turn into the Town Green and follow a meandering path.

The proposed facilities for this alternative include replacement sidewalks on Main Street from South Street to the railroad bridge, except for the sidewalks on the bridges, shared lanes for bicycles from South Street to the west side of the railroad bridge, and a shared use path meandering through the Town Green from the railroad bridge to the north end of the Town Green.

Alternative 2C – Main Street (from South Street to Railroad Bridge) to Path along Railroad tracks

Alternative 2C utilizes the existing sidewalk alignments and shared lanes from South Street to the west side of the railroad bridge, as described previously in Alternative 2A. From the west side of the railroad bridge, this alternative includes a shared use path along the east side of the railroad tracks.



This alternative would follow an existing path from the east side of the railroad bridge down to the railroad tracks. The slope would need to be reviewed after a topographic survey is completed to determine if it meets ADA running slope criteria. This alignment would require a ramp from the road across the sidewalk to the path for bicycles. Additionally, a railroad crossing would be required at the north end of the Town Green.

The path would be within the railroad right-of-way and would therefore require coordination with and approval from the railroad owner. The railroad right-of-way is owned by the State of Vermont and leased to Vermont Railway.

The proposed facilities for this alternative include replacement sidewalks on Main Street from South Street to the railroad bridge, except for the sidewalks on the bridges, shared lanes for bicycles from South Street to the west side of the railroad bridge, and a shared use path along the railroad tracks from the railroad bridge to the north end of the Town Green.

Alternative 2D – New Pedestrian Bridge Over Otter Creek, Combined into Alternative 2A, 2B or 2C



Alternative 2D utilizes one of the alignments described in Alternatives 2A, 2B and 2C from the west side of the Marble Bridge to the

north end of the Town Green. The variation for this alternative only affects the alignment across Otter Creek.

This alternative would include a new standalone pedestrian bridge adjacent to the Marble Bridge over Otter Creek. The bridge would be 12 feet wide to accommodate bicycles and pedestrians and would span approximately 180 feet. A new bridge would require stream alteration and floodplain permitting from the Watershed Management Division. It would also be the costliest alternative.

The proposed facilities for this alternative include a new bridge structure over Otter Creek. This alternative would be an addition to Alternative 2A, 2B or 2C.

Middle Alignment Alternatives Evaluation

The existing conditions were presented in Section 2 and are briefly summarized as follows:

- Main Street is characterized by moderately heavy commercial and industrial development.
- Main Street has existing sidewalks with curbing on one side of the road from the OMYA office to North Street. All the existing sidewalks are in poor condition and do not comply with ADA guidelines.
- Main Street does not have dedicated bicycle facilities.
- Main Street has a high traffic volume.

Alternative 3A – Shared Use Path from Town Green to North Street

Alternative 3A utilizes the abandoned rail spur from the north end of the Town Green to North Street for a shared use path. The abandoned rail spur is owned by OMYA. This alternative would require discussions with OMYA and land acquisition for the path.

At the eastern extent of the path, the alignment would cross over a parcel owned by OMYA known as Parcel 5B. This parcel is known to be contaminated, as discussed previously in Section 2. The area impacted by the shared use path would be confined to the southern extent of the parcel and would not impact the contaminated area to the north. A land record notice for this parcel states the following:



Abandoned Rail Spur Looking East

Future use of the property...shall be restricted to passive recreation, limited to hiking and walking. No other use, ground disturbance, nor excavation shall occur without prior written approval from the VTDEC.

Matthew Becker at the Waste Management Division was consulted regarding the possibility of a shared use path. The surface soils (0-1 foot below grade) on the south end of the parcel are impacted by polycyclic aromatic hydrocarbons in excess of residential and industrial soil screening values. There are two options for constructing a path in this area, as described below. Both options would require the submittal and approval of a Corrective Action Plan.

- Place path at existing grade, which requires excavating into surface soils.
 - o Excavated surface soils may be capped elsewhere on the site or disposed of at a landfill. This option would minimize impacts to drainage patterns.
- Place path above existing grade, with no excavation into surface soils.
 - o An indicator fabric and 6-inches of permeable cover material or minimum 2-inches concrete/asphalt cover would be required for the path and areas immediately adjacent to the path. This option would impact drainage patterns and may require culverts to allow for drainage flow across the path.

As both options require coordination and a soil cap, it is recommended that the path be placed at the existing grade to minimize the impact to drainage patterns.

The proposed facilities for this alternative include a shared use path from the north end of the Town Green to North Street.

Alternative 3B – Main Street from Town Green to North Street

Alternative 3B utilizes the existing sidewalk alignments from the Town Green to North Street. The existing sidewalks would require replacement as they are too narrow for ADA compliance.

The existing sidewalk on the north side of Main Street extends from the driveway to the Marble Museum to the OMYA office building. In this area, the landscaping and trees are set back from the edge of the road and there are no buildings, utility poles or hydrants, therefore there are no conflicts associated with widening the existing sidewalks. Since there are existing sidewalks along the entire route, there would be no change in character or aesthetics. This section of sidewalk ends at the OMYA office building. It is not possible to extend the sidewalk west along the north side of Main Street due to the building located directly adjacent to the road. Therefore, a crosswalk and a short sidewalk extension would be required to connect this section to the sidewalk network on the south side of Main Street.



The existing sidewalk on the south side of Main Street extends from the OMYA office building to North Street. The sidewalk is bordered to the south by a steep slope that is showing obvious signs of erosion. It would not be feasible to widen this section of

sidewalk to the south. Therefore, the sidewalk would need to be widened into the road. The road is sufficiently wide enough, at approximately 36 feet, to allow for a wider sidewalk; although the existing drainage system, which includes three catch basins, would need to be modified based on the new curb location.

The bicycle facility in this section would be an on-street facility. As the existing road is approximately 36 feet wide, there is sufficient space for bicycle lanes to be installed on both sides of the road.

The proposed facilities for this alternative include replacement sidewalks and bicycle lanes on Main Street from the entrance to the Marble Museum to North Street.

Northern Alignment Alternatives Evaluation

The existing conditions were presented in Section 2 and are briefly summarized as follows:

- North Street, Florence Street, and Beaver Pond Road are characterized by a moderate amount of residential development. Market Street is characterized by a mix of residential, commercial and industrial development.
- North Street and Florence Street have existing sidewalks on one side of the road from Main Street to Beaver Pond Road. All the existing sidewalks are in poor condition and do not comply with ADA guidelines. Beaver Pond Road and Market Street do not have existing sidewalk facilities.
- None of the streets have dedicated bicycle facilities.
- North Street has a moderate traffic volume. The remainder of the streets have very low traffic volume.

Alternative 4A – Shared Use Path Along the Existing Trail from North Street to Beaver Pond

Alternative 4A utilizes an existing trail from North Street to Beaver Pond for a shared use path. This trail crosses lands owned by the Town of Proctor and Frank Beyette. This alternative would require discussions with Mr. Beyette and land acquisition for the path. Mr. Beyette appears to be in support of a path as he has already been working on clearing and widening the existing trail.

Portions of the existing trail are already cleared to more than 8 feet wide. Other portions are in the process of being cleared by Mr. Beyette and as of the date of this report are approximately 5 feet wide.

Prior to the work by Mr. Beyette to clear the trail, it was believed that ledge removal may be required to obtain sufficient width for the path. However, based on the trail already cleared by Mr. Beyette, it appears that the ledge removal will be minimal.



Along the north border of Proctor Gas, there is a chain link fence. It would be beneficial to install plantings to provide screening between Proctor Gas and the path.

The proposed facilities for this alternative include a shared use path from North Street to Beaver Pond.

Alternative 4B – North Road to Florence Road to Beaver Pond Road

Alternative 4B includes a loop around Beaver Pond along North Street, Florence Road and Beaver Pond Road. Beaver Pond Road and North Street would be connected by a shared use path along the existing trail north of Proctor Gas, as discussed previously under Alternative 4A.

These are quieter roads that are frequented by avid cyclists. The more rural character and reduced traffic on these roads does not warrant dedicated bicycle lanes as the benefit would likely not justify the cost. The bicycle facilities would be shared lanes.

Pedestrians would likely use the shared use path from North Road to Beaver Pond and not continue around the loop.

Alternative 4C – Market Street to the Existing Trail to Beaver Pond

Alternative 4C would take users through a mixed use area with lower density commercial, industrial and residential development. This route would require new sidewalks, which would moderately impact the character of this area. This route would also utilize an existing snowmobile trail from Market Street to Beaver Pond.



There is an existing drainage swale along the south side of Market Street and the topography slopes from the drainage swale up a steep slope. There would not be sufficient space for a sidewalk along the south side of Market Street. Additionally, a sidewalk along the south side of Market Street would require two road crossings, which reduces safety.

The new sidewalk would be located along the north side of Market Street. The existing snowmobile trail is located west of the Proctor Gas driveway. The sidewalk would transition at this point into a shared use path along the existing snowmobile trail and then connect into the existing trail described in Alternative 4A. The proposed facilities for this alternative include new sidewalk on Market Street and a shared-use path from Market Street to Beaver Pond.

“No Build” Alternative

The “no build” alternative must be considered for all projects funded by the Federal Highway Administrative Act to comply with the National Environmental Policy Act

(NEPA). The “no build” alternative would consist of doing nothing. There would be no construction, no signage installed and no pavement markings installed. The “no build” alternative would not increase safety for pedestrians and cyclists as there would be no improvement to the existing condition. As the “no build” alternative does not satisfy the Purpose and Need Statement, this alternative is not recommended.

Evaluation Matrix

An evaluation matrix was prepared to compare the alternatives and is presented in Table 4-1. The evaluation matrix includes factors such as impacts, local and regional issues, permitting and cost.

Preferred Alternative

Based on input from the public and the committee, the preferred alternative includes the following components and is shown in Figures 4-2, 4-3 and 4-4:

- Olympus Street –610 feet of Sidewalk Replacement and Shared Lanes
- Grove Street –370 feet of Sidewalk Replacement and Shared Lanes
- South Street – 1,690 feet of Sidewalk Replacement and Wide Shoulders
- Main Street (South Street to Railroad Bridge) – 400 feet of Sidewalk Replacement (between the bridges) and Shared Lanes
- Main Street (Railroad Bridge to Marble Museum) –1,000 feet of Sidewalk Replacement and Bicycle Lanes
- Main Street (Marble Museum to North Street) – 1,100 feet of Shared Use Path
- North Street to Beaver Pond Road – 1,500 feet of Shared Use Path
- North Street – Shared Lanes
- Florence Road – Shared Lanes
- Beaver Pond Road – Shared Lanes

Design Considerations

The anticipated impacts of the preferred alternative are summarized in Figure 4-5 and further discussed below.

Natural Resource Impacts:

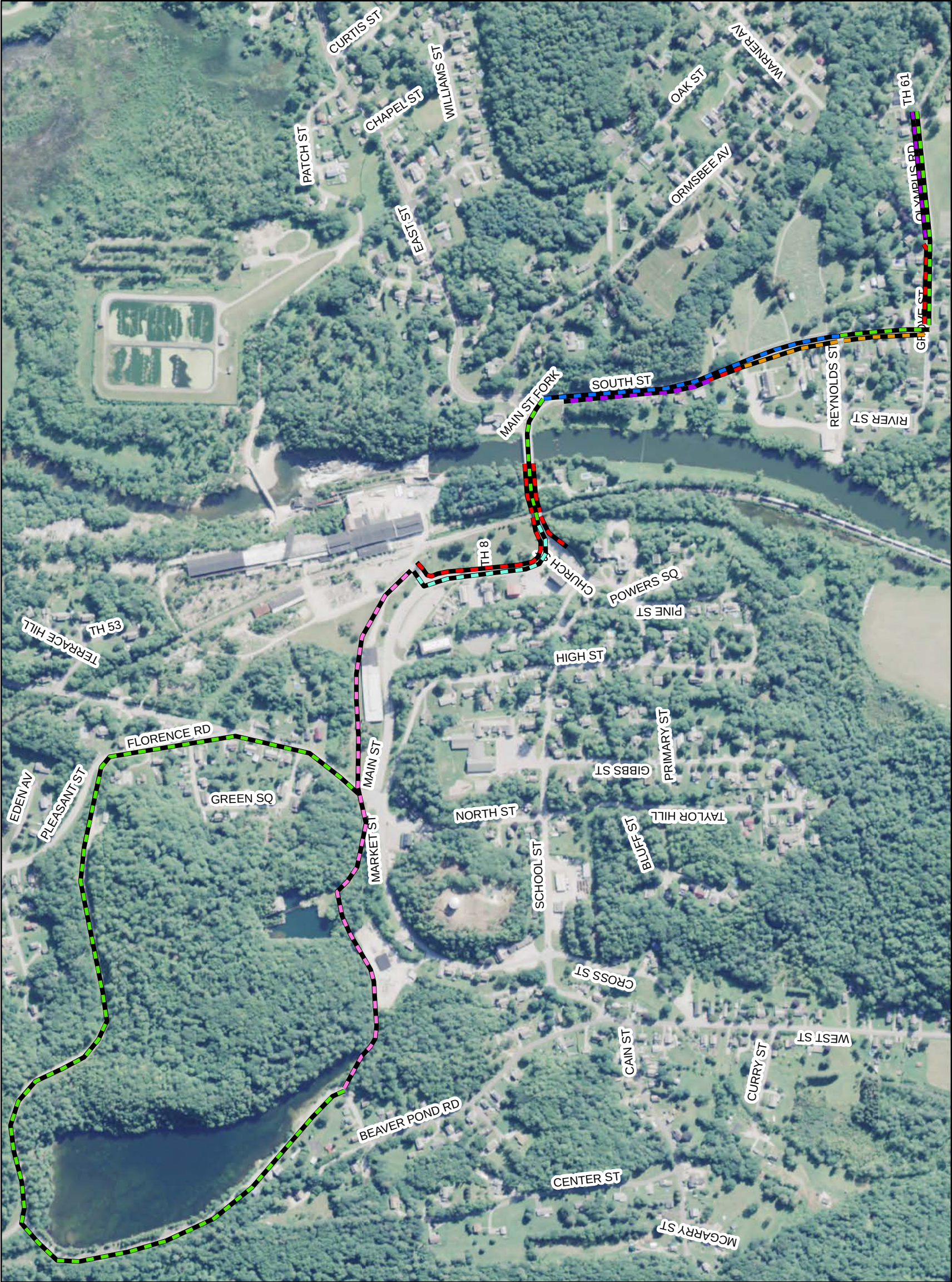
There are several areas of Prime and Statewide agricultural soil within the preferred alignment. As the improvements are located within proximity to the edge of the road, within the Town right-of-way, or along former rail spurs or trails, the soils impacted are previously disturbed soils. As noted in Section 2, there is typically no impact to the agricultural soils if the project is located directly adjacent to an existing road.

The shared use path from North Street to Beaver Pond will extend through an area identified as agricultural soils; however, the proposed shared use path will follow an existing path and will border along the toe of a steep slope where ledge is present. It is unlikely that this alignment will have an impact on agricultural soils due to previous disturbance and the presence of ledge.

**TABLE 4-1
EVALUATION MATRIX
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT**

Category	Do Nothing	Southern Alignment			Village Center Alignment				Middle Alignment		Northern Alignment		
		1A	1B	1C	2A	2B	2C	2D	3A	3B	4A	4B	4C
Impacts													
Utility	None	None	None	Poles	None	None	None	None	None	None	None	None	None
Prime Ag	None	Minimal	Moderate	Minimal	None	Minimal	Minimal	None	None	None	Minimal	None	Minimal
Archeological & Historic	None	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
Hazardous Materials	None	None	None	None	None	None	None	None	Moderate	None	None	None	None
Floodplain	None	None	Minimal	None	None	None	None	None	None	None	None	None	None
T&E Species	None	None	None	None	None	None	None	Minimal	None	None	None	None	None
Wetlands	None	None	None	None	None	None	None	None	None	None	Moderate	None	Significant
Right-of-Way (Permanent)	None	None	Yes	None	None	None	Yes	Yes	Yes	None	Yes	None	Yes
Local & Regional Issues													
Concerns	Accessibility, Safety	None	Slope, Length	Trees, Slope	None	None	Railroad	Maintenance	None	None	None	Slope, Length	None
Aesthetics	No Change	No Change	Moderate	Moderate	No Change	Minimal	Minimal	Significant	Minimal	No Change	Minimal	No Change	Minimal
Character	No Change	No Change	Negative	Negative	No Change	Minimal	Minimal	Negative	Minimal	No Change	Minimal	No Change	Minimal
Conformance to Town/Regional Plan	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Satisfies Purpose & Need	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Permits & Approvals													
19 V.S.A. 1111 Access Permit	No	No	No	No	No	No	No	No	No	No	No	No	No
401 Water Quality	No	No	No	No	No	No	No	Yes	No	No	Possibly	No	Yes
404 COE Permit	No	No	Yes	No	No	No	No	Yes	No	No	Possibly	No	Yes
Act 250	No	No	No	No	No	No	No	No	No	No	No	No	No
Floodplain	No	No	Yes	No	No	No	No	No	No	No	No	No	No
Stream Alteration	No	No	Yes	No	No	No	No	Yes	No	No	No	No	No
Stormwater Discharge	No	No	No	No	No	No	No	No	No	No	No	No	No
Stormwater Construction	No												
Shoreline	No	No	Yes	No	No	No	No	No	No	No	No	No	No
Wetlands	No	No	No	No	No	No	No	No	No	No	Possibly	No	Yes
Cost													
Construction Cost Estimate	\$0	\$208,000	\$500,000	\$800,000	\$250,000	\$250,000	\$250,000	+\$200,000	\$165,000	\$240,000	\$225,000	\$15,000	\$230,000

FIGURE 4-2
PREFERRED ALTERNATIVE
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT



Legend

- 5' wide Concrete Sidewalk w/ Granite Curb
- 5' wide Concrete Sidewalk w/ Grass Edge Zone
- 5' wide Concrete Sidewalk w/ Marble Inlay and Granite Curb
- 5' wide Bicycle Lanes
- 8'-10' wide Paved Shared Use Path
- Wide Shoulders
- Shared Lanes



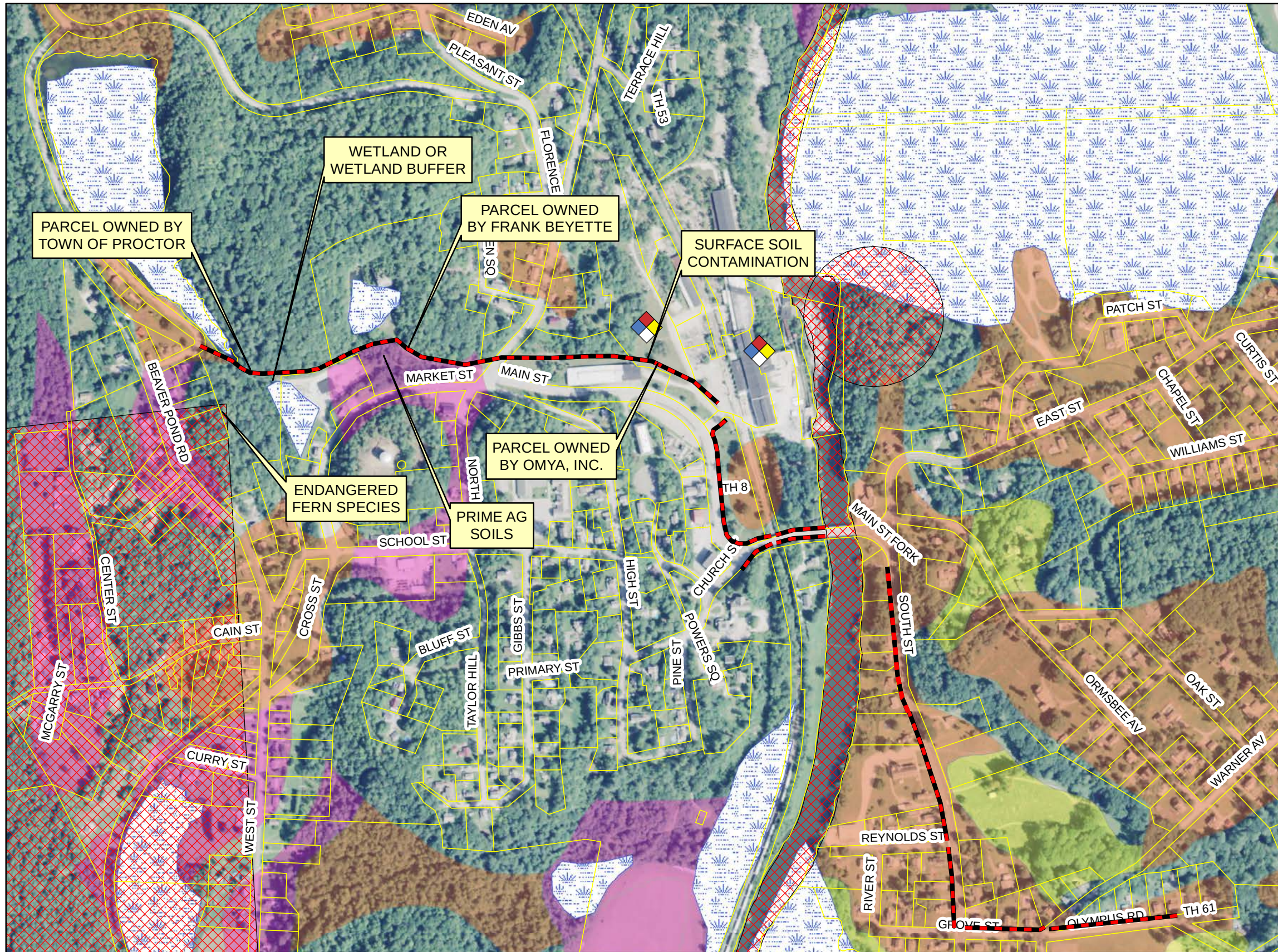
FIGURE 4-3
PREFERRED ALTERNATIVE - TOWN GREEN AREA
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT



FIGURE 4-4 PREFERRED ALTERNATIVE - BEAVER POND AREA BICYCLE AND PEDESTRIAN SCOPING STUDY PROCTOR, VERMONT



**FIGURE 4-5
POTENTIAL IMPACTS
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT**



Legend

 Proposed Improvements Requiring Construction



0 250 500 1,000
Feet

The shared use path between North Street and Beaver Pond will be close to a Class 2 wetland at the northwest corner of Proctor Gas. The wetland should be delineated in this area during the final design phase to determine the actual distance between the proposed construction and the wetland.

In regard to endangered or threatened species, there is an endangered fern species that is mapped approximately 175 feet from the proposed shared use path south of Beaver Pond. It is unlikely that this fern species will be impacted, but additional investigation may be necessary once the alignment is defined. Additionally, all VTrans MAB funded projects are reviewed for impacts to the northern long eared bat during the review of the Environmental Document. Typically, tree cutting is an impact to the bats. This project should not require significant tree cutting, therefore there should be no impact.

Hazardous Site Remediation:

As previously discussed, the shared use path across OMYA's parcel north of the Town Green will require a soil cap due to known contamination from the abandoned rail spur. A Corrective Action Plan will need to be submitted to the Waste Management Division for approval prior to construction.

Utility Impacts:

There are no impacts to water, sewer, storm drains or utility poles. The project may require adjustment of valve boxes or curb boxes that are located within the sidewalk. Catch basins located adjacent to proposed curbing may require adjustment to accommodate the new curb.

Archeological Impacts:

As previously noted in Table 2-1, the marble sidewalks are in poor condition, as evidenced by uneven surfaces and cracked marble slabs. The marble sidewalks are not ADA compliant as they are too narrow. The marble sidewalks will need to be replaced for ADA compliance. While this may be an adverse effect, there is a way to mitigate the adverse effect of replacing the sidewalks.

In areas where the existing sidewalks are marble, the marble slabs should be salvaged for reuse in the new 5-foot wide sidewalks. The new sidewalks should be concrete with the salvaged marble slabs inlaid in the concrete. The marble inlay does add cost to the sidewalk replacement; however, it maintains the character of the area. Proctor has a rich history of marble, which should be embraced by maintaining the marble sidewalks. Additionally, it is likely that VTrans and/or Federal Highway Administration will require the reuse of the marble slabs in the sidewalk to maintain the historic character.

The cost estimates provided in this report only include the marble inlay for areas that currently have marble sidewalk. There was some discussion by the committee that if additional marble slabs can be obtained by the Town, they can be installed in other

areas of the project. The addition of marble inlay in other areas of the project will likely become quite costly as the additional cost for marble inlay is estimated at \$100 per square yard of sidewalk. When the construction cost of marble inlay is added to the construction cost of a typical concrete sidewalk, the cost more than doubles.

Right-of-Way Impacts:

The proposed shared use path crosses two parcels that are privately owned. The parcels are owned by OMYA, Inc. and Frank Beyette. Permanent easements will be required across both properties in order to construct the shared use path. Both owners appear to be in support of the project.

Ledge Removal:

Along the north side of Proctor Gas, there are a few small areas of ledge that will restrict the available width for the shared use path. In these areas, the ledge will need to be removed to make room for a shared use path. The ledge would need to be removed for the width of the path plus a 2 foot shoulder on each side. The cost estimates provided in this report include an estimate for ledge removal; however, this estimate should be further refined during final design.

Shared Use Path Width and Surface Material:

As previously noted, the minimum width for a shared use path is 8 feet. If the path is constructed with an unpaved surface, the 8-foot minimum width is typical. However, if the path is constructed with a paved surface, the VTrans Pedestrian and Bicycle Facility Planning and Design Manual recommends a minimum width of 10 feet and notes that the 8-foot minimum is rare with paved shared use paths. The area north of Proctor Gas is too narrow to accommodate a 10-foot wide path, as it is anticipated that ledge removal will be required to fit an 8-foot wide path. Table 4-2 provides a summary of acceptable shared use path surface materials. The materials listed in Table 4-2 are all slip resistant and ADA compliant and will provide a firm and stable surface.

Portland cement concrete is not recommended due to the higher cost and the fact that it would not fit with the more rural character of the path. Aggregate requires more maintenance than asphalt and can be more difficult for cyclists (especially with road bikes) to ride on. Typically, for a shared use path similar to the one proposed, it is common for the path be constructed with a bituminous concrete surface. However, since a portion of the proposed shared use path is currently used as a snowmobile trail, it may be beneficial to construct an aggregate path initially. If the volume of cyclists using the path warrants a bituminous concrete path, the path could be paved in the future. As such, a bituminous concrete path is recommended for the portion from the Town Green to North Street and an aggregate path is recommended for the portion from North Street to Beaver Pond.

**TABLE 4-2
SHARED USE PATH SURFACE MATERIALS
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT**

Surface Material	Recommended Minimum Path Width (ft)	Absolute Minimum Path Width (ft)	Estimated Construction Cost per Square Yard	Maintenance
Bituminous Concrete (asphalt)	10	8	\$75	Minimal ¹
Portland Cement Concrete	10	8	\$90	Minimal ¹
Aggregate with Stabilizer (Sur-Pac)	8	8	\$60	Moderate ²

Notes:

1. The maintenance requirements for asphalt and concrete are minimal. Concrete has the lowest maintenance requirement as it does not tend to crack or break apart. Asphalt surfaces may require repair for cracks or breaking along the edges.
2. The maintenance requirements for crushed stone are moderate. Crushed stone will likely need seasonal maintenance to repair potholes and erosion.

Bicycle Facility Transitions:

The proposed bicycle facilities transition from shared lanes to wide shoulders to bicycle lanes and a shared use path. The transitions between each facility should be clear to both cyclists, motorists and pedestrians (on shared use paths) to maximize safety. The transition areas should include advanced warning and guidance signs.

Future Hiking Trail:

Members of the community plan to mark a hiking trail from the dam at the south end of Beaver Pond to the top of the hill east of Beaver Pond. This trail was approximately shown previously in Figure 4-4. The design of the shared use path should integrate this local hiking trail as an added feature for pedestrians. It would also be beneficial to include a sign indicating the name of the trail and a map of where it goes.

Permitting:

The permitting requirements for the proposed pedestrian and bicycle facilities were previously presented in Table 4-1.

A stormwater discharge permit would not be required as the proposed improvements will only increase impervious area by 0.7 acres throughout the entire project area. The wider sidewalks will increase impervious area by 0.1 acres for the full project. The shared use paths will increase impervious area by 0.6 acres.

If the proposed construction will occur within 50 feet of the delineated wetland, a Wetlands permit and approval from the Army Corps of Engineers will be required for work within the wetland buffer.

If the path along the south side of Beaver Pond is constructed outside of the footprint of the existing gravel path, a Shoreland Permit may be required. As such, it is recommended that the new path be aligned exactly with the existing gravel surface.

The path from the Town Green to North Street will require a Corrective Action Plan and coordination with the Waste Management Division.

If Federal funding is utilized, an environmental analysis will be required in accordance with the National Environmental Policy Act (NEPA). It is likely that the project would qualify for a Categorical Exclusion as it is not anticipated to have a significant effect upon natural and cultural resources, nor a significant environmental impact.

Traffic Control:

The construction of the proposed improvements will require work within the travel way and along the shoulder of the road. A general traffic plan should be developed during the final design phase of the project to address any potential lane closures or road closures, as well as typical construction signage.

Typical Cross Sections

The road cross sections for Olympus Road, Grove Street, North Street, Florence Road and Beaver Pond Road will not change based on the preferred alternative. The sidewalk reconstruction on Olympus Road and Grove Street will widen the sidewalk from 4 feet to 5 feet. The cross sections for South Street will change slightly due to the narrower travel lane for the addition of wide shoulders. The proposed cross section for South Street would reduce the travel lane width to 10 feet in each direction, which would create an increase of 1-foot in the shoulder on both sides of the road for a minimum 3 foot shoulder. The South Street shoulder width modifications would be as follows:

- Grove Street to Reynolds Street: No Change
- Reynolds Street to Cemetery (west side): Existing 3 feet vs. Proposed 4 feet
- Reynolds Street to Cemetery (east side): Existing 5 feet vs. Proposed 6 feet
- Cemetery to Main Street: Existing 2 feet vs. Proposed 3 feet

The proposed cross section of Main Street with the new bicycle lanes at the Town Green is shown in Figure 4-6. The existing cross section is approximately 42 feet wide with travel lanes and two parking lanes. The elimination of one parking lane will allow the installation of the bicycle lanes. Note that the travel lanes will shift to the east approximately 4 feet in the proposed cross section.

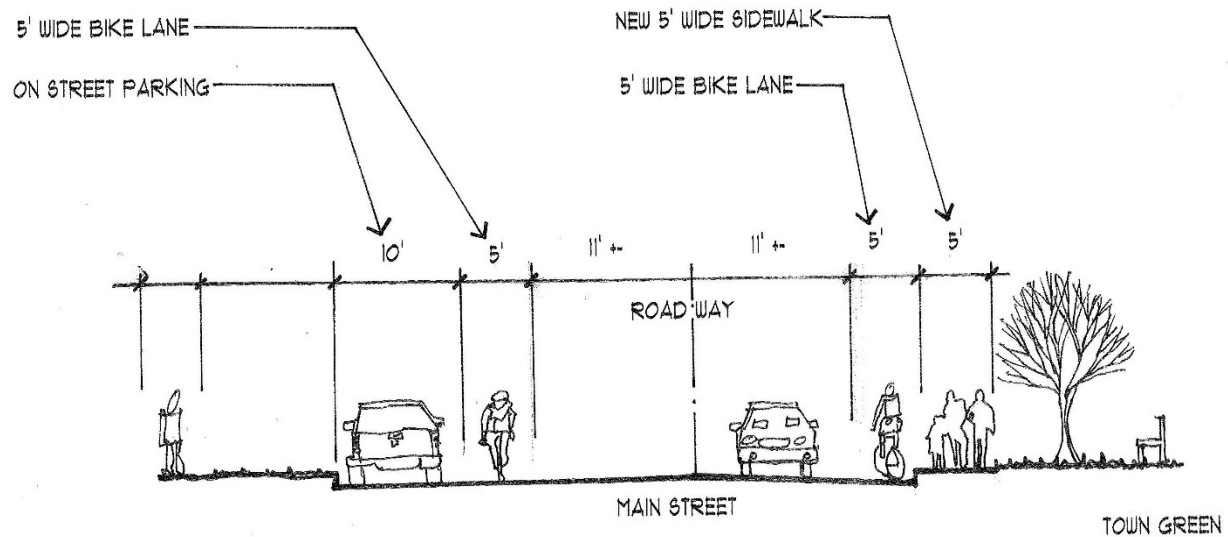


Figure 4-6: Proposed Main Street Cross Section

The proposed cross section for the shared use paths is shown in Figure 4-7. The paths will be 10 feet wide in most areas and reduce to 8 feet wide where required along the north side of Proctor Gas. The horizontal and vertical clearances, cross slopes and side slopes shall comply with VTrans Standard A-78.

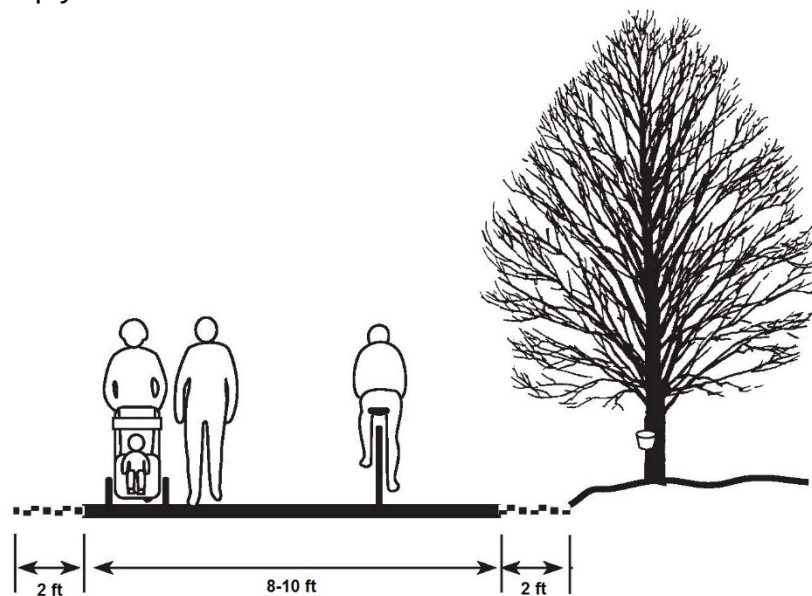


Figure 4-7: Shared Use Path Cross Section

Pavement Markings and Signage

There are several types of signage and pavement markings included in the proposed improvements. The proposed pavement markings and signage are shown in Figures 4-8 and 4-9.

The shared use path will not receive any pavement markings initially. After being in use for a period, the Town can decide if pavement markings are necessary and, if so, install at that time.

FIGURE 4-8
PROPOSED PAVEMENT MARKINGS
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT

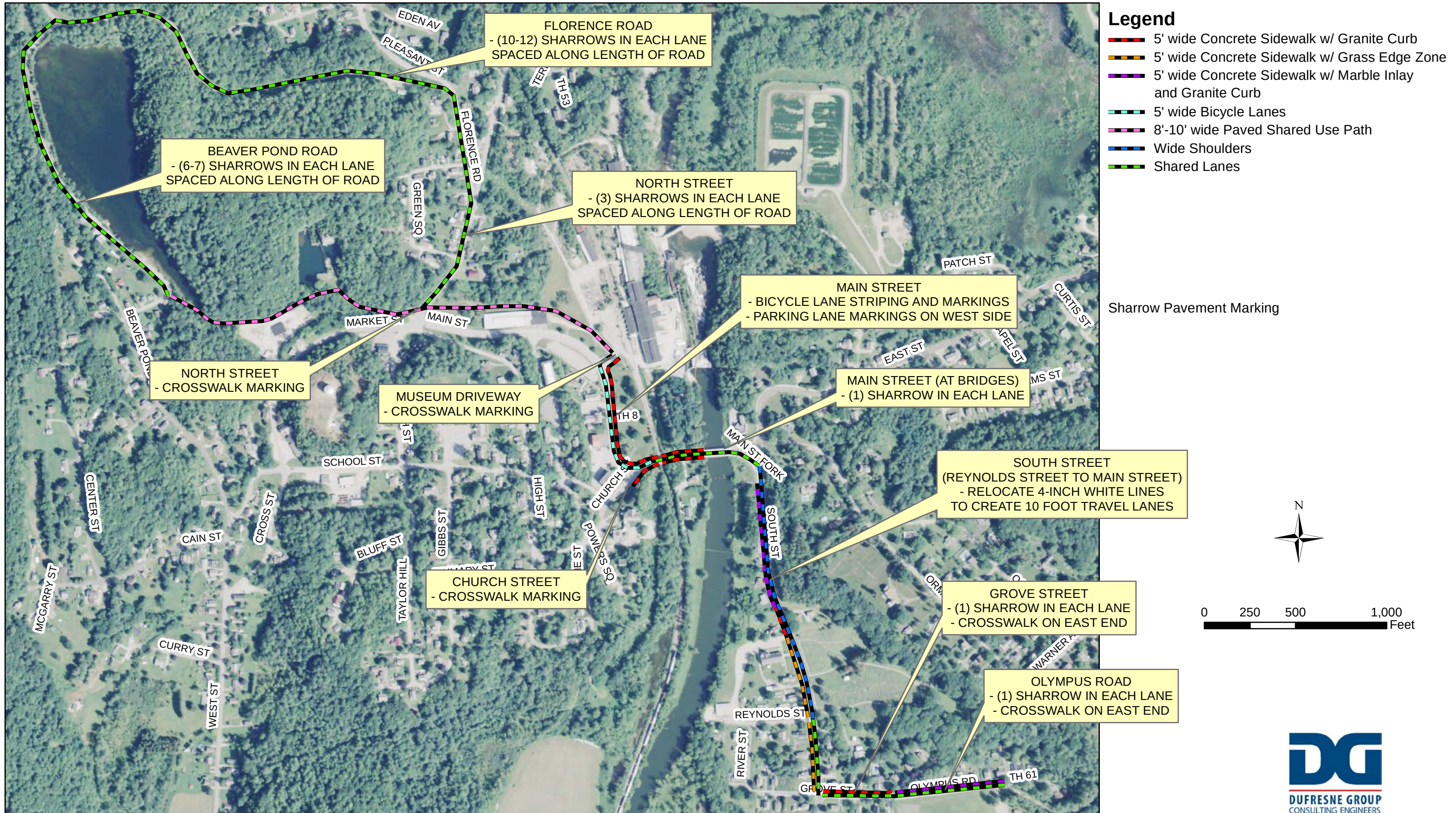
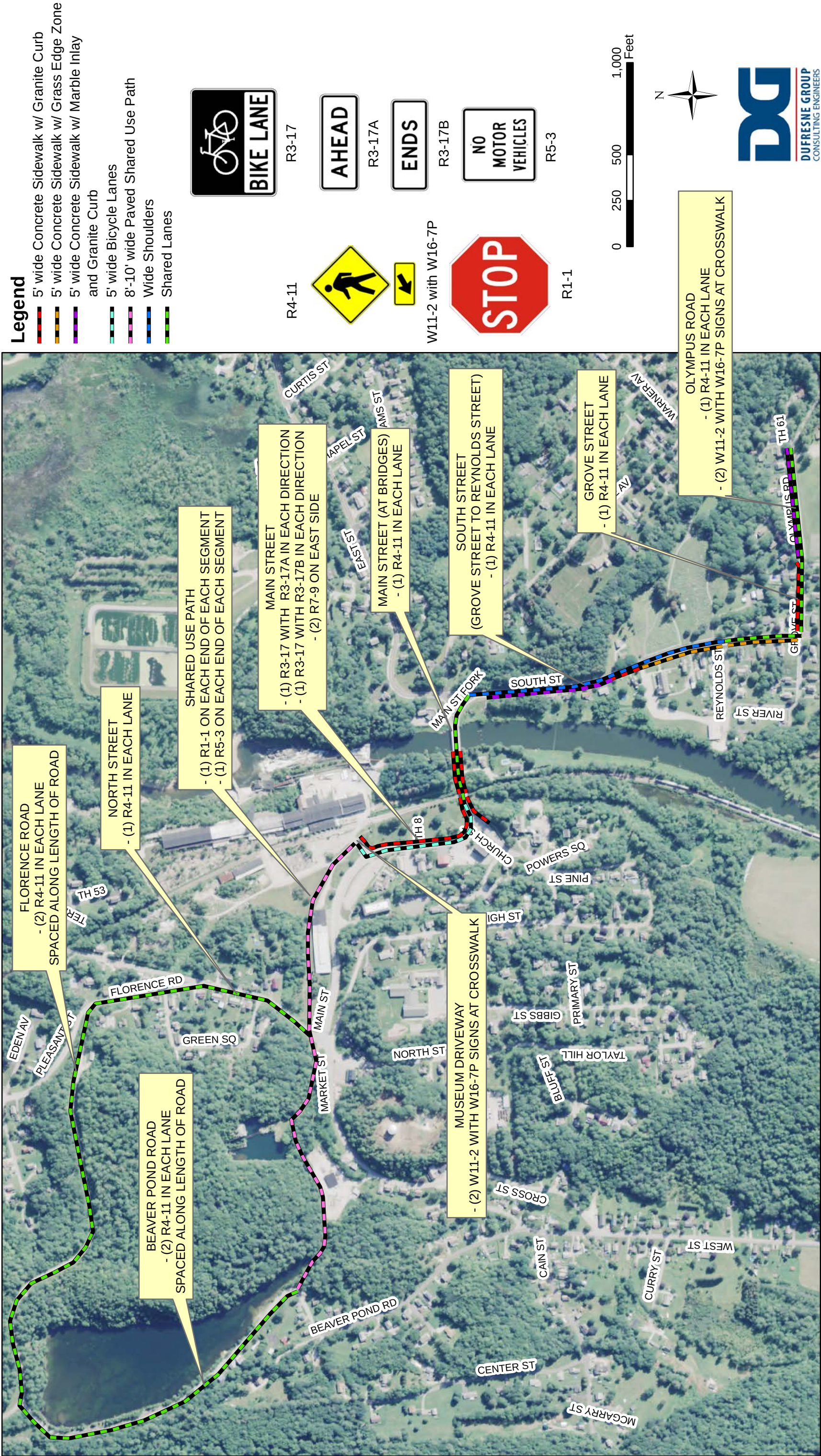


FIGURE 4-9
PROPOSED SIGNAGE
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT



Regarding “Share the Road” signage for the shared lanes, the typical signage includes a combination of yellow warning signs W16-1P and W11-1, as shown in Figure 4-10. However, this signage tends to be ineffective and does not have a high impact on drivers. Additionally, according to VTrans, the yellow warning signs used to encourage shared roads may be eliminated from the Manual of Uniform Traffic Devices in the next revision. An alternative to the typical yellow warning signs could be a white regulatory sign stating “Bikes May Use Full Lane” (R4-11), as shown in Figure 4-11. It is recommended that the white regulatory signs be used as they tend to be clearer in their intent.



*Figure 4-10: Typical Warning Signs
(W11-1 and W16-1P)*



*Figure 4-11: Regulatory Sign
(R4-11)*

The Town may also choose to install designated bike route signage for the cycling route from Pine Hill Carriage Trail to and around Beaver Pond. It is recommended that bike route signage include destination and distance information. This signage has not been included in the construction cost estimate.

Total Project Cost Estimate

The preliminary cost estimate presented in Table 4-3 has been prepared for the preferred alternative as described previously in this section. As shown, the preliminary construction cost estimate for the preferred alternative is \$1,070,000 in 2017 dollars, which includes a 25% contingency.

**TABLE 4-3
PRELIMINARY CONSTRUCTION COST ESTIMATE
BICYCLE AND PEDESTRAIN SCOPING STUDY
PROCTOR, VERMONT**

Item Description	Quantity	Unit	Unit Price	Total Price
Clearing and Grubbing	1	LS	\$ 14,000.00	\$ 14,000.00
Solid Rock Excavation	250	CY	\$ 125.00	\$ 31,250.00
Bituminous Concrete Pavement	175	TON	\$ 185.00	\$ 32,375.00
Detectable Warning Surface	164	SF	\$ 45.00	\$ 7,380.00
Durable 4 inch White Line	3000	LF	\$ 4.00	\$ 12,000.00
Durable 4 inch Yellow Line	750	LF	\$ 4.00	\$ 3,000.00
Durable 6 inch White Line	1500	LF	\$ 4.00	\$ 6,000.00
Durable Symbols	68	EA	\$ 95.00	\$ 6,460.00
Durable Crosswalk	165	LF	\$ 20.00	\$ 3,300.00
Removal of Existing Pavement Markings (via grinding only)	940	SF	\$ 0.60	\$ 564.00
Signs	46	EA	\$ 120.00	\$ 5,520.00
Sign Post (12 ft high)	36	EA	\$ 168.00	\$ 6,048.00
Remove and Reset Sign	9	EA	\$ 45.00	\$ 405.00
Concrete Sidewalk	1625	SY	\$ 90.00	\$ 146,250.00
Concrete Sidewalk w/ Marble Inlay	630	SY	\$ 190.00	\$ 119,700.00
Granite Curb	3080	LF	\$ 45.00	\$ 138,600.00
Shared Use Path - 10' Wide Bituminous Concrete	1100	LF	\$ 75.00	\$ 82,500.00
Shared Use Path - 8' Wide Aggregate	1480	LF	\$ 58.00	\$ 85,840.00
Flaggers	550	MHRS	\$ 28.00	\$ 15,400.00
Traffic Control	1	LS	\$ 15,000.00	\$ 15,000.00
Mobilization/Demobilization	1	LS	\$ 108,000.00	\$ 108,000.00
SubTotal Construction Cost				\$ 840,000.00
Contingencies (25%)				\$ 210,000.00
Allowance for Contamination				\$ 20,000.00
Total Construction Cost (2017)				\$1,070,000.00

Notes:

1. Construction costs are preliminary and are not based on detailed plans and specifications. Actual cost may vary substantially from these estimates. Contingencies are based on approximately 25% of the construction cost at the preliminary planning stage.
2. The Engineering News Record Construction Cost Index was 10532 when the cost estimate was completed in January 2017.
3. Restoration of growth and erosion prevention/sediment control are included in the Mobilization/Demobilization item.

Table 4-4 presents the total project costs for the preferred alternative. The total project cost for the preferred alternative is estimated at \$1,550,000 based on a construction cost of \$1,070,000 in 2017. However, even if design is started in 2017, the project will not likely reach construction until 2021. As such, the construction cost estimate has been inflated at 4% per year. Therefore, for planning purposes the total project cost is estimated at \$1,795,000 based on construction costs of \$1,250,000 in 2021.

**TABLE 4-4
PRELIMINARY TOTAL PROJECT COST
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT**

DESCRIPTION	TOTAL COST
Construction Cost (2017) with 25% Contingency	\$1,070,000
Construction Cost (2021) with 25% Contingency	\$1,250,000
Engineering:	
Design Phase Engineering	\$190,000
Construction Phase Engineering	\$190,000
Local Project Management	\$125,000
Legal, Administrative and Fiscal	\$40,000
Total Project Cost (2021)	\$1,795,000

Notes:

1. Construction costs are shown in Table 4-3. The construction cost includes 25% contingency.
2. Engineering costs are estimated at 15% of the construction cost for both the design and construction phases.
3. Local Project Management costs are estimated at 10% of the construction cost.
4. Legal, administrative and fiscal costs are estimated at 3% of the construction cost.

SECTION 5
FISCAL IMPLEMENTATION
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VT
February 17, 2017

As presented in Section 4, the proposed project consists of the following improvements:

- Olympus Street –610 feet of Sidewalk Replacement and Shared Lanes
- Grove Street –370 feet of Sidewalk Replacement and Shared Lanes
- South Street – 1,690 feet of Sidewalk Replacement and Wide Shoulders
- Main Street (South Street to Railroad Bridge) – 400 feet of Sidewalk Replacement (between the bridges) and Shared Lanes
- Main Street (Railroad Bridge to Marble Museum) –1,000 feet of Sidewalk Replacement and Bicycle Lanes
- Main Street (Marble Museum to North Street) – 1,100 feet of Shared Use Path
- North Street to Beaver Pond Road – 1,500 feet of Shared Use Path
- North Street – Shared Lanes
- Florence Road – Shared Lanes
- Beaver Pond Road – Shared Lanes

The estimated total project cost for these improvements is \$1,795,000 based on a 2021 construction cost estimate of \$1,250,000. The construction costs were inflated by 3-4% per year to estimate construction costs in the future, with non-construction costs increased accordingly.

Funding Alternatives

The Town of Proctor does not have the funds to finance the entire improvement project locally as a single project. The options for funding include grants, long-term debt or phasing. The VTrans Bicycle and Pedestrian Program, administered by the VTrans Municipal Assistance Bureau, provided funding for this report and is the most likely funding source for design and construction if the Town chooses to pursue grant funding.

The proposed project is an eligible project under the Bicycle and Pedestrian Program. The funding shares are 80% Federal/State and 20% local. However, if a project funded under this program does not proceed to construction, any funds provided for the preliminary and design phases are subject to being paid back by the municipality. Grant applications are accepted annually and are generally due in July.

The Transportation Alternatives Program, also administered by the Municipal Assistance Bureau, is an option for funding design. As the maximum Federal award under the Transportation Alternatives Program is limited to \$300,000, this is not an option for funding the construction phase for the entire route. The Transportation Alternatives Program has an award range of \$20,000 to \$300,000 and the local match is 20%. A minimum of 50% of the local match must be a cash expenditure, with the remainder of the local match as “in-kind” services; however, an in-kind match is not required and the entire local match may be a cash expenditure.

Phasing Plan

The implementation plan is anticipated to be a phased approach with the project divided into multiple segments and prioritized based on need. The most critical section of the project is South Street, with the second most critical section being Main Street. A recommended phasing plan has been developed as follows:

- Phase 1
 - o South Street sidewalk replacement and wide shoulders
- Phase 2
 - o Main Street sidewalk replacement, shared lanes and bicycle lanes
- Phase 3
 - o Shared use path from Town Green to Beaver Pond
- Phase 4
 - o Olympus Road sidewalk replacement and shared lanes
 - o Grove Street sidewalk replacement and shared lanes
- Phase 5
 - o Bicycle loop on North Street, Florence Road and Beaver Pond Road

The estimated cost per phase is shown in Table 5-1.

**TABLE 5-1
COST PER PHASE
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT**

Description	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Construction Cost with Contingency (2017)	\$ 275,000.00	\$ 250,000.00	\$ 325,000.00	\$ 205,000.00	\$ 15,000.00
Construction Cost with Contingency (2021)	\$ 320,000.00	\$ 290,000.00	\$ 380,000.00	\$ 240,000.00	\$ 20,000.00
Engineering:					
Design Phase Engineering	\$ 50,000.00	\$ 45,000.00	\$ 60,000.00	\$ 35,000.00	\$ -
Construction Phase Engineering	\$ 50,000.00	\$ 45,000.00	\$ 60,000.00	\$ 35,000.00	\$ -
Local Project Management	\$ 30,000.00	\$ 30,000.00	\$ 40,000.00	\$ 25,000.00	\$ -
Legal, Administrative and Fiscal	\$ 10,000.00	\$ 10,000.00	\$ 15,000.00	\$ 5,000.00	\$ -
Total Project Cost (2021)	\$ 460,000.00	\$ 420,000.00	\$ 555,000.00	\$ 340,000.00	\$ 20,000.00

Notes:

1. The construction cost includes 25% contingency. The construction cost for Phase 3 includes the allowance for contamination.
2. Engineering costs are estimated at 15% of the construction cost for both the design and construction phases.
3. Local Project Management costs are estimated at 10% of the construction cost.
4. Legal, administrative and fiscal costs are estimated at 3% of the construction cost.

Project Schedule

The proposed project schedule for Phase 1 is shown in Table 5-2. This schedule is achievable if grant funding is obtained in 2017.

**TABLE 5-2
PROJECT SCHEDULE
BICYCLE AND PEDESTRIAN SCOPING STUDY
PROCTOR, VERMONT**

Project Task	Date
Receive Approval of Scoping Study	March 2017
Town Approval of Grant Application	May 2017
Submit Grant Application	June 2017
Receive Notice of Grant Award	September 2017
Grant Agreement Executed	December 2017
Procurement for Design Services	January 2018
Design of Phase 1 Improvements	2018-2021
Construction of Phase 1 Improvements	2021

SOUTH STREET/ROUTE 3 (VILLAGE, PRINCIPAL ARTERIAL)

INDEX OF SHEETS	
SHEET	TITLE
	COVER
G1	GENERAL NOTES, LEGEND AND ABBREVIATIONS
G2	QUANTITY SHEET
C1	SITE PLAN, PROFILE AND CROSS SECTIONS STA 0+00 TO 4+30
C2	SITE PLAN, PROFILE AND CROSS SECTIONS STA 4+30 TO 9+20
C3	TYPICAL DETAILS
T1	TRAFFIC CONTROL PLAN
R1	RIGHT-OF-WAY PLAN AND DETAIL SHEET

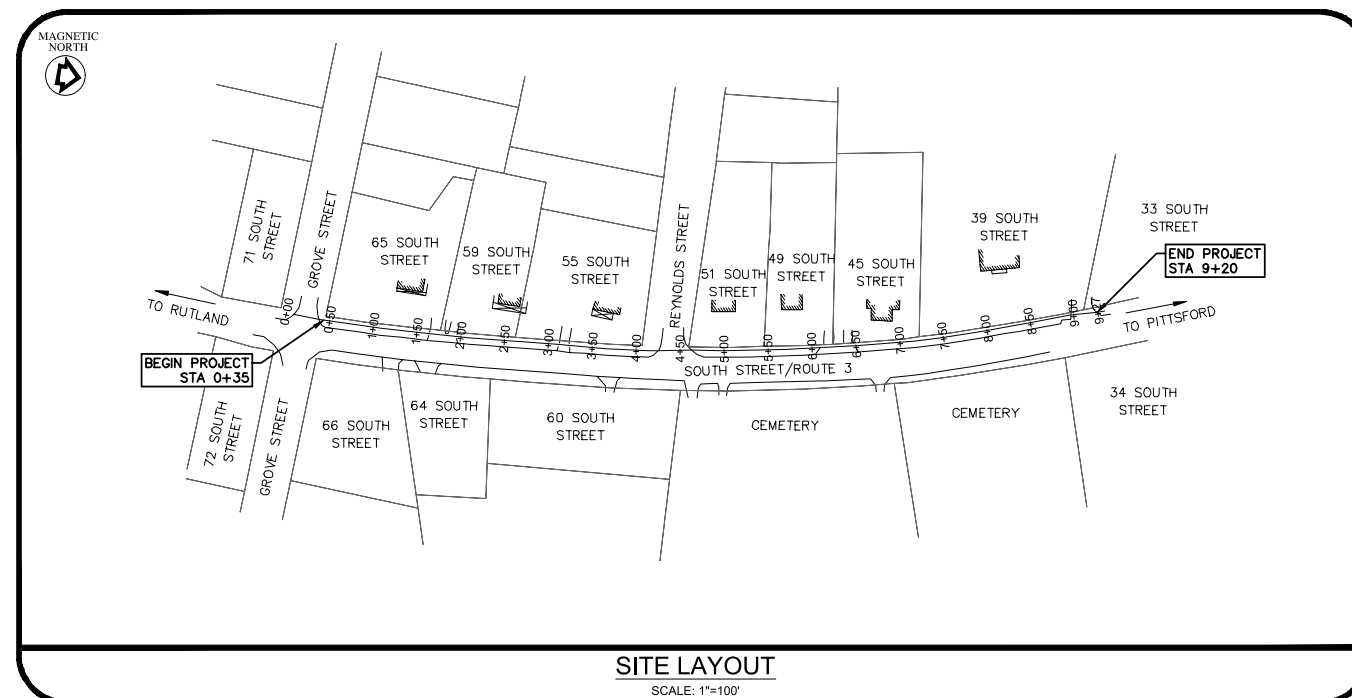
INDEX OF VAOT STANDARDS		
SHEET	TITLE	DATE
C-2B	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES WITH SIDEWALK AND GREEN STRIP	10-14-05
C-3A	SIDEWALK RAMPS	04-07-20
E-121	STANDARD SIGN PLACEMENT CONVENTIONAL ROAD	08-08-95
T-1	TRAFFIC CONTROL GENERAL NOTES	04-25-16
T-10	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING	08-06-12
T-28	CONSTRUCTION SIGN DETAILS	08-06-12
T-30	CONSTRUCTION SIGN DETAILS	08-06-12

NOTE: VAOT STANDARDS ARE INCLUDED IN 11X17 FORMAT IN THE APPENDICES OF THE SPECIFICATIONS.

PROJECT AREA

VICINITY MAP

SCALE: 1"=500'



Dufresne Group is owned by Dufresne & Associates, PC

GENERAL NOTES:

1. SURVEY PROVIDED BY DUFRESNE GROUP IN OCTOBER 2021. THIS IS NOT A BOUNDARY SURVEY. HORIZONTAL DATUM IS NAD 83 AND VERTICAL DATUM IS NAVD 88. ALL BEARINGS ARE IN REFERENCE TO GRID NORTH.
2. RIGHT-OF-WAY (ROW) INFORMATION PROVIDED BY COLEMAN SURVEYS, INC.
3. GENERALLY HEAVY OR DARK LINE WORK OR NOTES REFER TO PROPOSED IMPROVEMENTS. LIGHT LINE WORK OR TEXT GENERALLY DENOTES EXISTING FEATURES.
4. ALL WORK SHALL BE DONE IN THE PUBLIC RIGHT-OF-WAY OR EASEMENT AREAS. CONTRACTOR SHALL NOT WORK OUTSIDE THE CONSTRUCTION LIMITS SHOWN ON THE PLANS. CONTRACTOR MAY NEGOTIATE USE OF ADDITIONAL PROPERTIES AT NO COST TO THE OWNER.
5. CONTRACTOR SHALL USE EXTREME CAUTION TO PREVENT DAMAGE TO EXISTING UTILITIES. CONTRACTOR SHALL COORDINATE WITH DIG SAFE (1-888-DIG SAFE) A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION. CONTRACTOR SHALL COORDINATE WITH THE TOWN HIGHWAY, WATER AND SEWER DEPARTMENTS FOR LOCATION OF TOWN OWNED UTILITIES A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION.
6. ALL EXISTING UNDERGROUND UTILITIES WERE LOCATED USING THE BEST AVAILABLE INFORMATION. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL UTILITIES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. ALL REPAIRS TO DAMAGED UTILITIES SHALL BE MADE BY THE CONTRACTOR USING MATERIALS APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
7. CONTRACTOR SHALL VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND ELECTRIC, CABLE AND TELEPHONE LINES AND TAKE NECESSARY PRECAUTIONS IN STRICT ACCORDANCE WITH OSHA STANDARDS DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE LOCAL POWER UTILITY AND TELEPHONE UTILITY REGARDING ANY NECESSARY SUPPORT OF ANY UTILITY POLES DURING CONSTRUCTION. LOCAL ELECTRIC UTILITY IS GREEN MOUNTAIN POWER (GMP). LOCAL PHONE UTILITY IS CONSOLIDATED COMMUNICATIONS.
8. ALL GRASS AREAS DISTURBED AS PART OF THIS PROJECT SHALL BE RESTORED AS DESCRIBED IN VAOT SECTION 651, UTILIZING TOPSOIL, SEED, AND MULCH, AND FERTILIZER AND LIME AS NEEDED. IN GENERAL, GRASSED AREAS SHALL BE GRADED IN A MANNER THAT ENSURES WATER RUNOFF AND SNOW MELT IS DIVERTED AWAY FROM BUILDINGS (POSITIVE SLOPE). AREAS OF GRASS RESTORATION SHALL BE SEEDED WITH VAOT URBAN LAWN MIX, AS DESCRIBED ON THIS SHEET.
9. IN ALL AREAS WHERE EXISTING PAVEMENT OR CONCRETE IS OUTSIDE THE LIMITS OF THE PROPOSED SIDEWALK OR PAVING, REMOVE THE EXISTING PAVEMENT OR CONCRETE SURFACE AND REPLACE WITH GRASS. REFER TO NOTE 8 FOR GRASS RESTORATION REQUIREMENTS.
10. ALL TREES AND SHRUBS WITHIN PROJECT AREA AND TEMPORARY CONSTRUCTION EASEMENTS ARE TO REMAIN UNLESS OTHERWISE NOTED. CONTRACTOR SHALL EXERCISE DUE CARE TO PREVENT DAMAGE TO EXISTING TREES, SHRUBS AND ROOT SYSTEMS IN ACCORDANCE WITH VTSSC SECTION 656.10, UNLESS OTHERWISE NOTED ON THE PLANS. CONTRACTOR IS RESPONSIBLE FOR PROTECTING AND GUARDING ALL TREES, SHRUBS AND VEGETATION, AS PART OF PAY ITEM 201.10 CLEARING AND GRUBBING AND 656.85 TREE PROTECTION, UNLESS SPECIFICALLY DESIGNATED FOR REMOVAL OR TRIMMING. CONTRACTOR IS RESPONSIBLE FOR REMOVAL, CARE AND REPLANTING (OR REPLACEMENT) OF ANY LANDSCAPING REMOVED OR DISTURBED DURING CONSTRUCTION WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
11. ANY PROPOSED ELEVATIONS ARE PROVIDED FOR REFERENCE ONLY. FINAL ELEVATIONS MAY VARY AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE OFF SIDEWALK/PATHWAY AND COMPLIANCE OF ALL PEDESTRIAN IMPROVEMENTS WITH AMERICAN DISABILITIES ACT REQUIREMENTS, VERMONT AGENCY OF TRANSPORTATION (VAOT) 2018 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND VAOT STANDARD DRAWINGS, LATEST VERSIONS.
12. EXISTING WALKWAYS TO BUILDINGS SHALL BE EXTENDED OR REPLACED AS REQUIRED FOR THE SIDEWALK CONSTRUCTION, WITHIN THE EXISTING ROW AND EASEMENTS ONLY. REPLACEMENT SHALL MATCH EXISTING MATERIAL. THIS WORK SHALL BE INCIDENTAL TO PAY ITEM 618.10 PORTLAND CEMENT CONCRETE SIDEWALK, 5-INCH.
13. REFER TO ADDITIONAL DETAILS ON SHEET C3 FOR SIDEWALK AND APPURTENANT CONSTRUCTION REQUIREMENTS.
14. ALL PAVEMENT REMOVAL REQUIRED ON THE PLANS SHALL BE PAID FOR UNDER PAY ITEM 203.15, COMMON EXCAVATION.
15. PAVEMENT RESTORATION ON EXISTING PAVED DRIVES SHALL BE 1' BEHIND SIDEWALK (3" THICK), UNLESS OTHERWISE SHOWN ON SECTIONS OR PLAN. REFER TO SIDEWALK DETAIL ON SHEET C3 FOR PAVEMENT RESTORATION ALONG ROAD-SIDE OF SIDEWALK. ALL ROAD AND DRIVEWAY PAVEMENT RESTORATION SHALL BE PAID FOR UNDER PAY ITEM 406.38.
16. CONSTRUCTION IS TO BE CARRIED OUT IN ACCORDANCE WITH THESE PLANS AND THE VAOT 2018 STANDARD SPECIFICATIONS FOR CONSTRUCTION FOR USE ON THIS PROJECT AND SPECIAL PROVISIONS THAT ARE INCORPORATED IN THESE PLANS.
17. THIS PROJECT IS NOT SUBJECT TO THE REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT 3-9020 AND THEREFORE A PERMIT IS NOT REQUIRED. HOWEVER, CONTRACTOR SHALL COMPLY WITH THE LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL.
18. CONTRACTOR SHALL COORDINATE WORK SCHEDULE, CONSTRUCTION SIGNAGE, AND EQUIPMENT/MATERIAL DELIVERIES WITH THE FOLLOWING PROJECTS THAT MAY BE OCCURRING CONCURRENTLY WITH THIS PROJECT: PROCTOR STP BP18(2) - BEAVER POND SHARED USE PATH
19. REFER TO SHEET T1 FOR TRAFFIC CONTROL REQUIREMENTS.

VAOT URBAN LAWN MIX						
LBS/AC		NAME		LATIN NAME		GERM PURITY
WEIGHT	BROADCAST	HYDROSEED				
42.5%	34	68	CREEPING RED FESCUE	FESTUCA RUBRA X RUBRA	35%	98%
20.0%	16	32	PERENNIAL RYE GRASS	LOLIUM PERENNE	90%	95%
32.5%	26	52	KENTUCKY BLUE GRASS	POA PRATENSIS	35%	85%
5.0%	4	8	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM	35%	95%
100%	80	160				

GENERAL AMENDMENT GUIDANCE			
FERTILIZER		LIME	
10/20/10	AG LIME	PELLITIZED	
500 LBS/AC	2 TONS/AC	1 TONS/AC	

CONSTRUCTION GUIDANCE

1. SEED MIX: THE URBAN AREA MIX SHALL NOT BE USED IN WETLANDS OR ANY WATERS OF THE STATE OF VERMONT.

2. SEED MIX: USE ONLY AS INDICATED IN THE PLANS.

3. SEED MIX: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.

5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.

6. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED.

7. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

LEGEND			
EXISTING		PROPOSED	
--- 502 ---	MINOR CONTOUR		CONCRETE SIDEWALK
--- 500 ---	MAJOR CONTOUR		PAVEMENT
	PAVED ROAD/DRIVE	-----	CONSTRUCTION LIMITS
---	GRAVEL ROAD/DRIVE		SIGN
---	RIGHT OF WAY/PROPERTY LINE		DETECTABLE WARNING
	TREELINE	=====	BASELINE
	FENCE		
	OVERHEAD UTILITY		
	STORM DRAIN		
	MANHOLE		
	CATCH BASIN		
	WATER VALVE		
	UTILITY POLE		
	SIGN		
	LIGHT		
	TREE/SHRUB		
	CROSSWALK		

ABBREVIATIONS

CB	CATCH BASIN
CI	CAST IRON
CMP	CORRUGATED METAL PIPE
DI	DROP INLET
DIA	DIAMETER
EL	ELEVATION
HYD	FIRE HYDRANT
ID	INSIDE DIAMETER
INV	INVERT
IPF	IRON PIPE FOUND
RRFB	RECTANGULAR RAPID FLASHING BEACON
SMH	SEWER MANHOLE
TBM	TEMPORARY BENCH MARK
TYP	TYPICAL
VAOT	VERMONT AGENCY OF TRANSPORTATION
VTSSC	VERMONT STANDARD SPECIFICATIONS FOR CONSTRUCTION
WSO	WATER SHUTOFF
WWR	WELDED WIRE REINFORCEMENT



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DATE	COMMENTS	BY		

SOUTH STREET SIDEWALK
PROCTOR TAP TA20(5)

GENERAL NOTES, LEGEND
AND ABBREVIATIONS

PROCTOR, VERMONT

Project #	7121018
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	T.P.KNAPP
Approved by	C.M.HASKINS
Date	AUGUST 10, 2023
Scale	AS SHOWN

G1

SHEET 1 OF 7

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[illegible][illegible]

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SOUTH STREET SIDEWALK
PROCTOR TAP TA20(5)

QUANTITY SHEET

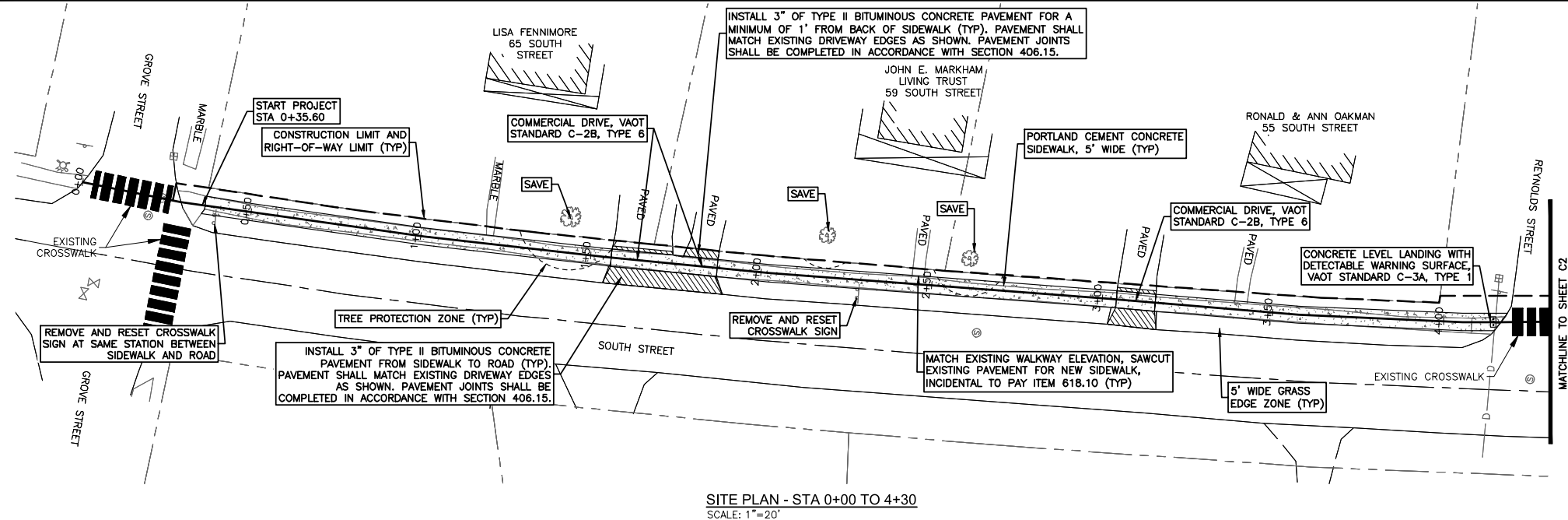
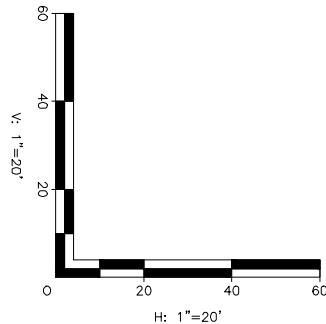
PROCTOR, VERMONT

Project #	7121018
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	T.P.KNAPP
Approved by	C.M.HASKINS
Date	AUGUST 10, 2023
Scale	AS SHOWN

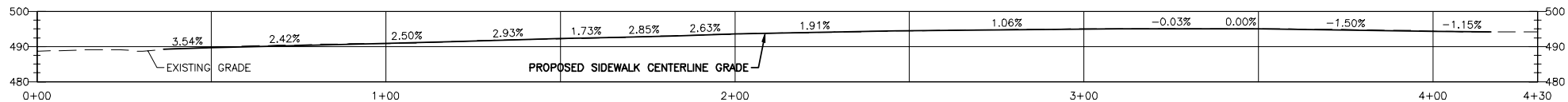
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SHEET 2 OF 7

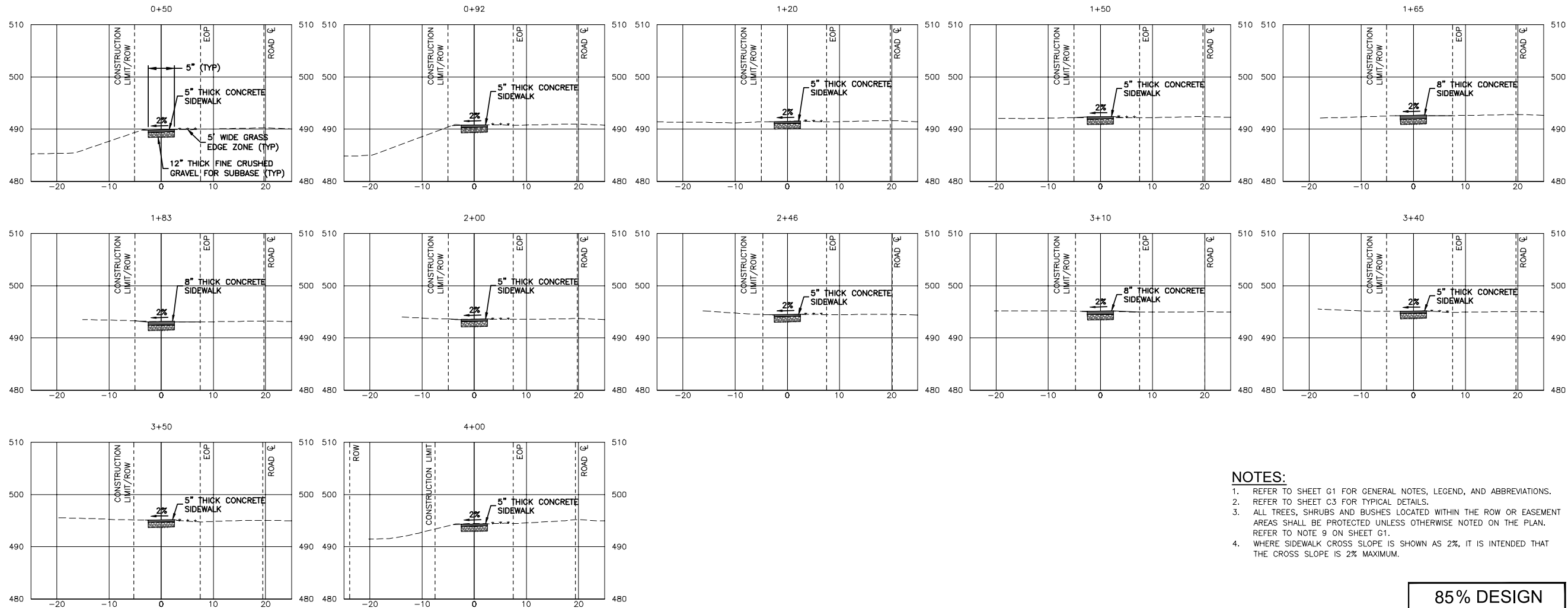
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NOT FOR CONSTRUCTION



SITE PLAN - STA 0+00 TO 4+30
SCALE: 1"=20'



SIDEWALK PROFILE - STA 0+00 TO 4+30
SCALE: H- 1"=20'
V- 1"=20'



SIDEWALK SECTIONS - STA 0+00 TO 4+30
SCALE: H- 1"=10'
V- 1"=10'

NOTES:

1. REFER TO SHEET G1 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. REFER TO SHEET C3 FOR TYPICAL DETAILS.
3. ALL TREES, SHRUBS AND BUSHES LOCATED WITHIN THE ROW OR EASEMENT AREAS SHALL BE PROTECTED UNLESS OTHERWISE NOTED ON THE PLAN. REFER TO NOTE 9 ON SHEET G1.
4. WHERE SIDEWALK CROSS SLOPE IS SHOWN AS 2%, IT IS INTENDED THAT THE CROSS SLOPE IS 2% MAXIMUM.

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SOUTH STREET SIDEWALK
PROCTOR TAP TA20(5)

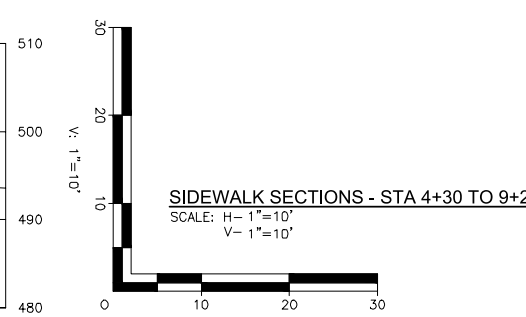
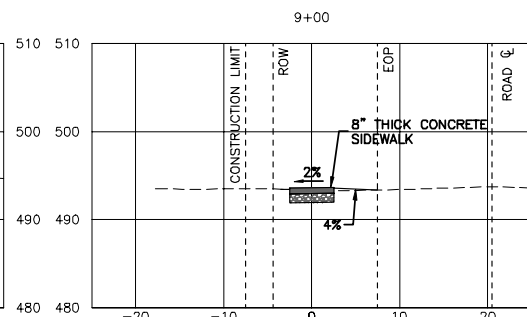
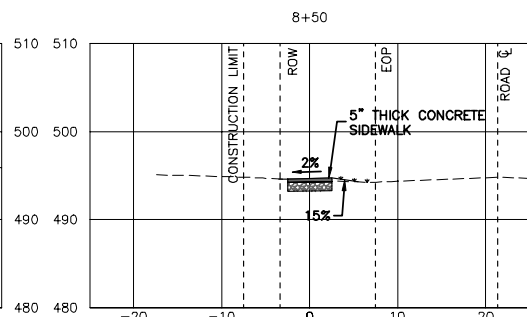
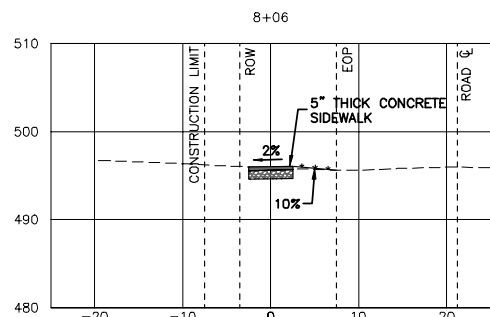
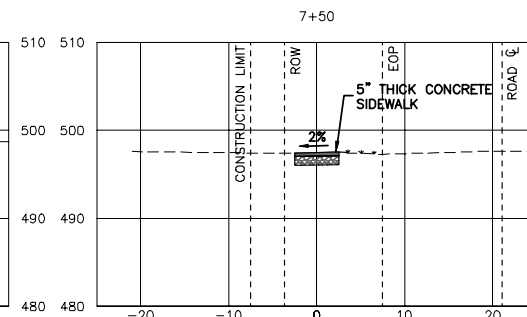
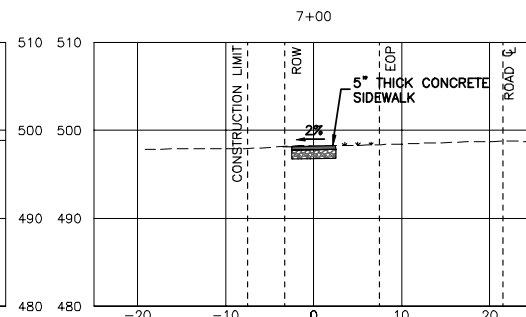
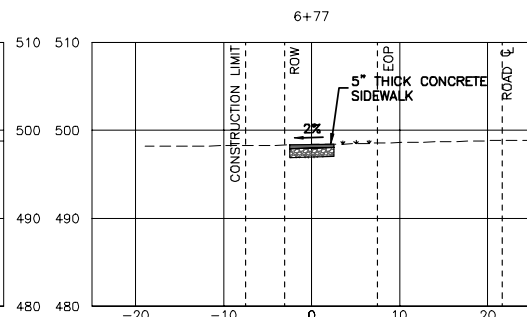
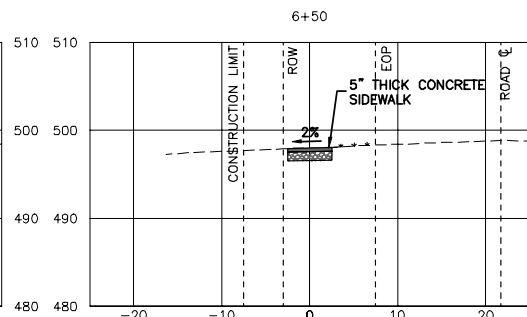
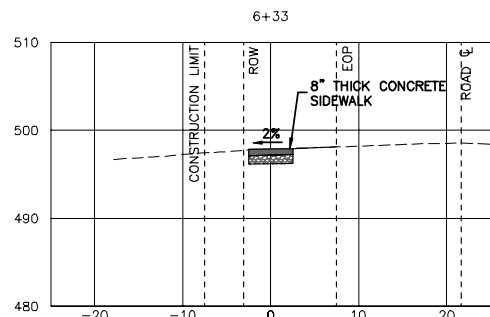
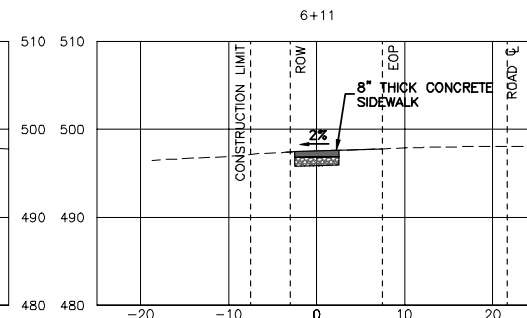
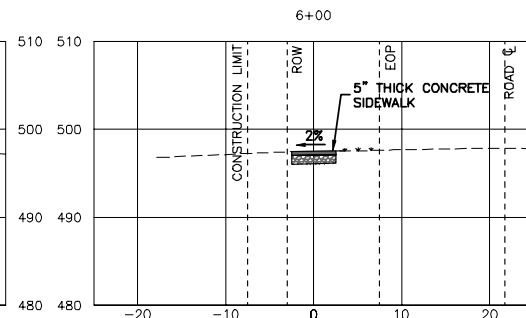
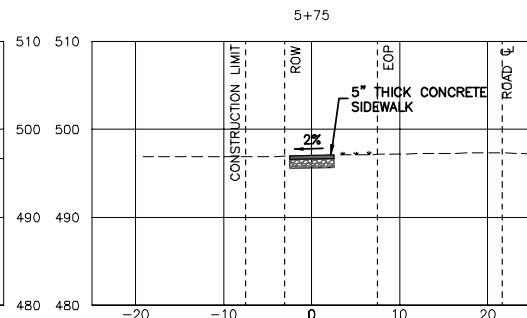
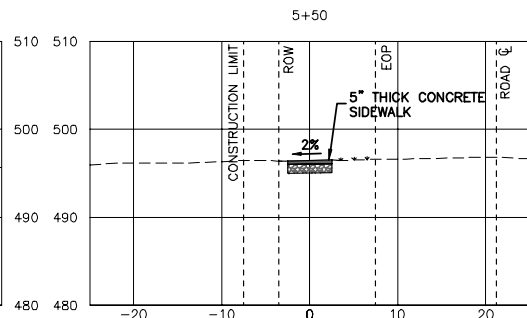
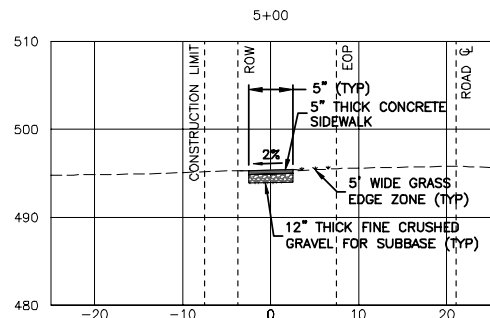
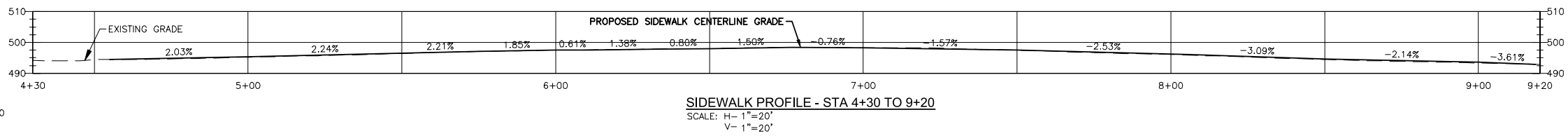
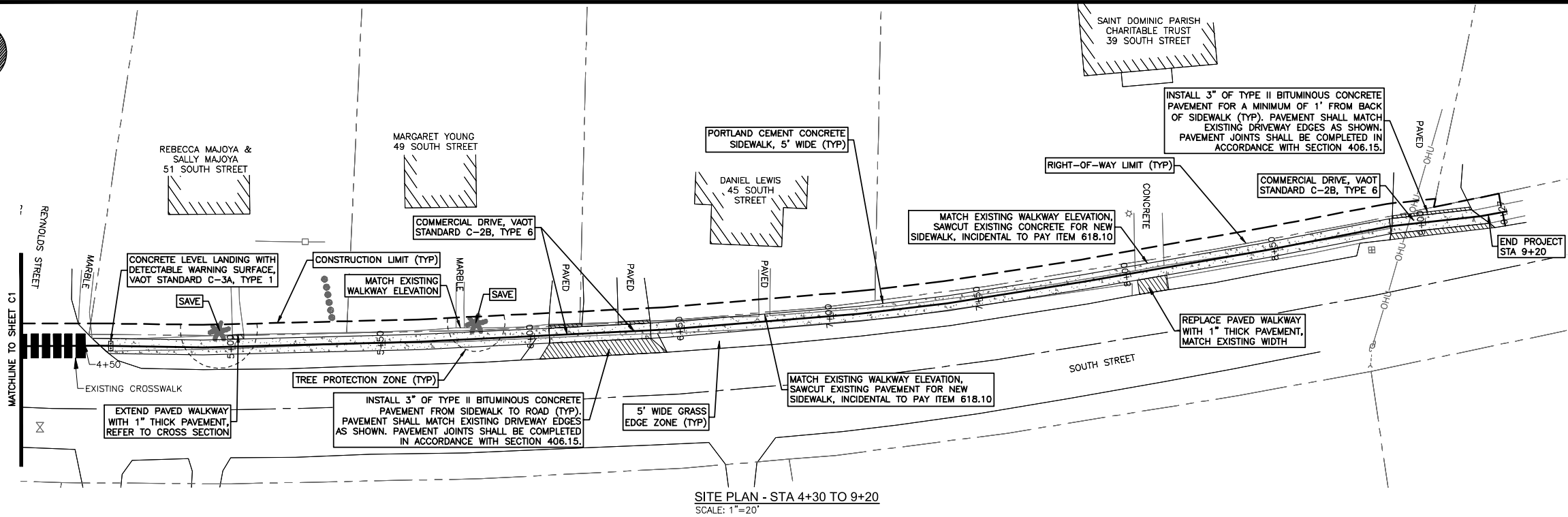
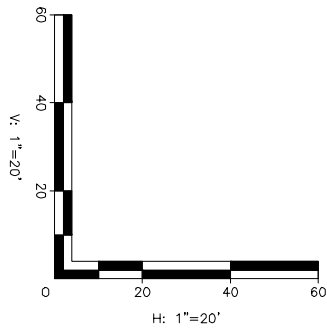
SITE PLAN, PROFILE
AND CROSS SECTIONS
STA 0+00 TO 4+30

PROCTOR, VERMONT

Project #	7121018
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	T.P.KNAPP
Approved by	C.M.HASKINS
Date	AUGUST 10, 2023
Scale	AS SHOWN

C1

SHEET 3 OF 7



NOTES:

1. REFER TO SHEET G1 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. REFER TO SHEET G3 FOR TYPICAL DETAILS.
3. ALL TREES, SHRUBS AND BUSHES LOCATED WITHIN THE ROW OR EASEMENT AREAS SHALL BE PROTECTED UNLESS OTHERWISE NOTED ON THE PLAN. REFER TO NOTE 9 ON SHEET G1.
4. WHERE SIDEWALK CROSS SLOPE IS SHOWN AS 2%, IT IS INTENDED THAT THE CROSS SLOPE IS 2% MAXIMUM.

SIDEWALK SECTIONS - STA 4+30 TO 9+20

SCALE: H- 1"=10'
V- 1"=10'

30
20
10
0

510
500
490
480

510
500
490
480

510
500
490
480

510
500
490
480

85% DESIGN
SUBMITTAL
NOT FOR CONSTRUCTION

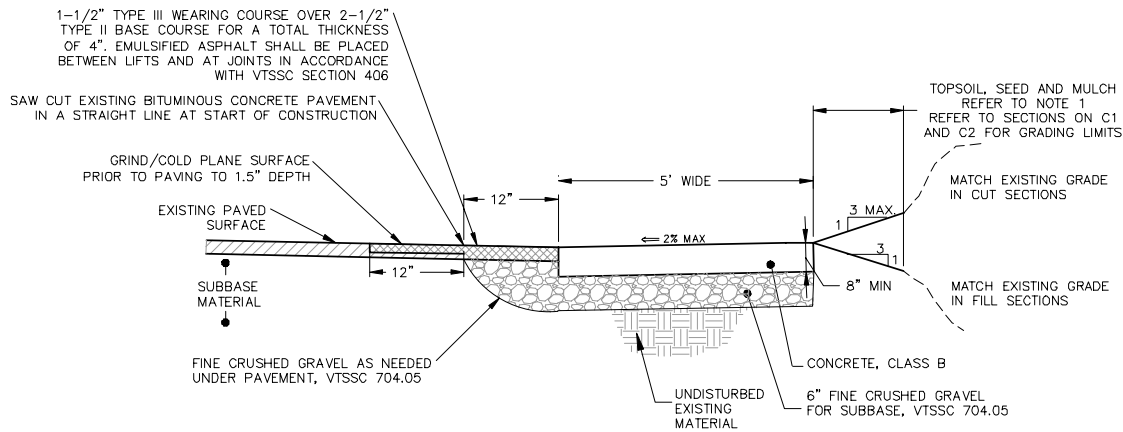
REVISIONS		DATE	COMMENTS	BY
NO.	DESCRIPTION			

SOUTH STREET SIDEWALK
PROCTOR TAP TA20(5)
**SITE PLAN, PROFILE AND
CROSS SECTIONS
STA 4+30 TO 9+20**
PROCTOR, VERMONT

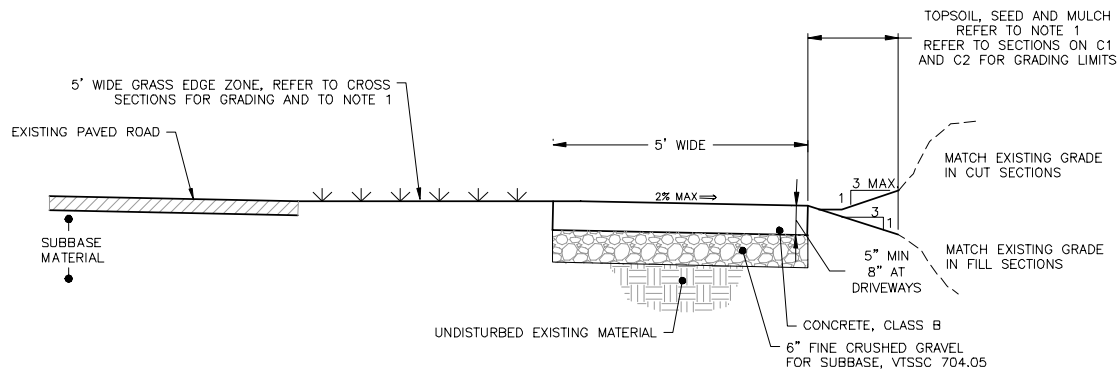
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Approved by	C.M.HASKINS
Date	AUGUST 10, 2023
Scale	AS SHOWN

C2

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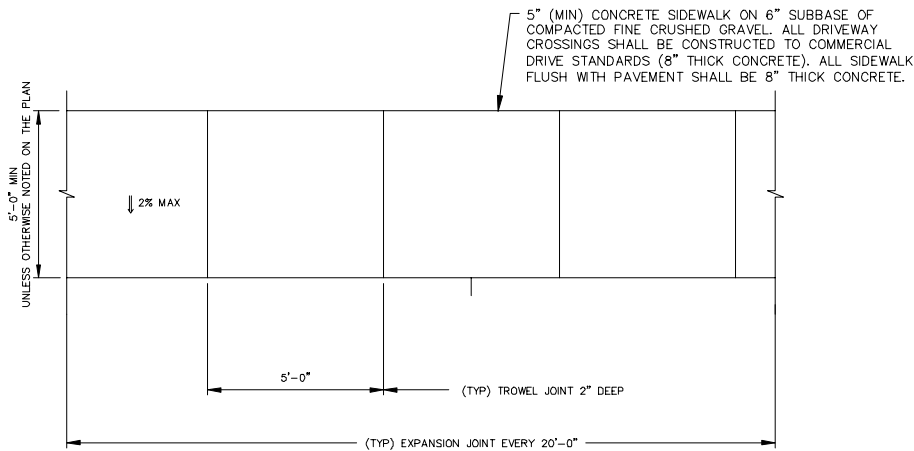
LEVEL LANDING SIDEWALK (ADJACENT TO ROAD)



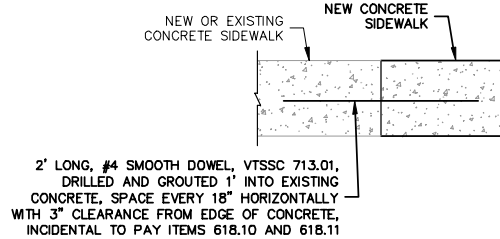
SIDEWALK WITH GRASS EDGE ZONE
PORTLAND CEMENT CONCRETE SIDEWALK DETAIL
NOT TO SCALE

NOTES:

- RESTORE ALL NEW AND DISTURBED EXISTING GRASS AREAS AS PER VAOT SECTION 651. REFER TO NOTES 8 AND 9 ON SHEET G1.
- SAW CUTTING AND GRINDING/COLD PLANING IS INCIDENTAL TO PAY ITEM 406.38.
- CLEAN SURFACES AND TACK COAT EDGES AND/OR SURFACES OF EXISTING PAVEMENT PRIOR TO PLACING NEW PAVEMENT. THIS WORK SHALL BE INCIDENTAL TO ITEM 406.38.
- ALL CONCRETE SIDEWALK SHALL BE 5 FEET WIDE, UNLESS OTHERWISE NOTED ON THE PLANS. SIDEWALKS SHALL BE CONSTRUCTED WITH CLASS B CONCRETE.
- IN ALL AREAS WHERE NEW CONCRETE SIDEWALK ABUTS EXISTING SIDEWALK, THE NEW SIDEWALK SHALL BE PINNED TO THE EXISTING SIDEWALK. REFER TO JOINT DETAIL A ON THIS SHEET. THIS WORK SHALL BE INCIDENTAL TO PAY ITEMS 618.10 AND 618.11.
- REFER TO CROSS SECTIONS FOR PROPOSED SIDEWALK ELEVATION INFORMATION. DESIGN INTENT FOR SIDEWALK ELEVATION IS TO GENERALLY MATCH EXISTING GRADE.
- DRIVEWAY PAVEMENT RESTORATION (3" THICK) SHALL BE DONE IN 2 LIFTS OF 1.5" TYPE III WEARING COURSE. DRIVEWAY PAVEMENT RESTORATION SHALL MATCH EXISTING DRIVEWAY EDGES AS SHOWN ON PLANS. DRIVEWAY PAVEMENT RESTORATION SHALL BE 3 FEET FROM BACK OF SIDEWALK ON GRAVEL DRIVES AND 1 FOOT FROM BACK OF SIDEWALK ON PAVED DRIVES UNLESS OTHERWISE NOTED ON THE PLANS OR SECTIONS. IN AREAS WITH GRASS EDGE ZONES, DRIVEWAY APRONS SHALL BE PAVED FROM SIDEWALK TO ROAD, REGARDLESS OF EXISTING DRIVEWAY MATERIAL. ROAD PAVEMENT RESTORATION SHALL BE PERFORMED AS INDICATED IN THE DETAIL. ALL PAVEMENT SHALL BE PAID FOR UNDER PAY ITEM 406.38.



TYPICAL CONCRETE WALK PLAN DETAIL
NOT TO SCALE



JOINT DETAIL A
NOT TO SCALE



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SOUTH STREET SIDEWALK
PROCTOR TAP TA20(5)

TYPICAL DETAILS

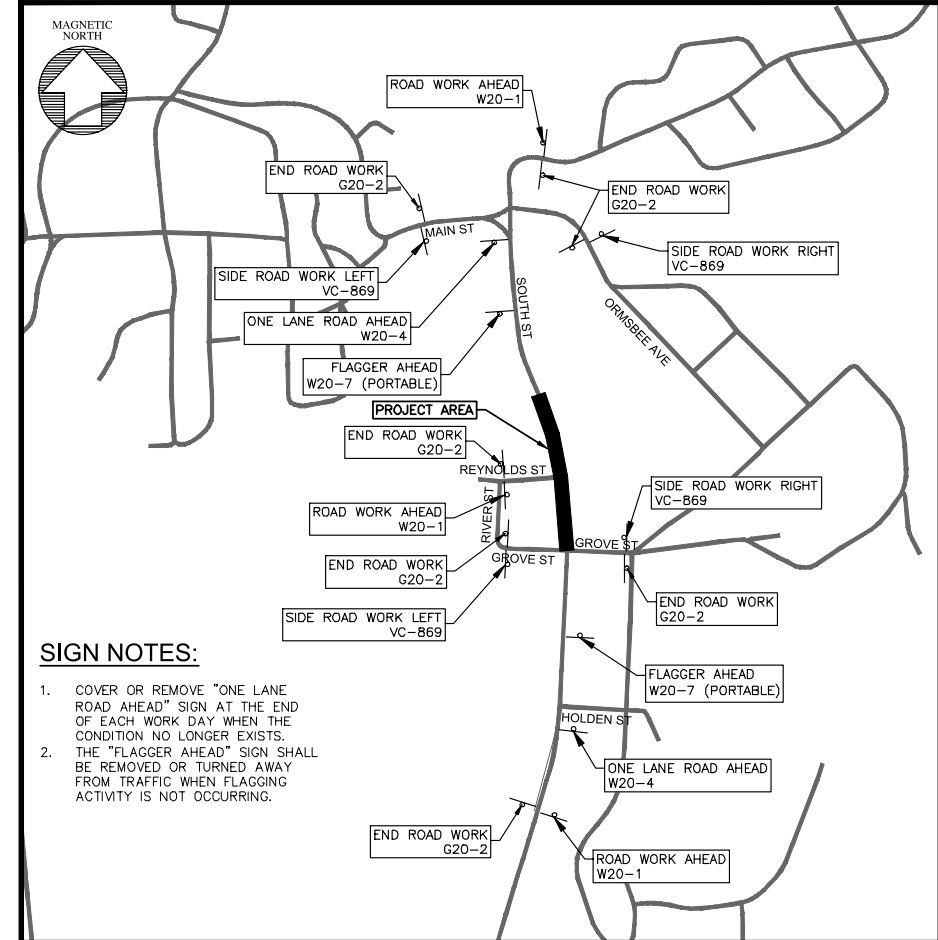
PROCTOR, VERMONT

Project #	7121018
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	T.P.KNAPP
Approved by	C.M.HASKINS
Date	AUGUST 10, 2023
Scale	AS SHOWN

85% DESIGN
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C3

SHEET 5 OF 7

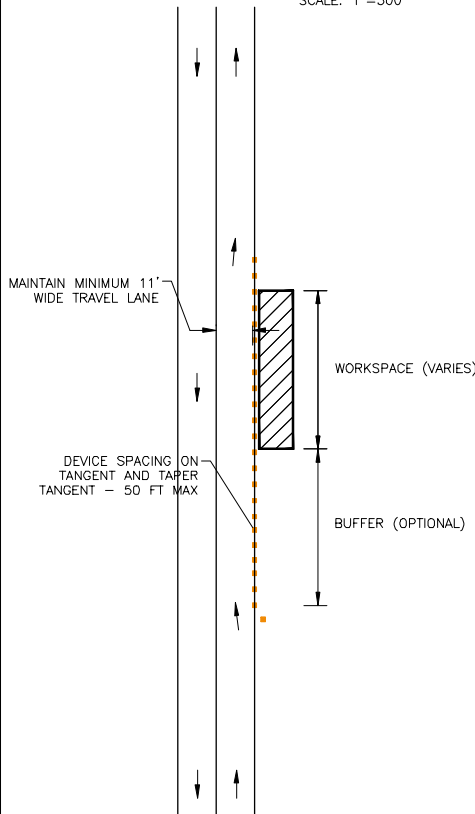


SIGN NOTES:

- COVER OR REMOVE "ONE LANE ROAD AHEAD" SIGN AT THE END OF EACH WORK DAY WHEN THE CONDITION NO LONGER EXISTS.
- THE "FLAGGER AHEAD" SIGN SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC WHEN FLAGGING ACTIVITY IS NOT OCCURRING.

TRAFFIC CONTROL PLAN

SCALE: 1"=500'



SHOULDER WORK WITH MINOR ENCROACHMENT:
TRAFFIC CONTROL PLAN, ACTIVITY AREA

NOT TO SCALE

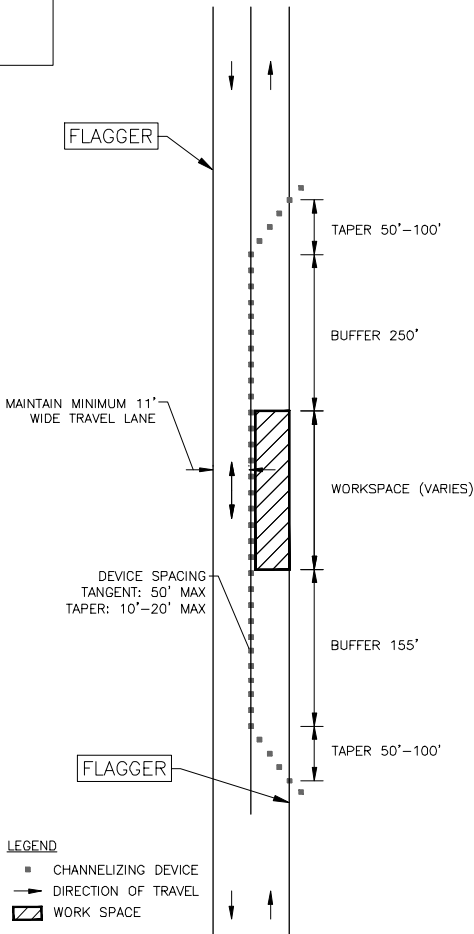
- NOTES:
- THIS PLAN DEPICTS A TYPICAL SHOULDER CLOSURE WITH MINOR ENCROACHMENT ANYWHERE IN THE PROJECT AREA.
 - IF THE SHOULDER WORK ENCROACHMENT REDUCES THE LANE IN THE SAME DIRECTION OF TRAVEL TO LESS THAN 11 FEET (MEASURED TO THE PAINTED CENTERLINE), ADDITIONAL DEVICES SHALL BE PLACED FOR THE OPPOSITE DIRECTION OF TRAVEL TO DELINEATE THE SHIFTED ROAD CENTER LINE AND EDGE OF TRAVEL.

GENERAL TRAFFIC CONTROL NOTES:

- REFER TO VAOT TRAFFIC CONTROL STANDARD DRAWNGS T-1, T-10, T-28 AND T-30 FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL MAINTAIN ONE LANE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL MINIMIZE IMPACTS TO AUTOMOBILE AND PEDESTRIAN TRAFFIC. CONTRACTOR SHALL PROVIDE ACCESS TO ALL PROPERTIES THROUGHOUT THE PROJECT DURATION. THE ONLY EXCEPTION SHALL BE DURING INDIVIDUAL DRIVE SIDEWALK CONSTRUCTION. PEDESTRIAN DETOURS SHALL BE IMPLEMENTED AT ALL TIMES THAT EXISTING PEDESTRIAN FACILITIES ARE OBSTRUCTED (REFER TO PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES ON THIS SHEET). CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN, FLAGGER SCHEDULE AND A TRAFFIC AND PEDESTRIAN SIGN PACKAGE FOR APPROVAL A MINIMUM OF 28 DAYS PRIOR TO MOBILIZATION. ALL CONSTRUCTION SIGNAGE SHALL COMPLY WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND ITS LATEST REVISIONS. REFER TO PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES, THIS SHEET, FOR ADDITIONAL REQUIREMENTS. ALL TRAFFIC CONTROL AND PEDESTRIAN TRAFFIC CONTROL SHALL BE INCLUDED UNDER ITEM 641.11.
- ALL TEMPORARY CONSTRUCTION SIGNS SHALL MEET AND BE INSTALLED TO ALL APPLICABLE VAOT STANDARDS. SIGNS AND BARRIERS SHALL CONFORM TO THE MUTCD, PART 6, AND ITS LATEST REVISIONS, AND CURRENT STATE STANDARDS AND SPECIFICATIONS FOR CONSTRUCTION.
- TEMPORARY CONSTRUCTION SIGNS SHALL REMAIN IN PLACE FOR THE DURATION OF THE PROJECT.
- SIGN LOCATIONS ARE SHOWN BASED ON MINIMUMS FOR RURAL ROAD TYPE. FIELD CONDITIONS SHALL CONTROL THE ACTUAL PLACEMENT OF CONSTRUCTION SIGNS. SEE VTRANS STANDARD T-10 FOR ADDITIONAL SIGN PLACEMENT DETAILS. PROPOSED CONSTRUCTION SIGNS SHALL NOT INTERFERE WITH THE SIGHT LINES TO EXISTING SIGNS. PROPOSED SIGNS SHALL BE LOCATED A MINIMUM OF 100 FEET FROM THE NEAREST EXISTING OR PROPOSED SIGN. EXACT SIGN LOCATIONS SHALL BE APPROVED BY THE FIELD ENGINEER.
- CONSTRUCTION SIGNING AND ALL TEMPORARY TRAFFIC CONTROL MEASURES SHALL IN ACCORDANCE WITH PART 6 OF THE CURRENT EDITION OF THE MUTCD AND ITS LATEST REVISIONS.
- CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE-NEW CONDITION.
- ALL DIAMOND SHAPED CONSTRUCTION SIGNS SHALL BE 48" BY 48". SIGNS SHALL BE BLACK LETTERING ON FLUORESCENT ORANGE BACKGROUND WITH THE EXCEPTION OF G20-2A SIGNS.
- PAYMENT FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF ALL CONSTRUCTION SIGNING WILL BE MADE UNDER 641.11 TRAFFIC CONTROL, ALL-INCLUSIVE.
- THE CONTRACTOR SHALL COVER COMPLETELY OR REMOVE ANY SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC CONTROL SIGNS. ALL SIGNS REMOVED OR COVERED BY THE CONTRACTOR SHALL BE REPLACED OR UNCOVERED BY THE CONTRACTOR WHEN THIS TRAFFIC CONTROL PLAN IS DISASSEMBLED. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO 641.11 TRAFFIC CONTROL, ALL-INCLUSIVE. SIGN COVERING SHALL NOT DAMAGE THE RETRO-REFLECTIVITY OF THE SIGN FACE. SIGN COVERING SHALL NOT DETERIORATE FOR THE DURATION THAT THE SIGN IS COVERED.
- LANE CLOSURES MAY BE REQUIRED THROUGHOUT CONSTRUCTION. ALL NEW LANE CLOSURES SHALL BE COORDINATED WITH THE TOWN HIGHWAY DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO THE CLOSURE. REGULAR LANE CLOSURES MAY BE NOTIFIED 48 HOURS PRIOR TO THE FIRST INSTANCE WITH NO CONTINUING NOTICES REQUIRED.
- FLAGGER CONTROL SHALL CONFORM TO MUTCD CHAPTER 6E AND THE CONTRACT SPECIFICATIONS.
- THE CONTRACTOR SHALL SUBMIT SITE SPECIFIC TRAFFIC CONTROL PLANS FOR ALL PHASES OF WORK TO BE APPROVED BY THE RESIDENT ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO 641.10 TRAFFIC CONTROL.
- THE CONTRACTOR SHALL PROVIDE ACCESS THROUGH THE WORK ZONE FOR EMERGENCY VEHICLES AT ALL TIMES OR COORDINATE EMERGENCY ROUTES PRIOR TO START OF CONSTRUCTION.
- ACCOMMODATIONS FOR POSTAL DELIVERIES, NEWSPAPER ROUTES, TRASH SERVICES AND/OR OTHER DELIVERY SERVICES INTERRUPTED BY THE PROJECT OR DETOUR SHALL BE COMMUNICATED WITH THE PROPER CONTACTS BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION.
- BICYCLE ACCOMMODATIONS SHALL BE IMPLEMENTED TO ENSURE THAT OBSTACLES, EQUIPMENT, CONSTRUCTION MATERIALS, TRAFFIC CONTROL DEVICES, ETC. IT IS IMPORTANT THAT BICYCLE ROUTES ARE CLEAR OF RUTS AND DEBRIS. BICYCLISTS SHALL NOT BE FORCED TO DISMOUNT. BICYCLISTS SHALL NOT BE DIVERTED IN A MANNER THAT FORCES THEM TO TRAVEL AGAINST VEHICULAR TRAFFIC. THERE ARE NO DEDICATED BICYCLE FACILITIES WITHIN THE PROJECT AREA, THEREFORE THE BICYCLE PATH OF TRAVEL IS IN THE TRAVEL LANE AND ALL VEHICLE TRAFFIC CONTROL SHALL ALSO APPLY TO BICYCLES.
- WHEN SCHOOL IS IN SESSION CONTRACTOR SHALL COORDINATE BUS STOP LOCATIONS WITH LOCAL SCHOOL TRANSPORTATION COORDINATOR. ADDITIONAL FLAGGERS WILL BE NECESSARY AT THESE LOCATIONS DURING TYPICAL MORNING PICK-UP AND AFTERNOON DROP-OFF PERIODS WHILE WORK IS PERFORMED IN THESE AREAS.

PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES:

- THE CONTRACTOR SHALL PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) FOR REVIEW AND WRITTEN APPROVAL BY THE RESIDENT ENGINEER A MINIMUM OF THREE WEEKS BEFORE SUCH PLAN IS IMPLEMENTED. THIS PLAN SHALL DETAIL THE CONSTRUCTION PHASING AND SCHEDULE AND THE SPECIFIC METHODS OF MAINTAINING SAFE PEDESTRIAN ACCESS THROUGHOUT THE CONSTRUCTION AREA. THIS PLAN SHALL PROVIDE THE LOCATION AND DETAILS OF TEMPORARY CONSTRUCTION SIGNING, MARKINGS, BARRICADES, CHANNELIZING DEVICES, TPARS AND METHODS TO MAINTAIN ACCESS TO ADJACENT PROPERTIES, BUSINESSES, RESIDENCES, ETC.
- THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN THROUGH MOVEMENTS FROM ONE END OF THE CONSTRUCTION AREA TO THE OTHER, ON AT LEAST ONE SIDE OF THE STREET DURING CONSTRUCTION. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), PART 6.
- PEDESTRIAN ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROPERTIES, BUILDINGS, RESIDENCES, COMMERCIAL PROPERTIES AND TRANSIT STOPS. THIS MAY INCLUDE TEMPORARY WALKWAYS SPANNING THE CONSTRUCTION AREA.
- IF SIDEWALKS ARE CLOSED, A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) SHALL BE PROVIDED ON THE SAME SIDE OF THE ROAD AS THE CLOSED SIDEWALK, IF POSSIBLE. SIGNS AND BARRICADES SHALL BE USED TO PROVIDE ADVANCE NOTICE OF THE CLOSURE AND THE ROUTE OF ANY PEDESTRIAN DETOURS. THE TPAR SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4 FEET. IF THE TPAR IS LESS THAN 5 FEET IN WIDTH, A 5 FOOT BY 5 FOOT PASSING SPACE MUST BE PROVIDED AT LEAST EVERY 200 FEET. THE SURFACE OF THE TPAR SHALL BE FIRM, STABLE AND SLIP-RESISTANT AND CONTINUOUS WITH A MINIMUM OF 80 INCHES OVERHEAD CLEARANCE FOR THE LENGTH OF THE TPAR. THE TPAR SHALL MAINTAIN THE SAME LEVEL OF ACCESSIBILITY AND DETECTABILITY AS THE FACILITY THAT IS BEING CLOSED. THE TPAR SHALL NOT LEAD PEDESTRIANS INTO CONFLICT WITH VEHICLES, EQUIPMENT, OR CONSTRUCTION OPERATIONS.
- WHEN TEMPORARY CROSSWALKS ARE UTILIZED FOR THE TPAR, TEMPORARY DETECTABLE WARNINGS SHALL BE PLACED AT EACH END OF THE TEMPORARY CROSSWALKS. THE TEMPORARY CROSSWALK SHALL BE DELINEATED WITH TEMPORARY PAVEMENT MARKINGS OR TAPE. THE MARKINGS SHALL BE PARALLEL 12" WIDE WHITE LINES PLACED 7 FEET ON CENTER APART. IT SHOULD BE NOTED THAT CURB PARKING SHALL BE PROHIBITED FOR AT LEAST 20 FEET IN ADVANCE OF MIDBLOCK CROSSWALKS. TEMPORARY CROSSWALK SIGNS SHALL BE PROVIDED FOR THE CROSSWALK.
- IF THERE IS WORK OCCURRING OVER AN OPEN SIDEWALK, PROTECTIVE OVERHEAD COVERING MUST BE PROVIDED AS NECESSARY TO ENSURE PROTECTION FROM FALLING OBJECTS AND DRIPPING FROM OVERHEAD STRUCTURES. COVERED WALKWAYS SHOULD BE STURDILY CONSTRUCTED AND ADEQUATELY LIGHTED FOR NIGHTTIME USE.
- INDIVIDUAL CHANNELIZING DEVICES, TAPE,OR ROPE USED TO CONNECT INDIVIDUAL DEVICES AND OTHER DISCONTINUOUS BARRIERS AND DEVICES, PAVEMENT MARKINGS ARE NOT DETECTABLE BY PERSONS WITH VISUAL DISABILITIES. THESE MEASURES DO NOT PROVIDE ACCEPTABLE PATH GUIDANCE ON TEMPORARY OR RE-ALIGNED SIDEWALKS OR OTHER PEDESTRIAN FACILITIES. PEDESTRIAN CHANNELIZING DEVICES SHALL INCLUDE A CONTINUOUSLY DETECTABLE BOTTOM AND TOP EDGE THROUGHOUT THE LENGTH OF THE FACILITY SUCH THAT IT CAN BE FOLLOWED BY PEDESTRIANS USING LONG CANES FOR GUIDANCE.
- CHANNELIZING DEVICES ON BOTH SIDES OF THE TPAR SHALL INCLUDE A CONTINUOUS SOLID TOP AND BOTTOM RAIL. THE TOP EDGE OF THE TOP RAIL SHALL BE 32"-38" ABOVE THE GROUND LEVEL. THE BOTTOM RAIL SHALL BE AT LEAST 6" WIDE, WITH THE BOTTOM EDGE OF THE BOTTOM RAIL SURFACE NO HIGHER THAN 2" ABOVE THE GROUND.
- IF THE TPAR IS ADJACENT TO MOVING TRAFFIC, CONSTRUCTION OPERATIONS/EQUIPMENT, OR DROP-OFFS, THEN CRASH WORTHY CHANNELIZING DEVICES THAT MEET THE REQUIREMENTS OF THE MUTCD SHALL BE USED.
- THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION MATERIALS, EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.
- PROVISION OF THE TPAR AND ALL ITS ELEMENTS, INCLUDING BUT NOT LIMITED TO SIGNS, CHANNELIZING DEVICES, BARRICADES, TEMPORARY CURB RAMPS, TEMPORARY PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES IS TO BE PAID FOR INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL.
- THE CONTRACTOR SHALL REVIEW AND USE THE "VERMONT BICYCLE AND PEDESTRIAN WORK ZONE TRAFFIC CONTROL GUIDE", AVAILABLE ON VTRANS WEBSITE TO DESIGN AND IMPLEMENT TRAFFIC CONTROL FOR BICYCLE AND PEDESTRIAN INTO THEIR SITE-SPECIFIC TRAFFIC CONTROL PLAN FOR ALL STAGES OF CONSTRUCTION.
- BASED ON SITE SPECIFIC INFORMATION, THE CONTRACTOR SHOULD CONSIDER A PEDESTRIAN DETOUR UTILIZING EXISTING SIDEWALKS ON GROVE STREET AND REYNOLDS STREET WITH A TPAR ON RIVER STREET, THROUGH THE TOWN OWNED PARCEL AT THE TOWN GARAGE AND THROUGH THE CHURCH PARCEL, ALONG THE CHURCH PARKING LOT AND DRIVEWAY.



ONE LANE, TWO-WAY TRAFFIC
CONTROL PLAN, ACTIVITY AREA

NOT TO SCALE

- NOTES:
- THIS PLAN DEPICTS A TYPICAL LANE CLOSURE ANYWHERE IN THE PROJECT AREA.
 - IF LANE CLOSURE IS REQUIRED AT NIGHT, NIGHT TIME LIGHTING REQUIREMENTS SHALL BE MET.
 - DEVICE SPACING SHALL BE 10' ON A 50' LONG TAPER AND 20' ON A 100' LONG TAPER.



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DATE	COMMENTS	BY	

SOUTH STREET SIDEWALK
PROCTOR TAP TA20(5)

TRAFFIC CONTROL PLAN

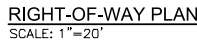
PROCTOR, VERMONT

Project #	7121018
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	T.P.KNAPP
Approved by	C.M.HASKINS
Date	AUGUST 10, 2023
Scale	AS SHOWN

T1

SHEET 6 OF 7

85% DESIGN
SUBMITTAL
NOT FOR CONSTRUCTION



REMARKS	PROPERTY OWNER	ROW LAYOUT NO.	BEGINNING STATION	ENDING STATION	TAKE (AREA ±)	REMAINDER (AREA ±)	RIGHT			RECORDING DATA					REMARKS
							TYPE	T/P	AREA±	TITLE TAKEN	DATE	TOWN/CITY	BOOK	PAGE	
1	REBECCA E. S. R. MAJOYA	R1	4+51.28 L	4+99.24 L			CONSTRUCTION	T	172 SF						
	SALLY ANN SICILIA MAJOYA		4+99.21 L	5+02.99 L			WALK	T	14 SF						3.5' PAVED
			5+02.61 L	5+37.64 L			CONSTRUCTION	T	134 SF						
2	MARGARET E. YOUNG	R1	5+37.31 L	5+74.19 L			CONSTRUCTION	T	148 SF						
			5+73.97 L	5+76.81 L			WALK	T	12 SF						2.7' MARBLE
			5+76.74 L	6+05.32 L			CONSTRUCTION	T	128 SF						
			6+04.95 L	6+15.60 L			DRIVE	T	46 SF						11' PAVED
3	DANIEL LEWIS	R1	6+15.28 L	6+28.20 L			CONSTRUCTION	T	57 SF						
			6+28.13 L	6+38.81 L			DRIVE	T	46 SF						10.5' PAVED
			6+38.50 L	6+75.58 L			CONSTRUCTION	T	163 SF						
			6+75.36 L	6+79.36 L			WALK	T	16 SF						3.7' PAVED
			6+79.00 L	7+14.83 L			CONSTRUCTION	T	149 SF						
4	CHRISTOPHER COYNE AS TRUSTEE OF THE SAINT DOMINIC PARISH CHARITABLE TRUST	R1	7+14.30 L	8+02.78 L			CONSTRUCTION	T	328 SF						
			8+02.23 L	8+12.59 L			WALK	T	39 SF						9.7' CONCRETE
			8+12.02 L	8+89.90 L			CONSTRUCTION	T	327 SF						
			8+89.31 L	9+04.22 L			DRIVE	T	48 SF						24' PAVED

[illegible]

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DATE	COMMENTS	BY	
6.19.23	REVISE TRUSTEE NAME FOR PARCEL 4	CMH	

Project #	7121018
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	T.P.KNAPP
Approved by	C.M.HASKINS
Date	AUGUST 10, 2023
Scale	AS SHOWN

R1

SHEET 7 OF 7



EJScreen Community Report

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

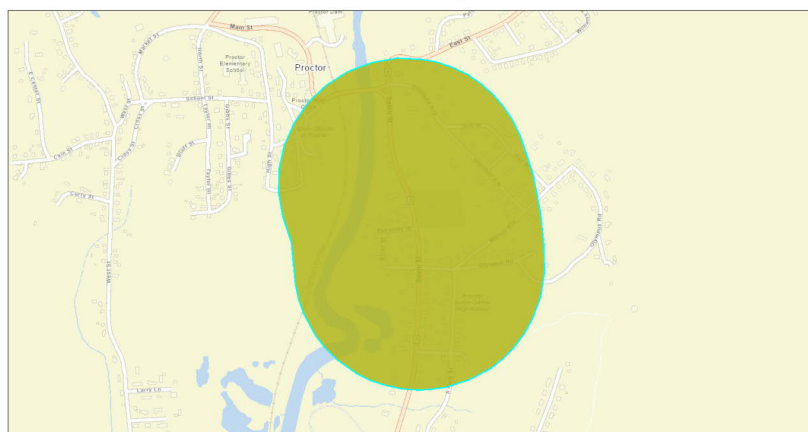
Proctor, VT

the User Specified Area

Population: 315

Area in square miles: 0.28

A3 Landscape



November 27, 2023

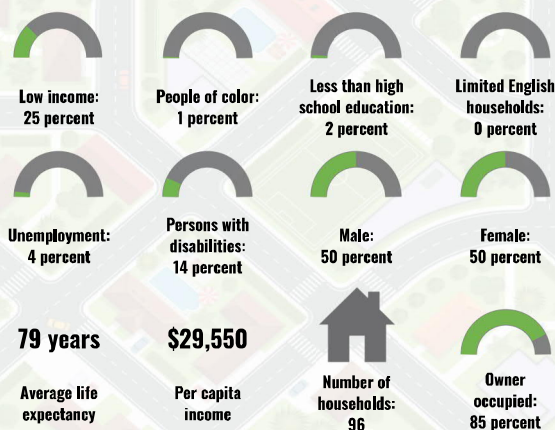
Project 1

proctorsouthstreetsw_buffer025mi

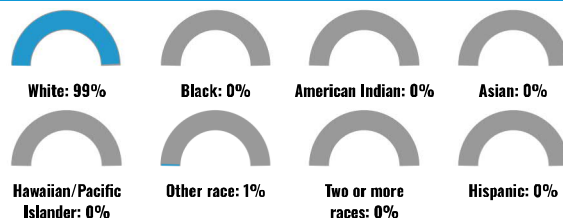
19,028
0 0.07 0.15 0.3 mi
0 0.13 0.25 0.5 km

Map Community Map Contributors: USGS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, DeLorme, GeoTechnique, Inc., VEHICULA, USGS, EPA, NPS, US Census Bureau, USGS

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
No language data available.	

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.

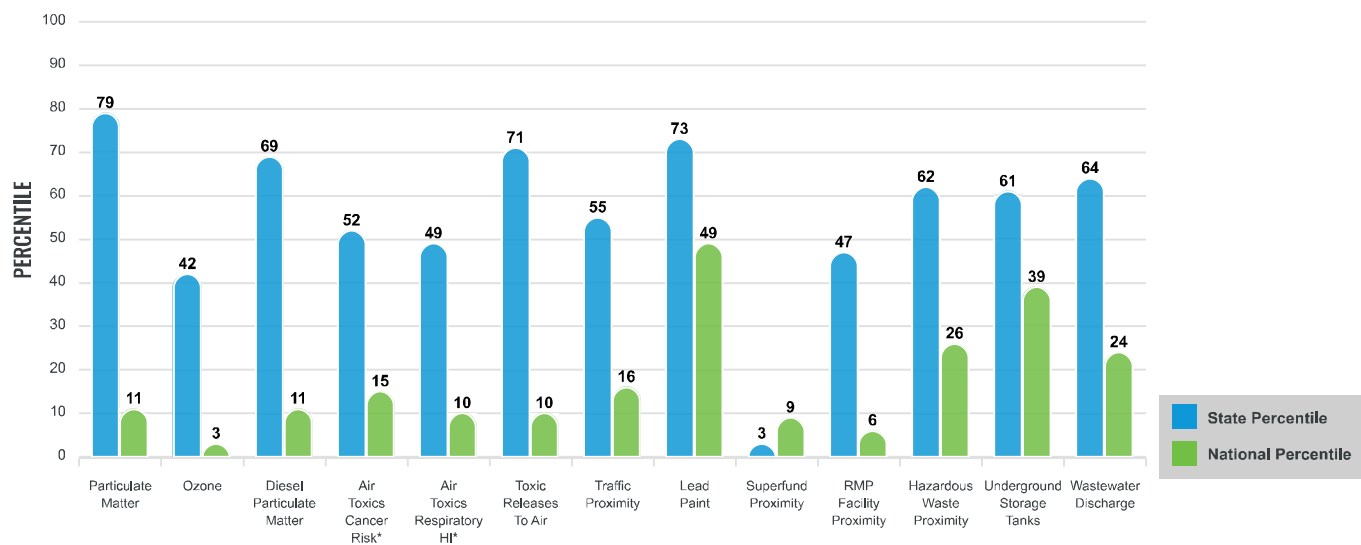
Environmental Justice & Supplemental Indexes

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.

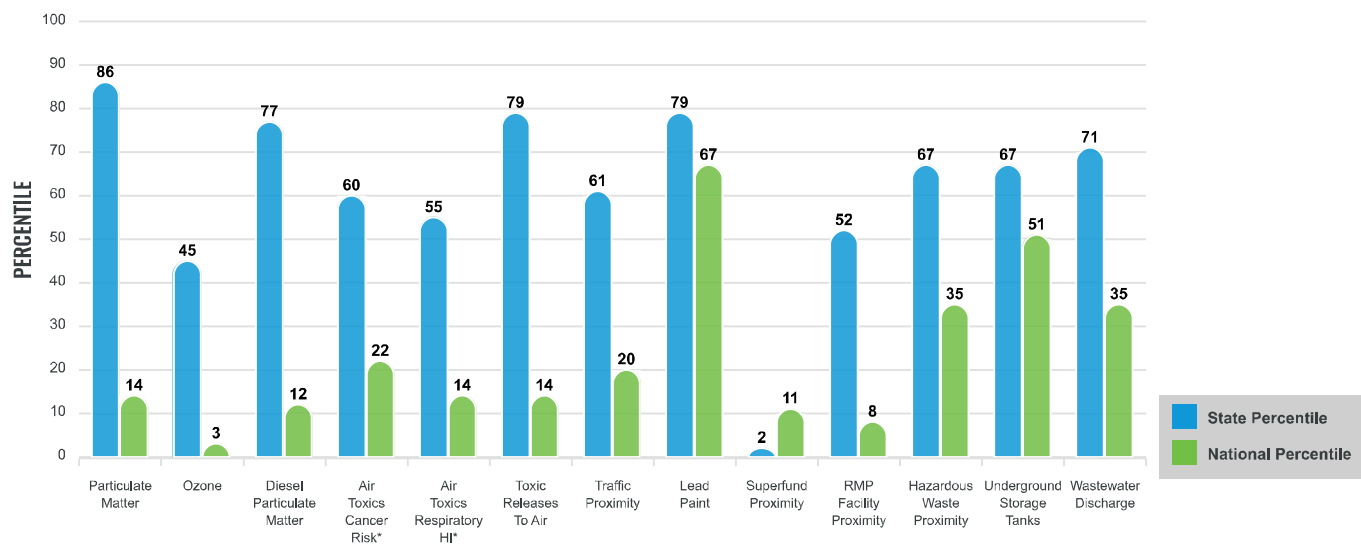
EJ INDEXES FOR THE SELECTED LOCATION



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 the User Specified Area

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	6.52	5.7	98	8.08	13
Ozone (ppb)	51.4	51.8	40	61.6	3
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.0898	0.0795	75	0.261	13
Air Toxics Cancer Risk* (lifetime risk per million)	20	18	23	25	5
Air Toxics Respiratory HI*	0.2	0.19	20	0.31	4
Toxic Releases to Air	31	15	85	4,600	14
Traffic Proximity (daily traffic count/distance to road)	14	46	55	210	19
Lead Paint (% Pre-1960 Housing)	0.76	0.37	94	0.3	89
Superfund Proximity (site count/km distance)	0.017	0.14	2	0.13	13
RMP Facility Proximity (facility count/km distance)	0.044	0.12	49	0.43	8
Hazardous Waste Proximity (facility count/km distance)	0.19	0.72	63	1.9	34
Underground Storage Tanks (count/km ²)	1.6	4	66	3.9	55
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.00026	0.054	68	22	37
SOCIOECONOMIC INDICATORS					
Demographic Index	13%	17%	37	35%	16
Supplemental Demographic Index	10%	11%	48	14%	34
People of Color	1%	8%	9	39%	0
Low Income	25%	26%	51	31%	47
Unemployment Rate	4%	4%	58	6%	47
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	2%	6%	19	12%	16
Under Age 5	2%	4%	29	6%	26
Over Age 64	21%	21%	57	17%	71
Low Life Expectancy	19%	17%	74	20%	49

*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/naps/air-toxics-data-update>.

Sites reporting to EPA within defined area:

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

Other community features within defined area:

Schools	1
Hospitals	0
Places of Worship	2

Other environmental data:

Air Non-attainment	No
Impaired Waters	No

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

Report for the User Specified Area

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	19%	17%	74	20%	49
Heart Disease	5.6	6.1	31	6.1	41
Asthma	10.1	10.2	46	10	58
Cancer	7.2	6.9	54	6.1	74
Persons with Disabilities	17.1%	14.5%	77	13.4%	76

CLIMATE INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	12%	15%	45	12%	72
Wildfire Risk	0%	0%	0	14%	0

CRITICAL SERVICE GAPS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	12%	16%	39	14%	52
Lack of Health Insurance	6%	4%	83	9%	45
Housing Burden	No	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

Footnotes

Report for the User Specified Area

Proctor TAP TA20(5) - Project Costs Summary

	TAP TA20(5)	Total Anticipated Project Costs	Total Project Cost Deficiencies
Federal Funding MLA	\$160,000	\$240,000	\$80,000
Local Match MLA	\$40,000	\$60,000	\$20,000
TOTAL Funding MLA	\$200,000	\$300,000	\$100,000

	TAP TA20(5)	Total Anticipated Project Costs	Total Project Cost Deficiencies	Notes
PE	\$27,000	\$22,000	\$0	Dufresne Group
ROW / acquisition	\$3,000	\$0	\$0	all easements donated
Construction	\$130,000	\$219,174 *	\$88,000	Contractor
Construction Engineering	\$21,000	\$33,000	\$12,000	TBD (assume 15% of construction cost)
MPM Costs	\$19,000	\$25,826	\$0	DuBois & King, Inc.
Subtotal	\$200,000	\$300,000	\$100,000	

* Latest construction cost estimate of \$173K plus 25% contingency + rounding

CONSTRUCTION COST ESTIMATE
SOUTH STREET SIDEWALK
PROCTOR TAP TA20(5)
PROCTOR, VERMONT
August 10, 2023

Item Number	Item Description	Quantity	Unit	Unit Price	Total Price
201.10	Clearing and Grubbing, Including Individual Trees and Stumps	1	LS	\$ 3,800.00	\$ 3,800.00
203.15	Common Excavation	350	CY	\$ 25.00	\$ 8,750.00
203.30	Earth Borrow	10	CY	\$ 30.00	\$ 300.00
301.26	Subbase of Crushed Gravel, Fine Graded	90	CY	\$ 50.00	\$ 4,500.00
406.38	Hand-Placed Bituminous Concrete Material, Drives	90	SY	\$ 75.00	\$ 6,750.00
618.10	Portland Cement Concrete Sidewalk, 5 Inch	410	SY	\$ 98.00	\$ 40,180.00
618.11	Portland Cement Concrete Sidewalk, 8 Inch	60	SY	\$ 113.00	\$ 6,780.00
618.30	Detectable Warning Surface	20	SF	\$ 55.00	\$ 1,100.00
630.15	Flaggers	900	HR	\$ 45.00	\$ 40,500.00
635.11	Mobilization/Demobilization	1	LS	\$ 25,346.00	\$ 25,346.00
641.11	Traffic Control, All-Inclusive	1	LS	\$ 6,000.00	\$ 6,000.00
651.15	Seed	18	LB	\$ 11.00	\$ 198.00
651.18	Fertilizer	50	LB	\$ 5.00	\$ 250.00
651.20	Agricultural Limestone	0.2	TON	\$ 845.00	\$ 169.00
651.35	Topsoil	55	CY	\$ 50.00	\$ 2,750.00
653.10	Hay Mulch	0.2	TON	\$ 935.00	\$ 187.00
656.85	Tree Protection	1	LS	\$ 1,000.00	\$ 1,000.00
675.341	Square Tube Sign Post and Anchor	22	LF	\$ 20.00	\$ 440.00
675.50	Removing Signs	2	EA	\$ 200.00	\$ 400.00
675.60	Resetting Signs	2	EA	\$ 300.00	\$ 600.00
SubTotal Construction Cost					\$ 150,000
Contingency (15%)					\$ 23,000
Total Construction Cost					\$ 173,000
Design Engineering					\$ 22,000
Right-of-Way					\$ 2,000
Construction Engineering (est.)					\$ 26,000
Local Project Management (est.)					\$ 25,826
Total Project Cost					\$ 248,826

Note: Estimate is based on 85% plans dated August 10, 2023.