

DRAFT Scoping Study Report
CHURCH STREET SIDEWALK
CHESTER BP18(6)
CHESTER, VERMONT
January 21, 2020



Submitted to:
David Pisha, Town Manager
Town of Chester
556 Elm Street
PO Box 370
Chester, VT 05143



DUFRESNE GROUP
CONSULTING ENGINEERS

Springfield, VT | Barre, VT | St. Johnsbury, VT | Manchester Center, VT | 802.674.2904 | info@dufresnegroup.com | www.dufresnegroup.com

**SECTION 1
SUMMARY
CHURCH STREET SIDEWALK SCOPING STUDY
CHESTER, VT**

The objective of this project is to create a safe and accessible route for pedestrians to travel a loop between Chester Village, the Stone Village and Chester Depot. The study area extends from the existing sidewalk on the south end of Church Street to the existing sidewalk on the east side of North Street.

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.

An Archeological Resource and Historic Preservation Assessment was completed, which indicated that the project area has low potential for precontact and historic archeological deposits in the study area. No further investigation was recommended.

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 to accommodate existing pedestrian traffic flow between Chester Village, the Stone Village and Chester Depot.

Need: The existing conditions are dangerous for pedestrians as there are no dedicated pedestrian facilities and pedestrians often travel on the road due to existing drainage swales and topography.

This project is necessary to improve and expand existing pedestrian facilities to increase safety and accessibility for all users and provide connectivity between Chester Village, the Stone Village and Chester Depot.

After the Local Concerns meeting, alternatives were developed based on design criteria and local input. The alternatives focused on minimizing impacts to adjacent properties, which resulted in the evaluation of multiple sidewalk alternatives, instead of walking path or shared use facilities further away from the road. The alternatives were compared on the basis of cost, impacts to environmental and cultural resources, permitting requirements and locally identified critical elements.

The alternatives were discussed at an Alternatives Presentation. The alternatives included three different alignments along Church Street. The discussions focused on improving safety for pedestrians and minimizing impacts to adjacent properties. The preferred alternative, which was selected and endorsed by the Selectboard, includes 4,410 feet of new 5-foot wide concrete sidewalk with granite curb and storm drainage

improvements. In addition, the crossing at the Williams River will include either a new pedestrian bridge or a new sidewalk cantilevered on the existing bridge.

The estimated total project cost for these improvements is \$2,180,000 based on a 2024 construction cost estimate of \$1,510,000. Phasing is not recommended as the purpose of this facility is to connect two existing sidewalk termination points and multiple village areas. There would be no logical stopping point in between phases. Pedestrians would need to be directed back into the road at the end of a particular phase to continue to their destination.

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

**SECTION 2
EXISTING CONDITIONS
CHURCH STREET SIDEWALK SCOPING STUDY
CHESTER, VT**

Project Study Area

The study area for the project was defined by the Town and is shown in Figure 2.1. The study area extends north along Church Street from the end of the existing sidewalk on the south end of Church Street. The study area turns east at the intersection of Church Street and Dalrymple Street and continues to North Street (Route 103). From the intersection of Dalrymple Street and North Street, the study area continues south to the existing sidewalk on the east side of North Street. The study area encompasses an existing well-traveled pedestrian route connecting three village areas including Chester Village, the Stone Village and Chester Depot.

Land Uses

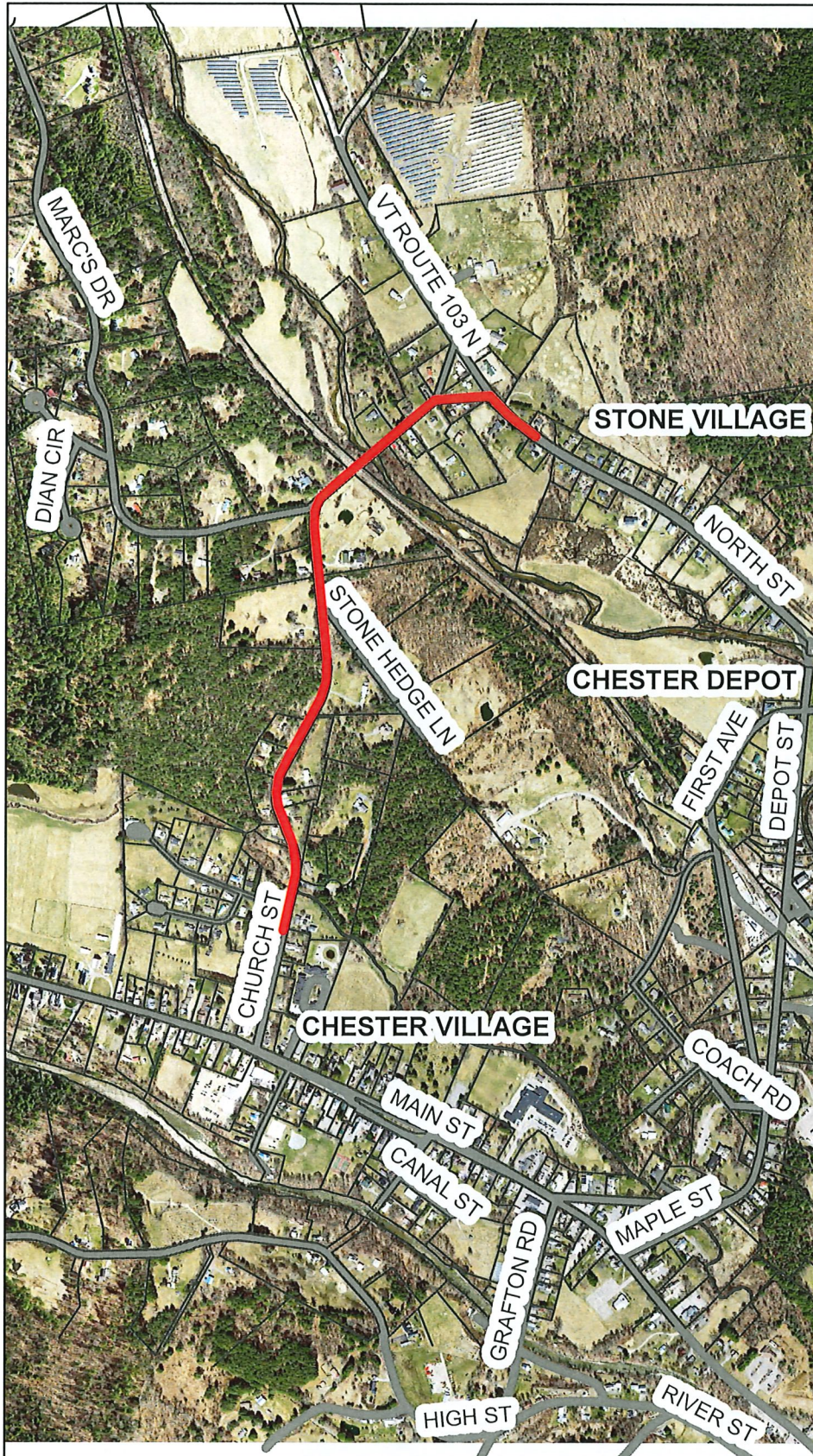
The study area includes residential, stone village and village uses, as shown in Figure 2.2. The southern end of the study area is Village Center, the middle section is Residential, and the northern section is Stone Village. These zoning districts are characterized as follows:

- Village Center: This district aims to provide a mix of commercial, residential and civic uses. Development in this district shall be of the highest density in the Town, preserve historic character, and provide a pedestrian-friendly streetscape that accommodates public transportation.
- Residential (40,000 sq.ft.): This district aims to provide moderate-density residential neighborhoods with compatible commercial and civic uses that are consistent with the Chester Town Plan.
- Stone Village: This district aims to preserve the unique historic character of the Stone Village while providing higher-density residential neighborhoods with compatible commercial and civic uses that are consistent with the Chester Town Plan.


Existing Transportation Facilities

There are three roads in the study area: Church Street, Dalrymple Street and North Street (Route 103). Church Street has an existing sidewalk extending along the east side of the road approximately 530 feet north from the intersection with Main Street (Route 11). North Street has an existing sidewalk extending along the west side of the road approximately 150 feet south from the intersection with Dalrymple Street. There is also an existing sidewalk on the east side of North Street connecting south to Chester Depot. This sidewalk ends approximately 360 feet south of the intersection with Dalrymple. The characteristics of these roads and sidewalks are described in Table 2.1.


**FIGURE 2.1
LOCATION MAP
CHURCH STREET SIDEWALK SCOPING STUDY
CHESTER, VERMONT**



Legend

 Study Area



0 400 800
 Feet

**FIGURE 2.2
EXISTING LAND USES
CHURCH STREET SIDEWALK SCOPING STUDY
CHESTER, VERMONT**



Legend

- Residential (3 acre)
- Residential (40,000 sf)
- Stone Village
- Village Center
- Parcel Line
- Road
- Stream
- Study Area



0 200 400 Feet

Table 2.1: Existing Road and Sidewalk Characteristics

Characteristic	Church Street (TH-5)	Dalrymple Street (TH-51)	North Street (VT-103)
Road Classification	Class 2 (Town)	Class 3 (Town)	Class 1 (Town)
Function Classification	Local	Local	Principal Arterial
Speed Limit (mph)	25	25	30
Travel Lane Width (ft)	11	11	11
Shoulder Width (ft)	0	0	2
Center Line	Yes	No	Yes
Edge Lines	No	No	Yes
On-Street Parking	No	No	No
Sidewalk Material	Bituminous Concrete (530')	None	Bituminous Concrete
Sidewalk Width (ft)	4	N/A	4.5 (W) / 5 (E)
Edge Zone	Grass	N/A	Grass
Curb	None	None	None
Sidewalk Condition	Fair	N/A	Fair/Good
Bicycle Facilities	None	None	None

There is a railroad that crosses the study area on the north end of Church Street. The railroad crossing has signals, but no crossbars.

Traffic Data

The Annual Average Daily Traffic (AADT) counts, as published by the Vermont Agency of Transportation (VTrans), are shown in Table 2-2 below.

Table 2.2: Annual Average Daily Traffic Counts

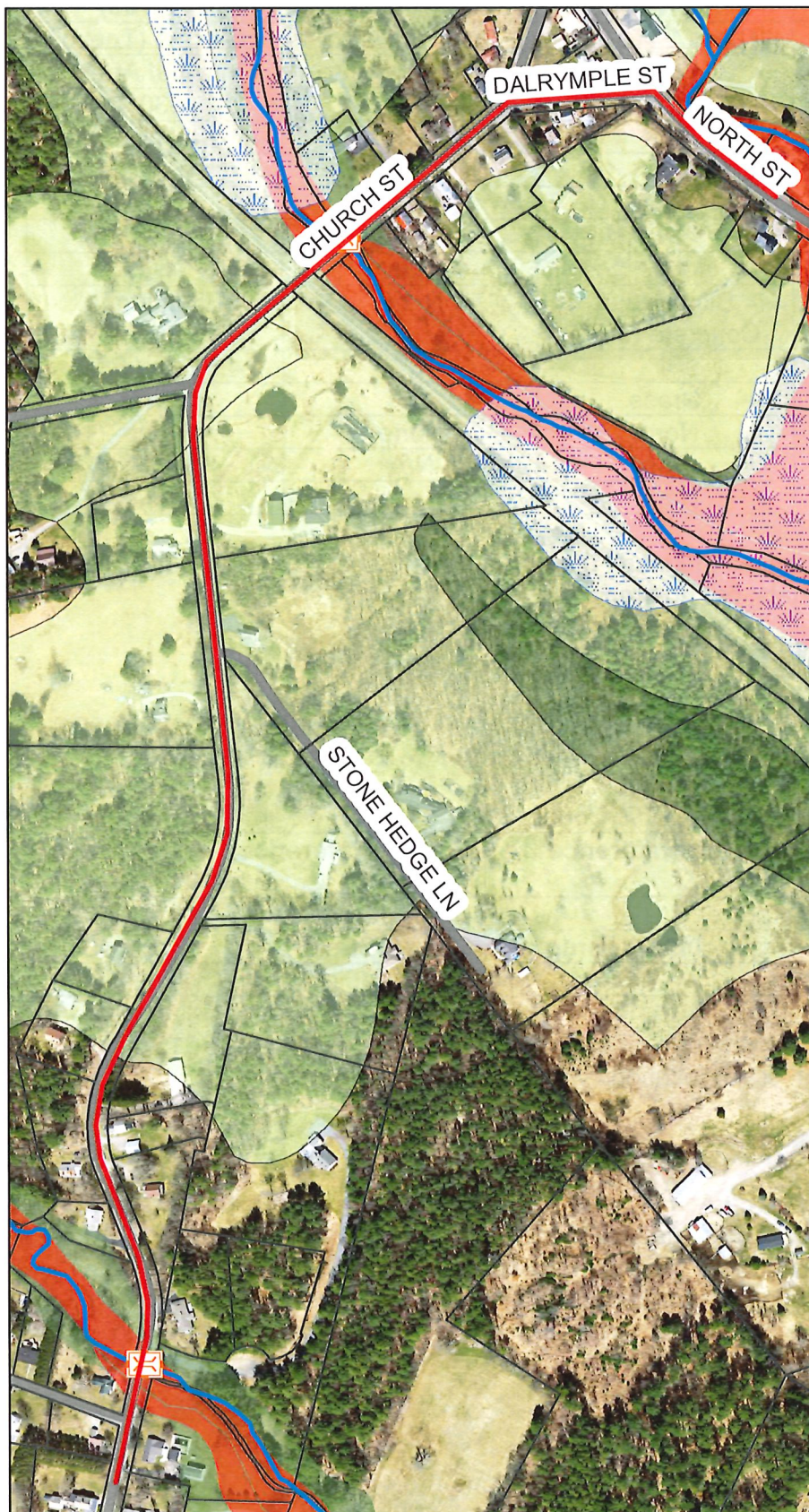
Street Name	Beginning Reference	Ending Reference	2018 AADT
Church Street	Main Street	North Street	1,000
North Street	Green Mountain Turnpike	Church Street	4,400
Dalrymple Street	No Data Available		

Data was obtained from VTrans for high crash locations compiled for the 2015-2019 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 2.3. 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.

**FIGURE 2.3
NATURAL RESOURCES AND ENVIRONMENTAL FEATURES
CHURCH STREET SIDEWALK SCOPING STUDY
CHESTER, VERMONT**



Legend

- Study Area
- Stream
- Parcel Line
- Road
-  Bridge
-  Wetland
- Floodplain
- Prime Soil
- Statewide Soil



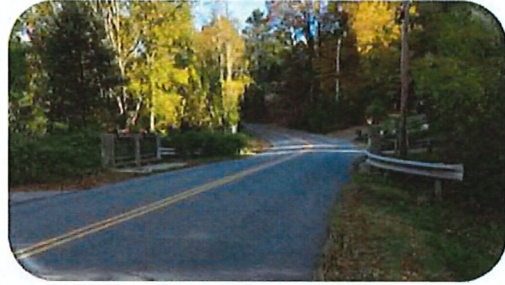
0 200 400
 Feet

Wetlands

There are two mapped Class 2 wetlands located along Williams River to the north and south of Church Street. The northern wetland appears to be located approximately 100 feet north of Church Street and the southern wetland appears to be located approximately 500 feet south of Church St. Based on these measurements, it is unlikely that potential sidewalk improvements along Church Street would impact the wetlands or their buffers.

Surface Waters

There are two streams/rivers within the study area. The first is Lovers Lane Brook. This stream crossing is located on the southern end of the study area. There is an existing bridge over the stream. The bridge deck is approximately 22 feet wide. Additionally, there is a 4' wide raised sidewalk on the west side of the bridge.



Bridge crossing in study area

The second is the Williams River, which flows north to south through the project area. There is an existing bridge over the Williams River. The bridge deck is approximately 23.5 feet wide and does not include a sidewalk. This bridge was replaced in 2004.

Floodplains

There are two areas of floodplain within the study area. One is the flood plain for the Williams River and the second is the floodplain for Lovers Lane Brook. Potential impacts from alternatives for the floodplains will be discussed in Section 4.

Stormwater

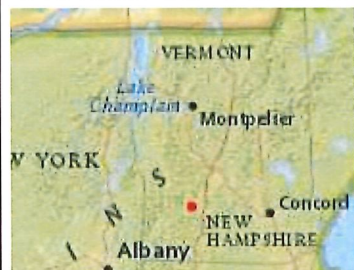
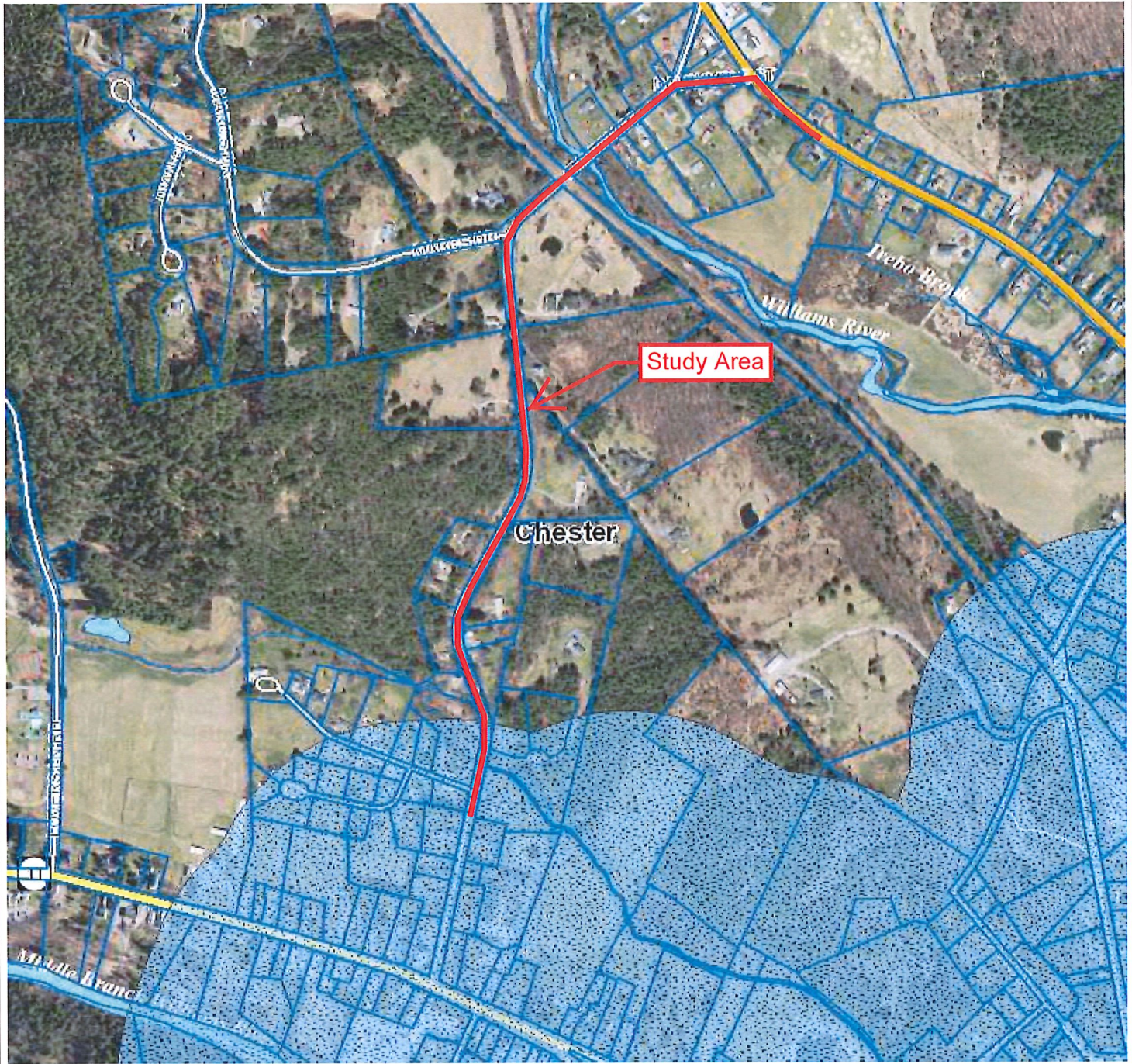
There are no impaired rivers, streams, lakes or ponds within the study area. Stormwater permit requirements will be discussed in Section 4.

Rare, Threatened and Endangered Species

There are no rare, threatened or endangered species located within or adjacent to the study area. The study area does fall 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 no hazardous waste sites or brownfields within or adjacent to the study area. A portion of the study area is designated as an Urban Soil Background area, as shown in Figure 2.4.



LEGEND

- Urban Soil Background Areas
- Parcels (standardized)
- Parcels (non-standardized)
- Roads**
 - Interstate
 - Principal Arterial
 - Minor Arterial
 - Major Collector

NOTES

Map created using ANR GIS mapping technology.

1: 8,042

January 9, 2020



Agricultural Land:

There are several areas of Prime and Statewide agricultural soil. As 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 November 2019 by Hartgen Archeological Associates, Inc. The report indicates there is low sensitivity in the study area for the presence of precontact and historic cultural resources. The report indicates that no further archeological investigation is recommended for this project area. 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 width is 3 rods, or 49.5 feet, for Church Street, which was recorded as a Town road in 1786, Dalrymple Street and North Street. 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 and sewer. Typically, the underground utilities will not be impacted by the proposed improvements due to the limited depth of sidewalk facilities. Valve boxes and sewer manholes may require height adjustment if they are located within a proposed sidewalk alignment. Hydrants may require relocation if they are located within a proposed sidewalk alignment. Utility impacts will be further discussed in Section 4.

Most of the above ground features, such as utility poles and fire hydrants, appear to be set back far enough from the roads to allow for the new sidewalk width. There may be some utility pole relocations and potentially hydrant relocations, which will be further discussed in Section 4.



Existing Hydrant along Church Street

Existing drainage swales may require replacement with storm drain collection systems. Impacts to stormwater drainage will be further discussed in Section 4.

**SECTION 3
PUBLIC INVOLVEMENT
CHURCH STREET SIDEWALK SCOPING STUDY
CHESTER, VT**

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 Town 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 on improving pedestrian safety along Church Street, while minimizing impacts to adjacent properties.

Local Concerns Meeting

A special meeting for property owners within the study area was conducted on July 9, 2019 to discuss the project and obtain input from the adjacent property owners regarding the purpose and need for the project. The participants discussed the following major topics:

- Traffic control and reduction of vehicle speeds;
- Impacts to adjacent properties (feasibility);
- Need (or possible lack thereof).

Most of the discussions centered around vehicle traffic, including speeding and trucks (as the road is posted “no trucks”). There were also several comments and questions regarding impacts to adjacent properties, such as drainage, right-of-way, stone walls and trees.

A Local Concerns Meeting was conducted July 24, 2019 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 participants discussed the following major topics:

- Traffic control and reduction of vehicle speeds;
- Increasing pedestrian safety;
- Maintaining the character of the “country setting” on Church Street.

The majority of the discussions centered again around reducing vehicle speeds and eliminating truck traffic on Church Street. However, there were also several participants who strongly supported the idea of a sidewalk, noting a need for increased pedestrian safety, as Church Street is a well-traveled pedestrian route. Participants also requested that the study consider the existing character of the area when evaluating alternatives for a potential pedestrian facility.

The Selectboard addressed public concern regarding traffic and vehicle speeds by noting that for this project, pedestrian safety is the primary concern. The board added

that vehicular traffic and speed is a separate issue that can be considered in the immediate future.

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 to accommodate existing pedestrian traffic flow between Chester Village, the Stone Village and Chester Depot.

Need: The existing conditions are dangerous for pedestrians as there are no dedicated pedestrian facilities and pedestrians often travel on the road due to existing drainage swales and topography.

This project is necessary to improve and expand existing pedestrian facilities to increase safety and accessibility for all users and provide connectivity between Chester Village, the Stone Village and Chester Depot.

Public Survey

A public survey was conducted after the Local Concerns meeting. The survey included three questions, as summarized below. There were 43 respondents.

1. Do you support the idea of a sidewalk or walking path along Church Street?
 - Yes: 81%
 - No: 12%
 - Not Sure: 7%
2. Are there any specific features you would like to see in a sidewalk facility?
 - Lighting: 12
 - Drainage Improvements: 10
 - Curb: 7
 - Landscaping: 6
 - Streetscaping (i.e. benches): 5
 - ADA Accessibility: 2
 - Garbage Cans: 1
 - More Speed Signs: 1
3. Other comments, concerns or questions.
 - Increase Safety: 13
 - Not Needed/Prioritize Other Needs: 3
 - Walking Path (vs Sidewalk): 2
 - Maintain Character: 2
 - Recreation/Health: 2
 - Traffic Modifications: 2

The two Local Concerns Meetings did not clearly indicate support from the community; however, the survey results showed overwhelming support for a pedestrian facility. There were several suggestions for additional features, as well as suggestions for traffic modifications, including the addition of a stop sign and modifying Dalrymple Street to one-way traffic.

Alternatives Presentation

The alternatives were presented to adjacent property owners in a special meeting on October 1, 2019. While the main topic of discussion was vehicle speeds, there were a few comments on the alternatives presented. Attendees asked questions regarding how close the proposed sidewalk facilities would be to adjacent houses, proposed crosswalk locations and how the facility would be maintained.

An Alternatives Presentation was conducted on October 16, 2019 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 C.

The meeting participants generally supported the proposed alternatives. There was again discussion on vehicle speeds, along with suggestions for additional stop signs and other speed reduction methods. The Selectboard noted again that vehicular traffic and speed is a separate issue and they will consider these suggestions. While Alternatives 1 and 2 required fewer road crossings, Alternative 3 offered the lowest estimated construction cost and the least amount of impacts and was generally supported as the preferred alternative. The Selectboard voted unanimously for Alternative 3 as the preferred alternative.

Public Informational Meeting

A Public Informational Meeting will be held after the Town and VTrans review the draft report.

Relationship to Local and Regional Plans

The Chester Town Plan and the Southern Windsor County (SWC) Regional Plan contain goals, policies and recommendations in support of the proposed improvements. The Chester Town Plan identifies the following goals:

- *General Goal #4: To encourage and maintain a safe, convenient, economic and energy efficient transportation network.*
 - *Alternative forms of transportation such as walking, bicycling and public transportation should be encouraged.*
- *General Goal #8: To maintain and enhance recreational opportunities for residents and visitors.*
 - *Develop and maintain good recreational plans and infrastructure to provide recreation opportunities for all residents and visitors.*

- *Transportation Goal #6: Encourage bicycle and pedestrian transportation through maintenance and expansion of existing facilities.*
 - *Policy #4: Continue to expand the sidewalk network while at the same time maintaining those segments that are in “good” and “fair” shape.*
- *Energy Goal #5: To encourage the development of a transportation system that encourages the use of public transportation and ride-sharing and enables increased non-motorized vehicle and pedestrian traffic. Emphasize links between schools, stores, work and home.*

The SWC Regional Plan contains the following goals:

- *Recreation Goal #6: To promote recreation and a healthy natural environment as regional assets and to plan development in a way that will ensure that those assets are not degraded.*
- *Transportation Goal #3: Provide for the safe, secure, convenient, economic, and energy efficient movement of people, goods and services.*
 - *Policy #4: Ensure the safety and security of users of highway, transit, bicycle, pedestrian, aviation, rail and freight systems. Safety shall be a priority criterion for the regional and state project development and prioritization processes.*
- *Transportation Goal #5: Offer diverse travel choices throughout the Region with an integrated multi-modal transportation system that encourages less travel by single-occupant vehicles and a reduction in the consumption of fossil fuels.*
 - *Policy #21: The transportation system shall promote energy efficiency and driving less through the following initiatives:*
 - *Invest in bicycling and walking facilities within villages and downtowns and invest in bicycle and walking facilities that connect neighborhoods and commercial growth centers.*
 - *Policy #24: Prioritize bicycle and pedestrian projects that:*
 - *Further the bicycle and pedestrian implementation strategies in this Plan;*
 - *Make connections between neighborhoods and destinations, such as schools, recreation facilities and villages.*

**SECTION 4
EVALUATION OF ALTERNATIVES
CHURCH STREET SIDEWALK SCOPING STUDY
CHESTER, VT**

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:

- Minimize the impact to adjacent properties.
- Avoid adverse effects on existing drainage issues and preferably improve drainage conditions.
- Maintain the existing character of the study area.

Alternatives Development

The alternatives include multiple alignments and a “no build” alternative. The alternative alignments considered are shown in Figures 4.1 and 4.2. These alignments are generally described as follows:

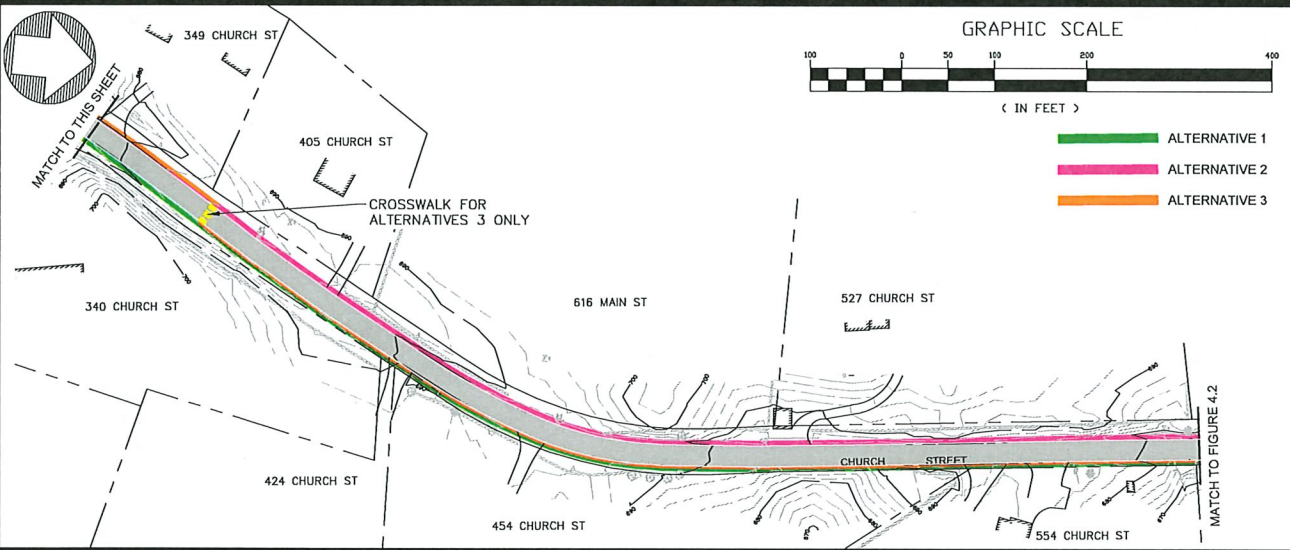
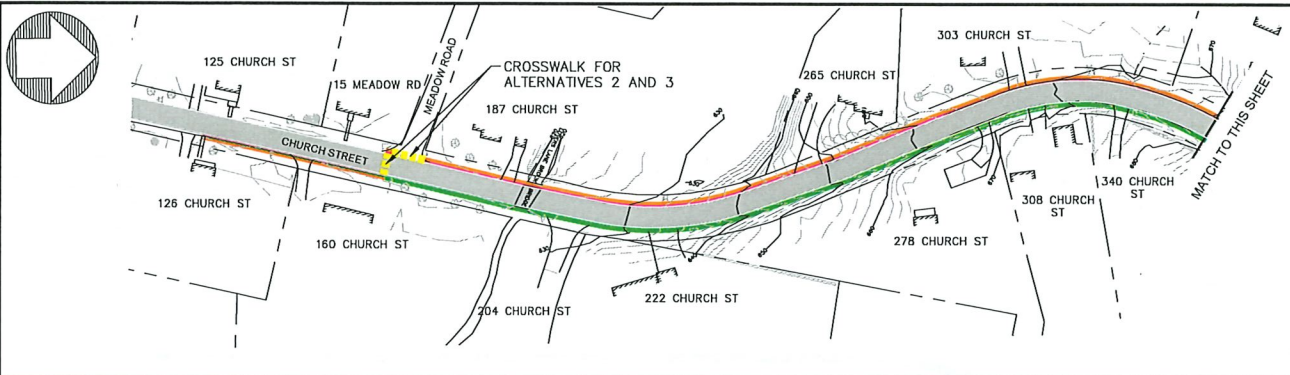
- Alternative 1: East and south side of the road
- Alternative 2: West and north side of the road
- Alternative 3: Combination of alternatives 1 and 2

These alternatives include a 5-foot wide sidewalk with curb. Cross sections with a grass edge zone were considered; however, based on the available right-of-way and existing topography, a grass edge zone would increase impacts to adjacent properties.

The options for sidewalk material include Portland cement concrete (concrete) and bituminous concrete (asphalt). Concrete sidewalks tend to be more durable than asphalt sidewalks; however, the concrete should be treated with a sealant to protect it from salt. Asphalt sidewalks will likely need to be replaced more frequently than concrete. Concrete also provides a strong visual delineation of pedestrian areas at driveway crossings, whereas asphalt sidewalks do not. In regard to cost, concrete is typically more expensive than asphalt.

The options for curb materials include granite and concrete (cast-in-place, precast or bituminous). Granite is more durable and requires little to no maintenance. Concrete curbs can be easily damaged by vehicles and plows and will require more frequent replacement than granite. In regard to cost, granite is more expensive.

Based on local input, the preferred materials are concrete sidewalk and granite curb.



DG
DUFRESNE GROUP
 CONSULTING ENGINEERS
 Suite 200, 56 Main Street
 Springfield, Vermont 05156
 Tel: (802) 874-3204 Fax: (802) 874-2313
 Email: info@dufrsne.com
 Home page: www.dufrsne.com

Project #	7150003
Project Mgr.	N.R. JOHNSON
Design	C.M. HASKINS
Drawn	K.S. MENEES
Checked by	N.R. JOHNSON
Date	JANUARY 2020
Scale	AS SHOWN
Approved by	C.M. HASKINS

NO WARRANTY FOR THIS PROJECT SHALL BE MADE BY DUFRESNE GROUP CONSULTING ENGINEERS, INC. OR ANY OF ITS EMPLOYEES OR AGENTS. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

DUFRESNE GROUP ©

CHURCH STREET SIDEWALK SCOPING STUDY

SIDEWALK ALIGNMENT ALTERNATIVES

CHESTER, VERMONT

4.1

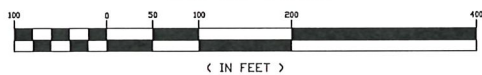
DWG NO. Alternatives.dwg
 SHEET 1 OF 1

FILE: \\NAVDWD-Floer\Chadler_VT\Church Street\Alternatives.dwg, Jan 15, 2020 - 3:00pm

FILE: \\VAD001\Files\Drawings\Church Street\Information.dwg Job: 12-2000-2430pm



GRAPHIC SCALE



- ALTERNATIVE 1
- ALTERNATIVE 2
- ALTERNATIVE 3

DG
DUFRESNE GROUP
 CONSULTING ENGINEERS
 Suite 200, 59 Main Street
 Springfield, Vermont 05156
 Tel: (802) 874-2904 Fax: (802) 874-2913
 E-mail: info@dgae.com
 Home page: www.dgae.com

Project #	7190003
Project Mgr.	N.R. JOHNSON
Design	C.M. HASKINS
Drawn	K.S. MENEES
Checked by	N.R. JOHNSON
Date	JANUARY 2000
Scale	AS SHOWN
Approved by	C.M. HASKINS

THE DRAWINGS FOR THIS PROJECT SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DUFRESNE GROUP ©

CHURCH STREET SIDEWALK SCOPING STUDY

SIDEWALK ALIGNMENT ALTERNATIVES

CHESTER, VERMONT

4.2

DWG NO: Alternatives.dwg
 SHEET 1 OF 1

Church Street Alignments

Alternative 1

Alternative 1 begins at the end of the existing sidewalk on the east side of Church Street at the southern end. The alignment continues along the east side and south side of Church Street to Dalrymple Street. This includes crossing the southern bridge on the east side and the northern bridge on the south side.

The following is a summary of potential impacts and characteristics for Alternative 1 on Church Street:

- The southern bridge has an existing sidewalk on the west side, therefore a crossing on the east side would require either replacement of the existing bridge or a new pedestrian bridge. There are currently no Town or State plans to replace this bridge.
- There is a landscaped area on a steep slope at 222 Church Street that would be partially impacted.
- At the top of the hill, there is a stone wall along the east side of the road. The stone wall appears to be set back far enough from the edge of the road that most of it would not be impacted by a sidewalk. It is likely that a small section at the northern end may need to be reset further away from the road.
- There is a ledge outcrop south of 554 Church Street that would require removal for the sidewalk installation.
- The railroad crossing will require coordination with the railroad and a Master Licensing Agreement revision.
- The northern bridge does not have an existing sidewalk; therefore, a pedestrian crossing would require either replacement of the existing bridge or a new pedestrian bridge. There are currently no Town or State plans to replace this bridge.
- Stormwater drainage will need to be considered along the entire length of the sidewalk as the existing sheet flow drainage will be disrupted by the curb and the removal of drainage swales. Drainage along the east and south side of the road could be accomplished via drop inlets daylighting behind the sidewalk, trench drains under the sidewalk, a storm drain collection system or a combination of methods.
- There are five utility poles that may require relocation.
- There are three water and sewer system impacts requiring potential adjustment of a valve box and two sewer manholes. There may be other water service valve box adjustments required.
- There are four houses that are in close proximity to the sidewalk. This may create an impact related to aesthetics or privacy at these private residences.
- There are no crosswalks needed on Church Street with this alignment, although one may be desired by the Town to allow for pedestrian crossings to and from Meadow Road.
- The anticipated right-of-way needs include five temporary easements and two permanent easements.

Alternative 2

Alternative 2 begins in the same location as Alternative 1 and follows the same alignment up to the intersection of Church Street and Meadow Road. On the south side of Meadow Road, the sidewalk crosses to the west side of Church Street to a level landing and then cross Meadow Road. From Meadow Road, the sidewalk extends along the west side and north side of Church Street to the intersection with Dalrymple Street. At this point, the sidewalk crosses back to the south side of Church Street.

The following is a summary of potential impacts and characteristics for Alternative 2 on Church Street:

- The southern bridge has an existing sidewalk on the west side, which would be utilized in this alternative.
- The area around the hydrant in front of 405 Church Street is a wet area. This appears to be a shallow drainage swale but this location should be further evaluated for potential wetland impacts during final design.
- Along the 616 Main Street parcel, the existing stone wall would need to be reconstructed further away from the road. In this same area, there is a slope that will need to be excavated and regraded or modified with a retaining wall.
- Starting at 527 Church Street to Marcs Drive, there is a significant slope that will need to be modified with a retaining wall.
- The railroad crossing will require coordination with the railroad and a Master Licensing Agreement revision.
- The northern bridge does not have an existing sidewalk; therefore, a pedestrian crossing would require either replacement of the existing bridge or a new pedestrian bridge. There are currently no Town or State plans to replace this bridge.
- Stormwater drainage will need to be considered along the entire length of the sidewalk as the existing sheet flow drainage will be disrupted by the curb and the removal of drainage swales. Drainage along the east and south side of the road could be accomplished via drop inlets daylighting behind the sidewalk, trench drains under the sidewalk, a storm drain collection system or a combination of methods.
- There are three utility poles that may require relocation.
- There are five water system impacts requiring potential relocation of two hydrants, adjustment of three valve boxes. There may be other water service valve box adjustments required.
- There are six houses that are in close proximity to the sidewalk. This may create an impact related to aesthetics or privacy at these private residences.
- This alternative requires two crosswalks across Church Street and two crosswalks across side roads, Meadow Road and Marcs Drive.
- The anticipated right-of-way needs include five temporary easements and two permanent easements.

Alternative 3

Alternative 3 begins in the same location as Alternatives 1 and 2 and follows the same alignment up to the intersection of Church Street and Meadow Road. At this point, Alternative 3 follows the Alternative 2 alignment to the west side of Church Street. In the vicinity of the parcel boundary between 349 and 405 Church Street, Alternative 3 crosses back over to the east side of Church Street and continues north following the Alternative 1 alignment to the intersection with Dalrymple Street.

The following is a summary of potential impacts and characteristics for Alternative 3 on Church Street:

- The southern bridge has an existing sidewalk on the west side, which would be utilized in this alternative.
- There are existing stone walls along the east side of the road in the area between 405 and 454 Church Street. The stone walls appear to be set back far enough from the edge of the road that most of them would not be impacted by a sidewalk. It is likely that a small section at the northern end could require resetting further away from the road.
- There is a ledge outcrop south of 554 Church Street that would require removal for the sidewalk installation, which also results in a stone wall being reset.
- The railroad crossing will require coordination with the railroad and a Master Licensing Agreement revision.
- The northern bridge does not have an existing sidewalk; therefore, a pedestrian crossing would require either replacement of the existing bridge or a new pedestrian bridge. There are currently no Town or State plans to replace this bridge.
- Stormwater drainage will need to be considered along the entire length of the sidewalk as the existing sheet flow drainage will be disrupted by the curb and the removal of drainage swales. Drainage along the east and south side of the road could be accomplished via drop inlets daylighting behind the sidewalk, trench drains under the sidewalk, a storm drain collection system or a combination of methods.
- There are five utility poles that may require relocation.
- There is one water system impact requiring potential adjustment of a valve box. There may be other water service valve box adjustments required.
- There are five houses that are in close proximity to the sidewalk. This may create an impact related to aesthetics or privacy at these private residences.
- This alternative requires two crosswalks across Church Street and one crosswalk across Meadow Road.
- The anticipated right-of-way needs include five temporary easements and two permanent easements.

Dalrymple Street Alignments

In considering potential sidewalk alignments on Dalrymple Street, it is necessary to consider the alignments on Church Street and North Street. Church Street Alternatives 1 and 3 would best be served by a sidewalk on the south side of Dalrymple Street, while

Church Street Alternative 2 would best be served by a sidewalk on the north side of Dalrymple Street. This layout would minimize the number of road crossings in each scenario. An alignment along the north side of the street would require a crosswalk to connect to North Street, either across the east end of Dalrymple Street or across North Street.

Based on the need for additional crossings for the northern alignment alternative, it is recommended that the sidewalk facility be located on the south side of Dalrymple Street. All Church Street alternatives have been combined with the alternative on the south side of Dalrymple Street.

There are trees along the south side of Dalrymple that would be impacted by a potential sidewalk, as well as brush and vegetation that would require removal. There is a utility pole on the corner of Church Street and Dalrymple Street that will likely require relocation. Additionally, there is a hydrant near the intersection of Dalrymple Street and North Street that may require relocation.

North Street Alignments

The existing sidewalk extending north towards Dalrymple Street from the Stone Village is located on the east side of North Street. A sidewalk alignment on the east side of North Street from Dalrymple Street to the existing sidewalk would require a crossing at the intersection with Dalrymple Street, whereas a sidewalk alignment on the west side of North Street allows for a crossing further south. The speed limit on North Street increases north of Dalrymple Street. Vehicles often increase speed prior to the speed limit transition (in this case northbound) and also often do not decrease speeds until well past the speed limit transition (in this case southbound). Based on this typical driver behavior, it can be assumed that vehicle speeds would be higher on North Street at Dalrymple Street than they would be further south. This would make a southern location a safer place for pedestrian crossings. Based on this crossing evaluation, it is recommended that the sidewalk facility be located on the west side of North Street. All Church Street alternatives have been combined with the alternative on the west side of North Street.

There is an existing sidewalk along the west side of North Street from Dalrymple Street part of the way to the existing sidewalk on the east side. This bituminous concrete sidewalk is in fair condition and should be replaced as part of the potential sidewalk extension. The existing sidewalks are separated from the road by a grass edge zone. This cross section should be maintained on North Street to avoid a short section of curbing and to maintain existing sheet flow drainage off the road. One valve box may require adjustment.

“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 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 issues, permitting and cost.

Preferred Alternative

Based on input from the public and the Town, the preferred alternative includes the following components and is shown in Figures 4.3 and 4.4:

- 4,410 feet of new 5-foot wide concrete sidewalk
- 3,670 feet of new granite curb
- 120-foot long steel girder pedestrian bridge with concrete footings
- 700 feet of 18-inch storm drain with precast concrete catch basins
- Approximately 15 drainage structures (drop inlets with pipe or trench drains) daylighting behind the sidewalk

Design Considerations

The anticipated impacts of the preferred alternative are summarized in Figures 4.3 and 4.4, and further discussed below.

Natural Resource Impacts:

There are several areas of Prime and Statewide agricultural soil within the preferred alternative. As the improvements are located within proximity to the edge of the road, 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.

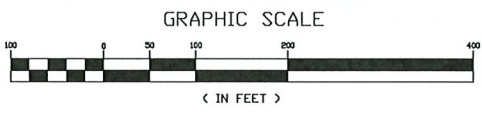
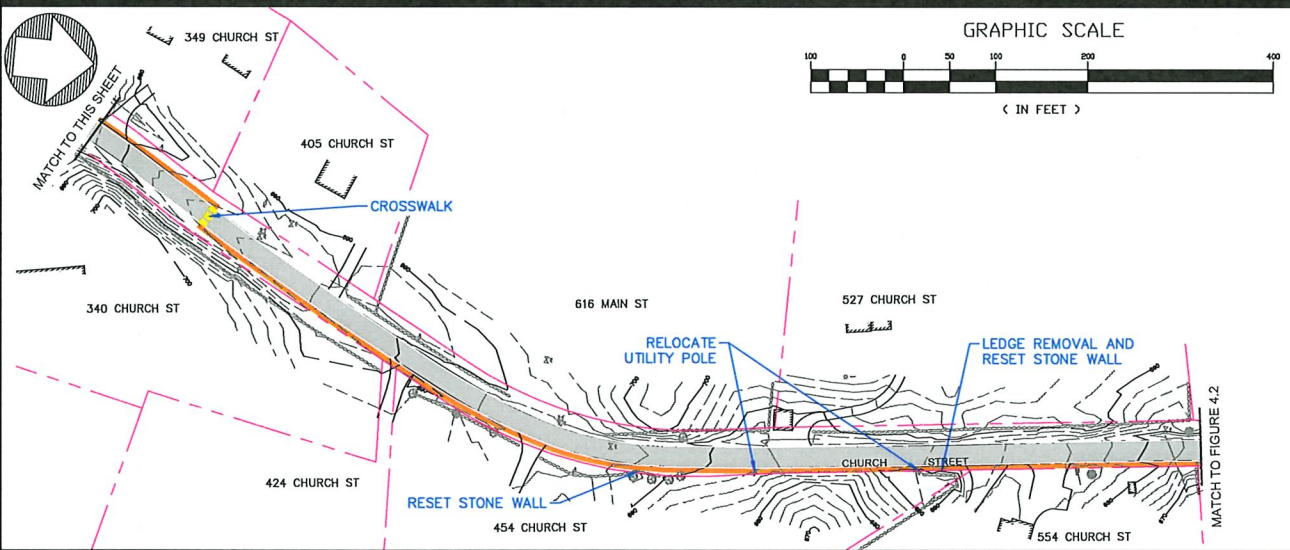
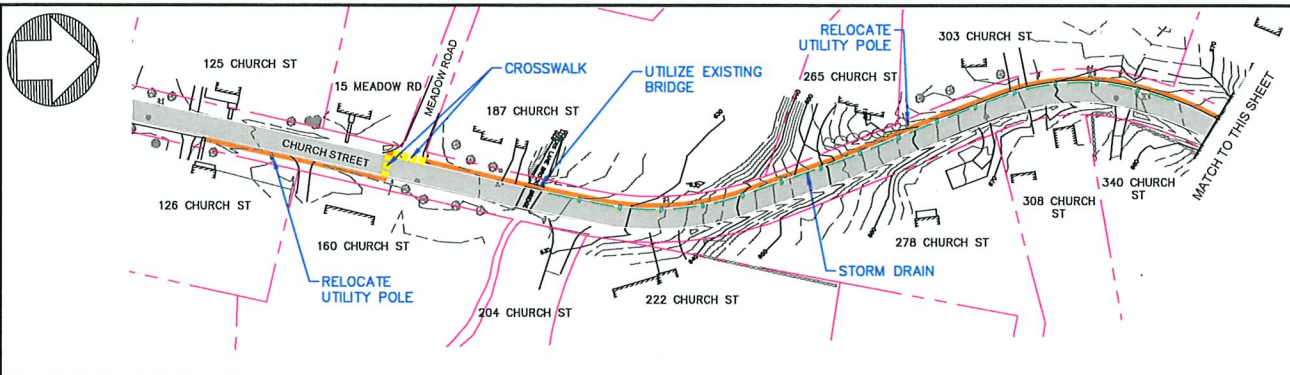
The preferred alternative utilizes the existing sidewalk on the bridge over Lovers Lane Brook. Therefore, there are no anticipated impacts to the stream or stream banks. There would be sidewalk construction within the floodplain, which will require coordination with the local and State floodplain coordinators. The sidewalk construction would not significantly change existing elevations and therefore is not anticipated to affect the flood elevation in this area.

Table 4.1: Evaluation Matrix

Criteria	No Build	Alternative 1	Alternative 2	Alternative 3
		East/South Side	West/North Side	Combination
Impacts				
Private Property	None	Minimal (5)	Moderate (7)	Minimal (6)
ROW Acquisition	None	Minimal (10)	Minimal (10)	Minimal (10)
Stormwater/Drainage	None	Moderate	Moderate	Moderate
Elevations/Grading	None	Minimal (1)	Moderate (4)	Minimal (1)
Utility Relocation	None	Moderate (9)	Moderate (9)	Moderate (7)
Archeological & Historic	None	Minimal	Minimal	Minimal
Prime Agriculture Soils	None	Minimal	Minimal	Minimal
Hazardous Materials	None	Minimal	Minimal	Minimal
Floodplains	None	Minimal	Minimal	Minimal
T&E Species	None	None	None	None
Wetlands	None	None	Potential	None
Local & Regional Issues				
Maintenance	No Change	Minimal	Moderate	Minimal
Character	No Change	Minimal	Moderate	Minimal
Conformance to Town/Regional Plan	No	Yes	Yes	Yes
Satisfies Purpose & Need	No	Yes	Yes	Yes
Permits/Approvals				
19 V.S.A. 1111 Access Permit	No	No	No	No
Railroad	No	Yes	Yes	Yes
Act 250	No	No	No	No
Floodplain	No	Yes (2)	Yes (1)	Yes (1)
Stream Alteration	No	Yes (2)	Yes (1)	Yes (1)
Stormwater Discharge	No	No	No	No
Stormwater Construction	No	Yes	Yes	Yes
Shoreline	No	No	No	No
Wetlands	No	No	No	No
Miscellaneous				
New Bridges	None	2	1	1
Road Crossings	None	2	5	4
Cost				
Preliminary Estimated Construction Cost	\$0	\$1,490,000	\$1,470,000	\$1,340,000

Notes:

1. The numbers in parenthesis are the count of anticipated impacts under each criteria.



DG
DUFRESNE GROUP
 CONSULTING ENGINEERS
 Suite 200, 66 Main Street,
 Springfield, Vermont 05156
 Tel: (802) 874-2204 Fax: (802) 874-2313
 Email: info@dufresne.com
 Home page: www.dufresne.com

Project # 7190003
 Project Mgr. N.R. JOHNSON
 Design C.M. HASKINS
 Drawn K.S. MENES
 Checked by N.R. JOHNSON
 Date JANUARY 2020
 Scale AS SHOWN
 Approved by C.M. HASKINS

FOR PROVISION FOR THIS PROJECT ONLY. NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

DUFRESNE GROUP ©

CHURCH STREET SIDEWALK SCOPING STUDY

PREFERRED ALTERNATIVE IMPACTS

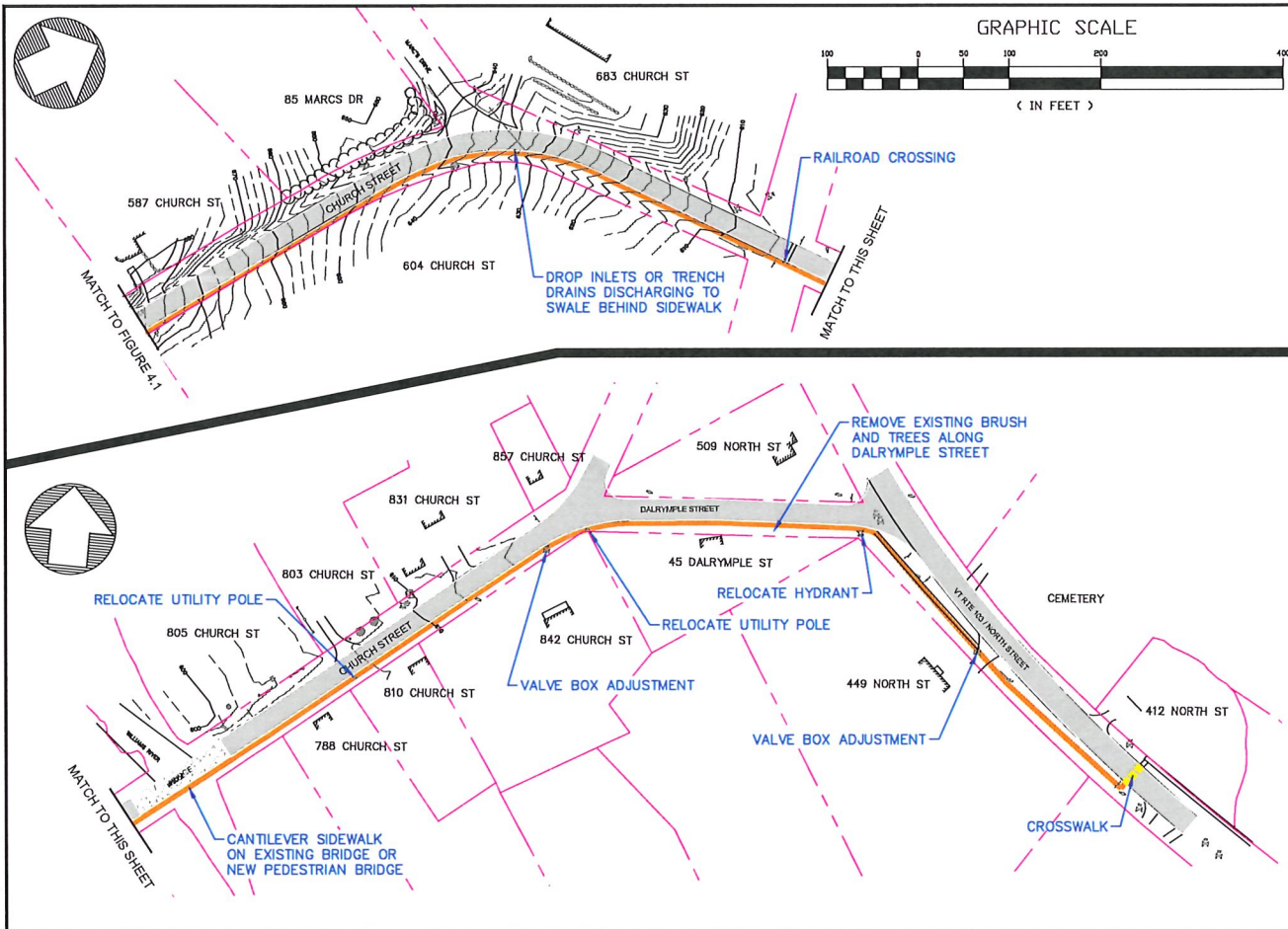
CHESTER, VERMONT

4.3

DWG. NO. Preferred.dwg
 SHEET 1 OF 1

FILE: H:\000 Files\Chester\Church Street\Preferred.dwg Jan 15, 2020 - 4:26pm

FILE: H:\0300 Files\Chester VT\Church Street\Preferred.dwg Jun 15, 2020 - 4:27pm



DG
DUFRESNE GROUP
 CONSULTING ENGINEERS
 Suite 200, 56 Main Street
 Springfield, Vermont 05156
 Tel: (802) 874-2924 Fax: (802) 874-2913
 E-mail: info@dg-engineers.com
 Home page: www.dg-engineers.com

Project #	710003
Project Mgr.	N.R. JOHNSON
Design	C.M. HASKINS
Drawn	K.S. MENEES
Checked by	N.R. JOHNSON
Date	JANUARY 2020
Scale	AS SHOWN
Approved by	C.M. HASKINS

WE WARRANT THAT THE PROJECT SHALL NOT BE BUILT OR OPERATED IN ANY MANNER THAT DEVIATES FROM THE DESIGN AND CONSTRUCTION DETAILS SHOWN ON ANY DRAWING AND THE STATE OF VERMONT SHALL NOT BE RESPONSIBLE FOR ANY SUCH VIOLATION.
 DUFRESNE GROUP ©

CHURCH STREET SIDEWALK SCOPING STUDY
**PREFERRED SIDEWALK
 DESIGN CONSIDERATIONS**
 CHESTER, VERMONT

4.4
 DWG NO Preferred.dwg
 SHEET 1 OF 1

The crossing at the Williams River will require a new pedestrian bridge, or a cantilever bridge off the existing bridge. A cantilever bridge would not require construction in the Williams River or its banks, as the construction would occur on the existing bridge. A new bridge would not impact the Williams River, but may impact the banks for the installation of footings. The new bridge would be constructed within the floodplain; however, it is not anticipated to modify existing elevations and therefore would not impact the flood elevation in this area.

There are no anticipated impacts to the two mapped Class 2 wetlands or wetland buffers along the Williams River. If a new pedestrian bridge is constructed, it would be located south of the existing bridge, but would be well outside the buffer of the mapped wetland to the south. There may be other, unmapped, wetlands along the Williams River. Additional investigations are recommended during final design to identify potential unmapped wetlands.

Topography Impacts:

There are no major topography impacts associated with the preferred alternative. There is one area near 554 Church Street where ledge removal is anticipated to lower the elevation to accommodate the proposed sidewalk.

Hazardous Site Remediation:

Approximately 480 feet of proposed sidewalk in the southern end of the project area is located in an Urban Soil Background Area, which means that excess soil removed from this portion of the project area must be utilized as fill within the same Urban Soil Background Area or disposed of as hazardous waste. If the material is utilized outside of the project area(s), the site(s) must be reviewed under the VTrans Off-Site Exemption Record. If a site does not qualify for an exemption, an Off-Site Activity Form must be submitted for review to the VTrans Environmental Section.

Based on preliminary calculations, the material to be removed from the project area would be approximately 90 cubic yards. It is possible that some of this material can be utilized on-site as fill behind the sidewalk. Any remaining material would need to be utilized within the Urban Soil Background Area (partially shown in Figure 2.4) or disposed of as hazardous waste.

Utility Impacts:

The preferred alternative may require the relocation of approximately 5 utility poles. The anticipated impact to the water system includes adjusting elevations on a few valve boxes and relocating one hydrant. There is no anticipated impact to the sewer system.

The largest utility impact is expected to be stormwater drainage. The preferred alternative will impact multiple drainage swales and sheet flow off the road. In order to address these impacts, multiple storm drain modifications will be necessary. It is anticipated that the hill north of Meadow Road will require a storm drain collection system with precast concrete catch basins and storm drain piping to replace the

drainage swale along the road. In other locations, it is anticipated that drop inlets could be installed to collect stormwater with a pipe daylighting behind the sidewalk. Trench drains under the sidewalk are another alternative in areas with limited elevation difference.

Archeological Impacts:

As previously noted in Section 2, there is low sensitivity in the study area for the presence of precontact and historic cultural resources and no further archeological investigation is recommended.

It is anticipated that small portions of the existing stone walls will need to be reset further away from the road to accommodate the sidewalk. These walls will be reset using the existing stones and match the existing walls with dry-laid methods.

Right-of-Way Impacts:

The proposed sidewalk would require both permanent and temporary easements from multiple parcels along the project area. The anticipated right-of-way impacts are summarized in Table 4.2. All of the anticipated permanent easements would be for minimal areas of property.

Table 4.2: Anticipated Right-of-Way Impacts

Property Address	Anticipated Temporary Easement	Anticipated Permanent Easement
340 Church Street	Yes	No
424 Church Street	Yes	No
454 Church Street	Yes	Yes
554 Church Street	Yes	No
604 Church Street	Yes	Yes
842 Church Street	Yes	Yes
45 Dalrymple Street	Yes	No

Permitting:

The permitting requirements for the proposed pedestrian facilities were previously presented in Table 4.1 and are further described below.

A stormwater discharge permit would not be required as the proposed improvements will increase impervious area by approximately 0.55 acres throughout the entire project area, which is well under the 1-acre threshold.

A stormwater construction general permit will be required if the total earth disturbance is 1 acre or more. The preliminary estimate for earth disturbance is just under 1 acre. The need for this permit will require further evaluation in the final design phase.

A stream alteration permit will be required for a new pedestrian bridge over the Williams River.

As the preferred alternative includes a railroad crossing and work within the railroad right-of-way, approval will be required from the railroad, including a Master Licensing Agreement.

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 will not change based on the preferred alternative. The travel lanes will remain the same width and any existing shoulder widths will be maintained. The majority of the preferred alternative alignment will have a cross section consisting of a 5-foot wide sidewalk directly adjacent to the road with granite curb, as shown in Figure 4.5. The section along North Street will match the existing conditions with a 5-foot wide sidewalk separated from the road by a grass edge zone, as shown in Figure 4.6. The grass edge zone should be a minimum of 3 feet wide.

Figure 4.5: Church Street & Dalrymple Street Sidewalk Cross Section

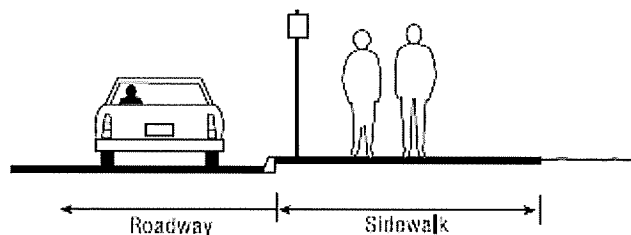
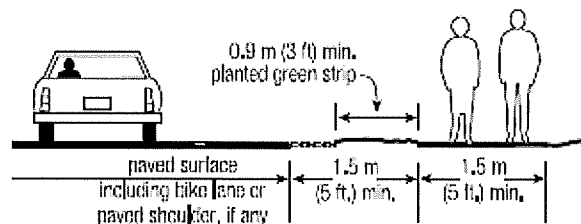


Figure 4.6: North Street Sidewalk Cross Section



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 \$1,340,000 in 2020 dollars, which includes a 25% contingency.

Table 4.3: Preliminary Construction Cost Estimate

Item Description	Quantity	Unit	Unit Price	Total Price
Clearing and Grubbing	1	LS	\$ 10,000.00	\$ 10,000.00
Removing Medium Trees	5	EA	\$ 1,252.00	\$ 6,260.00
Solid Rock Excavation	60	CY	\$ 125.00	\$ 7,500.00
Bituminous Concrete Pavement	225	TON	\$ 160.00	\$ 36,000.00
18" HDPE Storm Drain	1000	LF	\$ 80.00	\$ 80,000.00
Precast Concrete Drop Inlet	15	EA	\$ 3,500.00	\$ 52,500.00
Precast Concrete Catch Basin	4	EA	\$ 3,800.00	\$ 15,200.00
Detectable Warning Surface	90	SF	\$ 50.00	\$ 4,500.00
Adjust Elevation of Valve Box	2	EA	\$ 215.00	\$ 430.00
Relocate Hydrant	1	EA	\$ 3,900.00	\$ 3,900.00
Durable Crosswalk	105	LF	\$ 35.00	\$ 3,675.00
Signs	6	EA	\$ 300.00	\$ 1,800.00
Sign Post (12 ft high)	6	EA	\$ 300.00	\$ 1,800.00
Remove and Reset Sign	4	EA	\$ 325.00	\$ 1,300.00
Concrete Sidewalk	2570	SY	\$ 90.00	\$ 231,300.00
Granite Curb	3690	LF	\$ 45.00	\$ 166,050.00
Repair Stone Retaining Walls	150	LF	\$ 130.00	\$ 19,500.00
Pedestrian Bridge	1	LS	\$ 170,000.00	\$ 170,000.00
Flaggers	2200	MHRS	\$ 35.00	\$ 77,000.00
Railroad Flaggers	1	LS	\$ 5,000.00	\$ 5,000.00
Traffic Control	1	LS	\$ 20,000.00	\$ 20,000.00
Restoration	1	LS	\$ 15,000.00	\$ 15,000.00
Mobilization/Demobilization	1	LS	\$ 141,000.00	\$ 141,000.00
SubTotal Construction Cost				\$ 1,070,000.00
Contingencies (25%)				\$ 270,000.00
Total Construction Cost (2020)				\$ 1,340,000.00

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 11392 when the cost estimate was completed in January 2020.

Table 4.4 presents the total project costs for the preferred alternative. The construction cost is estimated at \$1,340,000 based on construction in 2020. However, if design is started in 2020, the project will not likely reach construction until 2024. As such, the construction cost estimate has been inflated at 3% per year. Therefore, for planning purposes the total project cost is estimated at \$2,180,000 based on construction costs of \$1,510,000 in 2024.

Table 4.4: Preliminary Total Project Cost

DESCRIPTION	TOTAL COST
Construction Cost (2020) with 25% Contingency	\$1,340,000
Construction Cost (2024) with 25% Contingency	\$1,510,000
Engineering:	
Design Phase Engineering	\$230,000
Construction Phase Engineering	\$230,000
Local Project Management	\$210,000
Right-of-Way	\$10,000
Total Project Cost (2024)	\$2,180,000

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. Right-of-way costs are estimated based on similar sized projects.

**SECTION 5
FISCAL IMPLEMENTATION
CHURCH STREET SIDEWALK SCOPING STUDY
CHESTER, VT**

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

- 4,410 feet of new 5-foot wide concrete sidewalk
- 3,670 feet of new granite curb
- 120-foot long steel girder pedestrian bridge with concrete footings
- 700 feet of 18-inch storm drain with precast concrete catch basins
- Approximately 15 drainage structures (drop inlets with pipe or trench drains) daylighting behind the sidewalk

The estimated total project cost for these improvements is \$2,180,000 based on a 2024 construction cost estimate of \$1,510,000. The construction costs were inflated by 3% per year to estimate construction costs in the future, with non-construction costs increased accordingly.

Funding Alternatives

The Town of Chester 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 June.

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. Grant applications are accepted annually and are generally due in November.

Phasing Considerations

A project of this size would typically be constructed in phases in order to take advantage of multiple rounds of funding. The purpose of this project is to create a new loop connecting multiple village areas. Since there are no existing pedestrian facilities to tie

into, there are no logical stopping points for phasing that would allow pedestrians to continue to their destination. If the project were phased, pedestrians would be directed back into the road at the end of a particular phase to continue along the loop. As such, phasing is not recommended for this project.

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 2020.

Table 5.2: Proposed Phase 1 Project Schedule

Project Task	Date
Receive Approval of Scoping Study	March 2020
Town Approval of Grant Application	May 2020
Submit Grant Application	June 2020
Receive Notice of Grant Award	September 2020
Grant Agreement Executed	December 2020
Procurement for Design Services	January 2021
Design of Phase 1 Improvements	2021-2024
Construction of Phase 1 Improvements	2024

APPENDIX

- A. ARA Report
- B. Local Concerns Meeting Minutes
- C. Alternatives Presentation Meeting Minutes (to be added)
- D. Final Presentation Meeting Minutes (to be added)

ARCHEOLOGICAL RESOURCE ASSESSMENT

Church Street Sidewalk Project

Town of Chester
Windsor County, Vermont

5413.11

Submitted to:

Naomi R. Johnson, P.E.
Dufresne Group Consulting Engineers
56 Main Street, Suite 200
Springfield, Vermont 05156
p. 802.674.2904
e. njohnson@dufresnegroup.com

Prepared by:

Hartgen Archeological Associates, Inc.
P.O. Box 81
Putney, Vermont 05346
p +1 802 387 6020
f +1 802 387 8524
e emanning@hartgen.com

www.hartgen.com

An ACRA Member Firm
www.acra-crm.org

November 2019

Church Street Bicycle and Pedestrian Scoping Study
Town of Chester, Windsor County, Vermont
Archeological Resource Assessment HAA 5413.11

MANAGEMENT SUMMARY

Involved State and Federal Agencies: *Vermont Agency of Transportation (VTTrans)*
Phase of Survey: *Archeological Resource Assessment*

LOCATION INFORMATION

Municipality: *Town of Chester*
County: *Windsor*

SURVEY AREA

Length: *Approximately 4,800 feet (1463 m)*
Width: *50 feet (15 m)*
Area: *The Study Area measures approximately 0.52 Acres (0.21 ha) in area*

RESULTS OF RESEARCH

Precontact Archeological sites within one mile: *None*
Historic Archeological sites within one mile: *Two*
Precontact Sensitivity: *Low Sensitivity*
Historic Sensitivity: *Low Sensitivity*

RECOMMENDATIONS

The Area of Potential Effect (APE) is considered to have low sensitivity for the presence of precontact and historic cultural resources. This assessment is based on the presence of sloping terrain and previous disturbance, most notably the presence of existing sidewalk along sections of the proposed alignment, as well as drainage trenches, driveways, utilities and utility poles. No further archeological investigation is recommended for the Church Street Bicycle and Pedestrian project area as presently proposed. This report and recommendations should be submitted to VTTrans for review and concurrence.

Date of Report: *October 2019*

ARCHEOLOGICAL RESOURCE ASSESSMENT

Introduction

Hartgen Archeological Associates, Inc. (Hartgen) was retained by Dufresne Group to conduct an Archeological Resource Assessment (ARA) for the proposed construction of a sidewalk/multi-use path along Church Street, located in Chester, Windsor County, Vermont (Map 1). The Town of Chester has received funding from the State of Vermont, Bicycle and Pedestrian Program to identify issues with construction of a sidewalk/walking path to connect the Main Street sidewalk in the Village Center with the North Street Sidewalk in the Stone Village (Map 2). The proposed cultural resources investigation is required according to Section 106 of the National Historic Preservation Act. The report will be reviewed by the Vermont Agency of Transportation (VTrans).

VTrans requires that all projects under archeological review have a clearly defined area of potential effects (APE) that includes all areas where ground disturbance is proposed and areas that may be affected temporarily or unintentionally, such as staging areas and rights-of-way. Based on the proposed effects listed above, the present study area measures approximately 4,800 feet (1463 m) in length and 50 feet (15 m) in width, resulting in an APE of approximately 0.55 acres (0.22 ha). Hartgen undertook an archeological site file search and background research, and conducted a site reconnaissance of the project area in order to complete the ARA.

Environmental Background

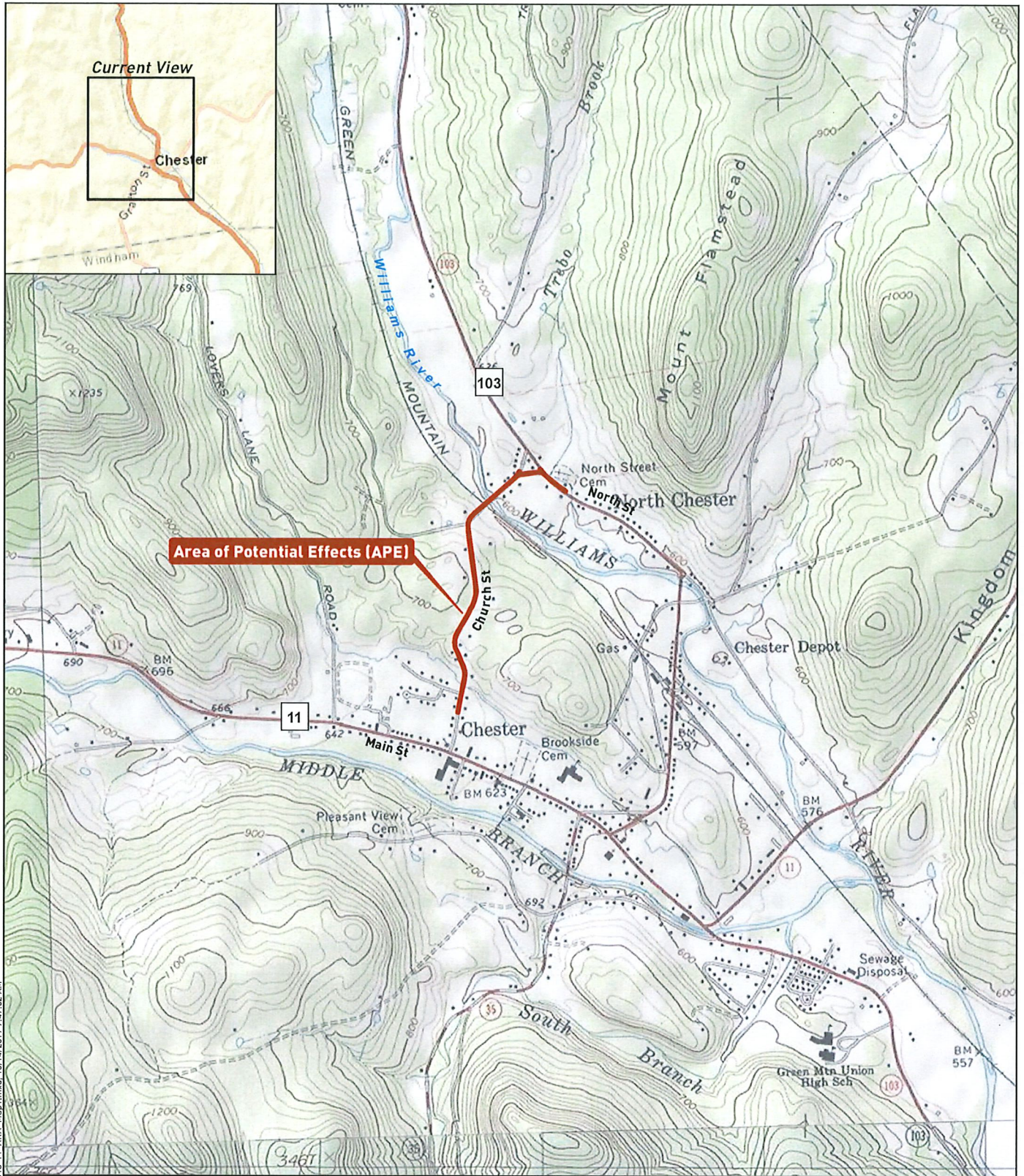
The ARA objectives are to examine areas of archeological sensitivity based on environmental factors, known site information and historical information for the project APE and the general vicinity as appropriate. A site visit was conducted to observe present land use, photograph existing conditions within the project area, and identify areas of disturbance and areas of archeological sensitivity.

The environment of an area is significant for determining the sensitivity of the project area for archeological resources. Precontact and historic groups often favored level, well-drained areas near wetlands and waterways. Therefore, topography, proximity to wetlands, and soils are examined to determine if there are landforms in the project area that are likely to contain archeological resources. Soil surveys provide a general characterization of the types and depths of soils that are found in an area. This information is an important factor in determining the appropriate methodology if and when a field effort is required. Soil conditions can provide a clue to past climatic conditions, as well as changes in local hydrology.

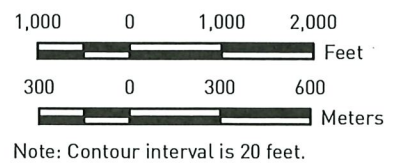
The project area is located on the eastern edge of the Green Mountain physiographic region, and ranges in elevation from approximately 600 feet (183 m) above mean sea level (amsl) at the north and south ends of the project alignment to a height of 680 feet (207 m) in the central section of Church Street. Chester, situated within a triangular river valley of sorts, bordered by the North Branch of the Williams River to the north and east and the Middle Branch of the Williams River to the south and west, is surrounded by steep sided hills and mountains. To the south, east and north are mountains that tower over the town, including Mt. Flamstead which rises to a height of over 1,100 feet (335 m) amsl directly north of North Chester. Even larger mountains are present northwest of town, including Butternut Hill and Ingraham Hill which rise to heights of 1,715 feet (523 m) and 1,948 feet (594 m) amsl, respectively.

The project alignment is directly adjacent to, or crosses over, three separate waterways – Trebb Brook, the Williams River and Lovers Lane Brook. At the northern end of the project alignment, Trebb Brook is located directly adjacent to North Street Cemetery on Route 103 (North Street). A bridge on Church Street spans the Williams River only a few hundred feet south of the Route 103 intersection. A tributary of the Middle Branch, Lovers Lane Brook, flows under the bridge near the southern end of the project APE.

Church Street Bicycle and Pedestrian Scoping Study, Town of Chester, Windsor County, Vermont
 Archeological Resource Assessment



E:\5413\GIS\Documents\HAA_5413-11_ARA_Map1.mxd, 10/14/2019 9:47:52 AM



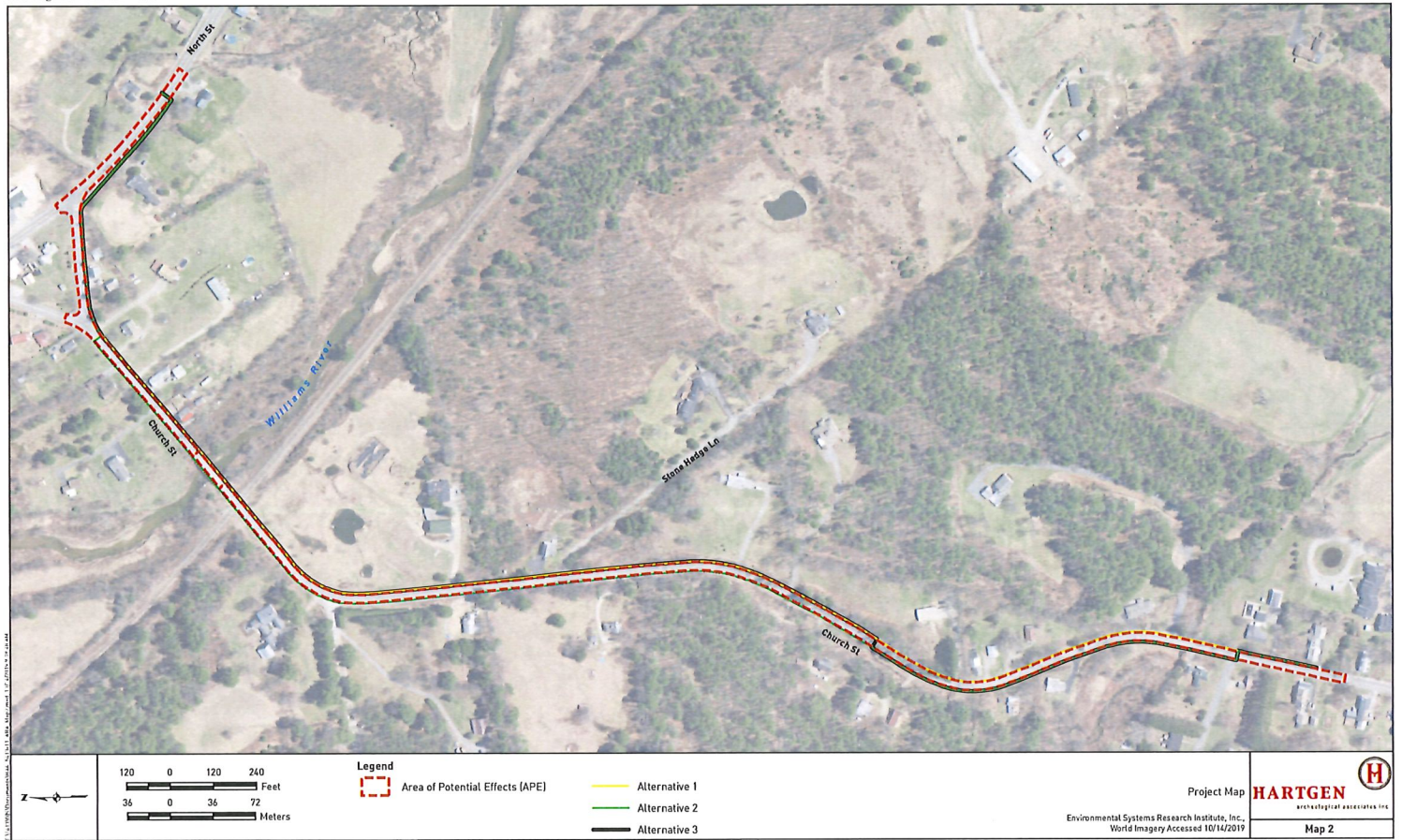
Project Location

GIS Services Accessed 10/14/2019:
 Environmental Systems Research
 Institute, Inc., World Street Map; National
 Geographic Society USA Topo Maps Layer



HARTGEN
 archeological associates inc

Map 1



The project area contains eight soil types which are related to slope and distance to waterways. The soils at the northern end of the project area, extending from North Street southward on Church Street to the Williams River, are characterized as – Urban land – Colton-Croghan complex, 0-8 per cent slopes (NRCS 2019). This soil type is derived from glaciofluvial deposits located on outwash terraces. Urban land complexes are soils that are extensively influenced by human activity, and are often disturbed through construction and landscaping. The southern side of the Williams River is defined as Croghan and Sheepscot fine sand loam. Four different soil types are found on the slopes in the central and southern portions of the project area, including: Adams loam sand, Peru-Skerry and Colonial soils, and Monadnock and Berkshire soils all at 8-15% slopes and Colton gravelly sand loam 15-25% slopes.

DOCUMENTARY RESEARCH

Precontact Research and Sensitivity

There are no known precontact archeological sites listed in the Vermont Archeological Inventory located within six miles of the project area. The paucity of known precontact sites in the project vicinity is quite likely a result of limited amount of archeological testing rather than the absence of sites, as the Williams River and its many tributaries provide many areas that would have been attractive for precontact occupation.

Completion of the Vermont Division for Historic Preservation (VDHP) predictive model form yields an overall score of 28 for the project area, with a score of 32 or above indicating archeological sensitivity for precontact sites (Appendix 1). The project area received points based on its location within a travel corridor, situated directly adjacent to the Williams River, and Trebb Brook and Lovers Lane Brook, near their confluence with the Williams River. Intact level terraces adjacent to the waterway would be considered to have precontact sensitivity.

There is one level terrace adjacent to Trebb Brook just south of the North Street Cemetery, which, if undisturbed, would have a high sensitivity for precontact resources. However, as noted below in the discussion of historic context, the area has been the site of several historic structures which have been razed or removed, and the area leveled and landscaped. Therefore, this terrace is considered to be disturbed and therefore have a low precontact sensitivity.

The total project also received negative points (-32) for the presence of steep slope and disturbance. The remainder of the areas directly adjacent to the proposed sidewalk alignment are considered to have very low sensitivity for the presence of precontact cultural material. This is based on the presence of sloping terrain, and previously disturbed soils from sidewalk, driveway and road construction, as well as the presence of man-made drainage ditches, utility poles and utilities.

Historic Research

A site file search and review of historic maps of the project area was conducted to attain an overview of the changing historical and environmental landscape within the project area.

Archeological Sites, Cemeteries and National Register Sites

There are two documented historic archeological sites listed on the Vermont Archeological Inventory (VAI) located approximately 3,000 feet to the southeast, in Chester Depot. The Dawson Grist Mill (VT-WN-190) site contains a standing grist mill structure, stone and wood crib-work and dam remnants, and stone mill pond retaining walls. Although portions of this large industrial site, which measures 722 by 197 ft (220 m by 60 m) in area, have been altered, it preserves intact construction features and a large standing structure. The Ippolito Site (VT-WN-191) contains a standing historic domestic structure. Both of these sites may retain intact historic archeological deposits.

The North Street Cemetery is located adjacent to Trebb Brook at the northern end of the project area near the intersection of Route 103 and Church Street. The cemetery, which is still in use, was established in 1816. Over 450 graves are present within the cemetery, which is described as being in excellent condition (Hyde and Hyde 1991). Directly adjacent to Route 103, the cemetery parcel contains a manicured and landscaped lawn which slopes down to Trebb Brook. The main portion of the cemetery is located north of Trebb Brook.

Historic Maps

The study of historic maps included identifying historic structures that may or may no longer be extant, alterations to road and rail systems, and changes in stream and river courses in the project vicinity, and the names of the residents who lived there in those years. The 1856 Doton maps and the 1869 Beers map offer a glimpse of the development of this portion of Chester and North Chester in the second and third quarters of the 19th century (Maps 3a, 3b and 4).

The 1856 Doton close-up map of North Chester shows great detail at the northern end of the project alignment, including the location of the North Street Cemetery on the north side of Trebb Brook. South of the brook and cemetery, a blacksmith shop is shown on the north side of the road, which was identified at that time as Main Street (Map 3a).

The 1856 Doton map of the Town of Chester shows the entire Church Road project alignment in detail (Map 3b). Only one structure, the residence of D.H. Hilton is located on the southern or central portion of Church Street. The map shows Church Street traversed by the Rutland and Burlington Railroad just south of the Williams River. Structures shown at the northern end of the alignment include the home of P.O. Sargeant on the west side of the railroad, and a grist mill located between the railroad and the river. Several houses, owned by various members of the Smith family, are shown located between the river and the triangular roadway alignment near the North Street intersection.

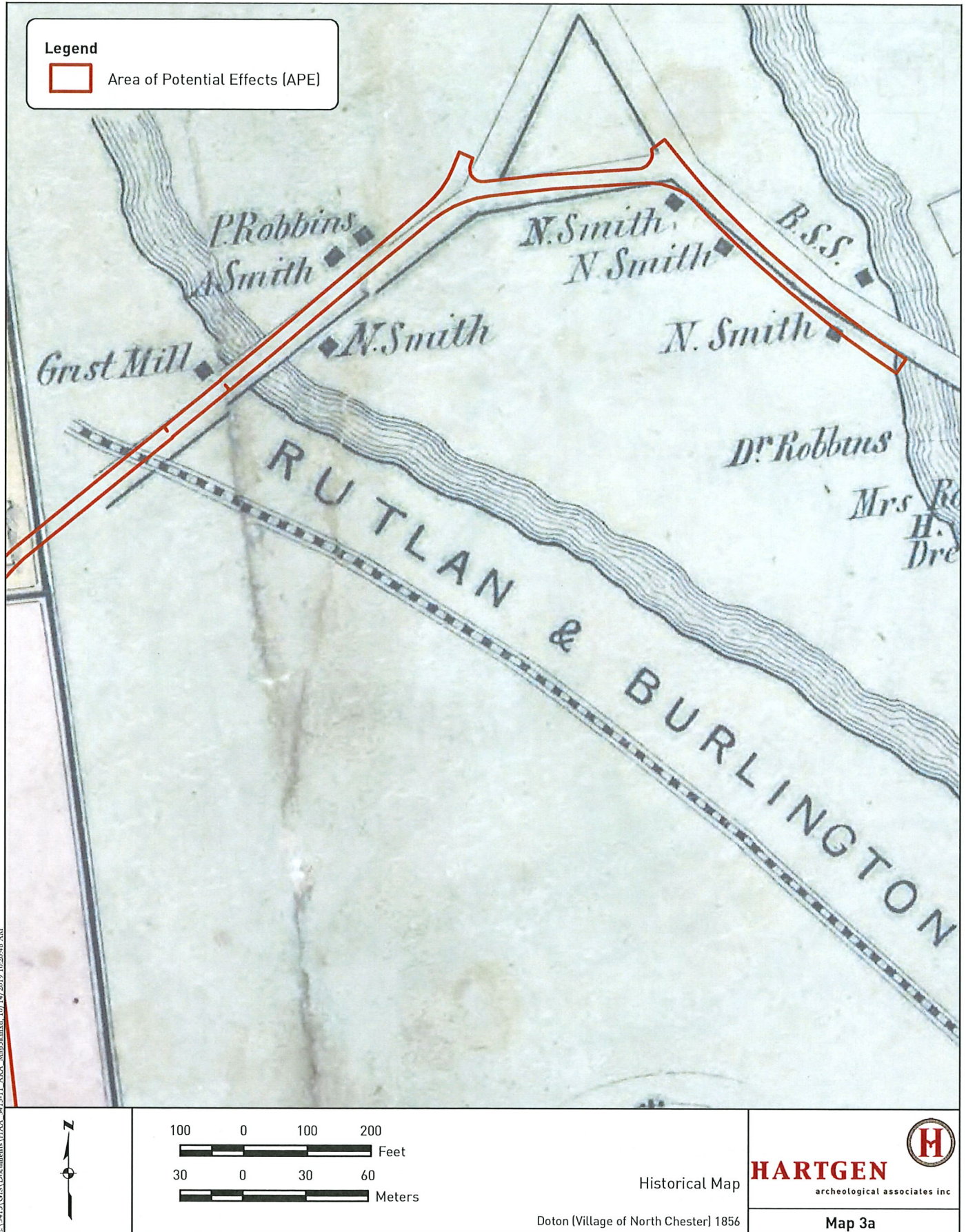
The 1869 Beers map depicts even more detail about house size and alignment of the structures located in North Chester (Map 4). This map shows some changes from the 1856 map, including the name of North Street, and the construction of the large residence of E. Collins in the approximate location of the blacksmith shop that was previously located south of Trebb Brook. The grist mill that was located south of the North Branch of the Williams River is not shown. The greatest difference between the 1856 and 1869 maps is the depiction of a rectangular Common where a triangular set of roads had been shown on the 1856 map. It is unclear whether in 1869 a town common had been planned at this locale, and was depicted on this map. However, it is unlikely that this common existed in this rectangular configuration, as the triangular road configuration shown on the 1856 map is the same as the modern day configuration of roads.

CONCLUSIONS AND RECOMMENDATIONS

A site visit was made to study existing conditions within the project area including present land use and evidence of prior disturbance. Photographs were taken which characterize the project alignment. Photographs illustrate the typical streetscapes along the project alignment, presented from the south end of the APE to the north (Photos 1-12).

Historic Sensitivity

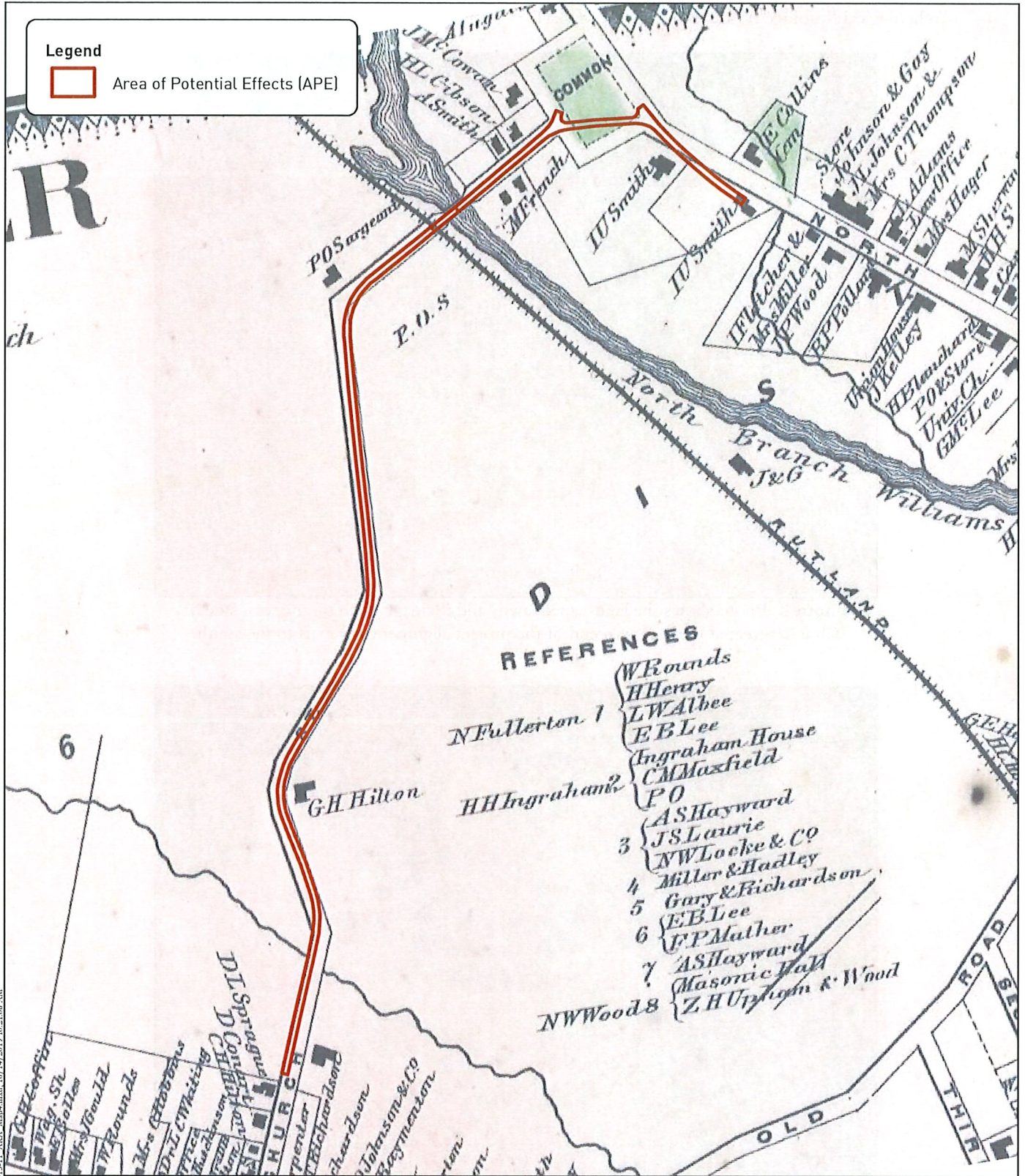
The Church Street project area is somewhat varied in character, with a rural residential street with widely spaced 19th and early-20th century houses, bordered to the south and north by small mid-20th century neighborhoods. The 20th century neighborhoods exhibit man-made gullies and manicured lawns, likely created through landscaping during the establishment of roads and house lots (Photos 1 and 2). On the south side of Lovers Lane Brook, the terrain is characterized as sloping and/or disturbed (Photo 3). The central portion of the project area exhibits slope along the Church Street roadway, slope leading up to higher



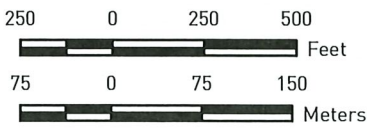
E:\5413\GIS\Documents\FAA_5413-1-AREA_Map3a.mxd, 10/14/2019 10:20:46 AM



E:\1413 GIS\Documents\HAA_5413-11_AEA_Map3b.mxd, 10/14/2019 10:20:20 AM



E:\1413\GIS\Documents\HAA_4413\1_ABA_Map4.mxd, 10/14/2010 10:21:08 AM



Historical Map

Beers 1869

HARTGEN
 archeological associates inc

Map 4



Photo 1. Photo shows the landscaped lawns and drainage ditch on the west side of Church Street at the southern end of the project alignment. View is to the south.



Photo 2. Photo shows the landscaped lawns, driveways and utility poles on the east side of Church Street at the southern end of the project alignment. View is to the south.



Photo 3. Photo shows the drainage ditch and fill on the east side of Church Street directly south of the Lovers Lane bridge. The bridge railings are visible on the left. The upward slope of Church Street is visible in the background. View is to the north.

ground where domestic structures are located, and which contains man-made gullies and drainages (Photo 4 and 5). Several sections of historic stone walls were noted along the east side of Church Street (Photo 6). Further to the north, Church Street slopes down to the railroad and the Williams River valley (Photo 7). Areas directly adjacent to the Williams River and the bridge spanning it exhibit moderate to steep slope (Photo 8). On the north side of the Williams River, the Church Street project area is characterized as containing grass lawns with drainage gullies, driveways and utilities (Photo 9).

The North Street portion of the project area contains an imposing 19th century structure on the south side of the street, in front of which is an existing sidewalk, as well as a grass lawn with granite boundary markers (Photos 10 and 11). On the north side of North Street is a manicured/landscaped parcel located directly adjacent to Trebb Brook and the North Street Cemetery (Photo 12). This small terrace had been the site of a blacksmith shop and a larger residence in the mid to late 19th century, as indicated by historic maps

The historic sensitivity of an area is based primarily on proximity to previously documented historic archeological sites and map-documented structures. While the project alignment is situated near many historic structures, predominantly dating to the mid to late 19th century, the proposed sidewalk will be located in the front yards of these structures. Historic features associated with 19th-century domestic structures, such as outbuildings, wells and privies were traditionally located in back yards, not in the front yard, within public view. Therefore, the historic sensitivity of the project area is considered to be low.



Photo 4. Photo shows Church Street at the top of the rise. Note the grass slope on the lawns leading up to the residences. View is to the north.



Photo 5. Photo shows stone drainage feature and gully on the upper portion of Church Street. View is to the north.



Photo 6. Photo shows historic stone wall located on the top of the hill on the east side of Church Street. View is to the east.



Photo 7. Photo shows the slope leading down to the railroad and Williams River valley. The railing of the bridge over the Williams River is visible in the foreground. View is to the southwest.



Photo 8. Photo shows the road fill and sloping ground on the northwest quadrant of the bridge over the Williams River. A train traversing the Rutland and Burlington Railroad is visible in the background. View is to the southwest.



Photo 9. Photo shows the streetscape on the east side of Church Street directly north of the bridge crossing the Williams River. View is to the southwest.



Photo 10. Photo shows the intersection of Church and North Streets. Note the existing sidewalk on the south side of North Street. View is to the west.



Photo 11. Photo shows the south side of North Street in front of a 19th century structure. Note the leveled ground surface adjacent to the roadway and the granite markers on the sloping lawn leading up to the historic house. View is to the east.



Photo 12. Photo shows lawn on the north side of North Street, directly adjacent to Trebb Brook and the North Street Cemetery. The grass parcel had been the location of a blacksmith shop in the mid-19th century, which was replaced by a later 19th-century residence, no longer extant. View is to the northeast.

Precontact Sensitivity

The ground surface/terrain directly adjacent to two of the three waterways in the project area— Lovers Lane Brook and the North Branch of the Williams River - exhibits slope or disturbance. Therefore, the precontact sensitivity is considered to be low.

The North Street portion of the project area contains the cemetery on the north side of the road and a 19th century structure on the south side. The area directly adjacent to Trebb Brook, the third waterway in the APE, is a relatively level grass lawn area which had been the previous location of a blacksmith shop, and later, a large 19th century residence (Photo 12). It is likely that this area has been impacted by historic development, and exhibits a low precontact sensitivity.

The remaining areas directly adjacent to the proposed sidewalk are considered to have low sensitivity for the presence of precontact cultural resources. This is based on the presence of sloping terrain, and previous disturbance, most notably, the presence of some existing sidewalks, driveways, utilities and utility poles.

Recommendations

No further archeological investigation is recommended for the Church Street sidewalk project as presently proposed.

BIBLIOGRAPHY

Beers, F.W.

1869 *Atlas of Windsor County, Vermont*. F.W. Beers, A. D. Ellis & G. G. Soule & Co., New York.

Doton, Hosea

1856 *Map of Windsor County, Vermont*. Hosea Doton, Pomfret, Vermont.

Hyde, Arthur L. and Frances P. Hyde, editors

1991 *Burial Grounds of Vermont*. Published by The Vermont Old Cemetery Association, Bradford, VT.

United States Department of Agriculture (USDA)

2018 Web Soil Survey 2.0, National Cooperative Soil Survey.

<http://websoilsurvey.nrcs.usda.gov/app/>United States Geological Survey (USGS)

United States Geological Survey (USGS)

1929 *Ludlow, Vermont 15' Topographic Quadrangle, NH-VT*. U.S. Government Printing Office, Washington, D.C.

Vermont Division for Historic Preservation (VDHP)

2017 Guidelines for Conducting Archeology in Vermont. The Vermont State Historic Preservation Office, Montpelier, VT.

Church Street Bicycle and Pedestrian Scoping Study
Town of Chester, Windsor County, Vermont
Archeological Resource Assessment HAA 5413.11

APPENDIX I: VDHP Predictive Model

VERMONT DIVISION FOR HISTORIC PRESERVATION
Environmental Predictive Model for Locating Pre-contact Archaeological Sites

Project Name Church Street
 DHP No.

County Windsor
 Map No. Staff Init.

Town Chester
 Date 9/2019

Additional Information

Environmental Variable	Proximity	Value	Assigned Score
A. RIVERS and STREAMS (EXISTING or RELICT):			
1) Distance to River or Permanent Stream (measured from top of bank)	0- 90 m	12	36
	90- 180 m	6	
2) Distance to Intermittent Stream	0- 90 m	8	12
	90-180 m	4	
3) Confluence of River/River or River/Stream	0-90 m	12	12
	90 –180 m	6	
4) Confluence of Intermittent Streams	0 – 90 m	8	12
	90 – 180 m	4	
5) Falls or Rapids	0 – 90 m	8	12
	90 – 180 m	4	
6) Head of Draw	0 – 90 m	8	12
	90 – 180 m	4	
7) Major Floodplain/Alluvial Terrace		32	
8) Knoll or swamp island		32	
9) Stable Riverine Island		32	
B. LAKES and PONDS (EXISTING or RELICT):			
10) Distance to Pond or Lake	0- 90 m	12	12
	90 -180 m	6	
11) Confluence of River or Stream	0-90 m	12	12
	90 –180 m	6	
12) Lake Cove/Peninsula/Head of Bay		12	
C. WETLANDS:			
13) Distance to Wetland (wetland > one acre in size)	0- 90 m	12	12
	90 -180 m	6	
14) Knoll or swamp island		32	
D. VALLEY EDGE and GLACIAL LAND FORMS:			
15) High elevated landform such as Knoll Top/Ridge Crest/ Promontory		12	
16) Valley edge features such as Kame/Outwash Terrace**		12	

17) Marine/Lake Delta Complex**		12	
18) Champlain Sea or Glacial Lake Shore Line**		32	
E. OTHER ENVIRONMENTAL FACTORS:			
19) Caves /Rockshelters		32	
20) <input checked="" type="checkbox"/> Natural Travel Corridor <input type="checkbox"/> Sole or important access to another drainage <input type="checkbox"/> Drainage divide		12	12
21) Existing or Relict Spring	0 – 90 m 90 – 180 m	8 4	
22) Potential or Apparent Prehistoric Quarry for stone procurement	0 – 180 m	32	
23)) Special Environmental or Natural Area, such as Milton aquifer, mountain top, etc. (these may be historic or prehistoric sacred or traditional site locations and prehistoric site types as well)		32	
F. OTHER HIGH SENSITIVITY FACTORS:			
24) High Likelihood of Burials		32	
25) High Recorded Site Density		32	
26) High likelihood of containing significant site based on recorded or archival data or oral tradition		32	
G. NEGATIVE FACTORS:			
27) Excessive Slope (>15%) or Steep Erosional Slope (>20)		- 32	-32
28) Previously disturbed land as evaluated by a qualified archeological professional or engineer based on coring, earlier as-built plans, or obvious surface evidence (such as a gravel pit)		- 32	
** refer to 1970 Surficial Geological Map of Vermont			
			Total Score: 28
Other Comments :			
0- 31 = Archeologically Non- Sensitive 32+ = Archeologically Sensitive			

TOWN OF CHESTER
BOARD OF SELECTMEN
SPECIAL MEETING

July 24, 2019
Minutes

PRESENT: Arne Jonynas; Heather Chase; Lee Gustafson; Leigh Dakin; David Pisha

VISITORS: Julie Hance; Shawn Cunningham; Karen Conway; Chris Conway; Rick Cloud; Ruth Stanton; Lee Whiting; Doug Morrison; Tom Elgan; Victoria Elgan; Naomi Johnson; Christina Haskins; Frank Esposito; Christine Esposito; Kathryn Frizzell-DeRosia; Mark Derosia; Evan Parks; Jim Houghton; Bill Dakin; Tory Spater; Tom Bock; Randall Wiggin; Sharon Sinclair; John Henry; Lillian Willis; David Willis; Sharon Huntley; Eva Ryan; Diane Ulbrich; Bob Ulbrich

The meeting was called to order at 6:30 p.m. by Arne Jonynas. There were no additions or deletions to the agenda.

1. PERMISSION TO USE TOWN PROPERTY:

Lee Whiting and Doug Morrison were present to request use of town property for the Wheels in the Field event. They indicated that the event will be the weekend prior to Columbus Day weekend. They are requesting to use the Pinnacle for the Scottish Trials and the portion near the information booth and Green for the Porsche event. They would like use for Friday and Saturday. They are hoping to park their bikes in a similar way to that of the Iron Ride this past weekend. Food will be cooked at the Green by the snowmobile club. Lee Whiting stated that there will be a cap of 120 people which was sold out last year.

A motion was made by Lee Gustafson to authorize use of the town property for the Wheels in the Field event on October 4-6. Seconded by Leigh Dakin. The motion passed.

It was noted that the cones will need to be set up on Saturday morning. They are hoping that the traffic cones and police contribution could be the same as for the Iron event.

2. LOCAL CONCERNS MEETING; CHURCH STREET SIDEWALK:

Naomi Johnson and Christina Haskins were present from Dufresne Group to discuss the scoping study for a sidewalk on Church Street. The power point is attached to these minutes.

Christina indicated that the scoping study for Church Street is a project that has come from the Master Plan process. The project begins at Main Street, continues up Church Street and down North Street for a small distance.

Diane Ulbrich stated that the primary concern on Church Street is traffic control. There are also tractor trailer trucks going over church street. Ruth Stanton mentioned that a stop sign is needed on Church Street near Dalyrumple Street. Tom Elgan indicated that there is a lot of traffic that drives very fast over Church Street.

Arne Jonynas indicated that pedestrian safety is a primary concern in this project. He agrees that “no truck traffic” signage could be enforced as well as speed limits. He further stated that a sidewalk over Church Street has been discussed many times over the years. The construction of the sidewalk would be several years in the future. However, the traffic and speed could be looked at now.

It was suggested to review speed limit sign locations. Leigh Dakin stated that she would like to know how we can address the weight limit on Church Street for tractor trailer trucks.

A suggestion was made to install speed bumps on Church Street. Jim Houghton stated that Lebanon has speed tables which are part of the street itself that are permanent and easier to plow. Evan Parks asked if benches could be incorporated into this plan so that people can have a place to sit as they walk.

A question was asked if data could be gathered from the radar sign that could be used. Chief Cloud indicated that it does. The average speed is 26 miles per hour. It was indicated that perhaps the radar sign could be moved to the Route 11 end of Church Street. Chief Cloud stated that he can spin the sign to catch the speeds as people are coming down the hill.

A request was made to establish a planned enforcement for the speed on Church Street. Heather Chase suggested that David Pisha and Chief Cloud get together to come up with a plan and report back to the Board. Leigh Dakin would like this plan to include enforcement of trucks, weight limits and no thru truck traffic.

Tory Spater stated that the concept of connecting the existing sidewalks would be a tremendous asset for the community. A request was made to maintain the integrity of the country setting of Church Street if a sidewalk is constructed.

3. APPROVE MINUTES:

A motion was made by Heather Chase to approve the minutes of the July 2, 2019 Special Selectboard meeting. Seconded by Lee Gustafson. The motion passed.

4. CITIZEN'S COMMENTS:

There were no citizen's comments.

5. OLD BUSINESS:

Gravel Extraction Project: David Pisha noted that the Noise Study has been completed. The Traffic Study is expected soon. Once these have been received, he will send the application to the Board for review.

EMS Building; David Pisha stated that the architect is reviewing multiple site plans for the project. They believe that site plan 2 would be the best option. The committee is still hoping for a fall vote.

David Pisha stated that the State came to do an inspection of the sewer plant today. He feels that the meeting and inspection went well. The state did indicate that treatment plants should be reviewed every 20 years.

6. YOSEMITE FEASIBILITY STUDY:

Lillian Willis was present on behalf of the Historic Preservation Committee. She presented a history of what has been taking place with Yosemite since the town took over the building. She also discussed the importance of the building to the community. Lillian Willis stated that the grant in 2018 was denied primarily due to the lack of a plan for a year round use and no plan for parking. Since then, she has spent a significant amount of time researching renovations that need to be done, spoken with experts and permitting authorities and met with Mark Wesner. When meeting with Mark Wesner, he indicated the steps that need to take place to create a true Feasibility Study for the building. She has also met with a structural engineer from out of state who will be sending a report of what he has found.

The Feasibility Study will go a long way toward moving the renovations and this project forward. The study will need to be done soon so that a parking solution can be determined prior to submitting a grant on October 1. Lillian Willis requested that the Board approve \$12,000 as soon as possible so that the Feasibility Study can be obtained sooner rather than later.

Arne Jonynas indicated that the \$12,000 has not been budgeted. He would prefer that this become a budgeted item in December. Arne Jonynas also stated that if the town proceeds with the Feasibility Study and the land is not given for parking, then the money is lost. Lillian Willis noted that there is interest in a land donation if the building is used for a fire museum. People want to see the Selectboard commit first.

Lee Gustafson suggested that the money would be better spent on the exterior of the building for preservation. Lillian Willis stated that she believes that it all goes together. Before the town can apply for the grant, a Feasibility Study needs to be done.

Heather Chase questioned the balance of the Revitalization budget to determine how much would be available. She also questioned the status of fund raising. Lillian Willis stated that she does not want to head up a capital campaign until the town puts forth more effort on preserving the building. Heather Chase indicated that she is proud of the efforts that the town has made towards this building. She also asked David Pisha to find out how much money the Historic Society has in their restoration fund to contribute towards this project.

Julie Hance will contact Mark Wesner to see if there are any areas in the estimate for the Feasibility Study that can be reduced in order to create a study that will help the grant application.

7. HIGHWAY SAFETY AUDIT:

Arne Jonynas stated that efforts have been made to review the speed at the high school. The Highway Safety Audit has been

A motion was made by Heather Chase to authorize Arne Jonynas to sign a letter to the Vermont Traffic Committee requesting a speed limit review. Seconded by Lee Gustafson. The motion passed.

The Board asked David Pisha to add this to the Old Business list so that we can keep track of accomplishing the other recommendations.

8. SIGN LOAN DOCUMENTS; LOADER:

A motion was made by Lee Gustafson to approve the loan documents in the amount of \$129,500 to purchase the loader. Seconded by Lee Gustafson. The motion passed.

9. APPOINTMENT TO EMS BUILDING COMMITTEE:

A motion was made by Heather Chase to appoint Chief Rick Cloud and Kirby Putnam to the EMS Building Committee. Seconded by Leigh Dakin. The motion passed.

10. FINANCIAL UPDATES:

General Fund: David Pisha stated that General Fund is operating similarly to last year. Revenue is up 7,000 over last year at this time. Expenses are up 98,000, due to public works and mud season. Lee Gustafson questioned the recreation line being up \$11,000. David will look into this.

In comparison to budget, the town is \$3,600 ahead of expectation. Expenses are up \$18,000. There are some internal factors such as timing which are affecting these numbers.

Lee Gustafson questioned the county taxes line. David Pisha responded that these are paid twice per year so often it is a timing issue in payment that distorts the percentages.

Water: David Pisha indicated that water is ahead due to rate increases. Contractual services is for the water project which is due for reimbursement. Overall the department is running on track. Heather questioned the status of increasing water rates. David Pisha believes that the rates are at the required 1%. This money will be used to pay the bond payment each year.

Sewer: David Pisha indicated that when comparing actual vs actual the sewer department is up slightly in revenue. Expenses are down slightly. Budget vs actual is down slightly in revenue.

David Pisha presented a graph on the solar farm earnings which goes back 2 years. It appears that the profitability is increasing slightly over time. After transferring to the Solar Farm, the town is still ahead in earnings. These earnings are being generated by 37.3% of the field's output. If the town owned the field, there is another 43% to be gained.

The board reviewed the smaller funds. The Chester Development Fund balance is up to a balance of \$380,000.

11. NEW BUSINESS/NEXT AGENDA:

It was agreed that Yosemite will be on the next agenda.

David Pisha stated that there will be a special meeting on August 29 for discussion scoping studies for State bridges.

Heather Chase would like to review the Health Officer role at a future meeting when Arne Jonynas is present.

Lee Gustafson stated that he would like to discuss Solar Field purchase, the Information booth and the Marijuana legislation at a future meeting.

12. ADJOURN:

A motion was made by Lee Gustafson to adjourn. Seconded by Heather Chase. The motion passed. The meeting adjourned at 8:35 p.m.

Julie Hance
Secretary of the Select Board

Ben Whalen
Clerk of the Selectboard

