

Scoping Study for
**PLAINFIELD LOWER VILLAGE
PEDESTRIAN IMPROVEMENTS**
STP BP15(16)
PLAINFIELD, VERMONT
July 18, 2017



Submitted to:
Town of Plainfield
P.O. Box 17
Plainfield, VT 05667

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PLAINFIELD, VERMONT
July 18, 2017

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**SECTION 1
SUMMARY
LOWER VILLAGE PEDESTRIAN IMPROVEMENTS STP BP15(16)
PLAINFIELD, VERMONT
July 18, 2017**

Summary:

The Town of Plainfield has been working towards developing a plan for completing a sidewalk network in both the Upper and Lower Village for several years. To continue their efforts to improve pedestrian safety in the Lower Village, the Town applied for and received funding from the Vermont Agency of Transportation (VTrans) Bicycle and Pedestrian Program. This program provided grant funds with a local match to complete this scoping study for the purpose of identifying alternatives, associated costs and selection of a preferred alternative to provide pedestrian improvements to complete the sidewalk network in the Lower Village – connecting the residences in the Lower Village to shops and facilities on Main Street and the Upper Village.

As part of the scoping study, the characteristics of the project area were reviewed including right-of-way width, roadway features, traffic data, historic/archaeological features, natural resources, and other environmental parameters.

There are three potential Class II and/or Class III wetland areas in the project area. Prior to construction of any improvements near the potential wetland areas identified in this study, a site visit with the Vermont Department of Environmental Conservation wetlands program should occur to determine permitting requirements.

An Archaeological Resource and Historical Preservation Assessment was completed for the project area. There are 9 structures in the project area that are on or eligible for listing on the National Register of Historic Places. Also, a small section of the project area lies within the Plainfield Village Historic District on the north end of Creamery Street.

Several public meetings were held during the development of the Scoping Study. A Local Concerns Meeting was conducted on June 13, 2016 to obtain input from the public on preferences, anticipated user groups and the purpose and need for the project. Based on this meeting, a draft Purpose and Need Statement was developed.

After the Local Concerns meeting, alternatives were developed based on design criteria and local input. Several detailed alternatives were developed to improve existing facilities and provide new pedestrian facilities on the Mill Street, Brook Road, and Creamery Street.

An Alternatives Presentation Meeting was held on December 12, 2016. The Purpose and Need Statement was reviewed and several alternatives were presented. The Purpose and Need Statement was approved and public comment forms were distributed to identify priority segments and the selection of a preferred alternative.

The Plainfield Sidewalk Committee met on January 12, 2017 to discuss the sidewalk Alternatives presented in this report. Priority segments were identified and a phased approach to construction was proposed. The three phases proposed by the Sidewalk Committee are as follows:

- Phase 1 – Construction of sidewalks on Mill street and Creamery Street. Installation of railing and relocate the utility pole on Main Street sidewalk.
- Phase 2 – Replacement of the deteriorating bridge on Brook Road.
- Phase 3 – Construction of sidewalks on Brook Road.

Two alternatives were presented by the committee to address how sidewalks may be incorporated on the south end of Creamery Street at the site of the historic barn that lies within the right-of-way, approximately one foot off the edge of the existing pavement. The first alternative is to end sidewalk installation at Hudson Avenue, therefore avoiding construction near the barn. The second alternative is to install the sidewalk alongside the barn following the road, narrowing to 4 feet at the barn, and widening the roadway to the east to accommodate the new sidewalk. Taking this into consideration, the sidewalk on Creamery Street has been broken into two cost estimates for the segments, one from Main Street to Brook Road and the second from Main Street to Hudson Avenue.

The study also reviewed alternatives for removal of a utility pole from the existing sidewalk on Main Street and installation of a railing along the sidewalk due to a steep drop-off.

**SECTION 2
EXISTING CONDITIONS
LOWER VILLAGE PEDESTRIAN IMPROVEMENTS STP BP15(16)
PLAINFIELD, VERMONT
July 18, 2017**

The existing conditions within the study area were reviewed to identify potential conflicts to the alternatives developed as part of the study. This review included the identification of natural and cultural resources, existing utilities, identification of any public lands or agricultural resources and review of the existing right-of-way.

Study Area

The Plainfield Lower Village lacks existing pedestrian facilities to provide a safe route for non-motorized transportation for residents. The project area includes approximately 0.35 miles of roadway, including the south end of Mill Street, Brook Road (from Mill Street to Creamery Street), Creamery Street and a small section of Main Street. A basemap of the project area is shown in Figure 2-1.

Land Uses

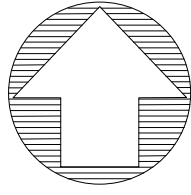
The land use throughout the project area is primarily residential. North of the project area lies Main Street with shops, restaurants, a park-and-ride, as well as the Town offices and a fire station. There was one apparent home business observed on Brook Road, but the majority of the land uses are residential.

Transportation Facilities

A summary of the existing pedestrian facilities and speed limits is included in Table 2-1.

Table 2-1
Existing Roadway Characteristics for Alternative Segments
Plainfield STP BP 15(16)
Plainfield, Vermont
February 16, 2017

Segment	Sidewalks	Roadway Characteristics	Paved Width (ft)	ROW Width	Speed limit (mph)
Mill Street	Approximately 700 ft. on east side	2 lanes	28	4 Rods (66')	25
Brook Road	None	2 lanes	22	3 Rods (49.5')	25
Creamery Street	Approximately 100 ft. on both sides of the road on the north end	2 lanes	25-32	3 Rods (49.5')	25



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Checked by	RED
Date	FEB 2017
Scale	AS SHOWN
Approved by	AJD

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SCOPING STUDY
PEDESTRIAN IMPROVEMENTS STP BP15(16)

PROJECT AREA

PLAINFIELD, VT

FIG 2-1

DWG. NO. Alt Map 1.dwg

SHEET 1 OF 1



PROPOSED NEW SIDEWALK AND PEDESTRIAN BRIDGE TO BE CONSTRUCTED AS SEPARATE PROJECT

STEEP EMBANKMENT AT BACK OF EXISTING SIDEWALK

UTILITY POLE LOCATED IN SIDEWALK

DETERIORATED 4' WIDE CONCRETE SIDEWALK

32' WIDE ROADWAY 25 MPH SPEED LIMIT

EXISTING 30" CMP CULVERT 2.5'-3.0' BELOW ROADWAY

APPROXIMATE LOCATION OF 8" WATER MAIN

PROJECT AREA

22' WIDE ROADWAY 25 MPH SPEED LIMIT


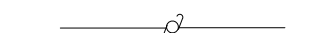



HISTORIC BARN WITHIN THE ROAD RIGHT-OF-WAY

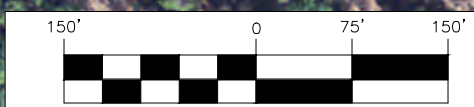
25' WIDE ROADWAY 25 MPH SPEED LIMIT

20.5' WIDE CONCRETE BRIDGE

PAST CONTAMINATED SITE - AST SPILL IN BASEMENT

LEGEND

-  EXISTING SIDEWALK
-  UTILITY POLE
-  EXISTING WATER MAIN
-  EXISTING SEWER MAIN
-  SEWER MANHOLE



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Great Brook crosses Brook Road through a 20.5-foot wide deteriorating concrete bridge. Replacement of the bridge is planned as a separate future project and is not included in the scope of this report. Construction of sidewalks on Brook Road will need to be coordinated with the bridge construction.

We reviewed VTrans data for high crash locations (HCL), compiled for the 2010-2014 period. There was one HCL identified within Plainfield on Route 2; there were no HCL identified within the project area.

Mill Street and Brook Road are both designated as functional class 8 (minor collectors) roads by the Vermont Agency of Transportation. The State of Vermont Design Standards for rural minor collector roads requires lane widths of 10 feet with shoulder widths of 3 feet for average daily traffic (ADT) volumes of up to 2,000 and design speeds of up to 50 miles per hour. The width of Brook Road was measured at 22 feet with widths of 20.5 feet observed at the bridge crossing. The minimum recommended paved shoulder width to accommodate shared use of rural collector roadways by bicycles is 2 feet in areas with speed limits up to 40 mph. This minimum width should be increased by 1 foot at bridges.

Creamery Street is considered a local street with recommended lane widths of 7 to 11 feet depending on conditions and traffic, as well as a 2-foot shoulder adjacent to curb based on the Vermont Design Standards for local streets. However, a minimum lane width of 10 feet is recommended to provide sufficient width for larger vehicles. The width of Creamery Street was measured at 32 feet at its widest point on the northern end and 25 feet at the narrowest point on the southern end. On-street parking is currently provided at the northern end of Creamery Street.

Natural and Cultural Resources

We compiled Geographic Information System (GIS) data available from the Agency of Natural Resources Center for Geographic Information to identify natural and cultural resources in the project area including the following:

Natural Resources

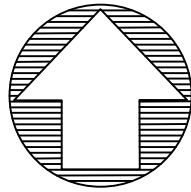
A. Wetlands

- 1) Three areas of potential wetlands were identified in the project area. Should work occur in these locations, a wetlands permit may be required. A site visit with a representative from the State of Vermont Watershed Management Division is recommended to determine permitting requirements for projects located within 50 feet of these areas. These potential wetland areas are shown in Figure 2-2.

B. Lakes/Ponds/Streams/Rivers (stormwater discharge and erosion/sediment control implications).

- 1) Great Brook meanders through the Lower Village and crosses Brook Road through a concrete bridge that is within the project limits.

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LEGEND

- PROJECT AREA
- FEMA FLOODPLAIN BOUNDARY
- HISTORIC DISTRICT BOUNDARY
- POTENTIAL WETLAND



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Project #	7160009
Project Mgr.	AJD
Design	AJD
Drawn	CWF
Checked by	RED
Date	OCT 2016
Scale	AS SHOWN
Approved by	AJD

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SCOPING STUDY
PEDESTRIAN IMPROVEMENTS STP BP15(16)
NATURAL AND CULTURAL RESOURCES
PLAINFIELD, VT

FIG 2-2

DWG. NO. Alt Map 1.dwg
SHEET 1 OF 1

- C. Floodplains
 - 1) The FEMA defined floodplain was shown to follow Great Brook and crosses Brook Road. Provisions will need to be made during design of these improvements to meet Town, State and Federal regulations to assure base flood elevation is not increased. The approximate location of the FEMA floodplain is shown in Figure 2-2.
- D. Endangered Species
 - 2) No endangered species were identified in the project area.
- E. Flora/Fauna
 - 3) No endangered flora/fauna was identified in the project area.
- F. Stormwater
 - 4) A construction stormwater permit will be required but can be simplified if the disturbed area will be less than one acre.
 - 5) A stormwater operational permit may be required once the disturbed area exceeds one acre.
- G. Hazardous Wastes
 - 6) There are no identified waste management areas in the project area. One spill site was identified on the Natural Resource Atlas, but that site has been closed.
- H. Forest Land
 - 7) There is no Forest Land identified in the project area.

Historic Resources

An evaluation of historic resources in the project area was performed by Catherine A. Quinn of the Consulting Archeology Program of the University of Vermont. A total of 9 structures were found to be on or eligible for listing on the National Register of Historic Places. A portion of the project area was also found to coincide with the Plainfield Village Historic District. Historic resources and the Village Historic District are shown previously in Figure 2-2. The Historic Resources Review is included in Appendix B.

A barn on Creamery Street is located approximately one foot off the road edge. The barn was identified as being a candidate for listing on the National Register of Historic Places.

Archeological Resources

An Archaeological Resource Assessment (ARA) was performed by Dr. Charles Knight of the UVM Consulting Archeology Program. The ARA found that all areas within the project alignment have been previously disturbed by historic activities and thus, all new activities will not disturb intact soils. These historic activities include water main trenching, bank stabilization, road leveling and filling and the existence of historic period structures. No additional archaeological study is needed as part of the Section 106 permitting review. The Archaeological Resources Assessment is included in Appendix C.

Public Lands and Agricultural Resources

No public lands or agricultural lands are anticipated to be impacted by the project. Project work should aim to remain in the right-of-way. Should construction need to

extend out of the right-of-way, plans should aim for the least amount of disturbance as possible. Once plans for improvements are developed, they should be provided to the Vermont Division for Historic Preservation for review.

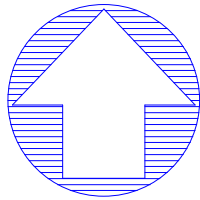
Right-of-Way

The public road right-of-way widths were researched by Shane Clark, PLS of Truline Land Surveyors, Inc. and are summarized in Table 2-2. All of the proposed alternatives fit within the right-of-way.

Table 2-2
Right-of-Way Summary
Plainfield STP BP 15(16)
Plainfield, Vermont
February 16, 2017

Street	ROW Width	Documentation
Mill Street/Barre Avenue (TH 1)	4 rods (66.0 feet)	Laid out as 4 rods wide (66.0 ft.) on May 30, 1812 as recorded in Town Records Book 1, Page 87 of the Plainfield Land Records.
Brook Road (TH 2)	3 rods (49.5 feet)	Laid out as 3 rods wide (49.5 ft.) on December 21, 1822 as recorded in Town Records Book 1, Page 143 of the Plainfield Land Records.
Hudson Avenue (TH 10)	2 rods (33.0 feet)	Laid out as 2 rods wide (33.0 ft.) on February 13, 1868 as recorded in Town Records Book 2, Page 172 of the Plainfield Land Records.
Creamery Street (TH 9)	3 rods (49.5)	Laid out as 3 rods wide (49.5 ft.) on June 8, 1868 as recorded in Town Records Book 2, Page 171 of the Plainfield Land Records.
Main Street (TH 3)	3 rods (49.5 feet)	No record layout was observed. An assumed width of 3 rods (49.5 ft.) is shown on (2) record surveys.

Temporary construction easements may be necessary and should be obtained during the design and construction phases of the project once limits of disturbance have been identified. If Federal Funding is used, the process to obtain easements or other real estate must follow the Uniform Act. In the event of conflicting information, the narrower right-of-way was assumed for the purposes of this project. Additional research and right-of-way work will be necessary during the design phase of the project. Figures showing property ownership in the project area are included as Figure 2-3.



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SCOPING STUDY
PEDESTRIAN IMPROVEMENTS STP BP15(16)

PROPERTY OWNERSHIP

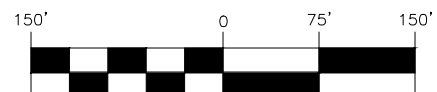
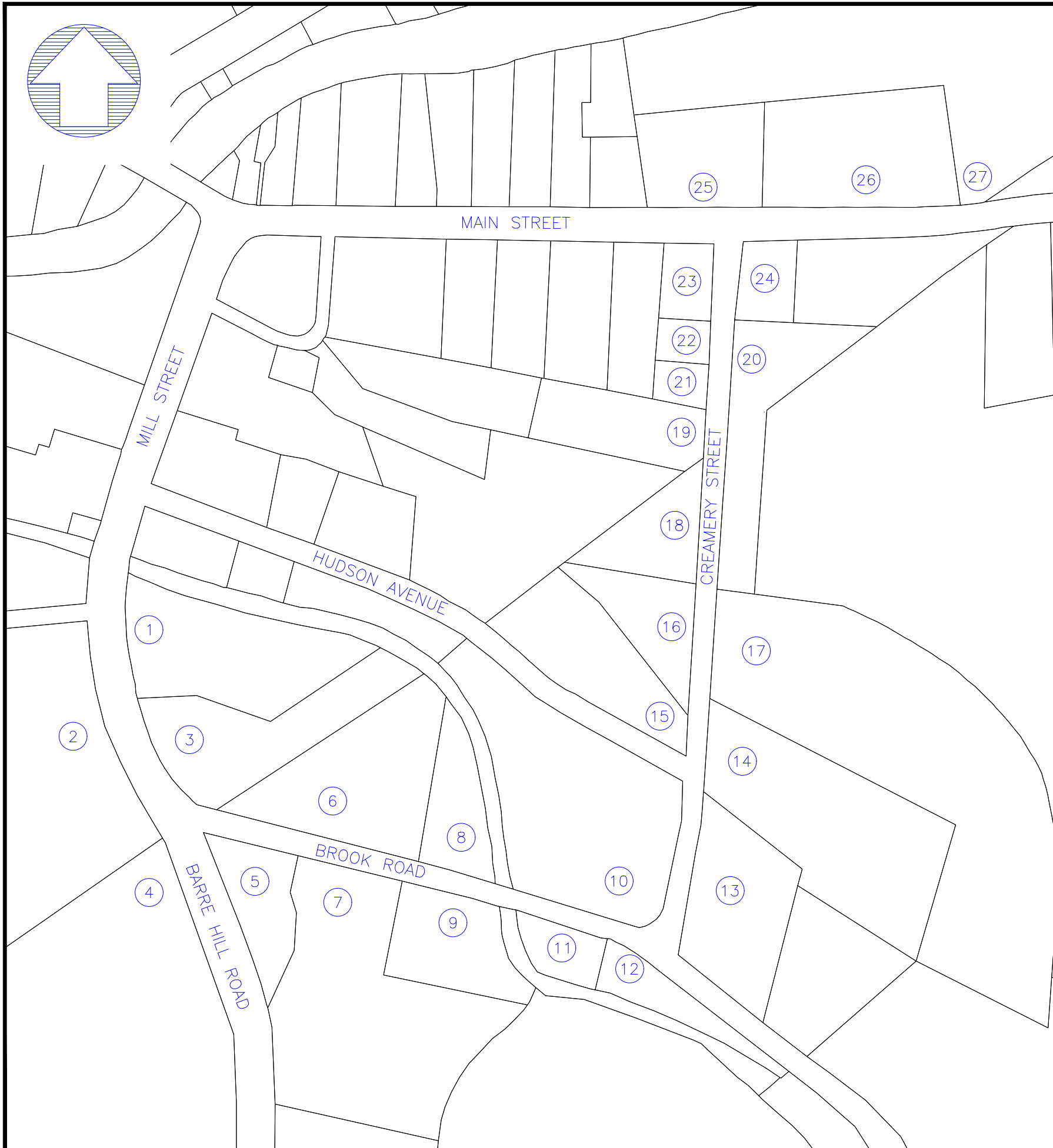
PLAINFIELD, VT

FIG 2-3

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SHEET 1 OF 1

NO.	OWNER	PARCEL ID NO.
1	JAMES GERSTMAN	025-0107
2	MILL STREET PLAINFIELD LLC	025-0110
3	ROBERT & KATHLEEN FANCHER	025-0133
4	JANICE LAMPHERE	005-0070
5	DOWNSTREET HOUSING	002-0010
6	DAVID LEE	002-0035
7	GEORGE CUSHING	002-0042
8	SUSAN ROSS	002-0065
9	ROBERT CASEY	002-0060
10	STEPHEN NEWHALL	002-0099
11	YOKO KISHISHITA	002-0100
12	SARA CADY	002-0118
13	DAVID DIAMANTIS	009-0175
14	ANDREA MIKSIC	009-0133
15	MICHAEL BILLINGSLEY	010-0123
16	JEFFREY RICHARDSON	009-0096
17	HEIDI WILSON	009-0113
18	JERI KEENAN	009-0078
19	GREGORY LIGHT	009-0056
20	CARSON LLC	009-0023
21	PHILIP & GIFFORD LEE	009-0042
22	EDWARD FOWLER	009-0030
23	MARY LANE	003-0162
24	RICHARD FLEURY	009-0013
25	TOWN OF PLAINFIELD	003-0169
26	MELINDA VIEUX	003-0191
27	TOWN OF PLAINFIELD	003-0165



Utilities

Overhead and underground utilities in the project area include the following:

1. The municipal sanitary sewer collection system serves the study area.
2. The municipal water distribution system serves the study area.
3. Numerous overhead electrical cable, TV, and communication lines exist throughout the study area.
4. Several storm drainage structures are located on Mill Street and Main Street, mostly sitting outside of the study area.
5. There is one culvert crossing identified on Creamery Street as shown previously on Figure 2-1.

The Town of Plainfield owns and operates the water and wastewater systems, therefore any conflicts with those utilities will be coordinated through the Town. Conflicts with utility poles in the project area can typically be reconciled by communicating with the utility provider, and in many cases, utility pole location is performed at no cost to the municipality. The utility poles in the project area are owned and maintained by Green Mountain Power. Relocation of hydrants and utility poles will be required for some sidewalk design alternatives.

**SECTION 3
PURPOSE AND NEED
LOWER VILLAGE PEDESTRIAN IMPROVEMENTS STP BP15(16)
PLAINFIELD, VERMONT
July 18, 2017**

Developing a Purpose and Need statement requires obtaining input from local citizens, and meeting with Town staff representatives. This task also includes reviewing characteristics of the area and reviewing local/regional plans to identify the relationships of the planned improvements to these plans.

Public Involvement

A Kick-Off Meeting was conducted on May 2, 2016 to discuss the project scope, schedule and roles of the project team.

A Local Concerns Meeting was held on June 13, 2016 to obtain input from the public on preferences, anticipated user groups, and the purpose and need for the project. Based on this meeting a draft Purpose and Need Statement was developed and segments were identified. Four written comments were received following the meeting (see Appendix A for public comment forms). Various other comments were received through social media online forums (Facebook, Front Porch Forum), and one comment was received by e-mail. The comments are included in Appendix A.

An Alternatives Presentation Meeting was held on December 12, 2016. The Purpose and Need Statement that was developed based on the Local Concerns Meeting was reviewed and approved and several alternatives were presented. Minutes and public comments from the Alternatives Presentation Meeting are included in Appendix A.

The Plainfield Sidewalk Committee met again on January 12, 2017 to discuss alternatives and choose preferred alternatives. Items regarding sidewalk layout, phasing, additional areas to receive sidewalk and railing options were discussed in depth during this meeting. Meeting comments and minutes are included in Appendix A.

Relationship to Town and Regional Plans

The Town of Plainfield has been aware of the need for improved pedestrian and bicycle facilities for several years and has been laying the groundwork to complete these improvements. The Town identified the need for bicycle and pedestrian improvements in their 2014 Town Plan, citing safety concerns for pedestrians travelling between the Upper and Lower Villages. In recent years the Town has constructed new sidewalks in the Lower Village along Main Street and Mill Street and a project to connect the Upper and Lower Villages with a pedestrian bridge, new sidewalks and a crosswalk at the Opera House is underway.

The Central Vermont Regional Planning Commission has identified the following policies in the 2016 Regional Plan:

- Continue to work with municipalities and VTrans to reduce conflicts between traffic needs and human-scale functions of Regional and Town Centers through practices like traffic-calming measures, pedestrian safety improvements and gateway improvements.
- Encourage the development of public places and cultural events within Regional and Town Centers.
- Support the creation of off-road bike and pedestrian paths that connect Regional Town centers with residential areas and neighboring centers in a hub and spoke pattern.
- Encourage the development of public places and cultural events within Regional and Town Centers.
- Development that diminishes the rural character of the area as defined by local and regional plans is discouraged. Development is encouraged to incorporate the following principles: Convenience and safety of vehicular and pedestrian movement, including measures such as traffic calming within the site and in relation to adjacent areas or roads.
- Central Vermont Regional Planning Commission encourages that land use planning and implementing programs to promote planning for efficient non-motorized alternatives to the automobile such as cycling and walking paths between or within population centers and the creation and maintenance of sidewalks or other pedestrian modes in areas of concentrated settlement.
- Promote projects that limit the conflicts between the motor vehicle traffic stream, pedestrians, and the rail system.

Both the Regional Transportation and Town Plans support the project.

Purpose and Need Statement

The development of the Purpose and Need statement required input from local citizens and Town representatives. The following Purpose and Need Statement was developed for this project:

The purpose of the project is to develop and identify preferred alternatives and their associated costs to improve the connection for pedestrians to the Park and Ride on Main Street and provide connections for residents and visitors on Creamery Street, Brook Road and Mill Street to existing sidewalk facilities in the Plainfield Lower Village. The project is needed because of the lack of pedestrian facilities in the densely developed Lower Village.

Additional goals for the project were discussed with the Town, those goals included:

- Provide safe pedestrian movement throughout the Lower Village;
- Improve the connection to the park and ride for pedestrians;
- Make the appearance of the Lower Village more attractive and cohesive

**SECTION 4
EVALUATION OF ALTERNATIVES
LOWER VILLAGE PEDESTRIAN IMPROVEMENTS STP BP15(16)
PLAINFIELD, VERMONT
July 18, 2017**

The objective of this project is to review the existing pedestrian facilities in the project area in the Town of Plainfield, identify areas needing facilities or improvement to existing facilities, prioritize areas identified as needing improvements and select specific improvements for the highest priority areas. The study area encompassed the project area shown previously in Figure 2-1 with alternatives for improvements shown in the following tables and figures.



Image 4-1: Creamery Street Looking West

Cross-sections for the alternatives were developed and typical cross section views of the alternatives are shown in Figures 4-1 and 4-2. Each of the alternatives was evaluated for construction characteristics, impacts, local and regional issues, permits and safety in an evaluation matrix. Details of the individual alternatives are discussed in the following sections. No significant impacts beyond those listed above were identified during the review of the alternatives against these factors.



Image 4-2: Brook Road Looking East

**Figure 4-1
Cross Section with Green Strip, Plainfield STP BP 15(16)
Plainfield, Vermont
February 16, 2017**

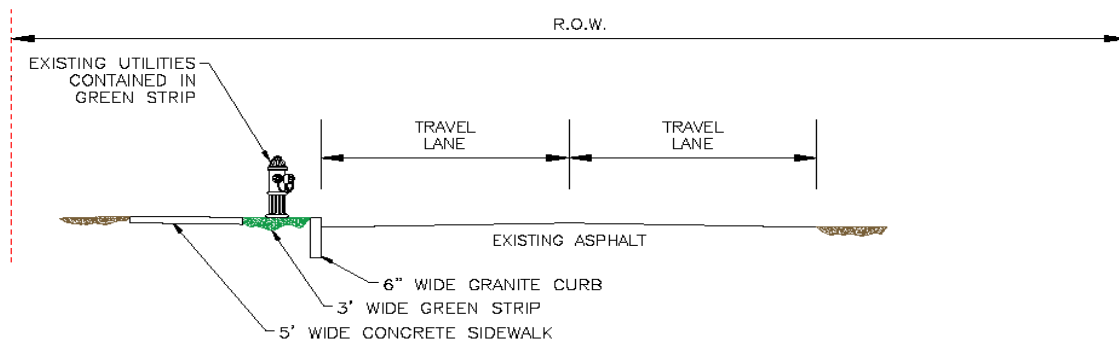
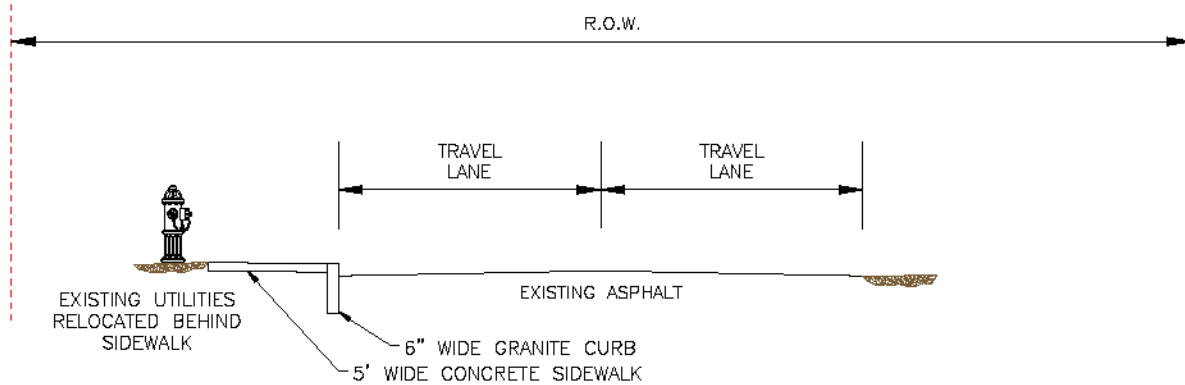


Figure 4-2
 Cross Section without Green Strip
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 February 16, 2017

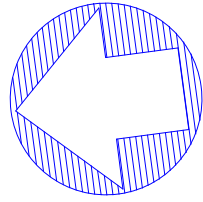


Mill Street

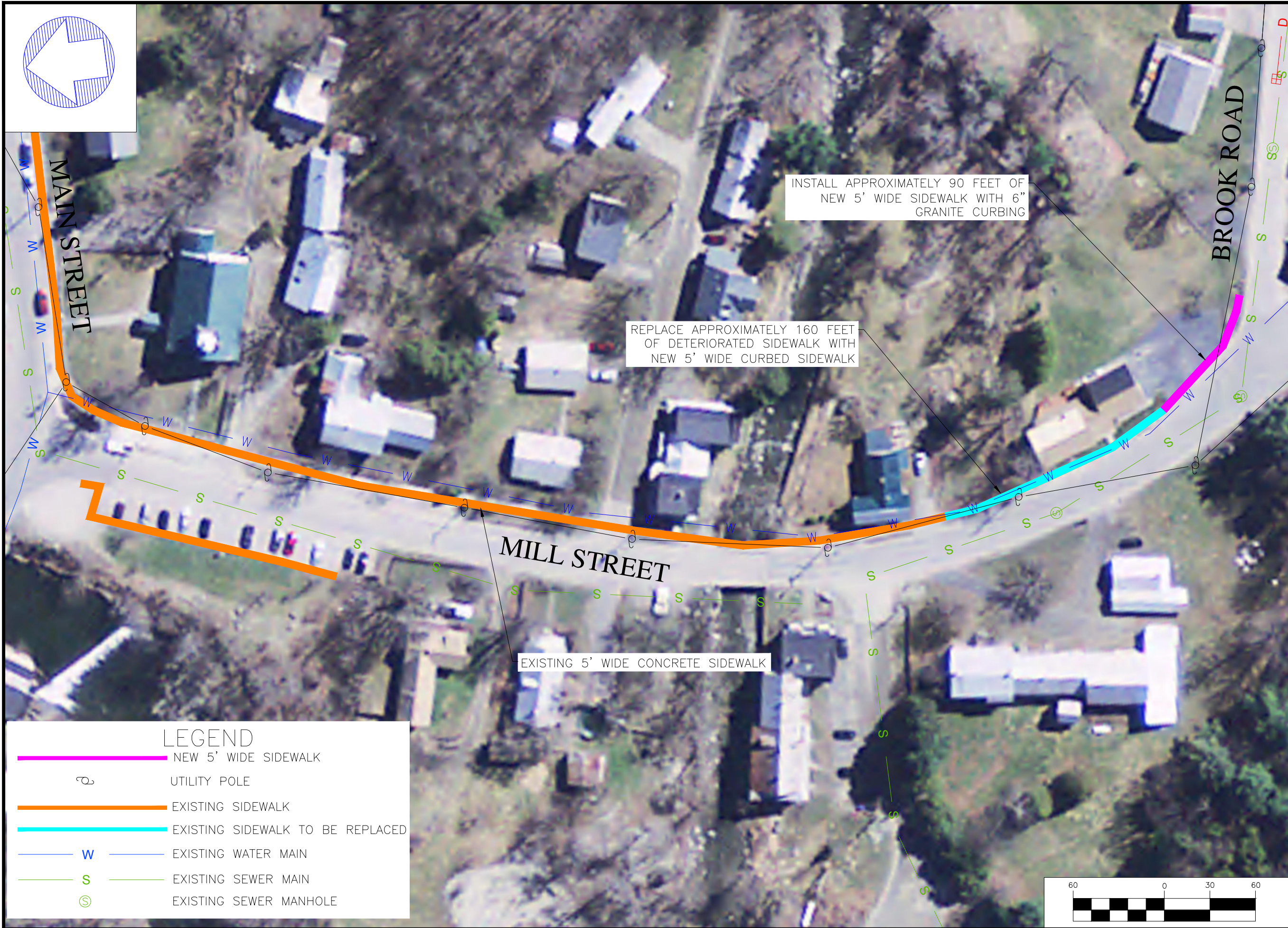
There is only one alternative presented for Mill Street as there is an existing sidewalk that does not meet Americans with Disabilities (ADA) requirements as it is less than 5 feet wide. A newer 5-foot wide sidewalk is currently installed on the northern section of Mill Street and will serve as the connection point for the proposed new sidewalk. The existing sidewalk that will remain in-place begins at the north end of Mill Street and continues south to approximately 250 feet north of the intersection with Brook Road. Where the 5-foot wide existing sidewalk ends, the new sidewalk installation is proposed to begin. A summary of characteristics is shown in Table 4-1. In addition to the summary of characteristics, this alternative was evaluated for construction characteristics, impacts, local and regional issues, permits and safety. This information is presented in an Evaluation Matrix in Table 4-2 and the existing conditions and alternatives are shown in Figure 4-3.

Table 4-1
 Mill Street Alternatives
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 February 16, 2017

Segment: Mill Street		
Alternative	Description	Characteristics
Alternative-1	5' wide concrete sidewalk with granite curb replacing non-ADA compliant sidewalk on east side of Mill Street.	<ul style="list-style-type: none"> • Connecting proposed sidewalk from Brook Road to Mill Street, matching width and alignment • Provides improved pedestrian facilities. • Additional Stormwater infrastructure is not anticipated for this section.



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Project #	7160009
Project Mgr.	AJD
Design	AJD
Drawn	CWF
Checked by	RED
Date	JULY 2017
Scale	AS SHOWN
Approved by	AJD

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SCOPING STUDY
PEDESTRIAN IMPROVEMENTS STP BP15(16)
MILL STREET ALTERNATIVE
PLAINFIELD, VT

FIG 4-3

DWG. NO. Alt Map 1.dwg

SHEET 1 OF 4

LEGEND	
	NEW 5' WIDE SIDEWALK
	UTILITY POLE
	EXISTING SIDEWALK
	EXISTING SIDEWALK TO BE REPLACED
	EXISTING WATER MAIN
	EXISTING SEWER MAIN
	EXISTING SEWER MANHOLE

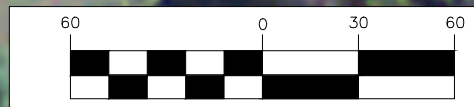


Table 4-2
 Mill Street Evaluation Matrix
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 February 16, 2017

Category		Do Nothing	Mill Street
			Alternative 1
Description			Replace 250' of existing sidewalk with 5' wide concrete sidewalk and granite curb
Construction Characteristics	Length (ft)	0	250
	Width (ft)	0	5' + 6" granite curb
	Surface	0	Concrete w/ granite curb
	New Impervious (sf)	0	470
Impacts	Ag. Lands	None	None
	Archaeological	None	None
	Historical	None	None
	Hazardous Materials	None	None
	Floodplains	No	No
	Fish & Wildlife	None	None
	Rare, Threatened & Endangered Species	None	None
	Public Lands - Sect. 4(f)	None	None
	LWCFFP - Sect. 6(f)	None	None
	Noise	None	None
	Wetlands	None	None
	Utilities - Aerial	None	None
Utilities - Underground	None	None	
Local & Regional Issues	Concerns	Pedestrian safety	Pedestrian safety
	Aesthetics	Unchanged	Improved
	Community Character	Unchanged	Improved
	Economic Impacts	None	None
	Conformance to Town Plan	No	Yes
	Satisfies Purpose & Need	No	Yes
	Permits	ACT 250	No
	401 Water Quality	No	No
	404 COE Permit (<3,000 SF - Self Verification)	No	No
	Stream Alteration	No	No
	Conditional Use Determination	No	No
	Storm Water Discharge	No	No
	Lakes & Ponds	No	No
	T & E Species	No	No
	SHPO	No	No
Safety	Number of Driveway Crossings	N/A	1
	Number of Roadway Crossings	N/A	None

Brook Road

There are four proposed alternatives for pedestrian facilities along Brook Road. Given the proximity of structures to Brook Road and the current narrow width of the road, no change in the road width was included in the alternatives evaluated for this study. Two alternatives stay on the north side creating an inner loop and eliminating the need for roadway crossings. The other two alternatives are aligned on the south side, avoiding existing utility poles. All alternatives will incorporate pedestrian facilities into the bridge design for the proposed bridge replacement. With the addition of curb, the construction of new stormwater drainage is anticipated throughout the length of Brook Road, including at least (3) catch basins and 250 feet of 18-inch drain piping.

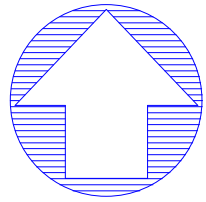
A summary of characteristics is shown in Table 4-3. In addition to this summary of characteristics, each of the alternatives was evaluated for construction characteristics, impacts, local and regional issues, permits and safety. This information is presented in an Evaluation Matrix in Table 4-4. The existing conditions and alternatives are shown in Figures 4-4 and 4-5.



Image 4-3: Brook Road Looking West



Image 4-4: Bridge on Brook Road



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Date	JULY 2017
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SCOPING STUDY
PEDESTRIAN IMPROVEMENTS STP BPI15(16)

**BROOK ROAD
ALTERNATIVES 1 & 2**

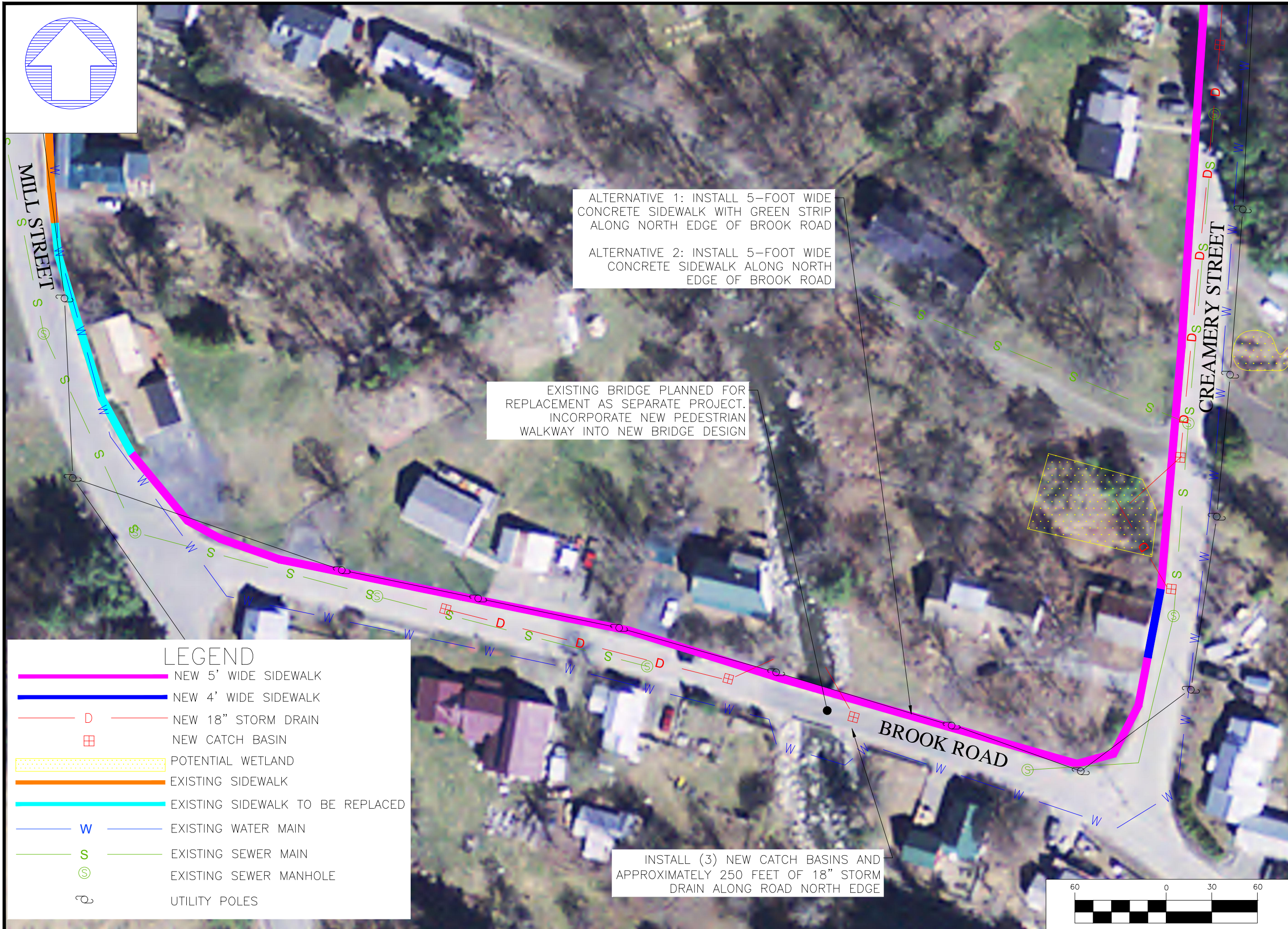
PLAINFIELD, VT

FIG 4-4

DWG. NO. Alt Map 1.dwg

SHEET 2 OF 4

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ALTERNATIVE 1: INSTALL 5-FOOT WIDE CONCRETE SIDEWALK WITH GREEN STRIP ALONG NORTH EDGE OF BROOK ROAD

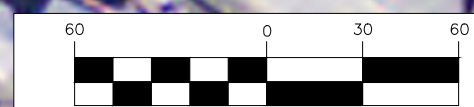
ALTERNATIVE 2: INSTALL 5-FOOT WIDE CONCRETE SIDEWALK ALONG NORTH EDGE OF BROOK ROAD

EXISTING BRIDGE PLANNED FOR REPLACEMENT AS SEPARATE PROJECT. INCORPORATE NEW PEDESTRIAN WALKWAY INTO NEW BRIDGE DESIGN

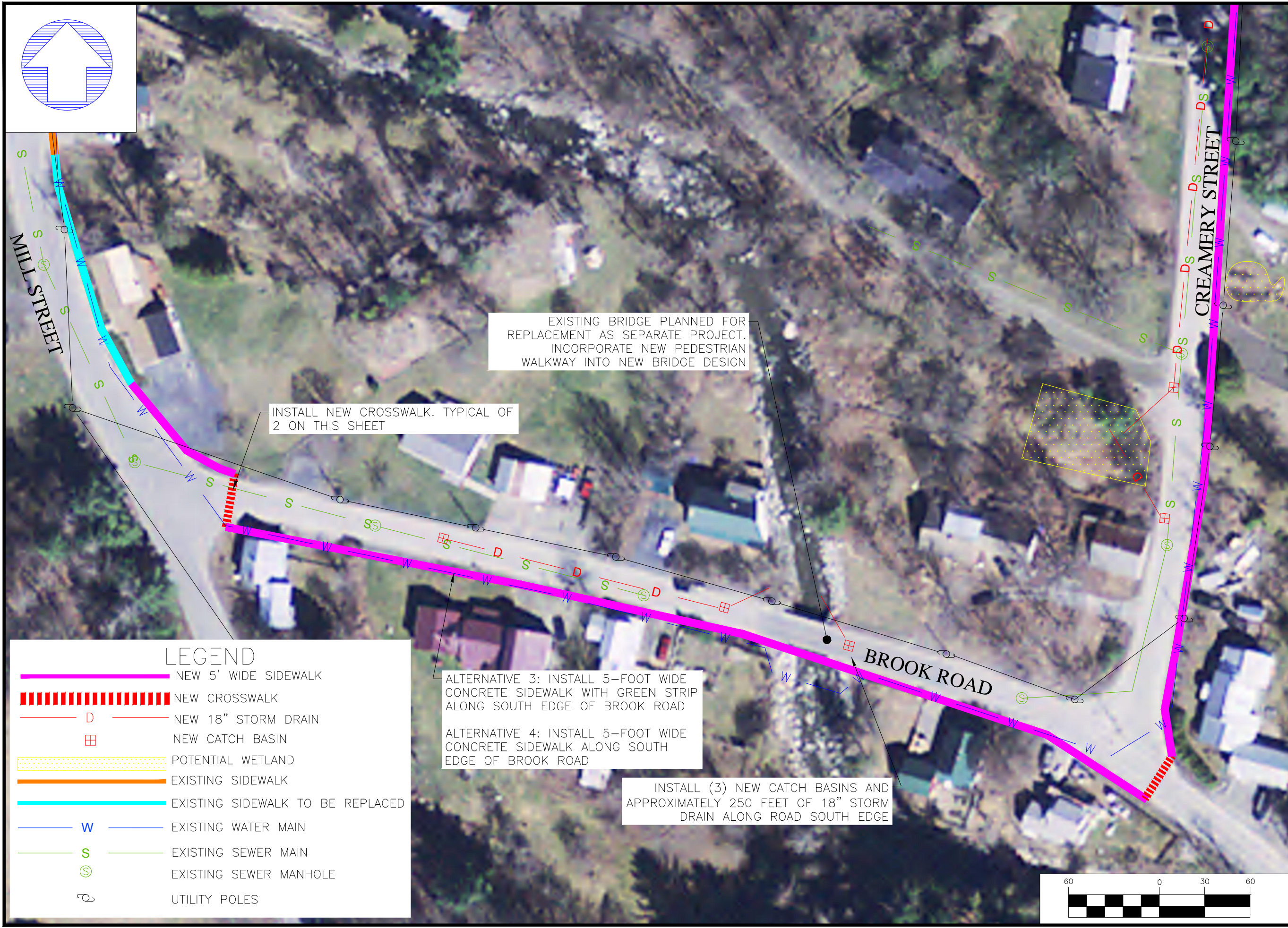
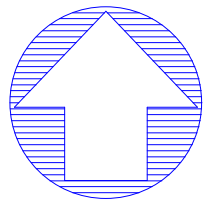
INSTALL (3) NEW CATCH BASINS AND APPROXIMATELY 250 FEET OF 18" STORM DRAIN ALONG ROAD NORTH EDGE

LEGEND

	NEW 5' WIDE SIDEWALK
	NEW 4' WIDE SIDEWALK
	NEW 18" STORM DRAIN
	NEW CATCH BASIN
	POTENTIAL WETLAND
	EXISTING SIDEWALK
	EXISTING SIDEWALK TO BE REPLACED
	EXISTING WATER MAIN
	EXISTING SEWER MAIN
	EXISTING SEWER MANHOLE
	UTILITY POLES



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EXISTING BRIDGE PLANNED FOR REPLACEMENT AS SEPARATE PROJECT. INCORPORATE NEW PEDESTRIAN WALKWAY INTO NEW BRIDGE DESIGN

INSTALL NEW CROSSWALK. TYPICAL OF 2 ON THIS SHEET

ALTERNATIVE 3: INSTALL 5-FOOT WIDE CONCRETE SIDEWALK WITH GREEN STRIP ALONG SOUTH EDGE OF BROOK ROAD

ALTERNATIVE 4: INSTALL 5-FOOT WIDE CONCRETE SIDEWALK ALONG SOUTH EDGE OF BROOK ROAD

INSTALL (3) NEW CATCH BASINS AND APPROXIMATELY 250 FEET OF 18" STORM DRAIN ALONG ROAD SOUTH EDGE

LEGEND	
	NEW 5' WIDE SIDEWALK
	NEW CROSSWALK
	NEW 18" STORM DRAIN
	NEW CATCH BASIN
	POTENTIAL WETLAND
	EXISTING SIDEWALK
	EXISTING SIDEWALK TO BE REPLACED
	EXISTING WATER MAIN
	EXISTING SEWER MAIN
	EXISTING SEWER MANHOLE
	UTILITY POLES



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Approved by	AJD

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SCOPING STUDY
PEDESTRIAN IMPROVEMENTS STP BP15(16)
**BROOK ROAD
ALTERNATIVES 3 & 4**
PLAINFIELD, VT

FIG 4-5

DWG. NO.	Alt Map 1.dwg
SHEET	2 OF 4

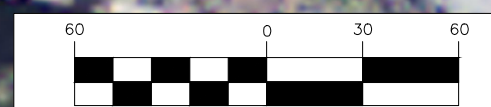


Table 4-3
 Brook Road Alternatives
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 February 16, 2017

Segment: Brook Road		
Alternative	Description	Characteristics
Alternative-1	5-foot wide concrete sidewalk with granite curb and a green strip on the North side of Brook Road.	<ul style="list-style-type: none"> • Will not require any roadway crossings. • Provides improved pedestrian facilities. • Green strip to contain utilities, signs and minimize hydrant and utility pole relocation.
Alternative-2	5-foot wide concrete sidewalk with granite curb and no green strip on the North side of Brook Road.	<ul style="list-style-type: none"> • Conflict with existing utilities including utility poles and hydrants. • Will not require any roadway crossings. • Provides improved pedestrian facilities. • Utilities to be relocated behind proposed sidewalk.
Alternative-3	5-foot wide concrete sidewalk with granite curb and a green strip on the South side of Brook Road.	<ul style="list-style-type: none"> • Conflict with existing hydrant and mailboxes. • Will require two roadway crossings to access new facilities. • Provides improved pedestrian facilities. • Green strip to contain utilities.
Alternative-4	5-foot wide concrete sidewalk with granite curb and no green strip on the South side of Brook Road	<ul style="list-style-type: none"> • Conflict with existing hydrant and mailboxes. • Will require two roadway crossings to access new facilities. • Provides improved pedestrian facilities. • Utilities located behind proposed sidewalk.

Table 4-4
 Brook Road Evaluation Matrix
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 February 16, 2017

Category		Brook Road			
		Alternative 1	Alternative 2	Alternative 3	Alternative 4
Description of Alternative		Install 600 feet of new curbed 5-foot wide sidewalk with 6" granite curbing on north side of street with 2.5'-3' green strip	Install 600 feet of new curbed 5-foot wide sidewalk with 6" granite curbing on north side of street	Install 640 feet of new curbed 5-foot wide sidewalk with 6" granite curbing on south side of street with green strip	Install 640 feet of new curbed 5-foot wide sidewalk with 6" granite curbing on south side of street
Construction Characteristics	Length (ft)	600'	600'	640' + (2) 30' crosswalks	640' + (2) 30' crosswalks
	Width (ft)	5' + 6" granite curb	5' + 6" granite curb	5' + 6" granite curb	5' + 6" granite curb
	Surface	Concrete w/ granite curb	Concrete w/ granite curb	Concrete w/ granite curb	Concrete w/ granite curb
	New Impervious (sf)	2,480	2,480	2,840	2,840
Impacts	Ag. Lands	None	None	None	None
	Archaeological	None	None	None	None
	Historical	(2) Houses, (1) Bridge*	(2) Houses, (1) Bridge*	(1) Bridge*	(1) Bridge*
	Hazardous materials	None	None	None	None
	Floodplains	Yes	Yes	Yes	Yes
	Fish & Wildlife	None	None	None	None
	Rare, Threatened & Endangered Species	None	None	None	None
	Public Lands - Sect. 4(f)	None	None	None	None
	LWCFP - Sect. 6(f)	None	None	None	None
	Noise	None	None	None	None
	Wetlands	None	None	None	None
	Utilities - Aerial	None	(5) Utility poles relocated	None	None
Utilities - Underground	None	(1) Hydrant relocated	None	(1) Hydrant relocated	
Local & Regional Issues		Pedestrian safety	Pedestrian safety	Pedestrian safety	Pedestrian safety
	Concerns				
	Aesthetics	Improved	Improved	Improved	Improved
	Community Character	Improved	Improved	Improved	Improved
	Economic Impacts	None	None	None	None
	Conformance to Town Plan	Yes	Yes	Yes	Yes
	Satisfies Purpose & Need	Yes	Yes	Yes	Yes
Permits	ACT 250	No	No	No	No
	401 Water Quality	No	No	No	No
	404 COE Permit (<3,000 SF - Self Verification)	No	No	No	No
	Stream Alteration	No	No	No	No
	Conditional Use Determination	No	No	No	No
	Storm Water Discharge	No	No	No	No
	Lakes & Ponds	No	No	No	No
	T & E Species	No	No	No	No
	SHPO	No	No	No	No
	Safety	Number of Driveway Crossings	4	4	5
Number of Roadway Crossings		None	None	None	None

*No impact on historic resources is anticipated

Creamery Street

There are four proposed alternatives for pedestrian facilities along Creamery Street. All alternatives assume 10 foot wide travel lanes and 2 foot wide shoulders. Two approaches stay on the west side creating an inner loop and eliminating the need for additional roadway crossings. Staying along the west side will require roadway widening and a short section of sidewalk to be narrowed to 4-foot wide due to a historic barn in the right-of-way. The other two approaches are aligned on the east side avoiding the historic barn and not requiring roadway widening.

With the addition of curb the construction of new stormwater drainage is anticipated throughout the length of Creamery Street, including at least (5) catch basins and 550 feet of 18-inch drain piping. During the Local Concerns Meeting residents expressed concern over stormwater runoff and discussed existing storm runoff issues. The addition of curb and a stormwater collection system is intended to resolve this issue. All alternatives will include the removal of approximately 100 feet of existing sidewalk on the east side at the north end of Creamery Street and replacement with new 5-foot wide concrete sidewalk with 6-inch wide granite curbing.

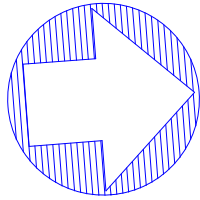
A summary of characteristics is shown in Table 4-5. In addition to this summary of characteristics, each of the alternatives was evaluated for construction characteristics, impacts, local and regional issues, permits and safety. This information is presented in an Evaluation Matrix in Table 4-6. The existing conditions and alternatives are shown in Figures 4-6 and 4-7.



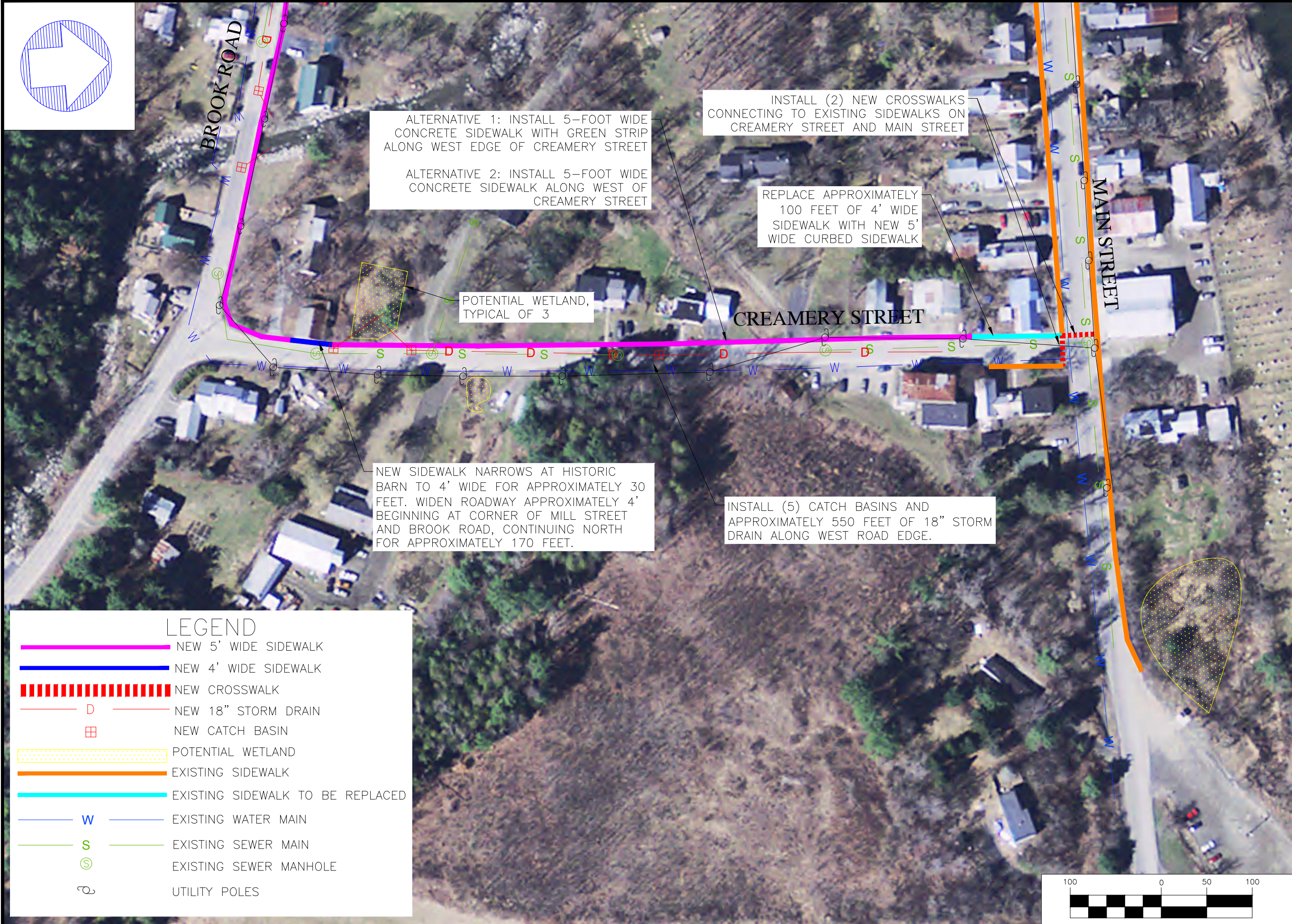
Image 4-5: Culvert and Historic Barn on Creamery Street.



Image 4-6: Creamery Street Looking South.



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ALTERNATIVE 1: INSTALL 5-FOOT WIDE CONCRETE SIDEWALK WITH GREEN STRIP ALONG WEST EDGE OF CREAMERY STREET

ALTERNATIVE 2: INSTALL 5-FOOT WIDE CONCRETE SIDEWALK ALONG WEST OF CREAMERY STREET

INSTALL (2) NEW CROSSWALKS CONNECTING TO EXISTING SIDEWALKS ON CREAMERY STREET AND MAIN STREET

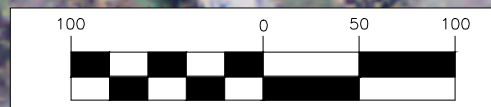
REPLACE APPROXIMATELY 100 FEET OF 4' WIDE SIDEWALK WITH NEW 5' WIDE CURBED SIDEWALK

POTENTIAL WETLAND, TYPICAL OF 3

NEW SIDEWALK NARROWS AT HISTORIC BARN TO 4' WIDE FOR APPROXIMATELY 30 FEET. WIDEN ROADWAY APPROXIMATELY 4' BEGINNING AT CORNER OF MILL STREET AND BROOK ROAD, CONTINUING NORTH FOR APPROXIMATELY 170 FEET.

INSTALL (5) CATCH BASINS AND APPROXIMATELY 550 FEET OF 18" STORM DRAIN ALONG WEST ROAD EDGE.

LEGEND	
	NEW 5' WIDE SIDEWALK
	NEW 4' WIDE SIDEWALK
	NEW CROSSWALK
	NEW 18" STORM DRAIN
	NEW CATCH BASIN
	POTENTIAL WETLAND
	EXISTING SIDEWALK
	EXISTING SIDEWALK TO BE REPLACED
	EXISTING WATER MAIN
	EXISTING SEWER MAIN
	EXISTING SEWER MANHOLE
	UTILITY POLES



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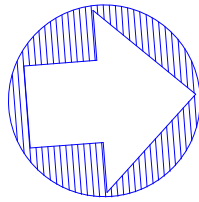
Project #	7160009
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Drawn	CWF
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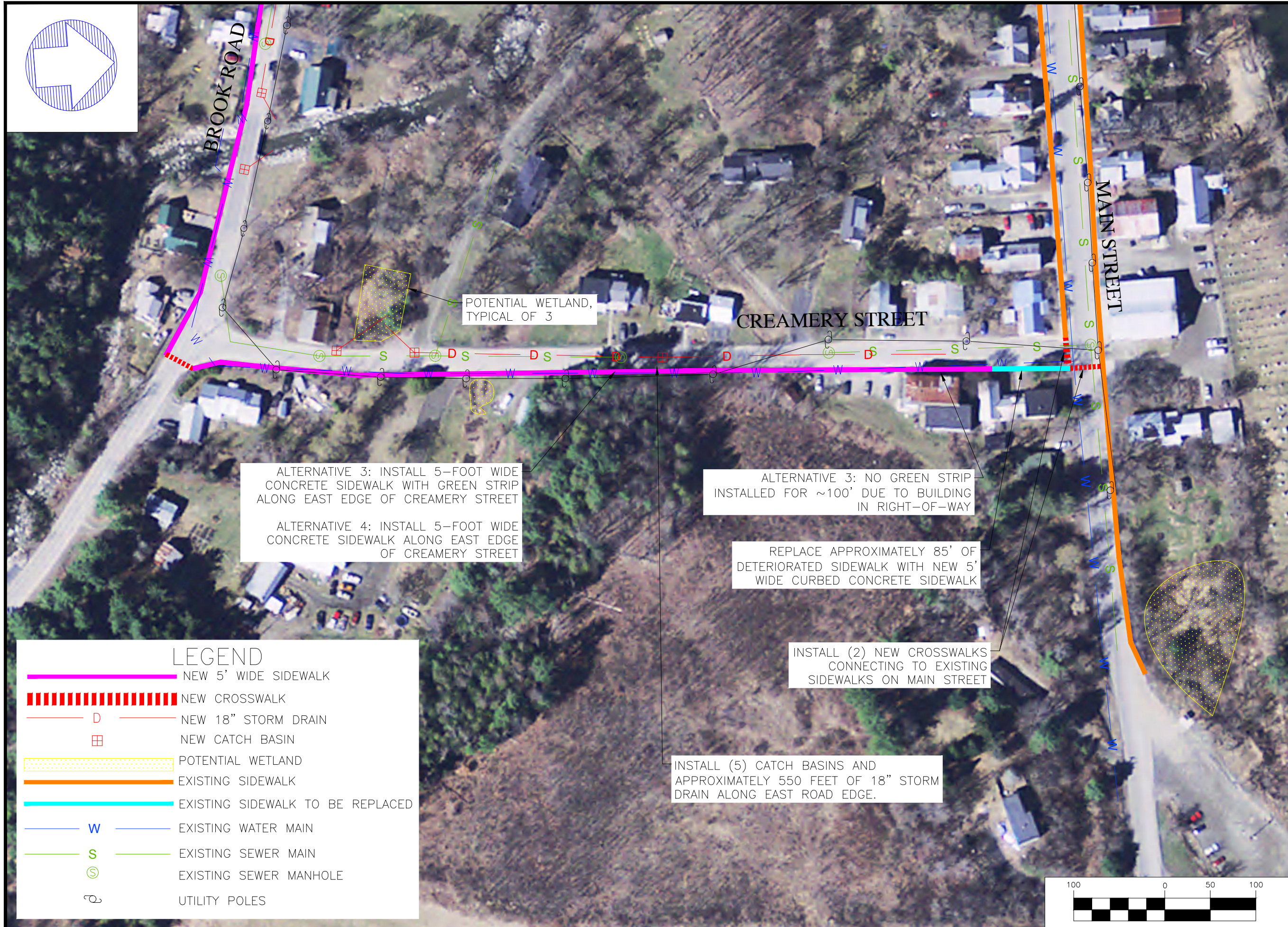
SCOPING STUDY
PEDESTRIAN IMPROVEMENTS STP BP15(16)
**CREAMERY STREET
ALTERNATIVES 1 & 2**
PLAINFIELD, VT

FIG 4-6

DWG. NO. Alt Map 1.dwg
SHEET 3 OF 4



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ALTERNATIVE 3: INSTALL 5-FOOT WIDE CONCRETE SIDEWALK WITH GREEN STRIP ALONG EAST EDGE OF CREAMERY STREET

ALTERNATIVE 4: INSTALL 5-FOOT WIDE CONCRETE SIDEWALK ALONG EAST EDGE OF CREAMERY STREET

ALTERNATIVE 3: NO GREEN STRIP INSTALLED FOR ~100' DUE TO BUILDING IN RIGHT-OF-WAY

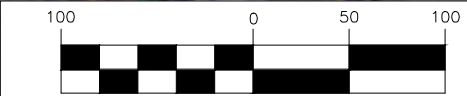
REPLACE APPROXIMATELY 85' OF DETERIORATED SIDEWALK WITH NEW 5' WIDE CURBED CONCRETE SIDEWALK

INSTALL (2) NEW CROSSWALKS CONNECTING TO EXISTING SIDEWALKS ON MAIN STREET

INSTALL (5) CATCH BASINS AND APPROXIMATELY 550 FEET OF 18" STORM DRAIN ALONG EAST ROAD EDGE.

POTENTIAL WETLAND, TYPICAL OF 3

LEGEND	
	NEW 5' WIDE SIDEWALK
	NEW CROSSWALK
	NEW 18" STORM DRAIN
	NEW CATCH BASIN
	POTENTIAL WETLAND
	EXISTING SIDEWALK
	EXISTING SIDEWALK TO BE REPLACED
	EXISTING WATER MAIN
	EXISTING SEWER MAIN
	EXISTING SEWER MANHOLE
	UTILITY POLES



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SCOPING STUDY
PEDESTRIAN IMPROVEMENTS STP BP15(16)
CREAMERY STREET
ALTERNATIVES 3 & 4
PLAINFIELD, VT

FIG 4-7

DWG. NO. Alt Map 1.dwg
SHEET 3 OF 4

Table 4-5
 Creamery Street Alternatives
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 February 16, 2017

Segment: Creamery Street		
Alternative	Description	Characteristics
Alternative-1	5-foot wide concrete sidewalk with granite curb and a green strip on the West side of Creamery Street.	<ul style="list-style-type: none"> • Conflict with historic barn within ROW, will require sidewalk narrowing and roadway widening. • Will not require any additional roadway crossings. • Provides improved pedestrian facilities. • Green strip to contain utilities.
Alternative-2	5-foot wide concrete sidewalk with granite curb and no green strip on the West side of Creamery Street.	<ul style="list-style-type: none"> • Conflict with historic barn within ROW, will require sidewalk narrowing and roadway widening. • Will not require any additional roadway crossings. • Provides improved pedestrian facilities. • Utilities to be relocated behind proposed sidewalk.
Alternative-3	5-foot wide concrete sidewalk with granite curb and a green strip on the East side of Creamery Street.	<ul style="list-style-type: none"> • Avoids conflict with historic barn located within ROW. • Will require two roadway crossings to access new facilities. • Provides improved pedestrian facilities. • Utilities to be relocated to green strip.
Alternative-4	5-foot wide concrete sidewalk with granite curb and no green strip on the East side of Creamery Street.	<ul style="list-style-type: none"> • Avoid conflict with historic barn located within ROW. • Will require two roadway crossings to access new facilities. • Provides improved pedestrian facilities. • Utilities to be relocated behind proposed sidewalk.

Table 4-6
 Creamery Street Evaluation Matrix
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 February 16, 2017

Category		Creamery Street				
		Alternative 1	Alternative 2	Alternative 3	Alternative 4	
Description of Alternative		Install 900 feet of new 5-foot wide sidewalk with 6" granite curbing with green strip on west side of street	Install 900 feet of new 5-foot wide sidewalk with 6" granite curbing on west side of street	Install 970 feet of new 5-foot wide sidewalk with 6" granite curbing and green strip on east side of street	Install 970 feet of new 5-foot wide sidewalk with 6" granite curbing on east side of street	
Construction Characteristics	Length (ft)	900' + (1) crosswalk	900' + (1) crosswalk	970' + (2) 30' crosswalks	970' + (2) 30' crosswalks	
	Width (ft)	5' + 6" curb; 4' + 6" curb	5' + 6" curb; 4' + 6" curb	5' + 6" curb	5' + 6" curb	
	Surface	Concrete w/ granite curb	Concrete w/ granite curb	Concrete w/ granite curb	Concrete w/ granite curb	
	New Impervious (sf)	3,560	3,560	3,670	3,670	
Impacts	Ag. Lands	None	None	None	None	
	Archaeological	None	None	None	None	
	Historical	(4) Houses, (1) Barn*	(4) Houses, (1) Barn*	(1) House*	(1) House*	
	Hazardous materials	None	None	None	None	
	Floodplains	No	No	No	No	
	Fish & Wildlife	None	None	None	None	
	Rare, Threatened & Endangered Species	None	None	None	None	
	Public Lands - Sect. 4(f)	None	None	None	None	
	LWCFP - Sect. 6(f)	None	None	None	None	
	Noise	None	None	None	None	
	Wetlands	Yes	Yes	Yes	Yes	
	Utilities - Aerial	None	Relocate (2) Utility Poles	None	Relocate (2) Utility Poles	
	Utilities - Underground	None	None	Relocate (1) Hydrant	Relocate (1) Hydrant	
	Local & Regional Issues	Concerns	Pedestrian safety	Pedestrian safety	Pedestrian safety	Pedestrian safety
Aesthetics		Improved	Improved	Improved	Improved	
Community Character		Improved	Improved	Improved	Improved	
Economic Impacts		None	None	None	None	
Conformance to Town Plan		Yes	Yes	Yes	Yes	
Satisfies Purpose & Need		Yes	Yes	Yes	Yes	
Permits		ACT 250	No	No	No	No
		401 Water Quality	No	No	No	No
		404 COE Permit (<3,000 SF - Self Verification)	No	No	No	No
		Stream Alteration	No	No	No	No
		Conditional Use Determination	No	No	No	No
		Storm Water Discharge	No	No	No	No
		Lakes & Ponds	No	No	No	No
		T & E Species	No	No	No	No
	SHPO	No	No	No	No	
Safety	Number of Driveway Crossings	6	6	4	4	
	Number of Roadway Crossings	1	1	0	0	

*No impact on historic resources is anticipated

Main Street Utility Pole and Railing

As part of the scoping study, a review of alternatives for removal of a utility pole from the existing sidewalk on Main Street and installation of a railing along the sidewalk due to a steep drop-off was conducted. The existing utility pole is within the sidewalk that connects the park and ride to the Lower Village. The pole is at a location where a steep drop is located on the side opposite the pole.

The existing utility pole located within the Main Street sidewalk can be relocated with coordination with Green Mountain Power (GMP). GMP will complete this service at no charge, but an easement will need to be obtained for relocating the guy wire on the problem pole. Upon removal of the pole a 10-foot section of sidewalk will need to be removed and replaced.

The sidewalk along the embankment on Main Street will require 225 ft. of railing to increase pedestrian safety. Many mounts, materials and railing types are available. The three available materials are galvanized, aluminum and stainless steel with galvanized being the least expensive. The Town is considering completing this part of the project without using VTrans funding. The Town would like the proposed railing to match the material and style of railing being installed as part of the Plainfield STP BP 14(3) project.



Image 4-7: Utility pole located on Main Street Sidewalk

No Build Alternative

The No Build Alternative proposes that the existing conditions of the project area remain. The No Build Alternative does not meet the Purpose and Need Statement. It is recommended that if the No Build Alternative is selected, the proposed handrail installation and utility pole relocation on the north side of Main Street proceed as suggested.

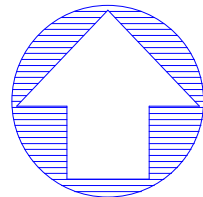
Recommended Alternative

Following the receipt of public comments, segments of the alternatives were selected to define the preferred alternative. Generally, the public and the Town have voiced their desire to continue the progress of working to complete the sidewalk network already in-place in the Town. It is a Town priority to provide pedestrian facilities in the Lower Village. Public Comments and relevant communication with Town officials are included in Appendix A. The following list summarizes the preferred alternative and is assembled from public comments and decisions provided by the Plainfield Sidewalk Committee:

- The no-green-strip design approach is preferred in order to minimize encroachment on the properties in the project area.
- The inner loop sidewalk route is preferred.

- The Town would like to break the project into three phases:
 - Construction of the sidewalk along Creamery Street and Mill Street.
 - Installation of railing and relocation of utility pole on Main Street Sidewalk.
 - Replacement of the Brook Road Bridge and pedestrian walkway on the bridge.
 - Complete the sidewalk network with construction of the new sidewalk along Brook Road.
- Regarding Phase 1 on Creamery Street, the sidewalk committee would like two alternatives:
 - New sidewalk construction will begin at the north end of Creamery Street, continuing south and ending at the intersection with Hudson Ave. By ending the sidewalk at this location, narrowing and routing the new sidewalk around the historic barn in the right-of-way is avoided.
 - New sidewalk construction occurs on Creamery Street for the entire length of the roadway.
- The Town would like to replace the approximately 100 foot long deteriorated section of sidewalk on the north end of Creamery Street on the east side of the road and extend the sidewalk to the Creamery Street Apartments.
- Regarding the installation of the proposed handrail on the north side of Main Street, the Town requests the least expensive option. The least expensive option described in this report is a double-rail galvanized handrail.

The recommended alternative is shown in Figure 4-8.



DUFRESNE GROUP
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Project #	7160009
Project Mgr.	AJD
Design	AJD
Drawn	CWF
Checked by	RED
Date	JULY 2017
Scale	AS SHOWN
Approved by	AJD

THE DRAWINGS FOR THIS PROJECT SHALL NOT BE REUSED OR ALTERED IN ANY WAY WITHOUT THE WRITTEN APPROVAL AND AUTHORITY OF DUFRESNE GROUP. ANY REVISIONS SHALL BE MADE BY THE ENGINEER.
DUFRESNE GROUP ©

SCOPING STUDY
PEDESTRIAN IMPROVEMENTS STP BP15(16)

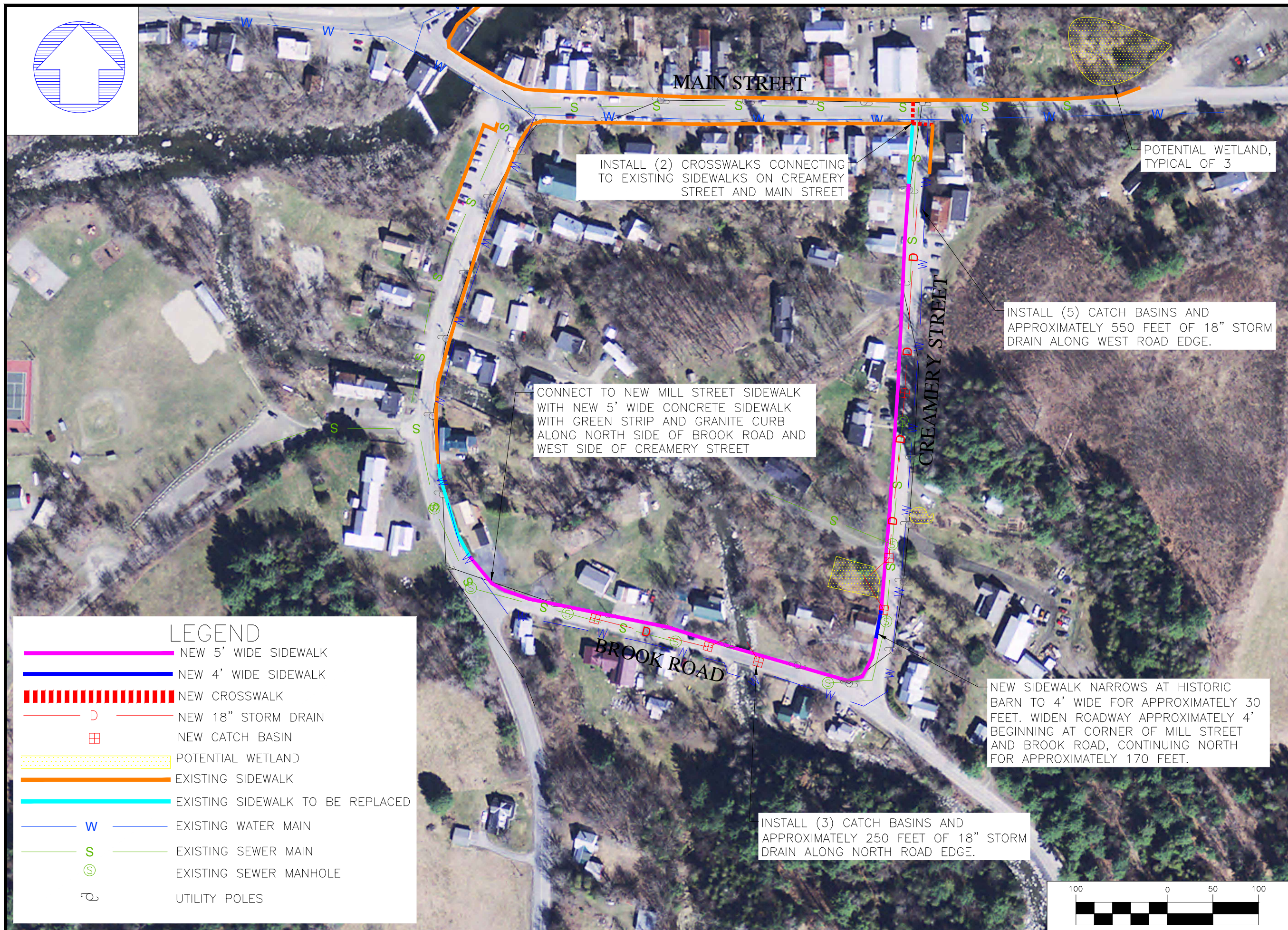
RECOMMENDED ALTERNATIVE

PLAINFIELD, VT

FIG 4-8

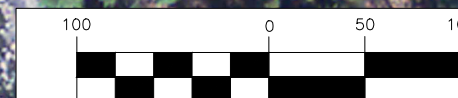
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SHEET 4 OF 4



LEGEND

- NEW 5' WIDE SIDEWALK
- NEW 4' WIDE SIDEWALK
- NEW CROSSWALK
- NEW 18" STORM DRAIN
- NEW CATCH BASIN
- POTENTIAL WETLAND
- EXISTING SIDEWALK
- EXISTING SIDEWALK TO BE REPLACED
- EXISTING WATER MAIN
- EXISTING SEWER MAIN
- EXISTING SEWER MANHOLE
- UTILITY POLES



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Construction Cost Estimate

As presented in the previous sections, the four alternatives provide options for sidewalk installation along Mill Street, Brook Road, and Creamery Street to connect to the existing sidewalks on Mill Street and Main Street. Given the expense and complications of completing both roadways at once, three phases were proposed by the Town:

1. Complete the sidewalk on Mill Street and construct the sidewalk on Creamery Street. Relocate pole on Main Street and install railing along Main Street.
2. Replace the aging concrete bridge on Brook Road.
3. Construct the sidewalk on Brook Road.

The information shown in Tables 4-7 through 4-11 provides cost estimate information for the selected alternatives. A cost summary of all three phases is shown in Table 4-12. The cost estimates were developed using the VTrans Report on Shared-Use Path and Sidewalk Unit Costs, updated August 2014, Costs for Pedestrian and Bicyclist Infrastructure Improvements prepared by the UNC Highway Safety Research Center dated October, 2013, and the VTrans 2-Year Averaged Price List from January 2013 - December 2014.

Constructing a new sidewalk around the historic barn on Creamery Street presents design challenges and cost increases recognized by the Town, therefore an option of halting the sidewalk construction on Hudson Road is included in the cost estimate and is shown as an alternate option with estimated costs shown in Table 4-10.

Table 4-7
 Mill Street Cost Estimate
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 July 18, 2017

DESCRIPTION	ESTIMATED QUANTITY	UNIT S	UNIT PRICE	TOTAL COST
5' wide Concrete Sidewalk with Granite Curb	160	LF	\$240	\$38,400
5' wide Concrete Sidewalk, No Curb	90	LF	\$160	\$14,400
Subtotal Construction Cost				\$52,800
Contingency (Approximately 20% of Construction Cost)				\$10,900
Total Construction Cost				\$63,700
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				\$9,500
Construction Phase Engineering (15% of Total Construction Cost)				\$9,500
Local Project Management (10% of Total Construction Cost)				\$6,300
Legal and Fiscal (3% of Total Construction Cost)				\$2,000
Total Project Cost				\$91,000

Table 4-8
 Brook Road Cost Estimate Alternative 2
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 July 18, 2017

DESCRIPTION	ESTIMATED QUANTITY	UNITS	UNIT PRICE	TOTAL COST
5' wide Concrete Sidewalk with Granite Curb	450	LF	\$240	\$108,000
5' wide Concrete Sidewalk, No Curb	150	LF	\$160	\$24,000
Storm Drain Structure	3	EA	\$3,560	\$10,680
Relocate Fire Hydrant	1	EA	\$2,500	\$2,500
18" Storm Drain Pipe	250	LF	\$70	\$17,500
Trench Patch	280	SY	\$35	\$9,800
Subtotal Construction Cost				\$172,480
Contingency (Approximately 20% of Construction Cost)				\$34,500
Total Construction Cost				\$206,980
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				\$31,050
Construction Phase Engineering (15% of Total Construction Cost)				\$31,050
Local Project Management (10% of Total Construction Cost)				\$20,700
Legal and Fiscal (3% of Total Construction Cost)				\$6,220
Total Project Cost				\$296,000

Table 4-9
 Creamery Street Cost Estimate
 Alternative 2
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 July 18, 2017

DESCRIPTION	ESTIMATED QUANTITY	UNITS	UNIT PRICE	TOTAL COST
5' wide Concrete Sidewalk with Granite Curb	740	LF	\$240	\$177,600
5' wide Concrete Sidewalk with, no curb	185	LF	\$160	\$29,600
Additional Asphalt	680	SF	\$6	\$4,100
Storm Drain Structure	5	EA	\$3,560	\$17,800
18" Storm Drain Pipe	550	LF	\$70	\$38,500
Trench Patch	615	SY	\$35	\$21,530
Crosswalk	2	EA	\$770	\$1,540
Fencing Relocation	30	LF	\$20	\$600
30" Culvert	15	LF	\$90	\$1,350
Subtotal Construction Cost				\$292,620
Contingency (Approximately 20% of Construction Cost)				\$58,550
Total Construction Cost				\$351,170
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				\$52,700
Construction Phase Engineering (15% of Total Construction Cost)				\$52,700
Local Project Management (10% of Total Construction Cost)				\$35,500
Legal and Fiscal (3% of Total Construction Cost)				\$10,930
Total Project Cost				\$503,000

Table 4-10
 Creamery Street Cost Estimate
 Alternative 2A – Sidewalk Stopping at Hudson Ave.
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 July 18, 2017

DESCRIPTION	ESTIMATED QUANTITY	UNITS	UNIT PRICE	TOTAL COST
5' wide Concrete Sidewalk with Granite Curb	540	LF	\$240	\$129,600
5' wide Concrete Sidewalk with, no curb	185	LF	\$160	\$29,600
Storm Drain Structure	3	EA	\$3,560	\$10,680
18" Storm Drain Pipe	550	LF	\$70	\$38,500
Trench Patch	615	SY	\$35	\$21,530
Crosswalk	2	EA	\$770	\$1,540
Fencing Relocation	30	LF	\$20	\$600
Subtotal Construction Cost				\$232,050
Contingency (Approximately 20% of Construction Cost)				\$46,450
Total Construction Cost				\$278,500
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				\$41,800
Construction Phase Engineering (15% of Total Construction Cost)				\$41,800
Local Project Management (10% of Total Construction Cost)				\$27,900
Legal and Fiscal (3% of Total Construction Cost)				\$9,000
Total Project Cost				\$399,000

Table 4-11
Pole Relocation and Railing on Main Street
Plainfield STP BP 15(16)
Plainfield, Vermont
July 18, 2017

DESCRIPTION	ESTIMATED QUANTITY	UNITS	UNIT PRICE	TOTAL COST
Sidewalk Replacement	10	LF	\$240	\$2,400
Double-Rail Galvanized Railing	225	LF	\$100	\$22,500
Subtotal Construction Cost				\$24,900
Contingency (Approximately 20% of Construction Cost)				\$5,100
Total Construction Cost				\$30,000
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				\$4,600
Construction Phase Engineering (15% of Total Construction Cost)				\$4,600
Local Project Management (10% of Total Construction Cost)				\$3,000
Legal and Fiscal (3% of Total Construction Cost)				\$800
Total Project Cost				\$43,000

Notes:

1. If the Town chooses to proceed with this project on their own the Engineering, Local Project Management and Legal and Fiscal costs can be eliminated.

Table 4-12
 Construction Phase Cost Estimate
 Plainfield STP BP 15(16)
 Plainfield, Vermont
 July 18, 2017

	PROJECT DETAILS	TOTAL COST
Phase 1	Construct new sidewalk along Mill Street, extend to corner of Mill Street and Brook Road.	\$91,000
	Construct Alternative 2 option for a new sidewalk with no green strip along the west side of Creamery Street	\$503,000
	Install railing and relocate utility pole along the Main Street sidewalk	\$43,000
	Phase 1 Total	\$637,000
Phase 2	Replace deteriorating concrete bridge on Brook Road, incorporating pedestrian walkway into the design	Cost to be determined under separate project
Phase 3	Construct sidewalk on Brook Road as described in Alternative 2, with no green strip, installed on the north side of the street.	\$296,000
Total Cost		\$933,000

The Town hasn't decided if they will elect to halt Phase 1 construction at Hudson Avenue to avoid conflict with the historic barn, allowing pedestrian traffic to travel along Hudson Avenue to reach Mill Street. This option would reduce the cost of Phase 1 by \$104,000 and reduce the total construction cost to \$829,000. The Town may also choose to complete the railing and utility pole relocation with local funds which would reduce the cost of that project to \$30,000.

**SECTION 5
FISCAL IMPLEMENTATION
LOWER VILLAGE PEDESTRIAN IMPROVEMENTS STP BP15(16)
PLAINFIELD, VERMONT
July 18, 2017**

Project Description

The proposed project was chosen from the four alternatives presented for sidewalk installation along Mill Street, Brook Road, and Creamery Street to connect to the existing sidewalks on Mill Street and Main Street. The chosen alternatives, described as Alternative 2 for Creamery Street and Brook Road would follow the inner loop of the Lower Village and would incorporate a no green strip design to reduce encroachment onto existing properties and minimize impacts to natural resources.

Total Project Cost Estimate

Table 5-1
Total Project Cost Estimate Summary
Plainfield STP BP 15(16)
Plainfield, Vermont
July 18, 2017

Project	Total Estimated Cost (2017 Dollars)
Creamery Street	\$503,000
Mill Street	\$91,000
Brook Road	\$296,000
Main Street Railing and Pole Relocation	\$43,000
Total	\$933,000

As shown in Table 5-1 the total project cost is \$933,000. The estimates include Construction, Contingency, Final Design Engineering, Construction Phase Engineering, Local Project Management and Legal and Fiscal expenses for construction of improvements. The estimated 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 20% of the construction cost at the preliminary planning stage.

It is important to note that the construction cost and total project cost estimates are developed based on the project being funded by a State or federally funded program. These programs typically have requirements that increase the total project cost.

Permit Summary

At this time, we anticipate that the following permits may be required for the project:

- Stormwater General Permit to Construct
- NEPA Categorical Exclusion
- Stream Alteration Permit for Bridge Replacement

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.

Maintenance

The materials selected for the preferred alternatives are concrete for sidewalks and granite for curbs due to durability and aesthetics. The VTrans Pedestrian and Bicycle Facility Design Manual notes that granite is the preferred curb material in Vermont. The estimated useful life of these materials from different guidance documents is outlined in Tables 5-2 and 5-3:

Table 5-2
Sidewalk Useful Life Estimates
Plainfield STP BP 15(16)
Plainfield, Vermont
February 16, 2017

Sidewalk Material	US DOT, Federal Highways Administration	Onondaga County Sustainable Streets Project (2014)	Fannie Mae Useful Life Tables (2014)
Concrete	Approximately 80 years	Average 34 years	50 years
Asphalt	Approximately 40 years	Average 11 years	25 years

Table 5-3
Curb Useful Life Estimates
Plainfield STP BP 15(16)
Plainfield, Vermont
February 16, 2017

Curb Material	LifeCycle Cost Comparison UMass Amherst (11/2006)	NYDOT (1998)
Concrete	10-20 years	20 years
Granite	Indefinite	60 years

The useful life of these materials depends heavily on several factors:

- Base soils and sub-base preparation
- Tree roots
- Heavy Vehicle loading
- Material thickness

Granite curb also has the benefit that it can be removed and reused, which is why the UMass Amherst report indicated an “indefinite” life cycle.

To maximize the useful life of any surface:

- Adequate sub-base soils that provide stability and good drainage should be provided.
- Trees adjacent to the sidewalk should be carefully selected and an adequate soil volume for the trees should be provided.
- The sidewalks should be designed for anticipated vehicle loading.
- Adequate concrete and asphalt thicknesses should be provided for the anticipated vehicle loading and frost conditions.

The Town of Plainfield owns and maintains the existing sidewalks in Town and will do the same for any additional pedestrian facilities added as a result of this project. The Town owns a sidewalk plow and currently plows the existing sidewalks during the winter months. They have had success in maintaining the existing sidewalks for use during the winter months and anticipate that they could expand their maintenance program to include the additional improvements proposed for this project.

Project Schedule

The proposed project schedule is based on several criteria including the following factors:

- The need for the improvements as defined by local officials.
- The cost of the project to property owners and local approval of the project.
- Securing temporary and, if necessary, permanent easements for the project.
- Funding requirements.
- Permitting requirements.

Based on these factors we suggest a project schedule as shown in Table 5-4.

Table 5-4
Project Schedule
Plainfield STP BP 15(16)
Plainfield, Vermont
February 16, 2017

PROJECT TASK	DATE
Receive Study Approval	April 2017
Submit Funding Application for Final Design Funds	July 2017
Receive Approval of Funding Application	August 2017
Grant Agreement Executed	October 2017
Procurement for Design Services	January 2018
Complete Topographic Survey of Project Areas	May 2018
Final Design Plans and Specifications Advertised for Bid	April 2021

Notes:

1. The project schedule is based on several items beyond the control of the Dufresne Group or the Town of Plainfield, including the availability of funding, securing easements, the time necessary to obtain permits, the time the regulatory and funding agencies need to review plans and specifications and the success or failure of local bond votes. The schedule may change based on the actual time needed to complete these tasks.

Viability

The Town of Plainfield has been proactively working towards improving the pedestrian and bicycle facilities in the Town. The improvement of pedestrian facilities in the Lower Village was a clear priority throughout this study. With the completion of this study, the Town of Plainfield has a prioritized plan for moving forward with improvements to the Lower Village to better serve alternative modes of transportation.

Funding Implications

The Town of Plainfield does not have the funds to finance the identified improvements locally. The options for funding include grants, long-term debt or phasing. The VTrans Bicycle and Pedestrian Program, administered by the VTrans Local Projects section 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 that has proceeded beyond the scoping study phase is funded under this program and does not proceed to construction, any funds provided for the preliminary and design phases are subject to being paid back by the municipality. Grant applications are accepted annually and are generally due in July.

Smaller projects may be able to be completed using local funds such as providing hand rails along the steep embankment and the utility pole relocation on Main Street.

Traffic Control

To provide optimum safety for workers and the traveling public while maintaining acceptable levels of mobility in an efficient environment for the contractors to complete the project work in accordance with their contract a Traffic Management Plan should be developed for all federally funded project. This can be a simple a single sheet Traffic Control plan or as intricate as a multi-page document denoting the TTC for each phase and activity of the project that includes, Traffic Operation and Public Information Components.

Appendix A

Meeting Minutes and Public Comment

Plainfield
STP BP 15(16)
Local Concerns Meeting Questionnaire
June 13, 2016
Plainfield, VT

DUFRÉSNE GROUP
CONSULTING ENGINEERS

459 Portland Street
Suite 102
Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605
E-mail: aday@dufresnegroup.com

1. What should the purpose of this project be?

IMPROVE SIDEWALKS IN PLAINFIELD
LOWER VILLAGE

2. Why is this project needed?

INCREASED TRAFFIC, YEARS OF NEGLECT

3. How would you prioritize the following areas for pedestrian improvements (enter numbers 1-4 with 1 being highest priority)?

4	Main Street (Utility pole and retaining wall)
2	Creamery Street
3	Mill Street
1	Brook Road

4. What are your preferences for:

Location (i.e. east or west side, separated or adjacent to road, etc.):

WHAT WORKS

Width:



Surface type (i.e. asphalt, concrete, gravel):

CONCRETE

5. Other concerns or comments?

NO SIDEWALKS ~~AND~~ SITUATION GOES BACK
TO HORSE + Buggy DAYS. PEDESTRIANS NEED PROTECTION
FROM TRAFFIC. APPEARANCE OF LOWER VILLAGE ~~WILL BE~~
& PEDESTRIAN SAFETY WILL BE
MARKEDLY IMPROVED.

6. If you are willing, please provide your contact information so we can contact you with any follow up questions.

Name: JOSEPH KLEIN

Address: 641 REG FIELD RD.

Phone Number: 454-8466

Email: littlewoodfarm@gmail.com



DUFRESNE GROUP
CONSULTING ENGINEERS

Plainfield STP BP 15(16) Local Concerns Meeting Questionnaire

June 13, 2016

Plainfield, VT

459 Portland Street
Suite 102
Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605
E-mail: aday@dufresnegroup.com

1. What should the purpose of this project be?

complete the lower village sidewalk network to provide safe pathway for pedestrians so they can exercise and access village businesses & amenities

2. Why is this project needed?

currently, people walk the area without sidewalks on a regular basis

3. How would you prioritize the following areas for pedestrian improvements (enter numbers 1-4 with 1 being highest priority)?

2	Main Street (Utility pole and retaining wall)
1	Creamery Street
	Mill Street
3	Brook Road (in conjunction w/ bridge project)

4. What are your preferences for:

Location (i.e. east or west side, separated or adjacent to road, etc.):

Creamery - West

Brook - North

Width: same as existing sidewalk but Main St sidewalk might be wider because of the steep drop off on North side

Surface type (i.e. asphalt, concrete, gravel): concrete w/ granite curb

5. Other concerns or comments?

would like to see a pipe railing adjacent to sidewalk ^{bolted into} Main St that goes to P+R, similar to the one that was once there - there should be a conversation about snow removal before making the decision on type of barrier between drop off & sidewalk

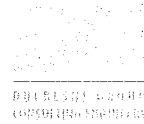
6. If you are willing, please provide your contact information so we can contact you with any follow up questions.

Name: Alice Merrill

Address: 127 Main

Phone Number: 454 8404

Email: merrill@charter.net



**Plainfield
STP BP 15(16)
Local Concerns Meeting Questionnaire**

June 13, 2016

Plainfield, VT

459 Portland Street
Suite 102
Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605
E-mail: aday@dufresnegroup.com

1. What should the purpose of this project be?

encourage free flow of pedestrians -
more for a safe/friendly/walkable environment

2. Why is this project needed?

currently no side walks - people are walking
in the road

3. How would you prioritize the following areas for pedestrian improvements (enter numbers 1-4 with 1 being highest priority)?

Main Street (Utility pole and retaining wall)	4
Creamery Street	2
Mill Street	3
Brook Road	1

4. What are your preferences for:

Location (i.e. east or west side, separated or adjacent to road, etc.):

Width:

Surface type (i.e. asphalt, concrete, gravel): it looks longer

5. Other concerns or comments?

give village a more complete look - give it definition

6. If you are willing, please provide your contact information so we can contact you with any follow up questions.

Name: Joe Klein

Address: 641 Recreation Field/ Plainfield

Phone Number: 421-8466

Email: littlewoodfarm@gmail.com

RECEIVED

DEC 12 2016

TOWN OF PLAINFIELD
TIME: _____ BY: _____

459 Portland Street
Suite 102

Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605
E-mail: aday@dufresnegroup.com

Home Page: <http://www.dufresneassociates.com>

**Plainfield
STP BP 15(16)
Local Concerns Meeting Questionnaire**

June 13, 2016

Plainfield, VT

1. What should the purpose of this project be?

2. Why is this project needed?

3. How would you prioritize the following areas for pedestrian improvements (enter numbers 1-4 with 1 being highest priority)?

	Main Street (Utility pole and retaining wall)
	Creamery Street
	Mill Street
	Brook Road

4. What are your preferences for:
Location (i.e. east or west side, separated or adjacent to road, etc.):

Width:

Surface type (i.e. asphalt, concrete, gravel):

5. Other concerns or comments?

Thanks to the Selectboard for seeking input while this project is still in the study stage. I do not feel that it is necessary to have any more sidewalks in the village. We are

• Page 1

a small town, not Montpelier, not suburban, and I value our small town look and feel. Adding more sidewalks will have a negative

-
-
6. If you are willing, please provide your contact information so we can contact you with any follow up questions.

Name: Marge Christie

Address: 1603 Bean Road

Phone Number: 454-7814

Email: marge-c@hotmail.com

impact on the friendly, low-key atmosphere in our town. And what is equally, if not more important, is that we need to keep as much of our earth uncovered by cement as possible! We know big changes are coming because of climate change. We need to look ahead and keep every possible square inch of the earth's surface available for grass, flowers, trees, whatever form of plants, because that's what's giving us oxygen, and absorbing carbon dioxide. Covering up the earth with cement is irresponsible, in my opinion. Plus, the work involved in this project (trucks hauling cement, machines excavating, etc) also adds to the problem of climate change. This is very irresponsible, and goes against our town plan of being good stewards of

the environment.

Plainfield
STP BP 15(16)
Local Concerns Meeting Questionnaire

June 13, 2016

Plainfield, VT

459 Portland Street
 Suite 102
 Saint Johnsbury, Vermont 05819
 Tel: (802) 748-8605
 E-mail: aday@dufresnegroup.com

Home Page: <http://www.dufresneassociates.com>

1. What should the purpose of this project be?

To come up with preferred designs and locations for sidewalks on Creamery St. and Brook Road, as well as repairs/improvements to the unfinished sidewalk on Mill Street

2. Why is this project needed?

and the sidewalk on Main St. to the Park and Ride. To provide safe pedestrian movement along these thoroughfares; to improve the appearance of the village; to encourage walking in the village area; to make the use of the Park and Ride more attractive and safe.

3. How would you prioritize the following areas for pedestrian improvements (enter numbers 1-4 with 1 being highest priority)?

2	Main Street (Utility pole and retaining wall)
1	Creamery Street
4	Mill Street
3	Brook Road

4. What are your preferences for:

Location (i.e. east or west side, separated or adjacent to road, etc.):

Creamery - West side. Separated if possible with shade trees
 Main Street - North side, adjacent to road, hand-rail on bank side
 Brook Rd - Adjacent to road on north side
 Mill Street - rebuild existing stub walkway

Width: 5' - all sidewalks (including granite curb)

Surface type (i.e. asphalt, concrete, gravel): Concrete with granite curb

5. Other concerns or comments?

It's understood that the Brook Rd sidewalk would have to wait until the bridge was replaced (and made wide enough to accommodate the sidewalk)

6. If you are willing, please provide your contact information so we can contact you with any follow up questions.

Name: DAVID STRONG

Address: 858 EAST HILL RD. PLATINFIELD, VT 05667

Phone Number: 802-454-1418

Email: dstrong@vtlink.net



Plainfield
STP BP 15(16)
Local Concerns Meeting Questionnaire

June 13, 2016
Plainfield, VT

459 Portland Street
Suite 102
Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605
E-mail: aday@dufresnegroup.com

1. What should the purpose of this project be?

To make it safe for pedestrians to walk to all the lower village amenities (P & R, Coop, Rec Field)

2. Why is this project needed?

There are no sidewalks on Creamery and Brook Road to connect to the existing sidewalk facilities on Main and Mill. Pedestrians use Creamery and Brook to access the Coop and the Rec Field.
Also, some of the existing sidewalks are deficient: the South end of Mill Street is deteriorated asphalt and the East end of Main Street sidewalk abuts a steep embankment and one sidewalk panel is compromised by a utility pole.

3. How would you prioritize the following areas for pedestrian improvements (enter numbers 1-4 with 1 being highest priority)?

2	Main Street (Utility pole and retaining wall) (access to P & R)
1	Creamery Street (access to Coop & Muni Offices)
3	Mill Street (access to rec field)
3	Brook Road (access to rec field)

4. What are your preferences for:

Location (i.e. east or west side, separated or adjacent to road, etc.):
New sidewalks should replicate existing facilities.

Width:
New sidewalks should replicate existing facilities.

Surface type (i.e. asphalt, concrete, gravel):
New sidewalks should replicate existing facilities.

5. Other concerns or comments?

Will need to coordinate the D & C phase of this project with the D & C phase of new bridges on Brook Rd and Mill St.
In the past, the Coop has suggested construction of a sidewalk bordering the East side of the Municipal Building to give pedestrians a safe walkway through the vehicle (deliveries) entrance and parking lot South of the Coop building.

Redesigning and paving the parking lot (shared by the Municipal Building (offices upstairs and down), the Fire Dept (Emergency Squad) and the Coop) would be a welcomed improvement, but it will be challenging to work out an agreement on assigned parking.

-
6. If you are willing, please provide your contact information so we can contact you with any follow up questions.
-

Name: Alice Merrill

Address:

Phone Number: 802-454-8404

Email: mermo@charter.net

Andrea

Plainfield Sidewalk Study 12=8-16 FPF

MARGE CHRISTIE, MARGE_C@HOTMAIL.COM, BEAN ROAD, PLAINFIELD
DISCUSSION

I am glad to see that the Selectboard is seeking comments on the possibility of extending the sidewalks in Plainfield while it is still in the study stage. I have submitted my comments on the questionnaire which is available in a previous FPF issue, and I want to share my feelings further here on FPF. I do not feel that it is necessary to have any more sidewalks in the Village. We are a small town, not Montpelier, not suburbia, and I value our small town look and feel. Adding more sidewalks will have a negative impact on the friendly, low-key feeling in our town. And what is equally, if not more important, is that we need to keep as much of our earth uncovered by cement as possible. We know big changes are coming because of climate change. We need to look ahead and keep every possible square inch of the earth's surface available for grass, flowers, trees, whatever form of plants, because that's what's giving us oxygen, and absorbing carbon dioxide!! Covering up the earth with cement when not absolutely necessary is irresponsible, in my opinion. Plus, the work involved in this project (trucks hauling cement, machines excavating, etc.) also adds to the problem of climate change. This is very irresponsible, and goes against our town plan of being good stewards of the environment. I hope others will weigh in with their opinion on this project.

Plainfield Sidewalk Study - 12-9-16 FPF

LAURIE VEATCH, LAURIE_VEATCH@YAHOO.COM, GORE ROAD, PLAINFIELD
DISCUSSION

Thank you Marge Christie for your thoughtful, environmentally responsible comments on the possibility of extending the sidewalks in Plainfield. I agree we have enough sidewalks in the Village, that adding more sidewalks would detract from the current friendly feel of the Village, and more importantly that we need to minimize covering our earth with cement. As Marge said, we should keep as much grass, flowers and trees as possible to increase oxygen and decrease carbon dioxide--and because plants are more beautiful and peaceful than concrete.

Plainfield Sidewalk Study

BEN GRAHAM, BEN@NEWFRAMEWORKS.COM, MAIN STREET, PLAINFIELD
DISCUSSION

Marge,

I appreciate your concerns on the impact of sidewalks to climate change and think that's a great thing to consider. My issue is that there are some places I like to walk to that are ridiculously dangerous because roads have taken over all the space of our traveling lanes.

What would be great is to have a safe place to walk that was designed in a low carbon impact way.

The sidewalk along Rt. 2 to the east of the blinking light is terrible and I have a kid that likes to walk around the village and there's no place to walk but the road, like on Creamery Street. Why not take up some of the pavement and have a brick sidewalk, or even staymat with stone curbs.

I don't think that giving a village nice walking paths makes it suburban, a lot of it seems to be in how it is designed and built. So your comments are well taken.

Plainfield Sidewalk Study 12-10-16

Sidewalks 12010-16 FPF

JANE BRADLEY, JOWENB1983@GMAIL.COM, MILL STREET, PLAINFIELD

DISCUSSION

I've lived in the village for over 30 years. I love our sidewalks. I support having sidewalks that go all around the block. There are beautiful trees and plantings integrated into the walkway. There is beautiful art drawn by local kids. Moms, Dads and grandparents push babies in strollers around on sunny days and summer evenings. Kids ride their bikes and bounce basketballs on their way to the rec field. I see people, like me, with disabilities able to walk or roll on a smooth predictable surface. I see a lot of good in our sidewalks.

Plainfield Sidewalks

GLEND A BISSEX, SONGBOAT@VTLINK.NET, EAST HILL RD., PLAINFIELD

DISCUSSION

A town that has few sidewalks says to me "This is a drive-through town." A town that has many sidewalks says to me "This is a walk-around town." It's neighborly. Having to walk in the street doesn't feel right to me--would actually feel dangerous if I had small children. I think the sidewalk project is being a good steward of the human environment.

BUT sidewalks need to be maintained or they become hazardous and eyesores, so a commitment to maintenance should be part of this project.

Plainfield Sidewalk Study 12-11-16 FPF

MARGE CHRISTIE, MARGE_C@HOTMAIL.COM, BEAN ROAD, PLAINFIELD

DISCUSSION

Thanks to those who have shared their perspectives on the possibility of more sidewalks in the Village. While I still do not want to see cement covering the earth, I can appreciate that people want to feel safe. Perhaps the idea of a surface other than cement is a good idea. Someone also brought up the idea of having the sidewalk go up Hudson Avenue instead of the Brook Road, thus avoiding the issue of crossing the bridge on the Brook Road, and also bringing down the cost quite a bit. (This idea was suggested on the link page to the questionnaire). I expect that the town will have a chance for more input in the future, as well as a vote.

Andrew

Comments on Plainfield People concerning the Side Walk Study: Nov. 15, 2016

As noted in the comments, the form was not accessible the day of this posting but was available later. I'm not sure if anyone sent in more Questionnaires; I did not receive any but I did receive the following comments. Most are on Plainfield People on Facebook and can be accessed through that site.

"I was not able to open a survey but I am all for more sidewalks. It's great for the kids. For me and for my neighbors who also use canes and scooters the predictable surface of the new sidewalk across from our house has permitted me to feel much safer walking in town. The kids draw on it. The flowers and trees are beautiful to look at. It's safer. There are Lots of kids on Creamery St and I would love to walk around the block and see their chalk drawings on a new sidewalk. I guess you can tell that I am all for it!

On another note there has been a noticeable decrease in speeding in the village since the stop signs. I know lots of folks felt inconvenienced by having to stop but I think it helps people pause and recognize they are going into a village. Jane Bradley

Sarah OBrien /react-text react-text: 265 /react-text I think it sounds great Betsy! Will fill out the form.

react-text: 306 Nicole Stratton /react-text I respectfully disagree. I think the new sidewalks that were added already make parking a real issue in general and for positive pie in particular. I think it is an unnecessary expense and walking on the side of the road on Creamery, as we have always

Lauren Cleary- Everyone knows that the intersection at the Blinking light is an issue. But this is out of the town's hands and requires the state to address it. When grants are given out they are specifically to address certain issues. In this case the addition of sidewalk in the lower village. Let's try to stay focused on that for the purpose of the survey.

react-text: 407 Darcy Roberts /react-text The sidewalks are an issue now. They have made the parking and travel in the village a nightmare, there is not enough room to drive two vehicles through the town if your vehicle is larger than a smart car. The parts of the sidewalks that push out into..

react-text: 459 Sarah OBrien /react-text I think the point of those was to slow down traffic. Not advocating, tho I don't mind them. But it isn't a design flaw - it's how they were meant to be. react-text: 500 Paul Burns /react-text if they were meant to be that way, and they don't work, that makes them a design flaw

react-text: 565 Joshua Stuart Pitts /react-text Having a built infrastructure that accommodates people with limited mobility is a good thing. The current state of built infrastructure in the village has gaps and I think creating a complete circuit makes sense.

react-text: 610 Jeannine DeWald /react-text I agree with Josh, but please no more bump outs.

react-text: 656 Joshua Stuart Pitts /react-text The plan has only a basic sidewalk I believe.

react-text: 766 Jenni Bee /react-text I think sidewalks in general are great, however they raised the sidewalks on Mill about half a foot, with only the ever so slightest tilt. So, whenever there are heavy rainfalls the water runs right at the house, destroying the foundation and creating a huge problem.

react-text: 807 Joshua Stuart Pitts /react-text I agree, the sidewalk between Brook and Hudson needs to be redone.

react-text: 852 Jenni Bee /react-text yes that would be really great.

react-text: 924 Leona Peacemus Chouinard /react-text I don't believe that a "village" needs more sidewalks; it only narrows the road; aesthetically, I feel it is even worse. What has already been done by the church makes it difficult enough to have two pickups meet there and have space to get through, e react

react-text: 1037 Paul Burns /react-text The sidewalks down town are a terrible design, And Yes I agree with Darcy Roberts that it would be a better thing to do with sidewalk money is to return them to the way they were before. As for speed bumps, they will make it very hard for plows in the winter, and won't last very long with the frosts we get.

react-text: 1083 Leona Peacemus Chouinard /react-text Hi Paul... if done correctly, speed bumps work great -- they have them in Burlington and trailer parks. By only having 2, it would significantly reduce speed coming into the village. I'm quite sure Mike Nolan and his crew would rather have two inconveniences when plowing, rather than narrower streets.

Completely agree with you and Darcy-- hate the design of what has already been done by the church.

react-text: 1125 Paul Burns /react-text I bet if you talked to Mike he won't want to have to be applying brakes coming down the hill approaching a speed bump while plowing. I have plowed a little and this seems like danger to me.

Matthew Bissell

From: Bram Towbin <hihoau@gmail.com>
Sent: Sunday, December 18, 2016 12:45 PM
To: Andrea Day; Betsy Ziegler
Cc: Linda Wells; Ross Sneyd
Subject: feedback on sidewalk

I got this email from a resident who lives on Brook Rd.

Hi Bram,

I have tried to fill out the form with Kami program, but in case you cannot open it, here is what I wanted to share with the sidewalk committee.

I have marked my 'yes' on the north side (Bill's house side), thinking that the south side is on my side on Brook road. I hope that is a correct interpretation.

I have a few concerns in terms of building a sidewalk on the side where my house sits.

1. The stop sign was also built in front of my house, which has been great to slow down the traffic on Brook Road. However, the byproduct of it is that we often get exposed to negativity because of what was built - many people pass right through it, and even throw out trash at the stop sign, which consequently ends up on my lawn. As a resident who directly receives the negative impact of this change, I am reluctant to add another venue for us to deal with what it would entail as a result of a new sidewalk right in front of my house.

2. If the sidewalk is built on my side, as opposed to Bill's side, I could again lose a bit of my property - even though the town might have certain rights when it comes to building something public onto residents' properties, I am reluctant to have my property to be the one that keeps getting 'chipped away'. If the bridge gets repaired/expanded down the road, again, my already small property needs to be affected in order for the opening of the bridge to be big enough. I really hope that things will be kept fair for everyone.

3. The sidewalk will probably make Brook road feel even narrower and tighter. I am debating on this because it could contribute to slowing down the traffic even more; but then again, walking on the bridge is where I feel people should feel safer with a side walk. If a sidewalk is added onto Brook Rd., then the bridge should certainly have a sidewalk. How does it make sense, adding something onto the bridge before rebuilding/expanding the bridge first? I personally feel that the bridge should be dealt with before adding a sidewalk onto it. A sign warning drivers to watch for pedestrian traffic might be something to consider, rather than a sidewalk here.

In all honesty, we have moved into this house because of the accessibility to the town, yet having a private feel. I definitely like the idea of being able to walk on this road safely, but I am very wary of adding another presence around my house on top of cars stopping and accelerating (and honking and screeching tires sometimes).

I will try to make it to the next sidewalk meeting, if possible. If I cannot make it to the next meeting, please share my input with the committee members.

Thank you for your patience to read through my response to this. I apologize that my response was not prompt this time - I meant to print it out weeks ago, and I forgot... I appreciate your reminder and inclusiveness.

Best,

Yoko Kishishita

--

Bram Towbin

802 476 5789

fotogosaurus.wordpress.com

DRAFT MINUTES

1/12/17

Lower Village Sidewalk Committee Municipal Building, 4 pm

Attending: Susan Grimaldi, Annie Coughlin, David Diamantis, Alice Merrill, Betsty Ziegler (Select Board Liason), Nick Meltzer (VTrans)

The focus of the meeting is to discuss and choose an alternative from the Dufresne Plainfield Sidewalk Scoping Study. The areas involved are: Creamery St and Brook Rd (new sidewalks); Mill St and Main St Extension (sidewalk improvements).

Nick informed the committee that the scoping study does not oblige the Town to move on to the design/construction phase. Once the committee chooses one of the alternatives, Dufresne will provide a more specific cost analysis and a report on the impact on environmental and historical features. In the future, the Town can use the scoping study as a resource if it chooses to apply for funding for design/ construction. Betsy confirmed that the Town has already paid for the scoping study.

The Committee discussed: if the new sidewalks will have 'green strips' or not; if the new sidewalks will be constructed as an 'outer loop' on Creamery and Brook or an 'inner loop' (see Alternatives Meeting handout dated 12/12/16). There was lengthy discussion about coordinating the new sidewalk on Brook Rd with the future construction of a bridge. It was noted that the span of the new bridge over the channel will be extend by an additional 10'; the height increased by 6" (see Great Brook Bridge Alternative Analysts dated 2/15/16). According to the engineers, the addition of a sidewalk on the new bridge will not have any effect on the flow of the water under the bridge. Nick confirmed that a sidewalk could be easily incorporated into the bridge design.

There was a discussion about the new sidewalk on encroaching on residents/ property. It was noted that most of the property is part of the Town's right of way. It was noted that Alternative 2 (Concrete sidewalk with granite curb and no green strip, Inner Loop Creamery & Brook) is the design that is less intrusive on residents properties. The committee agreed that green strips are not a good choice for the Town. However, this Alternative will present the challenge of dealing with a historic property (barn) and a wetland. The proposed sidewalk adjacent to the barn (and in other sections) can be reduced from 5' to 4' and still meet VTrans Standards. Discussion about how inner loop sidewalk on Brook would impact Grimaldi's property and about the wetland on Creamery.

Susan asked if the sidewalk on the bridge would need to be 5'. Nick said the ADA requires 5' sidewalks or 4' sidewalks with a 5' wide landing strip every 200'. He noted that it is more economically efficient to construct 5' sidewalks.

Discussion about phasing the project: sidewalks on Brook would be included in the design/construction phase of the new bridge. Nick noted that part of the funding for the new bridge may come for a Highway Structures Grant and that program may not include

funding for sidewalks. Nick said that there may be federal funds available for infrastructure. He suggested: phase 1-Creamery & Mill; phase 2-new bridge on Brook; phase 3-sidewalks on Brook.

Annie wondered, since there would be no sidewalk on Brook until a future date, is it worth considering stopping the new sidewalk on Creamery at Hudson Ave as a way of saving money. Nick wondered about Newhall's (property owner at Brook & Creamery) receptiveness to the project. Besty suggested we get a cost estimate for the full length of Creamery and another up to Hudson.

Discussion about how the new section of side walk at the corner of Mill and Brook with help define that broad corner and make it safer for pedestrians. General opinion is that vehicles travel at speeds on Brook that make it unsafe for pedestrians and that Brook is used by pedestrians on a regular basis.

Discussion about not applying to VTRans for funding for the Main St Ext improvements. Betsy believe that GMP may remove the utility pole in the sidewalk at their expense if they can work out an agreement with the abutting property owner. Dufrense recommends the Town not apply for VTRans funding for the railing. The expense of the railing and the legal expense of acquiring easements will be about the same as the Town's match through VTrans, but the process will go much faster if the Town takes on the project.

The committee agreed to the following:

- Alternative 2 is the best choice for the lower village
- The committee wants a cost estimate and analysis for an additional segment of sidewalk starting at the corner of Main and Creamery, extending on the east side of Creamer up to the large apartment building (reasoning is pedestrian safety)
- Design and Construction will have the following phases:
Phase 1-Creamery and Mill
Phase 2-Brook
- The Town will not apply for funding through VTrans for sidewalk improvements on Mill Street, but will pursue them on it's own
-

Susan had questions about stormwater drainage and how it will affect resident's property. Alice said that Dufresne will provide a map showing the existing water and sewer pipes and the improvements that will be part of the sidewalk project.

Meeting adjourned at 5:10 pm.

Respectfully submitted,

Alice Merrill

Matthew Bissell

From: Meltzer, Nicholas <Nicholas.Meltzer@vermont.gov>
Sent: Friday, January 13, 2017 4:17 PM
To: Andrea Day
Cc: Betsy Ziegler (betsy.littlewood@gmail.com)
Subject: Plainfield STP BP15(16) Update

Follow Up Flag: Follow up
Flag Status: Completed

Andrea,

The Plainfield sidewalk committee met last night and made a number of decisions regarding the alternatives. I've summarized them below:

- No green strip is preferred to minimize encroachment on properties
- The "inner loop" side of the road is preferred for the sidewalk
- The town would like to break the project up into three phases. 1) The sidewalk along Creamery and Mill Street (see next bullet). 2) The bridge replacement, with a sidewalk on it. 3) Completing the network with a sidewalk along Brook Rd
- In terms of Phase 1, the town would like it broken out into two options: one where the sidewalk ends at Hudson Ave, off Creamery, and one that extends to Brook Road. The thought is that by stopping at Hudson, the town may avoid the barn section entirely
- The town would also like to add a section along Creamery on the East side of the street, to extend the existing sidewalk to Creamery Street Apartments
- In terms of the railing along Main Street, the town would like the least expensive option that matches the bridge railing for the new pedestrian bridge
- As for additional information/questions, the following was raised:
 - How the drainage would function in conjunction with the roadway and surrounding houses (i.e. yard impacts, location of pipes/storm drains, etc.
 - There was additional concern by the landowner that abuts the brook about how drainage would impact the retaining wall separating her yard from the waterway

I think that's it, feel free to give me a call to discuss if you want (I'm off on Monday).

Have a good weekend,
Nick

Nicholas S. Meltzer, P.E.
Project Supervisor
Municipal Assistance Bureau, Highway Division
Vermont Agency of Transportation
1 National Life Drive
Montpelier, VT 05633
Phone: (802) 828-3885

Appendix B

Historic Resources Review



**HISTORIC RESOURCES REVIEW FOR THE
PLAINFIELD STP BP15(16) LOWER VILLAGE SIDEWALK SCOPING PROJECT,
PLAINFIELD, WASHINGTON COUNTY, VERMONT**



Submitted by:
Catherine A. Quinn
Consulting Archaeology Program
University of Vermont
111 Delehanty Hall
180 Colchester Avenue
Burlington, VT 05405
UVM CAP Report No. 997

August 18, 2016

**HISTORIC RESOURCES REVIEW FOR THE
PLAINFIELD STP BP15(16) LOWER VILLAGE SIDEWALK SCOPING PROJECT,
PLAINFIELD, WASHINGTON COUNTY, VERMONT**

Prepared for:

Andrea J. Day, PE
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459 Portland Street
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Submitted by:

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August 18, 2016

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INTRODUCTION

This Historic Resources Review for the Plainfield STP BP15(16) Lower Village Sidewalk Scoping Project, located in Plainfield, Washington County, Vermont, was conducted by 36 CFR 61 qualified Historic Preservation Specialist, Catherine A. Quinn of the UVM Consulting Archaeology Program, in order to assist Dufresne Group and the Town of Plainfield with compliance under Section 106 of the National Historic Preservation Act of 1966 and its amendments and assist with Section 4(f) of the Department of Transportation Act of 1966, and its amendments.

This proposed project was reviewed according to standards set forth in 36 CFR Part 800, the regulations established by the Advisory Council on Historic Preservation to implement Section 106. Review consists of identifying historic resources on or eligible for listing on the National Register of Historic Places that have the potential to be affected by project work. A visual inspection of the project area was conducted by Catherine Quinn on July 14, 2016; current photographs were taken during the site visit. Additional photographs were taken on August 5, 2016 by UVM CAP Historian Kate Kenny. Research conducted for this review included a search of the collections of Wilbur Special Collections of the Bailey Howe Library at the University of Vermont, the Plainfield Town Office, the Online Research Center of the Vermont Division for Historic Preservation, and the online Landscape Change Program of the University of Vermont, and included the State Register files, environmental review files, review of historic maps, images, postcard collections, newspapers, aerial photographs, family histories, town histories, vital records, business directories, federal census records, and land records. UVM CAP Historian Kate Kenny assisted with background research and writing.

PROJECT LOCATION AND DESCRIPTION

The proposed Plainfield STP BP15(16) Lower Village Sidewalk Scoping Project is located along a small portion of Mill Street, a portion of Brook Road, Creamery Street, and a portion of Main Street in the Town of Plainfield (Figure 1). Project work includes constructing new sidewalks with granite curbing along Mill Street, Brook Road and Creamery Street, and removing and relocating a utility pole and providing protection for pedestrians along a steep embankment along Main Street (Figure 2). Construction of the sidewalks will link to existing sidewalks along Main Street, completing the sidewalk network in the lower village. The project is in the scoping stage, so plans are not currently available for review.

A small portion of the project located along Main Street lies within the National Register-listed Plainfield Village Historic District (Figure 3) (NPS 1983). The District includes a mix of residential, commercial, public, religious and agricultural buildings, with contributing resources dating from the late 1700s through the first three decades of the 20th century. The Village developed throughout the 19th and early 20th centuries into a prosperous mill community and despite the loss of its industrial buildings, primarily to fire, the District retains the character of an intact rural Vermont village center. Buildings in the District represent the broad spectrum of architectural styles from this more than 100-year period, including Federal, Greek Revival, Gothic Revival, Italianate, Queen Ann and Colonial Revival, and it contains an unusually high number of pre-Civil War brick buildings (NPS 1983). At the time of the National Register Nomination in 1983, there was a total of 74 historic buildings that contributed to the District's

significance. Two of these contributing buildings (#46 and #48) have the potential to be directly affected by the Plainfield STP BP15(16) Lower Village Sidewalk Project (see Figure 3).

One other property within the project area, the Gale-Bancroft House, located on Brook Road, is individually listed in the National Register of Historic Places (NPS 1984). The three listed properties along with all other properties within the Area of Potential Effect (APE) of the Plainfield STP BP15(16) Lower Village Sidewalk Scoping Project were evaluated as part of this Historic Resources Review. After a history of the Town of Plainfield is presented for context, each property is described and assessed below with recommendations for significance and National Register listing eligibility provided, and general potential effects given.

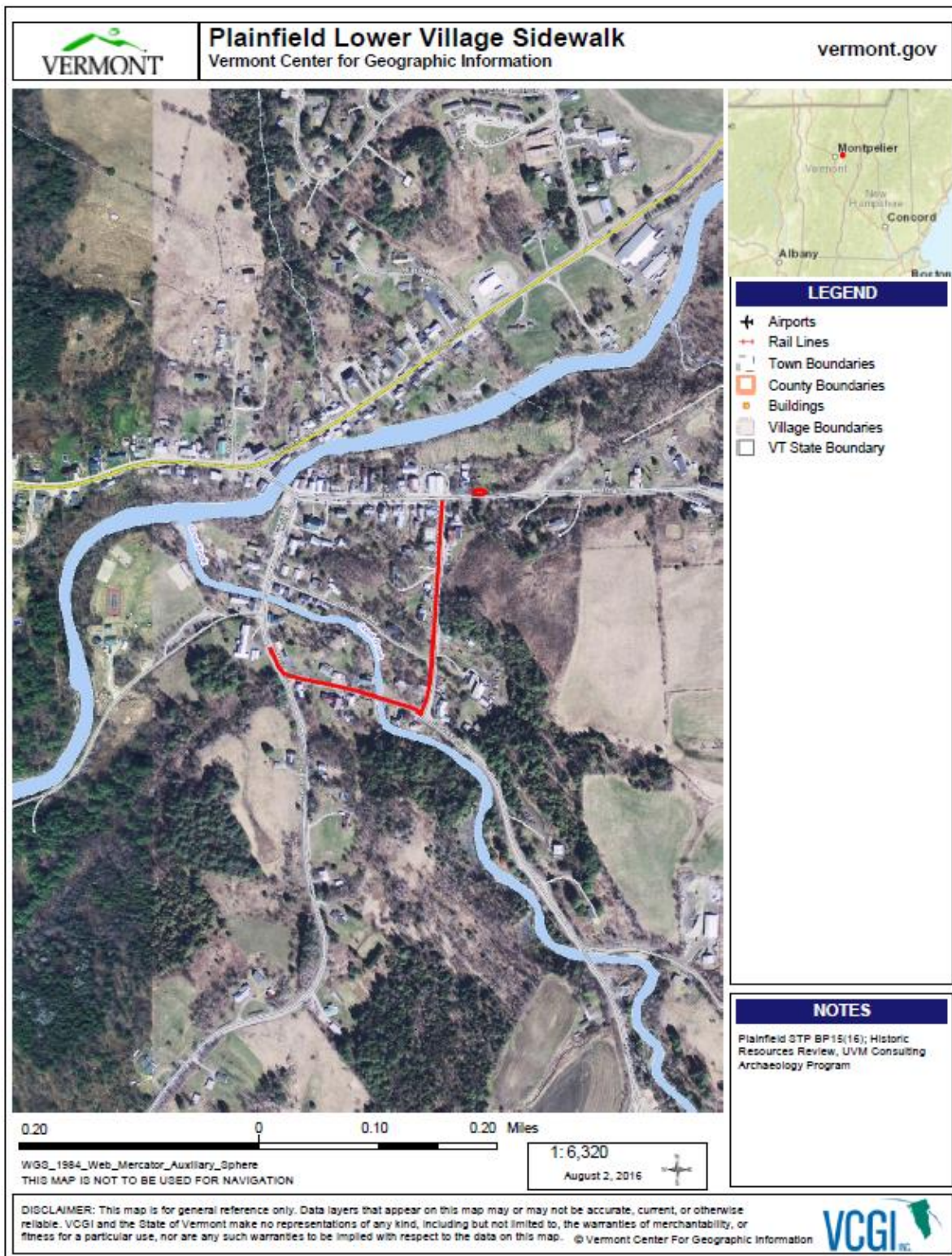


Figure 1. Map showing the location of the Plainfield STP BP15(16) Lower Village Sidewalk Scoping Project in Plainfield, Vermont.

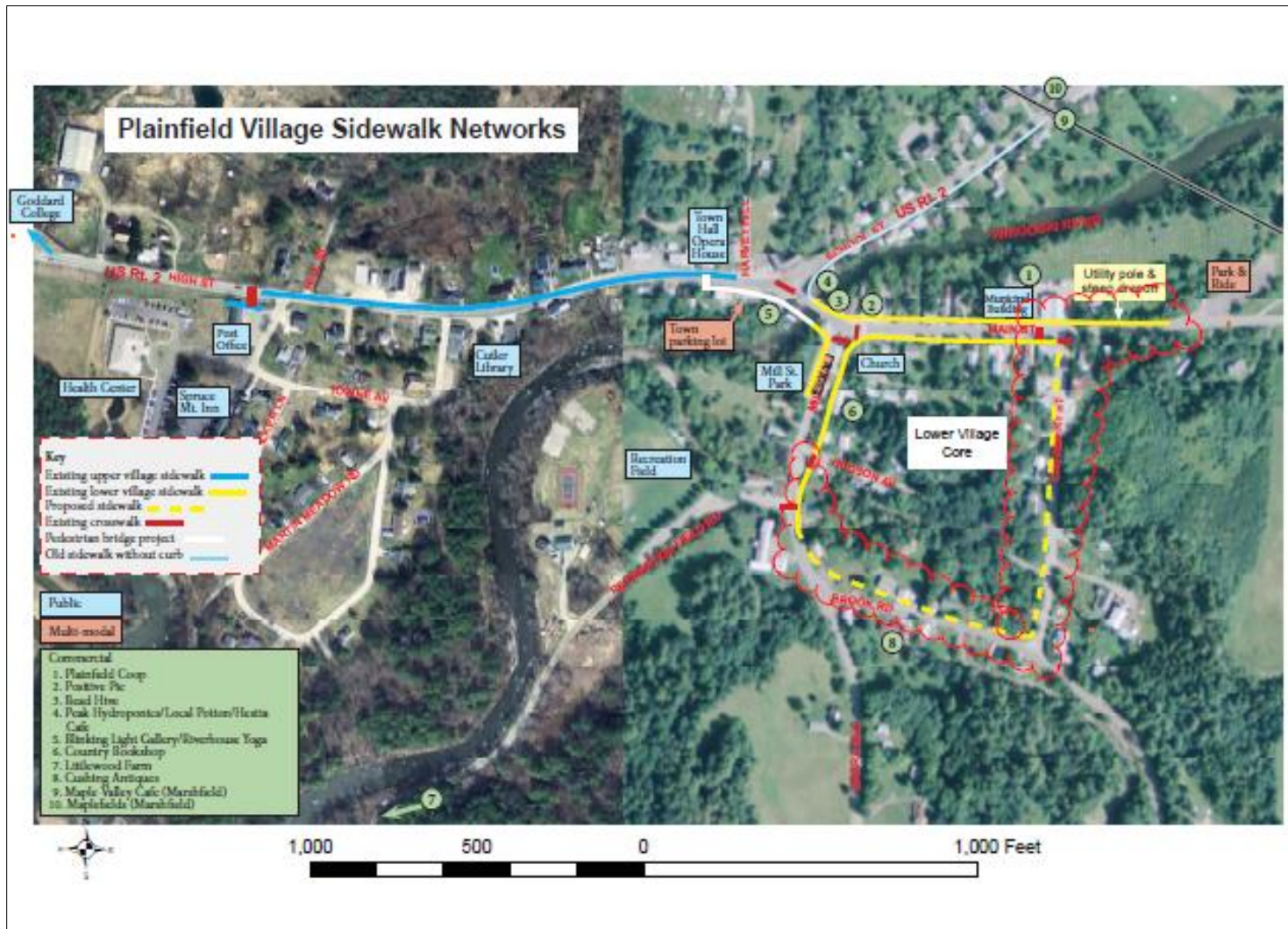


Figure 2. Plan showing the location of the Plainfield STP BP15(16) Lower Village Sidewalk Scoping Project in Plainfield, Vermont; project area reviewed lies within red circled area (provided by Dufresne Group).

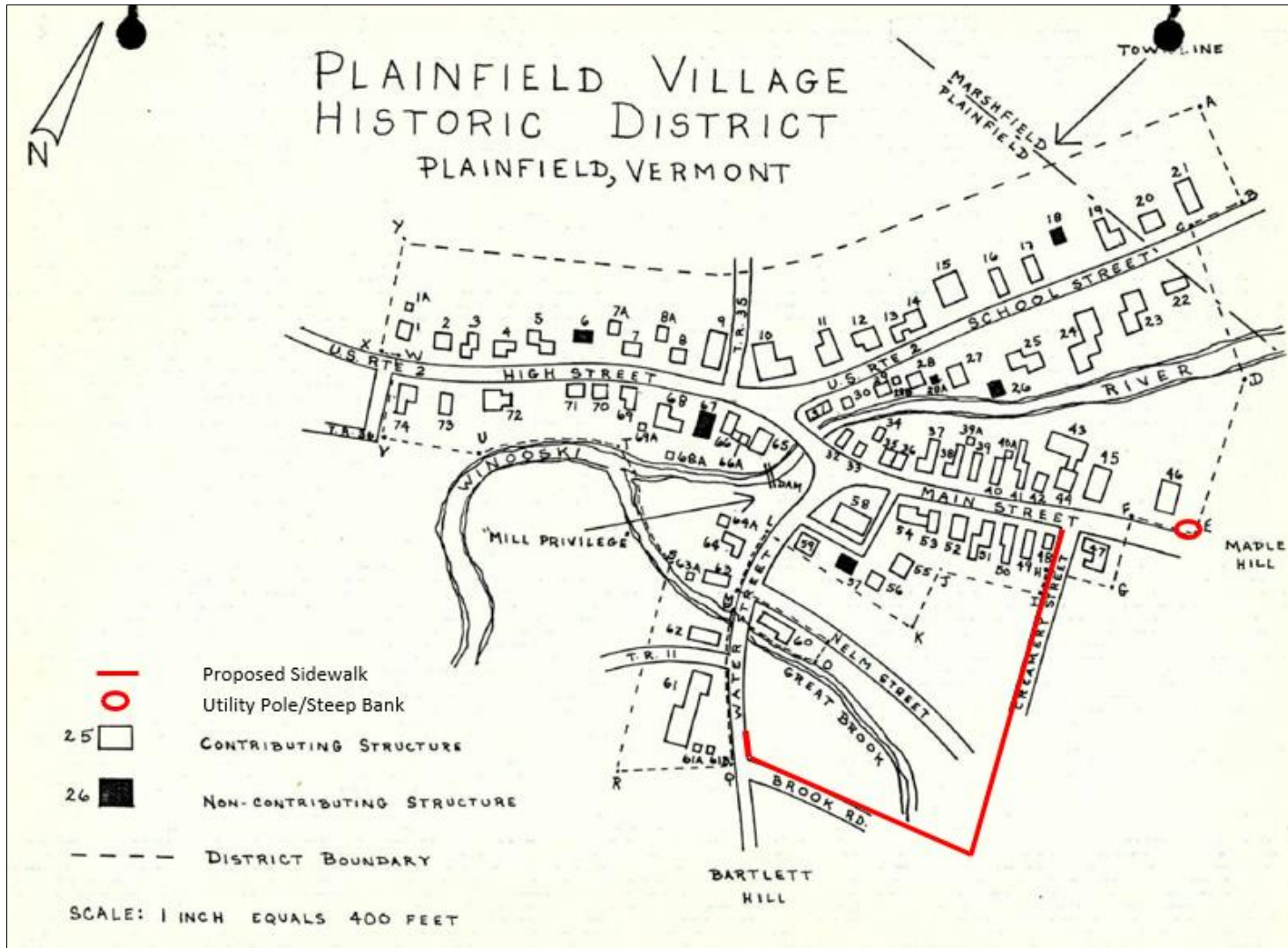


Figure 3. Sketch map of the National Register-listed Plainfield Village Historic District with the Plainfield STP BP15(16) Lower Village Sidewalk Scoping Project added.

PROJECT AREA HISTORY

In her 1965 historical sketch of Plainfield, ‘Early Plainfield and Its People,’ Myra Himelhoch notes that at the close of the Revolutionary War, Plainfield was considered “vacant” territory and claimed by the State of Vermont, because it was an area that had not been chartered by the New Hampshire grants (Himelhoch 1965:8). James Whitelaw, chief surveyor of Vermont, was charged with dividing up all of the vacant land into six mile square townships; pieces of land measuring less than six square miles that remained after the divisions were made, were termed “gores” (Himelhoch 1965:8). One such piece of land lay between Montpelier and Marshfield, and Whitelaw marked one corner of this gore as “St. Andrew’s Corner” (Himelhoch 1965:8). Whitelaw and his associates received St. Andrew’s Corner as partial payment for their surveying work in ca. 1788, but soon after sold most of the property to Ira Allen (Himelhoch 1965:8 – 10). Allen’s plan was to rent farmland to settlers and use the money to help fund a college in Burlington, Vermont (Himelhoch 1965:10). Reportedly, Allen’s agent, Jacob Davis mistakenly sold the land to the settlers instead of renting it, and lawsuits between Davis, the Allens and the settlers went on for years, with the settlers having to pay twice for their land (Himelhoch 1965:10).

The first settlers arrived in St. Andrew’s Corner in 1791; by 1797 there were 30 families in the new settlement, and that number doubled by 1800 by which time a blacksmith shop and tavern had been established (Himelhoch 1965:12). The town was legally named and incorporated as Plainfield in 1797, a name suggested by John Chapman who was from Plainfield, New Hampshire (Himelhoch 1965:12). By 1803, a saw and grist mill were in operation, followed by a store, potash works, a second blacksmith shop, oil mill and fulling mill (Himelhoch 1965:26). Two churches were built by 1819, and by 1820 there were about 100 families in Plainfield and it had two stores, two blacksmith shops, two potteries, three mills, a tannery, a tavern, a distillery, a saddler’s shop, and a hatter’s shop (Himelhoch 1965:36).

By the mid-1800s, Plainfield was well established on both sides of the Winooski River (Walling 1858; Beers 1873) (Figures 4 and 5). The completion of the Montpelier and Wells River Railroad line through Plainfield in 1873 stimulated the development of additional industry in the town and brought in tourists who frequented local hotels and the Spring House resort (Plainfield Historical Society 1993:82). By 1878, one to two cars of lumber or chair stock and several hundred pounds of farm produce was being shipped from the station on a weekly basis (Plainfield Historical Society 1993:83). The railroad’s impact on Plainfield continued through the late 1800s and into the first half of the 1900s, contributing to the success of local dairy farming. By 1895, a refrigerator house was built near the railroad station and in 1947 local farmers were receiving up to three loads of feed each week (Plainfield Historical Society 1993:85). However, by the late 1950s, the railroad no longer ran through Plainfield (Figure 6).

The proposed sidewalk project area was well developed by the mid-1800s, though not as densely as areas of the town to the north and east (see Figures 4 and 5). Along with houses, a cider mill, the tannery, a lumber house and the undertaker’s shop were all located in this part of town in the mid-19th century. Creamery Street (formerly Masonic Street) was built ca. 1870 and developed soon after the arrival of the railroad in 1873. Thirteen properties within the project area were reviewed in greater detail, because they have the potential to be directly impacted by project work; a more general review was conducted for indirect impacts (Figures 7 – 21).

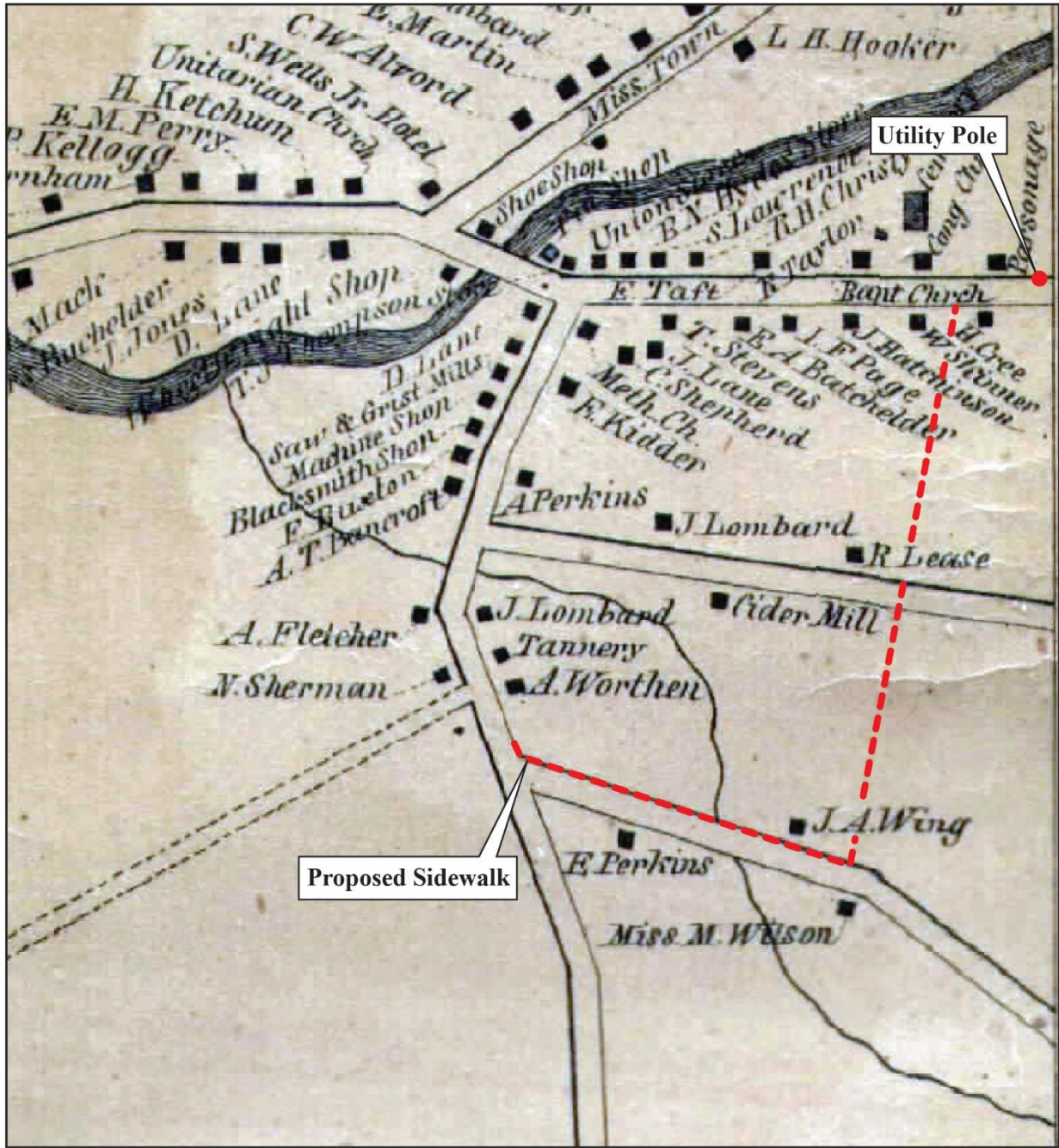


Figure 4. Detail from H. F. Walling's *Map of Washington County, Vermont* (1858), with project elements added.

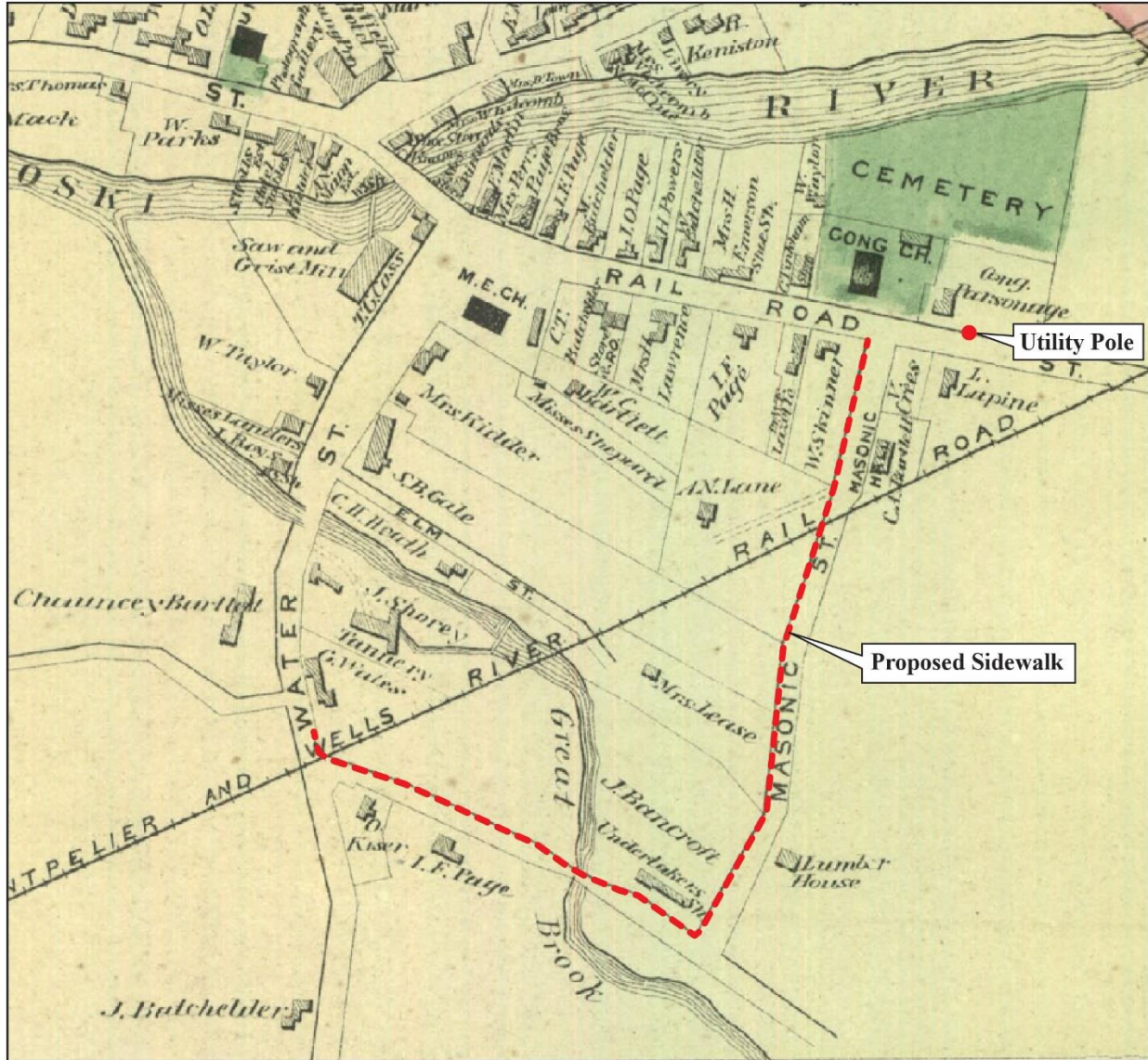


Figure 5. Detail from F.W. Beers' *County Atlas of Washington County, Vermont* (1873), with project elements added.

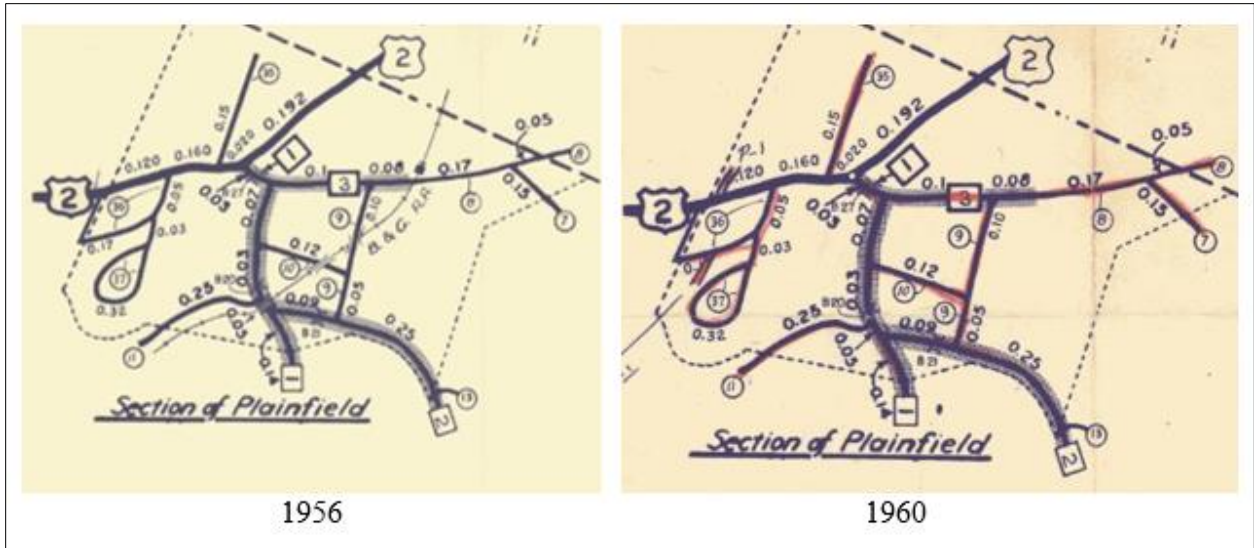


Figure 6. Section of Plainfield Town Highway Maps indicating the removal of the railroad line in the late 1950s.

PROJECT AREA PROPERTIES

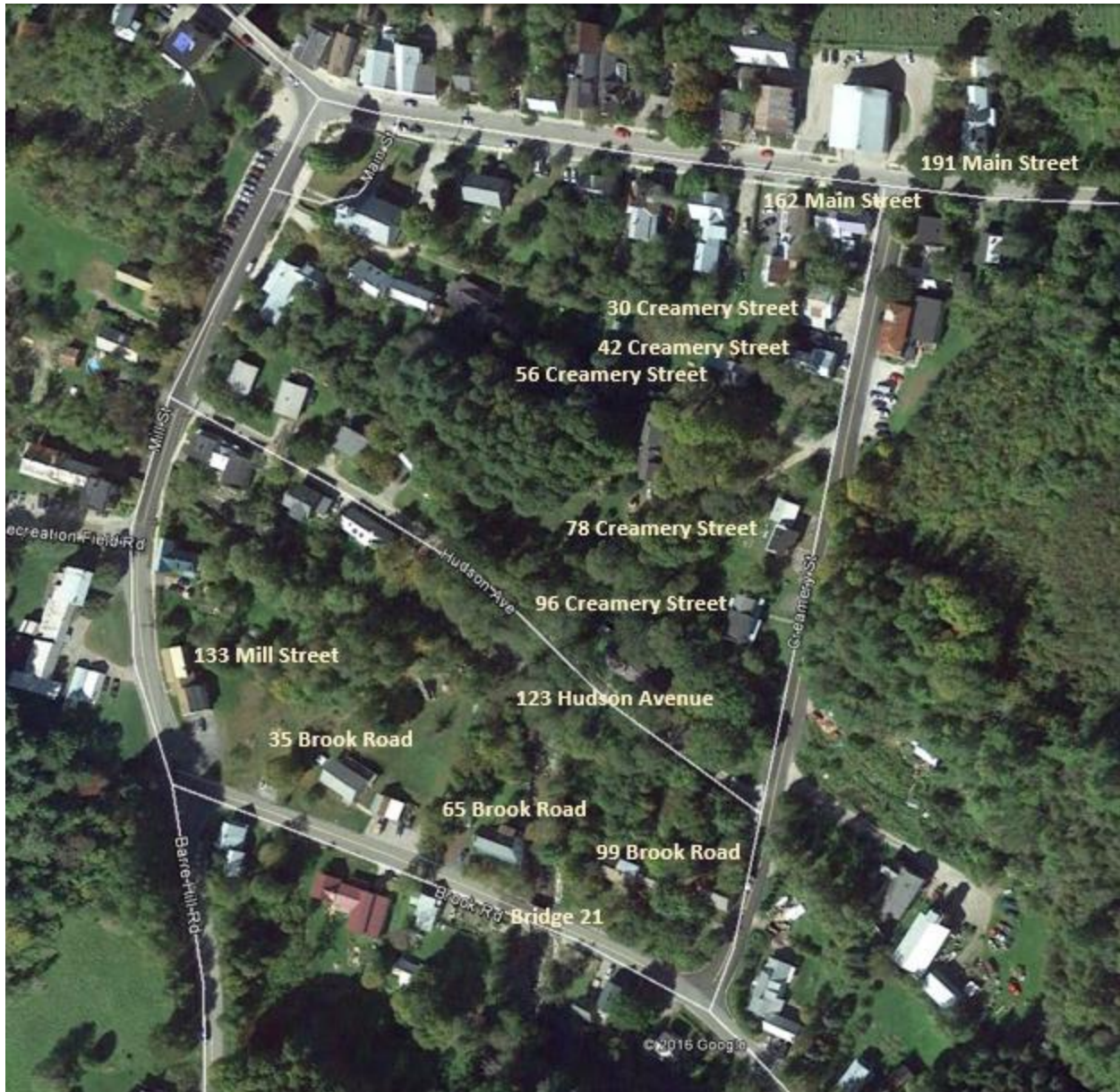


Figure 7. Image showing the location and street address of properties that were specifically reviewed within the Area of Potential Effect of the Plainfield STP BP15(16) Lower Village Sidewalk Scoping Project.

Streetscape Views



Figure 8. View southeast along Mill Street at the west end of the project area, looking towards the intersection of Mill Street and Brook Road; 133 Mill Street at right.



Figure 9. View southeast on Mill Street at the west end of the project area, with Brook Road stop sign at center; 133 Mill Street garage at left foreground.



Figure 10. View southeast down Brook Road from intersection of Mill Street and Brook Road; 35 Brook Road at left foreground.



Figure 11. View southeast down Brook Road with Creamery Street intersection in background; Bridge 21 at center.



Figure 12. View west down Brook Road from intersection of Brook Road and Creamery Street; Bridge 21 at center.



Figure 13. View northwest down Creamery Street from intersection of Brook Road and Creamery Street; 99 Brook Road at left.



Figure 14. View north down Creamery Street from intersection of Creamery Street and Hudson Avenue; 78 Creamery Street at left background.



Figure 15. View south down Creamery Street; 78 Creamery Street at right.



Figure 16. View north down Creamery Street; 42 Creamery Street at left foreground.



Figure 17. View south down Creamery Street; 42 Creamery Street at right center.



Figure 18. View northwest on Creamery Street toward Creamery Street and Main Street intersection; 162 Main Street at left.



Figure 19. View south down Creamery Street at the northeast corner of the project area; 162 Main Street at right foreground and 42 Creamery Street at right center.



Figure 20. View east down Main Street at the northeast corner of the project area; utility pole to be relocated in left background.



Figure 21. View northwest along Main Street; utility pole to be relocated in right foreground and 191 Main Street at center.

133 Mill Street

Property History: This single family dwelling is located on the east side of Mill Street, at Mill Street's intersection with Brook Road (see Figure 7). A building appears at this location by the mid-1800s when what is now Recreation Field Road was located across from it (see Figures 4 and 5). The house dates to ca. 1850, but has been very altered. The railroad line, which came through in 1873, ran directly to the south of this building (see Figure 5). A photograph taken in 1915 shows the building in its more original form and shows the Mill Street train trestle crossing Mill Street immediately south of the building (Plainfield Historical Society 1973:85, see 1915 photo).

Description: In form, 133 Mill Street is a 1 ½ story cape type house with an entry wing on its south side, which then attaches to a modern garage (Figures 22 – 24). It has a gable roof with eaves front orientation and composition shingles. The front elevation of the main block has a recessed, centered main entry door that historically had sidelights (Plainfield Historical Society 1973:85). Historic granite steps and a large granite slab stoop lead up to this entry door and are the only visible indication of the early construction date for this house. There is a second entry door into the wing which has a small porch covering it. The rear of the house has large shed dormers on both the main block and the garage. Wall sheathing is vinyl siding. A cinderblock chimney rises along the north wall of the building; the building formerly had brick end chimneys (Plainfield Historical Society 1973:85, see 1915 photo). A barn was formerly attached to the south end of the building; it has been replaced by the modern garage (Plainfield Historical Society 1973:85, see 1915 photo).

Recommended Statement of Eligibility/Determination of Effect: Although dating to ca. 1850, alterations to 133 Mill Street have greatly affected its significance. The house does not retain enough distinctive characteristics of type, period, or method of construction, to make it a significant historic resources. This review recommends that 133 Mill Street is therefore not eligible for inclusion on the National Register of Historic Places and that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would result in *No Effect* on the property.



Figure 22. View southeast of 133 Mill Street.



Figure 23. View east of 133 Mill Street.



Figure 24. View north of garage at 133 Mill Street.

35 Brook Road

Property History: This single family dwelling is located on the north side of Brook Road, approximately 125 feet east of the road's intersection with Mill Street (see Figure 7). It does not appear that this site contained any buildings through at least 1987 (see Figures 4 and 5) (USGS 1939 – 1987). The railroad line, which came through in 1873, ran along the eastern boundaries of this parcel (see Figure 5). A building is at this location by 1992 (Google Earth Historic Imagery).

Description: This small mobile/modular home has an eaves front orientation that faces Brook Road, metal gable roof and vinyl siding (Figure 25). The front entry door is located at the east end of the building and is covered by a small, shed roof porch. Window placement is irregular. A detached garage is located to the east of the building.

Recommended Statement of Eligibility/Determination of Effect: Due to its date of construction, this review recommends that 35 Brook Road is not a significant historic resource and not eligible for inclusion on the National Register of Historic Places. This review therefore recommends that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would result in *No Effect* on the property.



Figure 25. View east of 35 Brook Road.

65 Brook Road

Property History: This single family dwelling is located on the north side of Brook Road, approximately 330 feet east of the road's intersection with Mill Street, and about 250 feet west of Brook Road's intersection with Creamery Street (see Figure 7). The house is situated directly on the west bank of Great Brook. No building is indicated on this site on the Walling (1858) or Beers (1873) maps (see Figures 4 and 5). Based on detailed research, presented below, the house was constructed in 1891.

On August 18, 1884, Nelson E. Shorey (1852-1909),¹ and his first wife, Octavia (Wales) Shorey (1851-1891),² sold the lot at 65 Brook Road to brothers Olin L. Tillotson (1854-1956) and Chester Freeland Tillotson (1859-1933) for \$60 (Gravestones, Plainfield Village Cemetery, Plainfield, Vermont; PLR 9:145:10:456; U.S. Census 1870, 1880; Vermont Secretary of State, Vermont Death Records 1909-2008 and Vermont Vital Records 1720-1908). The lot began in the road at the west end of the bridge across Great Brook; then headed north on the west bank of Great Brook 79 ft; then west 40 ft; then 76 ft south to the center of the road; and then east in the road to the beginning 79 feet (PLR 9:145). The 1885 Grand List for the town of Plainfield showed the brothers as owning less than an acre with a cooper shop on it, all valued at \$700 (Plainfield Grand Lists). In the 1880 federal census, Olin L. Tillotson is listed as "mechanic" (U.S. Census 1880). In 1886, the property was valued at \$1200, but in 1891 it was valued at just \$300 (Plainfield Grand Lists). Child's Gazetteer of 1889 lists Olin Tillotson as the proprietor of the butter tub factory "h. Water" (Child 1889:182).

On April 8, 1891, the Tillotson brothers sold their property at 65 Brook Road to Frank and Carrie Yearlow (Yatter; Yarden?) for \$300 (PLR 10:112). On March 28, 1891, Octavia and Nelson Shorey sold an additional small parcel to Frank and Carrie Yearlow for \$35 (PLR 10:109). On July 22, 1891, Frank and Carrie Yearlow sold both parcels to Louis Lupien (1842-1921) and his son-in-law, George C. Vincent, "meaning to convey the building I now occupy as a blacksmith shop and dwelling" for \$550 (PLR10:119; Vermont Secretary of State, Vermont Death Records 1909-2008). George Vincent (1853-1936) was married to Hattie Lupien (1867-1927) (U.S. Census 1880; Vermont Secretary of State, Vermont Death Records 1909-2008). The 1892 Grand List shows Lupien and Vincent with 1/8 of an acre with a "new building" valued at \$700 (Plainfield Grand Lists). Subsequently, the property is variously listed on the grand lists as a "house" (e.g. in 1900; \$650) or "block" (e.g. in 1918, 1919; \$900/\$1000) on 1/8 of an acre – it may have been improved/enlarged (Plainfield Grand Lists). It was, at least in part, a rental property. For example, the *Argus and Patriot* reported on January 22, 1908, that "David Bushey and family of New York have moved into the Lupien Block" and on April 1, 1908, that "Forest Walker of Marshfield has moved into the Lupien house, he is second man at the creamery."

On October 15, 1919, Louis Lupin and George Vincent sold this property located west of Great Brook, east of Nelson Shorey's, and north of the highway with a blacksmith shop and dwelling on it to Jennie (Rutter) Hamel (1861-1944) (PLR 14:182: 184; Vermont Secretary of State, Vermont Death Records 1909-2008). In 1920 and 1930, Jennie R Hamel lived on Creamery Street (U.S. Census 1920, 1930). The Grand List for 1920 indicates that she owned 1/8 acre with a "tenement" valued at \$1000 (Plainfield Grand Lists). The building withstood the

¹ Son of a local tanner Joseph Shorey and his wife, Mary (King) Shorey.

² Daughter of George and Julia Wales.

flood of November 1927, thought it was reported that the flood waters, “undermined Mrs. Jennie Hamel’s dwelling, carried away the foundations of her outbuildings and flooded and filled the flat with sand” (Plainfield Historical Society 1973:120). This property passed from the estate of Jennie Hamel (and her daughter, G. Helene Hamel) to Elizabeth (Mercer) Brackett 1972-1973 (see PLR 18:202; 23:387; 23:388; lived on “Dora Street”, U.S. Census 1940 “rent for income”) and then to Susan Ross (PLR 24:411) and her husband, Michael Grimaldi, in 1978 (PLR 24:414), but they divorced in the 2000s with Susan Ross retaining this property (Misc. 6:470).

Description: This large, 2 ½ story, 6 x 3 bay house has a metal gable roof with eaves front orientation and two brick end chimneys on the south roof slope (Figures 26 and 27). These chimneys replaced former ridgeline chimneys on the building (Plainfield Historical Society 1973:120, see photo at top). The house has wood clapboard siding with corner boards, and wooden window surrounds with drip caps. The east elevation, which sits along the river, has vinyl siding. Window trim is slightly decorative in that the top rail is slightly larger and wider, and juts out beyond the other trim. First floor and attic story windows are 2/2 double hung, and second floor are 1/1 double hung; all appear to be wooden sash. The front entrance door, located toward the east end of the building, is wood paneled and has the same type of surround as the windows (Figure 28). There is a shed roof, ground level porch along the entire front elevation that dates to the early decades of the 1900s (Plainfield Historical Society 1973:76, see ca. 1935 photo and 120, see photo at top). An outbuilding situated to the west of the house may be the former cooper/blacksmith shop referenced in land records in 1885 and 1891, and/or one of the outbuildings referenced during the 1927 flood (Figure 29) (Plainfield Historical Society 1973:120).

Recommended Statement of Eligibility/Determination of Effect: Constructed in 1891, the house at 65 Brook Road retains its historic integrity, its simple, distinctive architectural characteristics, and qualities of location, design, setting, materials, workmanship, feeling and association. It helps record the history of Plainfield, as the village developed into a prosperous mill community, especially after the arrival of the Montpelier and Wells River Railroad line in 1873. The building’s use as a rental property/tenement in the last decade of the 19th century and first decades of the 20th century likely directly relates to this development and the increased need for housing workers. This review therefore recommends that 65 Brook Road is a significant historic resource and is eligible for inclusion on the National Register of Historic Places, especially as part of an expansion of the boundaries of the existing National Register-listed Plainfield Village Historic District. Given the low profile and low impact nature of the project, if sidewalk placement remains within the road Right of Way, this review recommends that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would likely result in *No Adverse Effect* on the property. Review of final plans will be needed.



Figure 26. View northeast of 65 Brook Road.



Figure 27. View northwest of 65 Brook Road.



Figure 28. View northeast of front entrance door at 65 Brook Road.



Figure 29. View northwest of garage at 65 Brook Road.

99 Brook Road

Property History and Description: This single family dwelling and barn are located at the northwest corner of the intersection of Brook Road and Creamery Street (see Figure 7). A building appears at this location by the mid-1800s (see Figures 4 and 5). The house, referred to as both the Flood House and the Gale-Bancroft House, was probably built ca. 1840 by S.B. Gale and is one of fourteen buildings in Plainfield that document an early 19th century local brick building tradition (Plainfield Historical Society 1973:20; NPS 1983, 1984). Gale lived in the house until 1847 (NPS 1984). By 1858, “J.A. Wing” is recorded at the location (see Figure 4). Wing was a prominent Plainfield and Montpelier lawyer who owned and likely rented out the house (Plainfield Historical Society 1973:20; NPS 1984). The property was purchased by J.A. Bancroft in 1859, who ran his undertakers shop at the site; it is not certain that Bancroft lived in the house (see Figure 5) (NPS 1984). Ira and Julia Stone operated the property as a farm from 1882 until 1903, at which point it was purchased by Alvinza Flood (Plainfield Historical Society 1973:20; NPS 1984). Flood and Newton Davis, Plainfield’s rural postman, lived at the house in the 20th century (NPS 1984). Flood is also described as being instrumental in starting the rural mail service from the Plainfield Post Office (Plainfield Historical Society 1973:20).

Description: In form, 99 Brook Road is a gabled-roof, 1 ½ story, 5 x 3 bay, cape/Classic Cottage type house with attached wing on its east end (Figures 30 and 31). It is brick construction and has an eaves front orientation. Fenestration is symmetrical, with a centered main entry door flanked by two, 2/2 double hung windows with shutters, on each side. The door is topped by a five pane fixed transom. Door and window surrounds consist of simple wood trim. Basement windows have flat granite lintels, the building rests on a cut granite block foundation, and there are cut granite block steps leading to the door. The wing, which is set back from the front elevation of the main block, has clapboard siding, an entry door with large, multi-paned windows to each side at its west end, and two sets of glazed, wooden, side-hinged doors at its east end. Roofs are sheathed with composite shingles. There is an off-center brick chimney on the roof slope of the main block.

The associated barn at 99 Brook Road sits just to the east of the house, and directly on Creamery Street (Figures 32 and 33). Although currently detached, historically, the 2 ½ story barn was connected to the wing of the house by a gabled roof, wood frame structure, which is visible in a 1903 photograph of the property (Plainfield Historical Society 1973:20, see ca. 1903 photo). The connected structures would have created the long, linear plan that appears on Beers’ 1873 atlas as the “undertakers shop” (see Figure 5). The National Register Nomination for the property reports that the barn is post and beam construction and that it originally had vertical board siding (NPS 1984). The building is now sheathed in clapboards and has corner board trim. It rests on a new, poured concrete foundation and has composite shingle roofing. A single story shed roofed wing is attached to the west side of the barn. Fenestration is irregular, with fixed multi-pane windows, hayloft doors and a large vertical board sliding door with a centered window at ground level on the east end of south elevation of the barn.

Recommended Statement of Eligibility/Determination of Effect: Constructed ca. 1840, the property at 99 Brook Road retains its historic integrity, its simple, distinctive architectural characteristics, and qualities of location, design, setting, materials, workmanship, feeling and association. The house is representative of a unique and unusual, early 19th century brick building tradition in Plainfield and it helps record the early history of Plainfield. This resource

was included in the National Register in 1984, and it has changed little since that listing (Figures 34 and 35). This review therefore recommends that 99 Brook Road is a significant historic resource and remains eligible for inclusion on the National Register of Historic Places. It is directly related to the nearby National Register-listed Plainfield Village Historic District. The barn's location directly on the edge of Creamery Road will need to be considered when designing the sidewalk placement. No part of the barn should be removed to accommodate the project, and the sidewalk should in no way be placed up against or attached to the structure. Given the low profile and low impact nature of the project, if sidewalk placement remains within the road Right of Way, and in no way directly impacts the barn, this review recommends that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would likely result in *No Adverse Effect* on the property. Review of final plans will be needed.



Figure 30. View north of 99 Brook Road.



Figure 31. View northwest of 99 Brook Road.



Figure 32. View northwest of barn at 99 Brook Road; Creamery Street in foreground.



Figure 33. View northwest of barn at 99 Brook Road.



Figure 34. View northwest in 1983 of 99 Brook Road.



Figure 35. View northwest in 1983 of barn at 99 Brook Road.

123 Hudson Avenue

Property History: This single family dwelling is located on the north side of Hudson Avenue, with the property's eastern boundary along Creamery Street (see Figure 7). A building is mapped at this location by the mid-1800s (see Figures 4 and 5). "R. Lease" is depicted as owning/occupying the building in 1858 (see Figure 4). The 1860 U.S. Federal Census shows Rufus Lease, a 57-year-old carriage trimmer, living in Plainfield with his wife Sally Lease (55 years old), and Julian Lease (13 years old) (U.S. Census 1860). Rufus Lease dies in Alexandria, Virginia in June of 1964 while serving with the 4th Vermont Infantry, and is buried in Alexandria National Cemetery (Vermont Vital Records 1720-1908). His widow Sally appears to remain at the house after Rufus' death, as "Mrs. Lease" is shown at the building in 1873 (see Figure 5). The railroad line, which came through in 1873, ran directly along the western edge of this property (see Figure 5). This house likely dates to ca. 1850; a Queen Ann style porch appears to have been added to the building in the late 1800s.

Description: This 2 ½ story, 5 x 2 bay house has a metal gable roof with eaves front orientation, a single story gable roof wing attached to its eastern side, and an exterior end chimney on its west elevation (Figures 36 – 39). The foundation appears to be cut granite blocks. The house has wood clapboard siding with corner boards, and wooden, 2/2 double hung sash with simple, wooden surrounds with drip caps. Fenestration is fairly symmetrical, with a centered main entry door flanked by two windows to each side; however, windows to the west of the door are spaced farther apart than windows to the east of the door. This pattern exists on both the first and second stories of the main block. A two story, Queen Ann style porch with turned posts and jigsaw brackets spans then entire front façade of the house. There are skylights on the front roof slope of the wing, and a small addition has been recently added to the east end of the wing.

Recommended Statement of Eligibility/Determination of Effect: Likely built ca. 1850 and embellished with a two story porch in the late 1800s, the house at 123 Hudson Avenue retains its historic integrity, its simple, distinctive architectural characteristics, and qualities of location, design, setting, materials, workmanship, feeling and association. This review therefore recommends that 123 Hudson Avenue is a significant historic resource and is eligible for inclusion on the National Register of Historic Places, especially as part of an expansion of the boundaries of the existing National Register-listed Plainfield Village Historic District. Given how far back the property is situated from Creamery Street, and given the low profile and low impact nature of the project, if sidewalk placement remains within the road Right of Way, this review recommends that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would likely result in *No Adverse Effect* on the property. Review of final plans will be needed.



Figure 36. View northeast of 123 Hudson Avenue.



Figure 37. View north of 123 Hudson Avenue.



Figure 38. View northwest of 123 Hudson Avenue.



Figure 39. View northeast of 123 Hudson Avenue.

96 Creamery Street

Property History: This multi-family dwelling is located on the west side of Creamery Street, approximately 410 feet north of the street's intersection with Brook Road, and about 520 feet south of Creamery Street's intersection with Main Street (see Figure 7). No building is indicated on this site on the Walling (1858) or Beers (1873) maps (see Figures 4 and 5). This house, along with the house to the north (78 Creamery Street), was probably built by Ira Batchelder shortly after 1873, when the railroad arrived in Plainfield (Plainfield Historical Society 1973:21). Ira's son Bert and his family lived in the house to the north, which was connected to Ira's house with a series of drive through sheds (Plainfield Historical Society 1973:21). The house is referred to as the Ira Batchelder House (Plainfield Historical Society 1973:21).

Description: This house consists of a 2 story, 3 x 2 bay, square main block with flat roof and attached 1 ½ story, gable roof wing with large shed dormer on the north side of the main block (Figures 40 and 41). The main block has widely overhanging eaves with large, Italianate brackets and there are decorative window crowns on the second story main block windows. Windows are 1/1 replacement sash, or horizontally sliding windows. Both the main block and the wing have full length, first story porches of modern construction. The house is sheathed in vinyl siding.

Recommended Statement of Eligibility/Determination of Effect: Although dating to ca. 1880, alterations to 96 Creamery Street have greatly affected its significance. Historically, the clapboard sided main block of the house had a centered bay window on the first story that supported a small, second story porch, and there was a wide band of decorative stickwork between the first and second stories (Plainfield Historical Society 1973:21, c. 1880 photo). The wing had a small, gable roof dormer on its roof slope (Plainfield Historical Society 1973:21, c. 1880 photo). The house does not retain enough distinctive characteristics of type, period, or method of construction, to make it a significant historic resource. This review recommends that 96 Creamery Street is therefore not eligible for inclusion on the National Register of Historic Places and that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would result in *No Effect* on the property.



Figure 40. View northwest of 96 Creamery Street.



Figure 41. View west of 96 Creamery Street.

78 Creamery Street

Property History: This single-family dwelling is located on the west side of Creamery Street, approximately 410 feet south of Creamery Street's intersection with Main Street and about 530 feet north of the street's intersection with Brook Road (see Figure 7). No building is indicated on this site on the Walling (1858) or Beers (1873) maps (see Figures 4 and 5). This house, along with the house to the south (96 Creamery Street), was probably built by Ira Batchelder shortly after 1873, when the railroad arrived in Plainfield (Plainfield Historical Society 1973:21). The railroad line would have crossed near the northwest corner of this property. Ira's son Bert and his family lived in the house, which was connected to the building to the south, which Ira and his wife lived in, with a series of drive through sheds (Plainfield Historical Society 1973:21). Bert's brother Dick operated the Woodbury Hardwick Stage from the sheds (Plainfield Historical Society 1973:79). The house is referred to as the Bert Batchelder House (Plainfield Historical Society 1973:21).

Description: This house is a 2 story square structure with a flat roof and a double level porch recessed into its southeast corner (Figures 42 and 43). It has widely overhanging eaves supported by Italianate brackets and a decorative stickwork frieze band. The house is sheathed in clapboards, has corner boards, and decorative door and window crowns. The porches have Queen Ann style turned posts and there is a spindlework railing on the top level. Windows are 1/1 replacement sash. A detached modern garage sits to the north of the house.

Recommended Statement of Eligibility/Determination of Effect: Dating to ca. 1880, this rather unique Italianate house has changed little since it was first constructed (Plainfield Historical Society 1973:21, see ca. 1896 photo). It helps record the history of Plainfield, as the village developed into a prosperous community, especially after the arrival of the Montpelier and Wells River Railroad line in 1873. The house at 78 Creamery Street retains its historic integrity, its distinctive Italianate and Queen Ann architectural characteristics, and qualities of location, design, setting, materials, workmanship, feeling and association. This review therefore recommends that 78 Creamery Street is a significant historic resource and is eligible for inclusion on the National Register of Historic Places, especially as part of an expansion of the boundaries of the existing National Register-listed Plainfield Village Historic District. The house is situated close to the edge of the street, which will need to be considered when designing the sidewalk placement. Given the low profile and low impact nature of the project, if sidewalk placement remains within the road Right of Way, this review recommends that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would likely result in *No Adverse Effect* on the property. Review of final plans will be needed.



Figure 42. View northwest of 78 Creamery Street.



Figure 43. View west of 78 Creamery Street.



Figure 44. View southwest of 78 Creamery Street.



Figure 45. Close-up view of second story porch, stickwork frieze board and roof line brackets at 78 Creamery Street.

56 Creamery Street

Property History: This single family dwelling is located on the west side of Creamery Street, approximately 245 feet south of Creamery Street's intersection with Main Street and about 725 feet north of the street's intersection with Brook Road (see Figure 7). No building is indicated on this site on the Walling (1858) or Beers (1873) maps (see Figures 4 and 5). This structure likely appears in a ca. 1910 photo of the Creamery Street Trestle included in the town's history (Plainfield Historical Society 1973:84). The railroad line, which came through in 1873, crossed Creamery Street (Masonic Street) immediately southeast of this building's location. It may also be the Spencer House described in the town's history, and pictured ca. 1925 (Plainfield Historical Society 1973:22, see ca. 1925 photo). The house was likely built ca. 1880.

Description: This house consists of a 1 ½ story gable roof main block and attached 1 ½ story, gable roof wing (Figure 46). The building has an eaves front orientation to the south, so does not face Creamery Street. The entrance door is centered on the south side of the main block and is covered by a small gable roof portico. There is what appears to be a brick chimney on the west side of the house, and a cinder block chimney runs up the east elevation. Siding appears to be vinyl.

Recommended Statement of Eligibility/Determination of Effect: Although dating to ca. 1880, alterations to 56 Creamery Street have greatly affected its significance. Based on historic photos, the dwelling originally consisted of three connected parts: the gable roof main block, a gable roof midsection with gabled wall dormer, and a barn type structure that was closest to Creamery Street (Plainfield Historical Society 1973:22, see ca. 1925 photo, and 84, see ca. 1910 photo). It appears that the barn was removed, along with the dormer on the midsection. The main block and the midsection are likely still standing; however, except for two 2/2 windows, any historic detailing appears to have been removed or covered over. The house does not retain enough distinctive characteristics of type, period, or method of construction, to make it a significant historic resource. This review recommends that 56 Creamery Street is therefore not eligible for inclusion on the National Register of Historic Places and that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would result in *No Effect* on the property.



Figure 46. View northwest of 56 Creamery Street.

42 Creamery Street

Property History: This building is located on the west side of Creamery Street, approximately 215 feet south of Creamery Street's intersection with Main Street (see Figure 7). No building is indicated on this site on the Walling (1858) or Beers (1873) maps (see Figures 4 and 5). It was built sometime after ca. 1870 when Creamery Street (formerly Masonic Street) was constructed, and probably after the arrival of the railroad in 1873. A more exact date or use of this structure was not determined.

Description: The building is 2 stories high and rectangular in form, with its gable end facing the street (Figures 47 – 49). There is a single story enclosed porch on the south side of the building with an entrance door, and there are entry doors at the ground level of a two story porch that is attached to the north elevation of the building. The low pitched metal roof of the main block continues to slope out to form the roof of the second story porch. The roof of the building appears to be a later alteration. Most of the building is sheathed in clapboards and it has corner board trim. Windows vary and include 6/6 and 1/1 sash. The portion of the foundation visible at the front of the structure is concrete.

Recommended Statement of Eligibility/Determination of Effect: Although likely dating to sometime in the late 1800s, this building does not retain enough distinctive characteristics of type, period, or method of construction, to make it a significant historic resource. This review recommends that 42 Creamery Street is therefore not eligible for inclusion on the National Register of Historic Places and that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would result in *No Effect* on the property.



Figure 47. View west of 42 Creamery Street.



Figure 48. View northwest of 42 Creamery Street.



Figure 49. View southwest of 42 Creamery Street.

30 Creamery Street

Property History: This commercial building is located on the west side of Creamery Street, approximately 145 feet south of Creamery Street's intersection with Main Street (see Figure 7). No building is indicated on this site on the Walling (1858) or Beers (1873) maps (see Figures 4 and 5). It appears to date to the last few decades of the 20th century; it is in place by 1992 (Google Earth Historical Imagery).

Description: This commercial garage consists of a gable roof main section that appears to have been extended forward toward the street by the addition of a gable roof section of roughly the same height (Figures 50 and 51). A shed roof projection with entry door and windows is located on the south side of the building and a second door enters the original main block to the north of the front extension. Two large overhead garage doors also provide access to the main part of the building. It has a metal roof and there is a cinder block chimney at the rear of the structure.

Recommended Statement of Eligibility/Determination of Effect: This building may be approaching 50 years old, however, it does not exhibit any distinctive characteristics of type, period, or method of construction, to make it a significant historic resource. This review recommends that 30 Creamery Street is therefore not eligible for inclusion on the National Register of Historic Places and that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would result in *No Effect* on the property.



Figure 50. View northwest of 30 Creamery Street.



Figure 51. View southwest of 30 Creamery Street.

162 Main Street

Property History: This single family dwelling is located at the southwest corner of the intersection of Main Street and Creamery Street (see Figure 7). A building appears at this location by the mid-1800s, listed as “W. Skinner” in both 1858 and 1873 (see Figures 4 and 5). When Creamery Street (formerly Masonic Street) was constructed ca. 1870 along the east side of the house, the property ended up as a corner lot. The house likely appears in a ca. 1880 photograph of Main Street taken from the railroad tracks to the east of the house (Plainfield Historical Society 1973:3, see 1880 photo). The house was probably built ca. 1840 (NPS 1983).

Description: This house consists of a 1 ½ story gable roof main block with a slightly smaller 1 ½ story wing attached to its western end (Figures 52 and 53). There is a shed dormer on the north (front) roof slope of the wing. The main block of the house has two front entrances: the entrance at the east end is sheltered by a shed roof canopy; a second entrance is located under a shed roof porch at the very west end. Windows appear to be 1/1 replacement sash. A metal roof covers the entire structure and the house is sheathed in vinyl siding, except for the rear (south) elevation, which retains wood clapboards. The porch is supported by square posts. A free-standing shed sits at the rear (south side) of the house.

Recommended Statement of Eligibility/Determination of Effect: Constructed ca. 1840, the house at 162 Main Street is a contributing resource to the Plainfield Village Historic District which was added to the National Register of Historic Places in 1983; it is referred to as the Goslant House (Figure 54; see Figure 3, #48) (NPS 1983). Although some changes have taken place since its listing, such as the addition of vinyl siding, the house retains its simple 1840s form, and qualities of location, design, setting, materials, workmanship, feeling and association. This review therefore recommends that 162 Main Street continues to be a contributing historic resource to the National Register-listed Plainfield Village Historic District. Only the portion of the property along Creamery Street will have the potential to be directly impacted by the sidewalk placement, as existing sidewalk will be replaced here. Given that there is already sidewalk in place here, and given the low profile and low impact nature of the project, if sidewalk placement remains within the road Right of Way, and in no way directly impacts house, this review recommends that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would likely result in *No Adverse Effect* on the property. Review of final plans will be needed.



Figure 52. View southwest of 162 Main Street.



Figure 53. View south of 162 Main Street.



Figure 54. View southeast in 1982 of 162 Main Street.

191 Main Street

Property History: This single family dwelling is located on the north side of Main Street, just east of Creamery Street's intersection with Main Street (see Figure 7). The house was built as the Congregationalist Church parsonage and appears at this location by the mid-1800s, listed as the parsonage (see Figures 4 and 5). The building appears in a ca. 1880 photograph of Main Street taken from the railroad tracks to the southeast of the house (Plainfield Historical Society 1973:3, see 1880 photo). The house was built ca. 1845 (NPS 1983).

Description: Built in the Greek Revival style, this 1 ½ story, 3 x 3 bay, brick house has a gable front orientation that faces Main Street (Figures 55 – 57). A wood frame, clapboarded, gable roof wing is attached to the rear (north side) of the main block. The building rests on a cut granite block foundation and it has smooth, cut granite window lintels and sills, and front door entry surround. The front entryway is elaborate, with multi-pane side and transom lights, wood paneling, and fluted columns with classic volute capitals that flank a wood panel door. The roof line has cornice returns and narrow, molded trim boards. A brick chimney pierces the roof at the rear of the main block, and a second brick chimney can be seen on the wing. A barn/out building sits behind (north of) the house.

Recommended Statement of Eligibility/Determination of Effect: Constructed ca. 1845, the house at 191 Main Street is a contributing resource to the Plainfield Village Historic District which was added to the National Register of Historic Places in 1983; it is referred to as the Edson House (Figure 58; see Figure 3, #46) (NPS 1983). Very little change has taken place at the property since its listing and the house retains its classic Greek Revival style character and qualities of location, design, setting, materials, workmanship, feeling and association. This review therefore recommends that 191 Main Street continues to be a contributing historic resource to the National Register-listed Plainfield Village Historic District. Proposed work nearby the property includes removing and relocating a utility pole and providing protection for pedestrians along a steep embankment along Main Street immediately east of the house, along the 191 Main Street property line (see Figure 2). As long as the utility pole is not moved to a location that directly impacts the property at 191 Main Street, and as long as the embankment protection does not directly cause adverse impact the property, this review recommends that the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project would likely result in *No Adverse Effect* on the property. Review of final plans will be needed.



Figure 55. View northeast of 191 Main Street.



Figure 56. View northwest of 191 Main Street.



Figure 57. View northeast of 191 Main Street.



Figure 58. View northeast in 1981 of 191 Main Street.

Bridge 21, Brook Road

Property History: Bridge 21 is located on Brook Road, approximately 410 feet east of the road's intersection with Mill Street, and approximately 190 feet west of the Creamery Street intersection (see Figure 7). A crossing has been at this location over Great Brook since at least the mid-1800s (see Figures 4 and 5) (Walling 1858; Beers 1873). No records were found to document what type of bridge (or bridges) was at this location prior to the current 1920 concrete structure. Devastating flooding is documented in Plainfield throughout the mid-1800s and early 1900s, including in 1857, 1869, 1899, 1902, and the "Great Flood" of 1927 (Montpelier Watchman 1857, 1869, 1902; Montpelier Argus and Patriot 1899; Barre Daily Times 1927, in Plainfield Historical Society 1973:119; St. Albans Daily Messenger 1902). Reporting on the 1927 flood in Plainfield, the Barre Daily Times specifically references damage to the bridge on Brook Road:

The Hamel home [65 Brook Road] was in such danger from the brook that they moved out to Cate's across the road. It washed each side of the cement bridge, but finally took the side near N.H. Davis', washed his driveway out and many trees in his yard; washed the endwall from Hamel's house, the back of his woodshed and all the wood out for the two families in the home (Barre Daily Times 1927, in Plainfield Historical Society 1973:119, and 120, see photo at top of page).

More recent floods that the bridge has survived include an event in May 2011; Hurricane Irene, later that year in August 2011; and a flash flood in July 2015 (Figures 59 – 61) (You Tube 2011 and 2015; Montpelier Times Argus 2016).

Description: Bridge 21 is a Town-owned, single span concrete T-Beam structure that carries Brook Road over Great Brook in Plainfield (VTrans 2015) (Figures 62 – 66). It has a concrete, cast-in-place deck with a bituminous wearing surface (VTrans 2015). The Vermont Agency of Transportation's (VTrans) Structure Inspection, Inventory and Appraisal Sheet lists the following geometric data for the bridge: length of maximum span, 25 ft; structure length, 28 ft; deck width out-to-out, 22 ft; approximate roadway width, 20 ft; and roadway width curb-to-curb, 20.2 ft; (VTrans 2015). The bridge has no sidewalks. Bridge 21 has solid concrete rails with three recessed panels; the year "1920" is stamped into the middle panel on each rail. There are slightly wider sections at each end of the paneled sections that give the appearance of posts. Rails have overhanging, concrete "cap-stones" that have slightly rounded edges. It rests on concrete abutments and has concrete wing walls.

Recommended Statement of Eligibility/Determination of Effect: Bridge 21 is a surviving example of early 20th century concrete bridges in Vermont, and a rare survivor of the 1927 flood. It exhibits characteristic detailing of this type of bridge, including its solid rails with recessed panels. A crossing has been at this location since at least c. 1850 and is important to the history of Plainfield. Bridge 21 retains its historic integrity, distinctive architectural characteristics, and qualities of location, design, setting, materials, workmanship, feeling and association. The bridge falls within the period of significance of the Plainfield Village Historic District. Bridge 21 also appears to meet the criteria for significance for inclusion in the National Register under the National Register of Historic Places Multiple Property Documentation Form, *Metal Truss, Masonry, and Concrete Bridges in Vermont* (NPS 1990). This review therefore recommends

that Bridge 21 is a significant historic resource and is eligible for inclusion on the National Register of Historic Places, especially as part of an expansion of the boundaries of the existing National Register-listed Plainfield Village Historic District. It appears unlikely that the bridge could accommodate a sidewalk within its roadway width. An adjacent pedestrian bridge would cause the least impact to the bridge and this review recommends that one would likely result in a *No Adverse Effect* on the structure; however, plans are not developed at this time, so it is not known if a separate pedestrian bridge is a possibility. The Times Argus recently reported that the Town of Plainfield is considering a replacement of the bridge (Times Argus 2016). If bridge replacement falls within the scope of work of the proposed Plainfield STP BP15(16) Lower Village Sidewalk Project, this review recommends that the project would have an *Adverse Effect* on the resource. Additional documentation of Bridge 21 may be required if replacement is necessary. Review of final plans will be needed.



Figure 59. Clip from You Tube video showing damage to Bridge 21 from flooding on May 27, 2011 (You Tube May 2011).



Figure 60. Clip from You Tube video showing flooding at Bridge 21 during Hurricane Irene at the end of August 2011 (You Tube September 2011).



Figure 61. Clip from You Tube video showing damage to Bridge 21 from flooding on July 19, 2015 (You Tube July 2015).



Figure 62. View southeast of Bridge 21 along Brook Road.



Figure 63. View west of Bridge 21 along Brook Road.



Figure 64. View south of Bridge 21 along Brook Road.



Figure 65. View west of Bridge 21 along Brook Road.



Figure 66. View west of Bridge 21 along Brook Road.

Additional Section 4(f) Resources

In addition to historic resources identified above, for the purposes of Section 4(f) of the Department of Transportation Act, the project area was also reviewed for any other Section 4(f) resources, such as public parks, recreational lands or wildlife/waterfowl refuges. No additional Section 4(f) resources were identified.

SUMMARY

The Town of Plainfield with the assistance of Dufresne Group is conducting a scoping study for the Plainfield STP BP15(16) Lower Village Sidewalk Project, located in Plainfield, Washington County, Vermont. Potential project work includes constructing new sidewalks with granite curbing along Mill Street, Brook Road and Creamery Street, and removing and relocating a utility pole and providing protection for pedestrians along a steep embankment along Main Street (Figure 2). For compliance under Section 106 of the National Historic Preservation Act of 1966 and its amendments, and to assist with Section 4(f) of the Department of Transportation Act of 1966, and its amendments, all historic resources and any additional 4(f) resources that lie within the Area of Potential Effect of the project were identified and their significance and National Register of Historic Places eligibility assessed. Because the project is in the scoping stage, detailed plans were not available for review, so only general potential effects were provided. Review of final plans will be necessary.

Seven properties directly along the project route, including three that are currently listed in the National Register of Historic Places, were recommended as historic as a result of the review. All would have the potential to be affected by the Plainfield STP BP15(16) Lower Village Sidewalk Scoping Project, though it appears likely that project work can take place with No Adverse Effect to most of the resources, especially if the project remains within the existing Right of Way. Three properties, a barn at 99 Brook Road that sits directly on the road's edge, a house at 78 Creamery Street that is situated close to the road's edge, and Bridge 21 crossing Great Brook along Brook Road, appear to have greater potential to be affected by the project. Given the low profile and low impact nature of the project, it is unlikely that project work would result in any indirect adverse effects to additional historic properties nearby the proposed sidewalk route. The placement of any project related signage, lighted pedestrian crossings or other proposed additions, should consider both direct and indirect impacts to historic resources. No additional Section 4(f) resources were identified along the project route.

REFERENCES

Argus and Patriot (Montpelier, Vermont)

- 1899 February 1, "Plainfield Paragraphs" p. 3.
- 1908 January 22, "Plainfield Paragraphs" p. 3.
- 1908 April 1, "Plainfield Paragraphs" p. 6.

Beers, F.W.

- 1873 *County Atlas of Washington, Vermont*. F.W. Beers & Co., New York, New York.

Child, Hamilton

- 1889 *Gazetteer of Washington County, Vt., 1783-1889*. William Adams (ed). The Syracuse Journal Company Printers and Binders, Syracuse, New York.

Himelhoch, Myra

- 1965 *Early Plainfield and Its People: Some Historical Sketches*. Plainfield, Vermont.

NPS (National Park Service) USDI

- 1983 *National Register of Historic Places Registration Form: Plainfield Village Historic District*. Form prepared by Courtney Fisher. United States Department of the Interior, National Park Service, Washington, D.C.
- 1984 *National Register of Historic Places Registration Form: Gale-Bancroft House*. Form prepared by Gina Campoli. United States Department of the Interior, National Park Service, Washington, D.C.
- 1990 *National Register of Historic Places Multiple Property Documentation Form: Metal Truss, Masonry, and Concrete Bridges in Vermont*. Form prepared by Heather Rudge. United States Department of the Interior, National Park Service, Washington, D.C.

Plainfield Historical Society

- 1993 *The Town of Plainfield, Vermont: A Pictorial History 1870-1940*. Northlight Studio Press, Montpelier, Vermont.

Plainfield (Town of) Grand Lists

- Various Years. *Grand Lists*. Manuscript on file, Plainfield Town Clerk's Office, Plainfield Vermont.

Plainfield (Town of) Land Records

- Various Years. *Land Records*. Manuscript on file, Plainfield Town Clerk's Office, Plainfield Vermont.

St. Albans Daily Messenger (St. Albans, Vermont)

- 1902 June 17, "Damage Wrought by Storm" p. 2.

Times Argus Online (Montpelier, Vermont)

- 2016 July 19, "Plainfield Ponders Dual Bridge Replacements".
www.timesargus.com/article/20160719/NEWS01/160719614

United States Census Bureau [U.S. Census]

- 1860 United States Federal Census. Database and Digital Image. Ancestry.com Operations Inc. Provo, Utah. *Ancestry.com*. [www.http://ancestry.com](http://ancestry.com) : 2011. From National Archives microfilm publication.
- 1870 United States Federal Census. Database and Digital Image. Ancestry.com Operations Inc. Provo, Utah. *Ancestry.com*. [www.http://ancestry.com](http://ancestry.com) : 2011. From National Archives microfilm publication M593.
- 1880 United States Federal Census. Database and Digital Image. Ancestry.com Operations Inc. Provo, Utah. *Ancestry.com*. [www.http://ancestry.com](http://ancestry.com) : 2011. From National Archives microfilm publication T9.
- 1900 United States Federal Census. Database and Digital Image. Ancestry.com Operations Inc. Provo, Utah. *Ancestry.com*. [www.http://ancestry.com](http://ancestry.com) : 2011. From National Archives microfilm publication T623.
- 1910 United States Federal Census. Database and Digital Image. Ancestry.com Operations Inc. Provo, Utah. *Ancestry.com*. [www.http://ancestry.com](http://ancestry.com) : 2011. From National Archives microfilm publication T624.
- 1920 United States Federal Census. Database and Digital Image. Ancestry.com Operations Inc. Provo, Utah. *Ancestry.com*. [www.http://ancestry.com](http://ancestry.com) : 2011. From National Archives microfilm publication T625.
- 1930 United States Federal Census. Database and Digital Image. Ancestry.com Operations Inc. Provo, Utah. *Ancestry.com*. [www.http://ancestry.com](http://ancestry.com) : 2011. From National Archives microfilm publication T626.
- 1940 United States Federal Census. Database and Digital Image. Ancestry.com Operations Inc. Provo, Utah. *Ancestry.com*. [www.http://ancestry.com](http://ancestry.com) : 2011. From National Archives microfilm publication T627.

USGS Topographic Maps

- 1939 Plainfield Quadrangle, Vermont, Washington County. 15 minute series. <http://ngmdb.usgs.gov/maps/topoview/>
- 1943 Plainfield Quadrangle, Vermont, Washington County. 15 minute series. <http://ngmdb.usgs.gov/maps/topoview/>
- 1953 Plainfield Quadrangle, Vermont, Washington County. 15 minute series. <http://ngmdb.usgs.gov/maps/topoview/>
- 1954 Plainfield Quadrangle, Vermont, Washington County. 15 minute series. <http://ngmdb.usgs.gov/maps/topoview/>
- 1961 Plainfield Quadrangle, Vermont, Washington County. 15 minute series. <http://ngmdb.usgs.gov/maps/topoview/>
- 1970 Plainfield Quadrangle, Vermont, Washington County. 15 minute series. <http://ngmdb.usgs.gov/maps/topoview/>
- 1977 Plainfield Quadrangle, Vermont, Washington County. 15 minute series. <http://ngmdb.usgs.gov/maps/topoview/>
- 1987 Plainfield Quadrangle, Vermont, Washington County. 7.5 minute series. <http://ngmdb.usgs.gov/maps/topoview/>

Vermont Secretary of State

- Various years. Vermont Death Records 1909-2008. Database and Digital Images. Ancestry.com Operations Inc. Provo, Utah. *Ancestry.com*.
[www.http://ancestry.com](http://ancestry.com) : 2011. From Microfilmed original documents of the Vermont Secretary of State, Montpelier, Vermont.
- Various years. Vermont Vital Records 1720-1908. Database and Digital Images. Ancestry.com Operations Inc. Provo, Utah. *Ancestry.com*.
[www.http://ancestry.com](http://ancestry.com) : 2011. From Microfilmed original documents of the Vermont Secretary of State, Montpelier, Vermont.

Vermont Agency of Transportation (VTrans)

- 1956 *Town of Plainfield*. General Highway Map.
<http://vtransmaps.vermont.gov/mapsftp>
- 1960 *Town of Plainfield*. General Highway Map.
<http://vtransmaps.vermont.gov/mapsftp>
- 2015 "Structure Inspection, Inventory and Appraisal Sheet for Plainfield Bridge 21". Structures Section, Bridge Management and Inspection Unit.

Walling, H.F.

- 1858 *Map of Washington County, Vermont*. Baker & Tilden, New York, New York.

Watchmen (Montpelier, Vermont)

- 1857 July 10, "Deluge in Plainfield" p. 2.
1869 October 6, "Terrible Disaster at Plainfield" p. 3.
1869 April 28, p. 3.
1902 March 5, p. 1.

YouTube

- 2011 May 27. Uploaded by Mary Lane.
<https://www.youtube.com/watch?v=NKC3Z94K6zQ>
- 2011 September 2. Uploaded by Beth Miller.
<https://www.youtube.com/watch?v=JhN6CKGiJak>
- 2015 July 19, 2015. Uploaded by grey ghost.
<https://www.youtube.com/watch?v=4yjyHL7yi5Q>

Appendix C

Archaeological Resources Assessment

**Archaeological Resources Assessment for the proposed Plainfield STP BP15(16): Lower
Village Sidewalk Project, Plainfield, Washington County, Vermont**

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Report No. 1003

August 24, 2016

Archaeological Resources Assessment for the proposed Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont

Project Description

The Town of Plainfield proposes the Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont (Figure 1). The Town of Plainfield proposes to provide new sidewalks with granite curbing on Creamery St, Brook Rd, and a portion of Mill St that will link with existing sidewalks on Mill St and Main St, thereby completing the sidewalk network in the lower village; to remove and relocate the utility pole located in the sidewalk panel on east end of Main St., leading to the Park & Ride; to provide protection for pedestrians from steep drop-off on the north side of the sidewalk panels on the east end of Main St leading up to the Park & Ride..

The University of Vermont Consulting Archaeology Program conducted an Archaeological Resources Assessment (ARA) as part of the Section 106 permitting process and no areas of pre-Contact Native American or Euroamerican archaeological sensitivity were identified.

Study Goal

The goal of an ARA (or “review”) is to identify portions of a specific project’s APE that have the potential for containing precontact and/or historic sites. An ARA is to be accomplished through a “background search” and a “field inspection” of the project area. For this study, reference materials were reviewed following established guidelines. Resources examined included the National Register of Historic Places (NRHP) files; the Historic Sites and Structures Survey; and the USGS master archaeological maps that accompany the Vermont Archaeological Inventory (VAI). Relevant town histories and nineteenth-century maps also were consulted. Based on the background research, general contexts were derived for precontact and historic resources in the study area.

Archaeological Site Potential

No known precontact Native American archaeological sites exist along the proposed project's alignment or anywhere in the downtown core of Plainfield. The closest known archaeological site is the precontact Native American site VT-WA-84, located 1.6 km to the northeast and upstream of the Winooski River. This site represents the remains of a farmstead that dates to 1912. Several structures remain above ground. No part of this archaeological site will be disturbed by the proposed project.

In regard to historic period resources, both the historic 1858 Wallings map (Figure 3) and the 1873 Beers map (Figure 4) show numerous historic properties along the proposed project alignment. Since these streets and structures existed at the time of the historic maps, we can expect their footprints to be their same, and therefore would not expect portions of the historic structures to extend beyond their original footprints and out into the current alignment of the streets or proposed sidewalk. It is likely that the same houses depicted on the historic period maps are still in existence today. However, the structures along what is now Creamery Street, for instance, are all adjacent to the road on what appears to be their original foundations. As a result

there is no expectation that historic structures might be impacted by the proposed sidewalk. A few structures along Creamery Street, at the intersection with Main Street are contributing properties to the Plainfield Village Historic District, which was listed on the National Register of Historic Places in 1983 (Figure 5). The historic district is also listed on the State Register of Historic Places. Structures that are located along, or immediately adjacent to the proposed project alignment include #47 and #48, as seen in Figure 5.

Desk Review

As part of the desk review, the UVM CAP utilized the Vermont Division of Historic Preservation's (VDHP) predictive model for identifying precontact Native American archaeological sites. The Plainfield Lower Village Sidewalk Project area scores 30 on the Predictive Model, due to its location within 90 m of Great Brook (12), within 180 m of the Winooski River (6), and along a major travel corridor (12). In addition to the paper-based predictive model, the desk review uses a Geographical Information System (GIS) developed jointly by the UVM CAP, and its consultant Earth Analytic, Inc., which operationalizes the paper-based model. It does this by applying the VDHP's sensitivity criteria to all lands within the State of Vermont. In these maps, archaeological sensitivity is depicted by the presence of one or more overlapping factors, or types of archaeological sensitivity (i.e. proximity to water, etc.). The Plainfield Lower Village Sidewalk Project area contains five sensitivity factors, which are Drainage, Waterbody, Kame Terrace, Floodplain, and Level Terrain (see Figure 1).

Field Inspection

A field inspection of the project area was carried out on August 23, 2016 by Charles Knight, Assistant Director of the UVM CAP. Knight walked the entire project alignment, taking soil cores throughout. The section of the alignment along Brook Road, along the northern-side of Brook Road, contains a water main and associated trench (Figure 6). Soils were identified as fill for about 2 m north of the edge of the road prism on the northern side of Brook Road. This existed for the length of Brook Road. At one point Brook Road crosses Great Brook, but the sides of the brook have been heavily disturbed as a result of the bridge construction and bank stabilization (Figure 7). The southern half of Creamery Street has been built up on a thick road prism, due to the slope down to Great Brook (Figure 8). This includes the intersection of Hudson Avenue and Creamery Street. The northern half of Creamery Street is marked by residential houses and lots of fill or ledge, since the east side of the road at this location was cut into a western-trending slope (Figure 9). Finally, the northern-most section of Creamery Street is marked by residential development very close to the edge of the road and the remains of an old asphalt sidewalk, thus has been disturbed (Figure 10). These historic houses appear to be on their original foundations and therefore, it is not expected that older historic properties exist on these lots.

Conclusions

The Town of Plainfield proposes the Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont. The UVM CAP conducted an Archaeological Resources Assessment of the proposed restoration project and no areas were identified as archaeological sensitive for precontact Native American or Euroamerican sites. The entire project

alignment has been disturbed by historic activities. These disturbances are either water main trenching, bank stabilization, road leveling and filling, and the existence of historic period structures. As a result, any sidewalk built along the north side of Brook Road and along the west side of Creamery Street will not disturb intact soils and thus, not disturb areas of archaeological sensitivity. Therefore, no additional archaeological study is recommended as part of the Section 106 permitting review.

Thank you for working with us on this project. Please let me know if you have any questions or comments.

Charles Knight, Ph.D.
Assistant Director

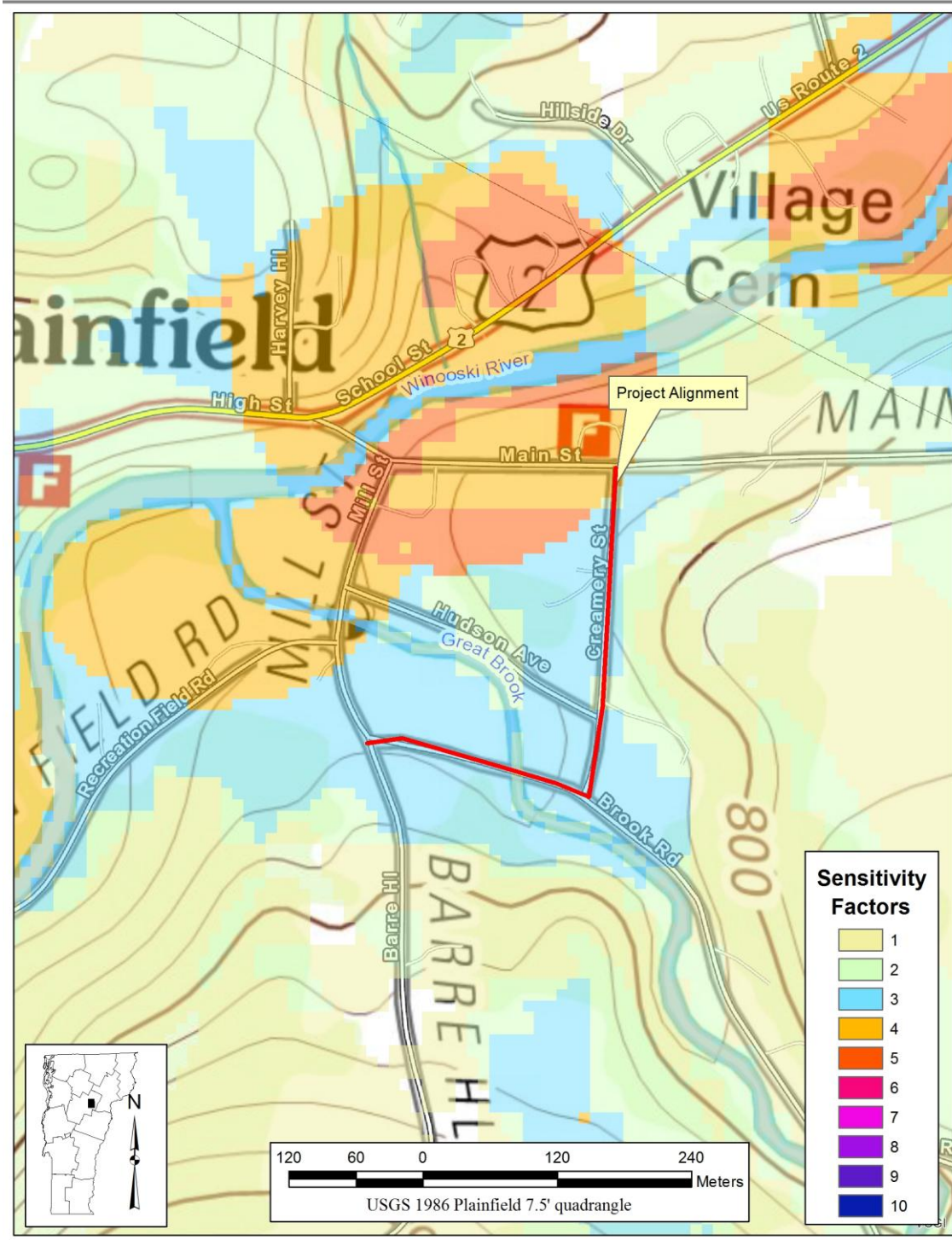


Figure 1. Map showing the location of the proposed Plainfield STP BP15(16): Lower Village Sidewalk Project, in relation to archaeological sensitivity factors, Plainfield, Washington County, Vermont.

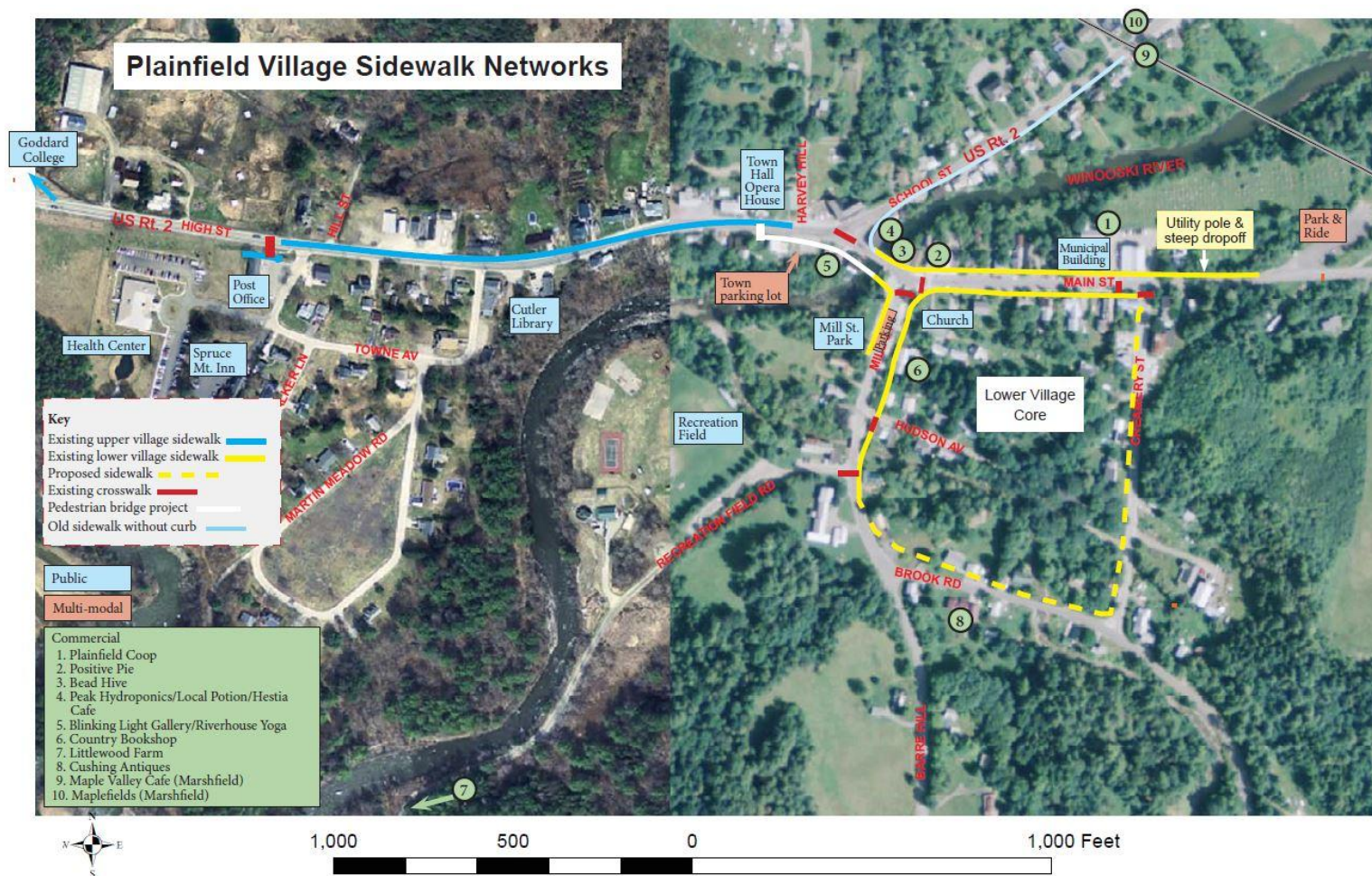


Figure 2. Project Map showing a the proposed alignment of the Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont.

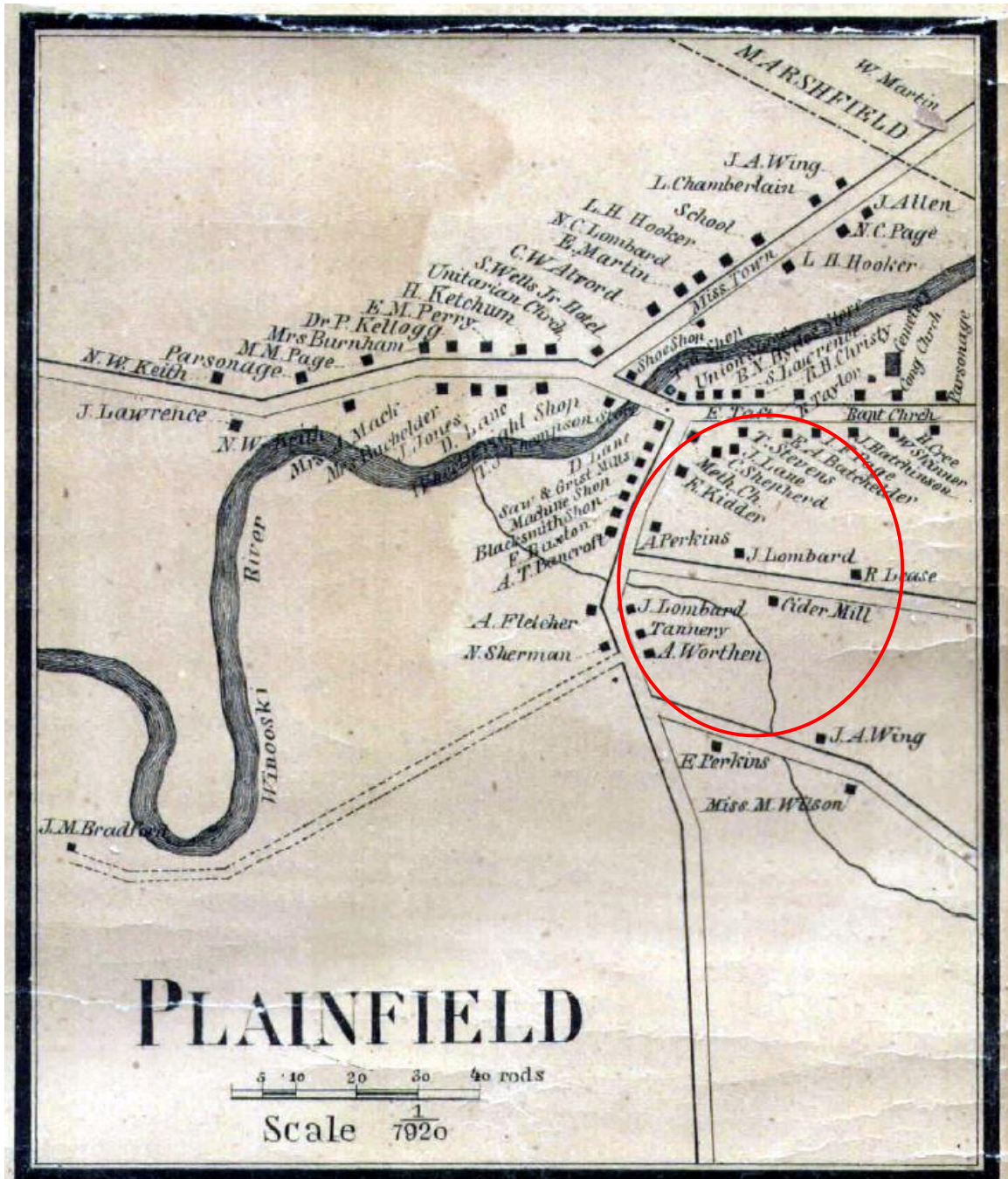


Figure 3. Historic 1858 Wallings map of the project location for the Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont.

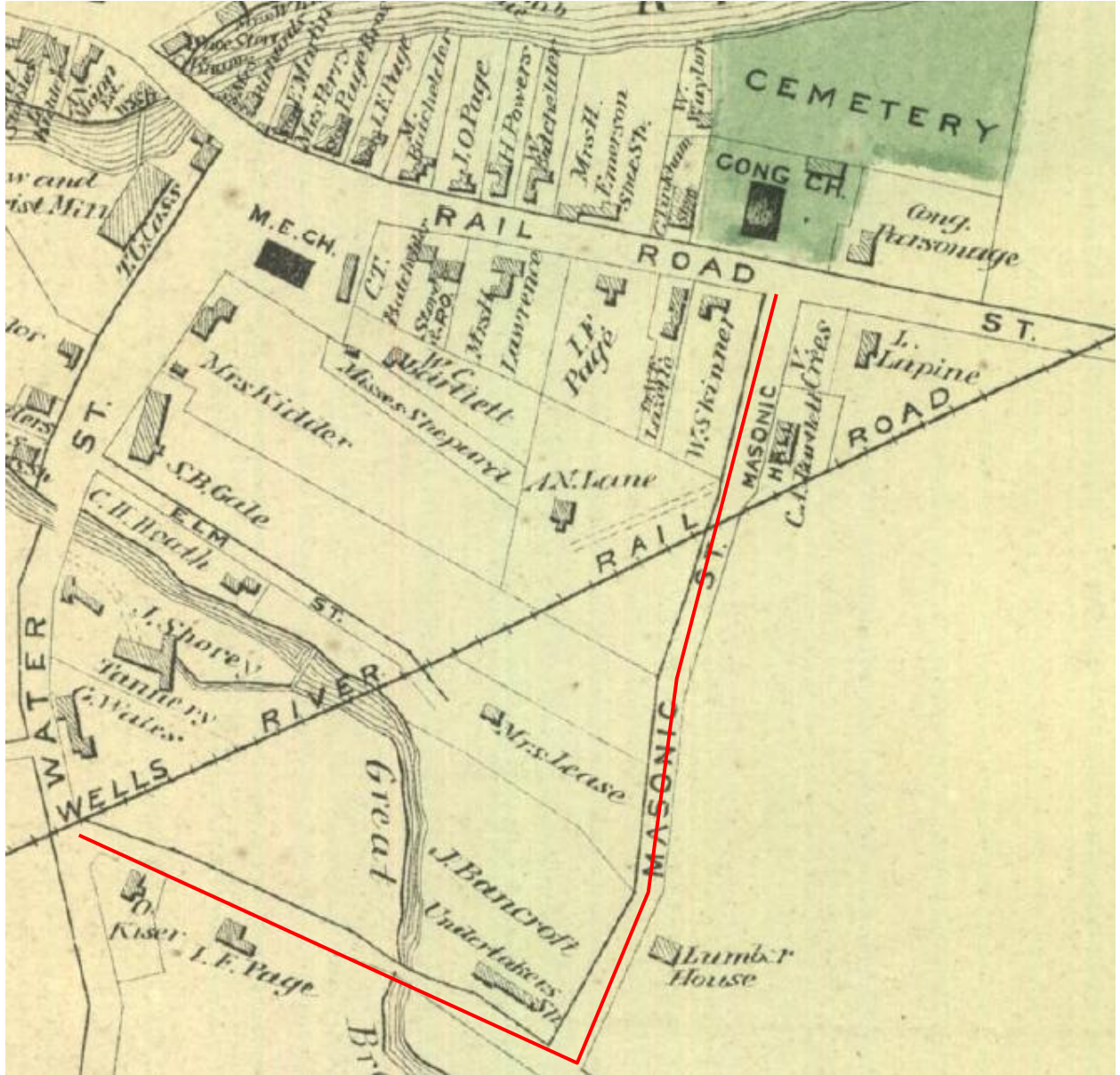


Figure 4. Historic 1873 Beer's atlas of the proposed location of the Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont.

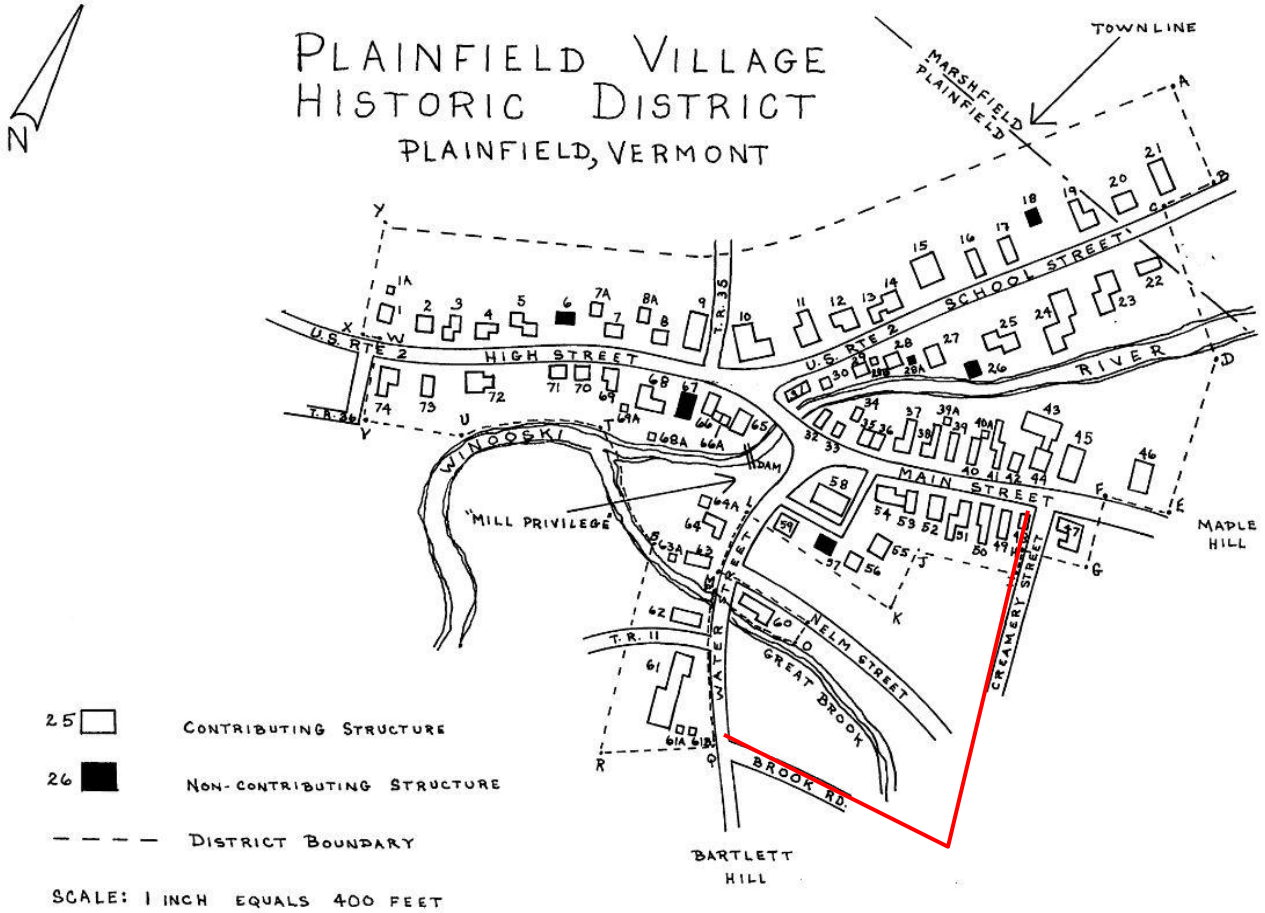


Figure 5. Map showing the limits of the Plainfield Village Historic District in relation to the alignment of the proposed Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont



a



b

Figure 6. Photos looking east (a & b) along the north side of Brook Road, showing the existing water main trench area along the alignment of the proposed Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont.



a



b

Figure 7. Photos looking west at the Great Brook crossing (a) and east just east of the Great Brook crossing (b) along Brook Road for the proposed Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont.



a



b

Figure 8. Photos looking north (a) and south (b) along the southern-half of Creamery Street at the western side of the road, showing the thick road prism and fill throughout this section of the alignment of the proposed Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont.



a



b

Figure 9. Photos looking north (a & b) at the historic structures and related filling along the northern section of Creamery Street along the alignment of the proposed Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont.



Figure 10. Photos looking north along Creamery Street towards the intersection with Main Street along the alignment of the proposed Plainfield STP BP15(16): Lower Village Sidewalk Project, Plainfield, Washington County, Vermont.