VTrans Vermont Agency of Transportation

REQUEST FOR PROJECT REVIEW

RFPR version 4.0.a.

PROJECT INFORMATION

Proj. Name and Number: Jeffersonville STP BP13(15)

EA No.: BP13015 PPMS: 13F384

Project Manager: Scott Robertson

DOCUMENTS FOR REVIEW AND FILES LOCATION

PLANS SCOPING REPORT FILE LOCATION : Z:\Highways\MUN\LCL\LTF Projects\Jeffersonville STP BP13(15)\Jeffersonville SW Scoping Study Report 2016-05-17.pdf

ESTIMATES NONE FILE LOCATION :

SPECIAL PROVISION NONE FILE LOCATION :

TIME LINES

SUBMITTED: 06-01-2016

DEADLINE: 06-21-2016

COMPLETED: 06-22-2016

Brief Project Description: Draft Scoping Report for pedestrian improvements in Jeffersonville.

Program: Municipal Assistance

Project Location: Village of Jeffersonville, Town of Cambridge

Route: *Town Highway*

INVITEES FOR REVIEW

☐ MOB District 1	☐ MOB District 7	☒ MAB Bicycle and Pedestrian Program Unit REVIEWED By Jon Kaplan (jon.kaplan@state.vt.us) at 10:27 am, Jun 20, 2016	☐ PDB Highway Safety & Design	☐ CMB Construction Section	☐ FHWA
☐ MOB District 2	☒ MOB District 8 Didn't participate in On-line review.	☐ PDB Right-of-Way	☒ PDB Environmental Section REVIEWED By Jeff Ramsey (jeff.ramsey@state.vt.us) at 12:37 pm, Jun 02, 2016		☐ Rail Bureau
☐ MOB District 3	☐ MOB District 9	☐ PDB Structural Section		☐ CMB Materials Testing and Certification Section	☐ Civil Rights
☐ MOB District 4	☐ MOB TSMO Traffic Operations REVIEWED By Nancy L. Avery (nancy.avery@vermont.gov) at 7:07 am, Jun 14, 2016 REVIEWED By Tyler Guazzoni (tyler.guazzoni@state.vt.us) at 9:53 am, Jun 14, 2016	☐ PDB Survey Section	☐ PDB Hydraulics Section	☐ CMB Geotechnical Engineering Section	Others: REVIEWED By Scott Gurley (scott.gurley@vermont.gov) at 1:10 pm, Jun 09, 2016 John LaBarge, MAB Nicholas Meltzer, MAB REVIEWED By Nick Meltzer (Nicholas.Meltzer@state.vt.us) at 9:47 am, Jun 20, 2016
☐ MOB District 5	☐ MOB Technical Services	☐ PDB Utility Section	☐ Integral Abutment	☐ Policy and Planning Bureau	

Review Focus Notes:

Print Form

Clear Form

Submit by Email

Quality Assurance Section

Master Plan and Scoping Study Report for

JEFFERSONVILLE BICYCLE & PEDESTRIAN IMPROVEMENTS; STP BP13(15)

JEFFERSONVILLE, VERMONT

May 16, 2016

Submitted to:
Rob Moore
Lamoille County Planning Commission
P.O. Box 1637
Morrisville, VT 05661

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An index or table of contents for Appendices would be

I. Summary

The Village of Jeffersonville has been working towards developing a plan for improvement of their bicycle and pedestrian facilities for several years. A sidewalk committee has been developed in the Village and has completed a review of the existing sidewalk conditions. To continue their efforts to improve bicycle and pedestrian facilities in the area, the Village applied for and received funding from the Vermont Agency of Transportation (VTrans) Bicycle and Pedestrian Grant Program. This grant provided funds to complete this scoping study to identify and prioritize areas in the Village in need of bicycle and pedestrian improvements.

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 several potential Class II and Class III wetland areas in the project area. However, there are no wetland areas currently mapped on the Vermont Significant Wetlands Inventory (VSWI) within the project area. Should improvements occur near the potential wetland areas identified as part of this study, a site visit with the Vermont Department of Environmental Conservation, wetlands program should occur to determine permitting requirements, if any.

An Archaeological Resource and Historical Preservation Assessment was completed for the project area. One potential archaeologically sensitive site was identified along Old Main Street as a result of the assessment. Should disturbance occur along Old Main Street, a Phase 1 Site Identification Survey should be completed. The project area is located within the National Register – listed Jeffersonville Historic District. The Historic Preservation Assessment determined that generally, as long as no existing structures are disturbed and the improvements remain within the road right-of-way, no additional assessment is necessary. It was recommended that the plans be provided to the Vermont Division for Historic Preservation to determine the significance of any impacts to historic resources.

Subsequent reviews will be conducted by VTrans HP staff, not DHP

Several public meetings were held during the development of the Scoping Study. A Local Concerns Meeting was conducted on July 14, 2015 to obtain input from the public on preferences, anticipated user groups and the purpose and need for the project. Based on this meeting, segment priorities and a draft Purpose and Need Statement were developed.

After the Local Concerns meeting, alternatives were developed based on design criteria and local input. Several alternatives were developed to improve existing facilities and provide new bicycle and pedestrian facilities on the streets identified for improvements in the Local Concerns Meeting. An Alternatives Presentation Meeting was held on November 24, 2015. 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 allow for the identification of priority segments and the selection of the preferred alternative.

Does the sidewalk committee really represent the interests of bicyclists as well? It is stated that this is a bicycle and pedestrian study.

Limited public comment was received as a result of the Alternatives Presentation Meeting. The Village repeatedly solicited the public for comments to try and prioritize improvements but in all, only three people submitted written comments as a result of the Alternatives Presentation Meeting. To obtain additional input, a survey was handed out at Town Meeting which returned 35 responses to assist in prioritizing segments for improvements.

With public comments from the Local Concerns Meeting, Alternatives Presentation Meeting and Town Meeting, the sidewalk committee and local representatives met on April 12, 2016 to finalize the priority segments and preferred alternatives for each of the priority segments.

The highest priority segment was identified as the intersection of Main, Mill and Church Streets. However, after discussion it was determined that this segment would not be reviewed further as part of this study as it is under special review by a safety team with the Vermont Agency of Transportation. The next highest priority segments were identified as Carlton Avenue and School Street. These areas have been discussed as the highest priority areas in each of the public meetings as both streets are part of a loop that connects Main Street to the Cambridge Elementary School. After reviewing alternative materials for each of these segments, the preferred alternative was determined to be concrete sidewalk with granite curb.

Jurisdiction of roads involved? All local?

After the improvements are completed on Carlton Avenue and School Street the committee plans to look at improving Main Street by replacing the existing sidewalk with concrete and installing granite curb, lighting and drainage improvements. Due to the large expense of completing all the improvements on Main Street at one time, the committee prioritized the improvements into phases. Once the improvements are completed in these areas, the committee will begin looking at improving other areas on the outskirts of the Village to promote non-motorized means of transportation to access services in the Village.

Priorities will likely focus on pockets of residential and recreational development, where connections to the Village's civic, commercial, and recreational services are important for residents and visitors to Jeffersonville. Priorities may change over time, as fluctuation in localized demographics may unexpectedly increase needs for infrastructure in one location or another.

II. Purpose and Need

So far, only sidewalks discussed

Developing a Purpose and Need statement requires obtaining input from local citizens, and meeting with Village 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. The following Purpose and Need Statement was developed during this process for this project:

> *The purpose of the project is to create safe and attractive pedestrian and bicycle facilities in the Village of Jeffersonville for students and staff getting to and from school and for people of all ages and abilities to walk or bicycle to the Village to patronize businesses*

and access municipal buildings. All improvements should consider the historic appearance of the Village and enhance the appearance of the Village.

The need for the project is to provide safe routes for residents and visitors to access businesses and municipal buildings in the Village.

This is a vague and incomplete need statement. Need should be based on existing conditions like road widths, traffic speeds, documented safety issues, etc.

III. Project Area and Existing Conditions

Project Area

The project area includes the Village of Jeffersonville as shown in Figure 3-1. Specific areas include:

- Intersection at Main, Mill and Church Streets
- School Street
- Carlton Avenue
- Upper Pleasant Valley Road
- Mill Street
- Church Street
- Main Street
- Old Main Street
- Depot Street
- Vermont Route 15

Image 3-1: Old Main Street looking south

For any work within state highway ROW, document input from the District

I recommend a separate overview of the bike network and the ped network being proposed. I hope some thought was given to continuity of a certain type of facility, especially when considering a shared use path vs. bike lanes. Mixing and matching with no thought may not be the best overall network for users in

VT ROUTE 15
8' WIDE SHARED USE PATHWAY

POTENTIAL WETLANDS AREA, TYP.

Due to sight distance restrictions a crosswalk would not be warranted at this location.

OLD MAIN STREET
ALTERNATIVE 1
5' WIDE SIDEWALK

ALTERNATIVE 2
5' WIDE SIDEWALK WITH 8' WIDE PARKING LANE

ALTERNATIVE 3
5' WIDE GRAVEL PATHWAY

There is currently a marked crosswalk at this location.

This Figure is incredibly too busy. Either split out segments, or split out alternatives onto separate

MAIN STREET
ALTERNATIVE 1
8' WIDE SHARED USE PATHWAY

ALTERNATIVE 2
REPLACE EXISTING SIDEWALK WITH 5' WIDE SIDEWALK

DEPOT STREET
5' WIDE CURBED SIDEWALK

SCHOOL STREET
ALTERNATIVE 1
5' WIDE SIDEWALK

ALTERNATIVE 2
5' WIDE SIDEWALK WITH 4' WIDE BIKE LANES

ALTERNATIVE 3
8' WIDE CURBED SHARED USE PATHWAY

MAIN/CHURCH/MILL INTERSECTION
ALTERNATIVE 1
5' WIDE SIDEWALK
ALTERNATIVE 2
8' WIDE SHARED USE PATHWAY
ALTERNATIVE 3
REPLACE EXISTING SIDEWALK WITH 5' WIDE CURBED SIDEWALK

CHURCH STREET
ALTERNATIVE 3
REPLACE EXISTING SIDEWALK WITH 5' WIDE SIDEWALK

CARLTON AVENUE
ALTERNATIVE 1
5' WIDE CURBED SIDEWALK

ALTERNATIVE 2
5' WIDE CURBED SIDEWALK WITH 4' WIDE BIKE LANES

ALTERNATIVE 3
8' WIDE CURBED SHARED USE PATHWAY

MAIN STREET
REPLACE EXISTING SIDEWALK WITH 5' WIDE SIDEWALK

VILLAGE BOUNDARY (TYP)

Where two lines are shown, is this proposing sidewalks both sides? Not

VTrans has a stormwater permit on VT15 from bridge project affecting this area...

CHURCH STREET
ALTERNATIVE 1
5' WIDE SIDEWALK WITH GREEN STRIP AND CURB

ALTERNATIVE 2
8' WIDE SHARED USE PATHWAY WITH GREEN STRIP AND CURB

MAIN/CHURCH/MILL INTERSECTION
5' WIDE CURBED SIDEWALK

Due to sight distance restrictions a crosswalk would not be warranted at this location.

UPPER PLEASANT VALLEY ROAD
ALTERNATIVE 1W
5' WIDE CURBED SIDEWALK

ALTERNATIVE 2W
5' WIDE CURBED SIDEWALK WITH 3' WIDE BIKE LANES

ALTERNATIVE 3
8' WIDE CURBED SHARED USE PATHWAY

UPPER PLEASANT VALLEY ROAD
ALTERNATIVE 1
5' WIDE CURBED SIDEWALK

ALTERNATIVE 2
5' WIDE CURBED SIDEWALK WITH 3' WIDE BIKE LANES

It should be noted that a sign project along VT 108 is currently in progress and should be completed by August 2016.

MILL STREET
ALTERNATIVE 1
5' WIDE CURBED SIDEWALK

ALTERNATIVE 2
8' WIDE CURBED SHARED USE PATHWAY

ALTERNATIVE 3
SIGNAGE AND STRIPING TO DELINEATE BIKE LANES ALONG ROADWAY TO SWIMMING HOLE

Minimum bike lane width per AASHTO and VTrans is 4 feet

FUTURE COMMUNITY CENTER
FUTURE UNION BANK
CAMBRIDGE ELEMENTARY SCHOOL
CAMBRIDGE POST OFFICE
HANLEY'S VT LIQUOR
CAMBRIDGE EMS
158 MAIN

NOTES:
1. ALL SIDEWALK IS PROPOSED TO BE CONCRETE.
2. ALL CURB IS PROPOSED TO BE GRANITE.

300' 0 150' 300'

Project #	7150020
Project Mgr.	AJD
Design	AJD
Drawn	EAE
Checked by	R.E. DUFRESNE
Date	JULY 2015
Scale	AS SHOWN
Approved by	APPROVED BY

MASTER PLAN AND SCOPING STUDY
BICYCLE AND PEDESTRIAN IMPROVEMNTS STP BP13(15)

PROJECT AREA

JEFFERSONVILLE, VT

FIG 3-1

DWG. NO. alternative map.dwg

SHEET 1 OF 1

FILE: J:\Jeffersonville VT\Jeffersonville Sidewalk 7150020\CADD\d 9:41am

It's more important to see the lane and shoulder widths than number of lanes. Please revise

Existing Conditions

A summary of the existing pedestrian/bicycle facilities and speed limits is included in Table 3-1.

Table 3-1
Existing Roadway Characteristics for Alternative Segments
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

It might be helpful to have a column for ROW width here.

Segment	Sidewalks	Roadway Characteristics	Paved Width	Speed limit (mph)
Mill Street	None	2 lane	28 feet	35
Church Street	Single on North Side	2 lane with parking on both sides	46 feet	25
Main Street	Both Sides between Church Street and Old Main Street	2 lane with parking on both sides	40 feet	25
Upper Pleasant Valley Road	None	2 lane	24 feet	25
School Street	None	2 lane	26 feet	25
Carlton Avenue	None	2 lane	22 feet	25
Old Main Street	None	2 lane	24 feet	25
Depot Street	Single on South Side	2 lane	28 feet	25
Maple Street	Single on East Side	2 lane	24 feet	25

All of these roads are paved with the following characteristics:

A major component of what happens on this street will be whether or not it's a Class 1 TH or under VTrans jurisdiction. Please reference this

Main/Mill/Church Intersection:

- Existing memorial limits improvements on south side of intersection.
- Parking adjacent to the Jeffersonville Country Store limits improvements on th side of the intersection.
- Existing ledge in the area may make construction difficult.
- Parking modifications at the Jeffersonville Country Store will be required to in safety for pedestrians.

Mill Street:

- The existing width of Mill Street is approximately 28 feet.
- Between the Maintenance Garage on Mill Street and Main Street some utility conflicts exist but there appears to be sufficient space available, with grading, to allow for a sidewalk on the east side of Mill Street.

Church Street:

- Church Street has sufficient shoulders and an existing sidewalk to allow for pedestrian and bicycle traffic.

what kind of conflicts?

Sufficient according to who? List dimensions!

- The width of the sidewalk on Church Street does not meet the standard requirement of 5 feet; however, it is in fair condition.

Main Street:

- Main Street is approximately 40 feet wide with existing sidewalks and parking on both sides with the exception of between VT 15 and Old Main Street.
- The existing sidewalks range from poor to excellent condition with the majority of the sidewalks in fair or good condition.
- The existing sidewalks are generally less than 5 feet wide. A minimum width of 5 feet is required for compliance with the Americans with Disabilities Act (ADA).

Image 3-2: Main Street meandering sidewalk

Not necessarily true

Upper Pleasant Valley Road is a Class II Town Highway classified as a rural major collector. In 2011, VTrans measured 1,800 AADT between Williamson Road and Church Street. The minimum lane width recommended by VTrans for a rural major collector with the AADTs experienced on Upper Pleasant Valley Road is 10 feet with a 3 foot shoulder for safety. A minimum width of 2 feet is recommended by VTrans for a paved shoulder to allow for shared bicycle and vehicle use. However, this does not meet the minimum width recommended for safety, therefore a 3 foot shoulder should be provided. The existing width of Upper Pleasant Valley Road within the study area is approximately 24 feet with no shoulders.

A travel lane narrower than a parking lane? This doesn't make sense

For local streets, such as Old Main Street, School Street, Carlton Avenue, and Depot Street, VTrans recommends lane widths of 7 to 11 feet. To provide the minimum lane width of 7 feet and a parking lane of 8 feet on both sides would require 30 feet, the addition of a 5 foot wide sidewalk on one side requires a total width of 35 feet. The local streets have the following characteristics:

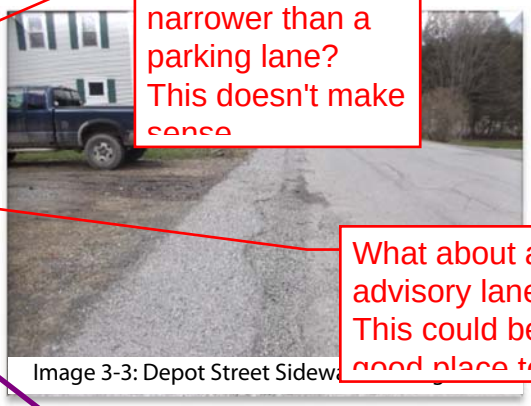


Image 3-3: Depot Street Sidewa

What about an advisory lane? This could be a good place to use

School Street:

- Existing width of approximately 26 feet.
- There are no existing sidewalks.

Carlton Avenue:

- Existing width of 22 feet
- There are no existing sidewalks.

Old Main Street:

- Existing width of approximately 24 feet.
- No existing parking or sidewalks.

It should be noted that larger vehicles -heating fuel, propane trucks, snow plows will have difficulty meeting a vehicle when lane widths are narrowed to 7 FT.

Depot Street:

- Existing width of approximately 28 feet.
- Existing sidewalk is located on the south side of the street directly adjacent to the roadway but it does not have clear separation from the roadway due to a lack of curb.
- Existing sidewalk width does not meet ADA requirements.

4' is sufficient if there is a 5x5 pull out every 200'. Please note surface type for sidewalk here too

Maple Street:

- Existing width of approximately 24 feet.
- Existing detached sidewalks on the east side that do not meet ADA requ
- Cars frequently park along the street narrowing the travel lanes.

We reviewed VTrans data for high crash locations, compiled for the 2006-2010 period and no high crash locations or sections were identified in the Village of Jeffersonville.

Proposed Location of Facilities

The objective of this project is to review the existing pedestrian facilities in the Village of Jeffersonville, identify areas needing facilities or improvement to existing facilities, prioritizing areas identified as needing improvements and selecting specific improvements for the highest priority areas. The study area encompassed the entire Village and identified alternatives for improvements are shown in the following tables and figures. An overview of these alternatives is shown on Figure 3-1, Project Area. Additional detail for each alternative is shown in Tables 3-2 through 3-22 and Figures 3-2 through 3-12.

Image 3-4: Main Street looking towards VT 15

The location of the alternatives was previously shown in Figure 3-1, Project Area map. In addition to the summary of characteristics above, 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 3-3. No significant impacts beyond those listed above were identified in the review of the alternatives against these factors.

Image 3-5: Mill/Main/Church Intersection looking east

Table 3-2
Main/Mill/Church Street Intersection Alternatives
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

"Do Nothing" alternative should be mentioned in table 3-2

Segment: Main/Church/Mill Intersection		
Alternative	**Description**	**Characteristics**
Alternative-1	Sidewalk improvements on the east and west sides of intersection from Carlton Ave to Maple Street, 5' wide concrete sidewalk with granite curb from Mill Street to Carlton Avenue and widen existing sidewalk on west to 8' asphalt with curb.	• Loss of parking at Hanley's and VT Liquor Store • ROW and Easements required for Hanley's and VT Liquor Store • Provides a safe route of travel for bicycles and pedestrians through the intersection
Alternative-2	Sidewalk improvements from Carlton Ave to Maple Street on the east and west sides of intersection and sharrows. Add 5' wide concrete sidewalk with granite curb from Mill Street to Carlton Avenue and replace existing sidewalk from Maple to Carlton with 5' wide concrete sidewalk and granite curb on west side.	• Loss of parking at Hanley's and VT Liquor Store • Lack of provisions for off-road bicycle facilities • Provides improved pedestrian facilities
Alternative-3	Replace existing sidewalk between Maple Street and Carlton Avenue with 5' wide concrete and granite curb	• Improves pedestrian safety until the intersection reconstruction project • No bicycle facilities provided • No facilities provided on the East side of the intersection

If there's only 3 alternativies, then why are there 20 tables?

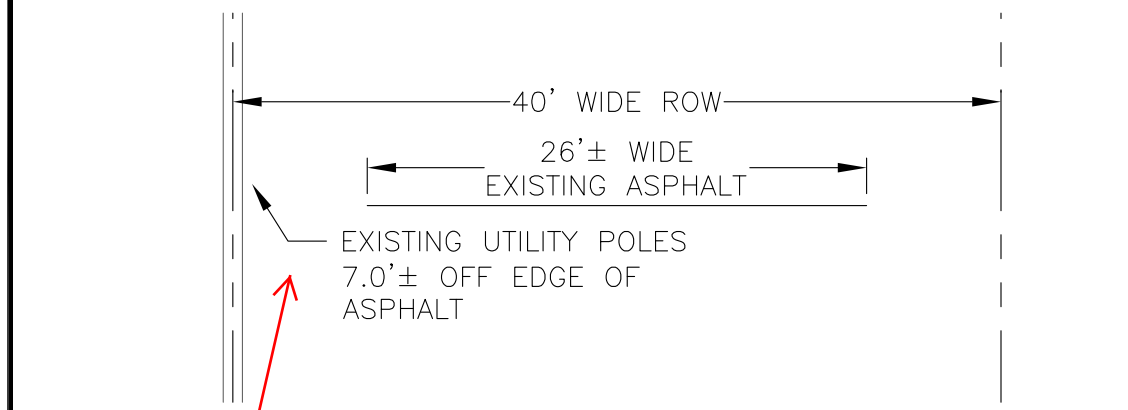
Table 3-3
Main/Mill/Church Street Intersection Evaluation Matrix
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Category		Do Nothing	Main/Church/Mill Street Intersection		
			Alternative-1	Alternative-2	Alternative-3
Description			Sidewalk improvements on the east and west sides of intersection from Carlton Ave to Maple Street, widen sidewalk on west to 8' and addition of a crosswalk at Carlton Ave	Sidewalk improvements from Carlton Ave to Maple Street on the east and west sides of intersection, sharrows and addition of a crosswalk at Carlton Ave	Replace existing sidewalk between Maple Street and Carlton Avenue with 5' wide concrete and curb
Construction Characteristics	Length (ft)	0	200 feet east side, 350 feet west side	200 feet east side, 350 feet west side	350 feet west side
	Width (ft)	0	5 east side, 8' west side	5	5
	Surface	0	Concrete, Ashpalt	Concrete	Concrete
	New Impervious (sf)	0	1400	350	350
Impacts	Ag. Lands	None	None	None	None
	Archaeological	None	None	None	None
	Historical	None	None	None	None
	Hazardous materials	None	None	None	None
	Floodplains	None	None	None	None
	Fish & Wildlife	None	None	None	None
	Rare, Threatened & Endangered Species	None	None	None	None
	Public Lands - Sect. 4(f)	None	None	None	None
	LWCP - Sect. 6(f)	None	None	None	None
	Noise	None			
	Wetlands	None	None	None	None
	Utilities - aerial	None	None	None	None
	Utilities - underground	None	None	None	None
Local & Regional Issues	Concerns	Pedestrian Safety	Parking conflicts	Bicycle Safety, parking conflicts	Bicycle Safety, does not improve parking conflicts
	Aesthetics	Unchanged	Improved	Improved	Improved
	Community Character	Unchanged	Improved	Improved	Improved
	Economic Impacts	Potentially negative	Loss of one parking space at Liquor Store	Loss of one parking space at Liquor Store	None
	Conformance to Town Plan	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	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	N/A	1	1	1
	Number of Roadway Crossings	N/A	1 new crosswalk	1 new crosswalk	1 new crosswalk

Cross sections of the alternatives for School Street are shown in Figure 3-2. In addition to the summary of characteristics shown in Table 3-4, 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 3-5. No significant impacts beyond those listed above were identified in the review of the alternatives against these factors.

The addition of pedestrian and/or bicycle improvements to School Street would provide a connection from the center of the Village, where the majority of the public services are located, to the Cambridge Elementary School.

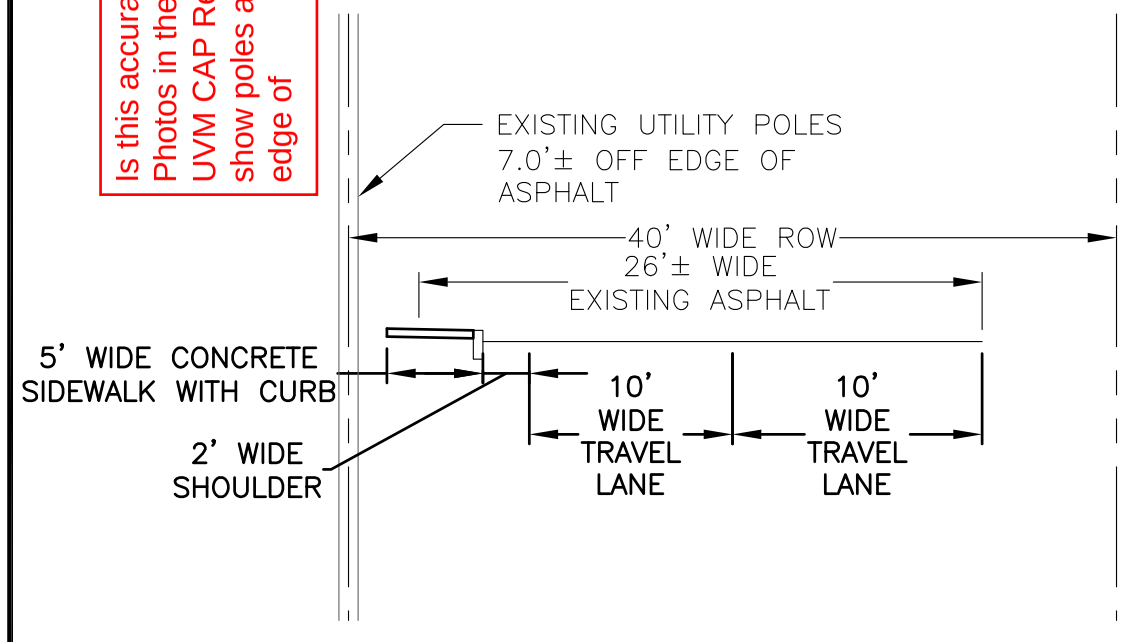
Due to sharp curve, intersection geometrics, and parking in this area sight distance for pedestrians is insufficient and a crosswalk would not be warranted.



SCHOOL STREET EXISTING CONDITIONS

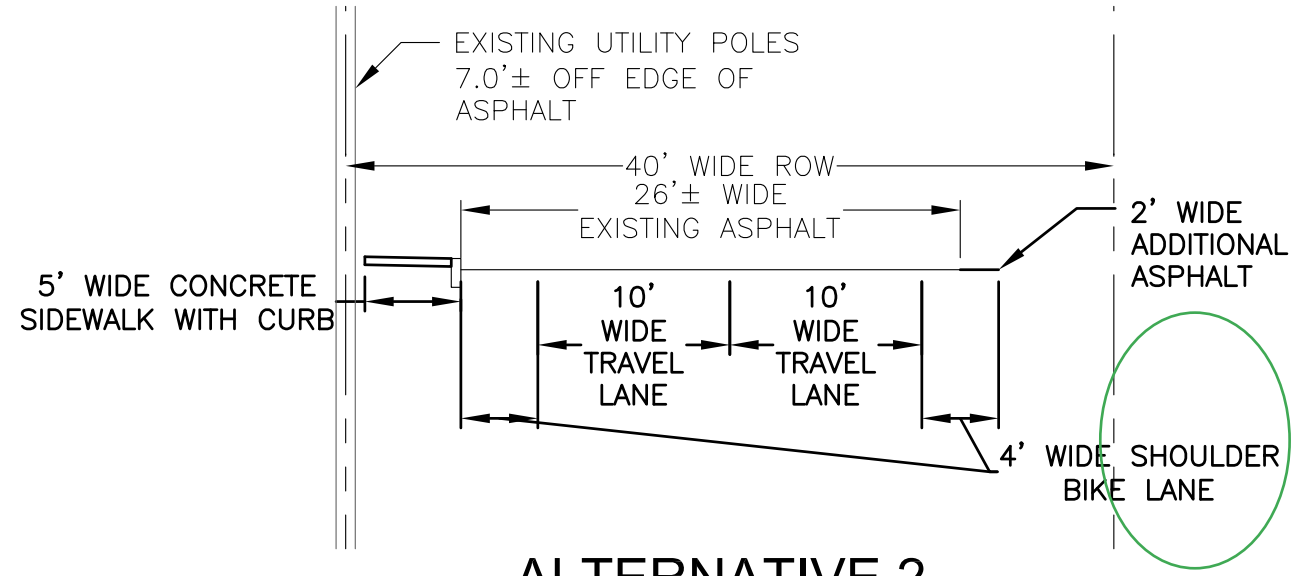
NOT TO SCALE

Is this accurate? Photos in the UVM CAP Report show poles at the edge of



ALTERNATIVE 1

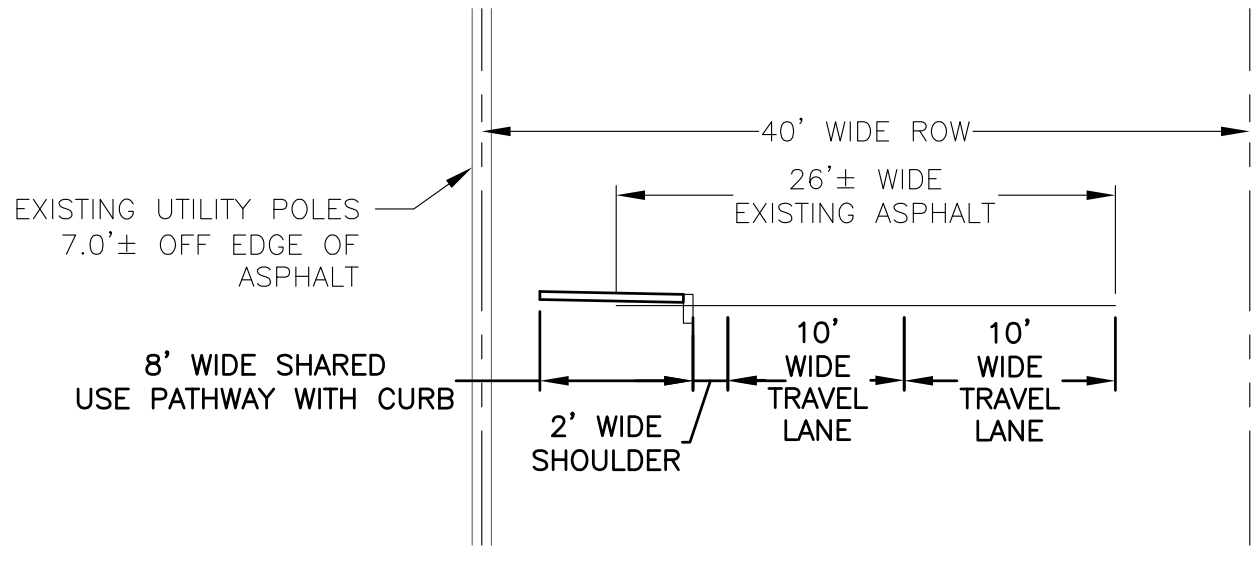
NOT TO SCALE



ALTERNATIVE 2

NOT TO SCALE

Is it a shoulder or a bike lane? Please be careful and precise with terminology.



ALTERNATIVE 3

NOT TO SCALE

DUFRESNE GROUP
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459 Portland Street, Suite 106
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Project #	7150020
Project Mgr.	AJD
Design	AJD
Drawn	EAE
Checked by	R.E. DUFRESNE
Date	SEPTEMBER 2015
Scale	AS SHOWN
Approved by	APPROVED BY

BICYCLE AND PEDESTRIAN IMPROVEMENTS STUDY
STP BP13(15)

SCHOOL STREET
ALTERNATIVE DETAILS

JEFFERSONVILLE, VERMONT

FIG 3-2

DWG. NO. SCHOOL STREET.dwg

SHEET 1 OF 1

FILE: J:\Jeffersonville VT\Jeffersonville Sidewalk 7150020\CADD\Figures\Alternative\SCHOOL STREET.dwg May 09, 2016 - 9:42am

Table 3-4
School Street Alternatives
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Segment: School Street		
Alternative	**Description**	**Characteristics**
Alternative-1	5' wide Concrete Sidewalk on south side only with granite curb and no bike lanes	• Conflict with existing tree near school • Does not provide for bicycle facilities • Provides improved pedestrian facilities
Alternative-2	5' wide Concrete Sidewalk on south side only with granite curb and 4' wide bike lanes	• Conflict with existing tree near school • Provides improved pedestrian and bicycle facilities • Bicycle facilities are not separated from the roadway • Required widening of the roadway by 2 feet
Alternative-3	8' wide Asphalt Shared Use pathway on south side only with curb	• Conflict with existing tree near school • Provide for bicycle and pedestrian facilities separated from the roadway • Requires widening of the roadway by 4 feet and shifting of the centerline north

Paths on one side of the road often have some operational issues at intersections. Have you looked at that? What about the number of driveway conflicts?

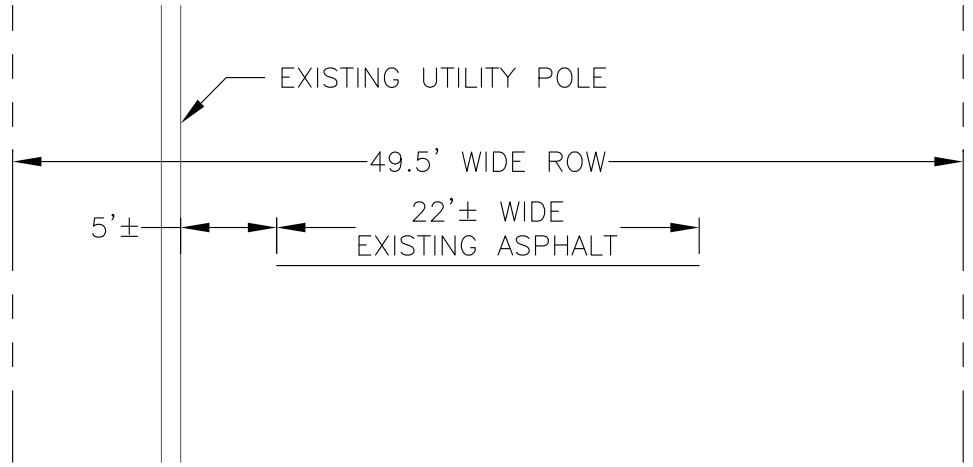
Why does the roadway need to be widened for Alternative 3? This isn't shown in Figure 3.2.

Table 3-5
School Street Evaluation Matrix
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Category		Do Nothing	School Street		
			Alternative-1	Alternative-2	Alternative-3
Description			Concrete Sidewalk on south side only with Granite Curb and NO bike lanes	Concrete Sidewalk on south side only with Granite Curb and bike lanes	Asphalt Shared Use pathway on south side only with curb
Construction Characteristics	Length (ft)	0	570	570	570
	Width (ft)	0	5	5	8
	Surface	0	Concrete	Concrete	Asphalt
	New Impervious (sf)	0	570	3,420	2,280
Impacts	Ag. Lands	None	None	None	None
	Archaeological	None	None	None	None
	Historical	None	None	None	None
	Hazardous materials	None	None	None	None
	Floodplains	None	500-yr	500-yr	500-yr
	Fish & Wildlife	None	None	None	None
	Rare, Threatened & Endangered Species	None	None	None	None
	Public Lands - Sect. 4(f)	None	None	None	None
	LWCP - Sect. 6(f)	None	None	None	None
	Noise	None	None	None	None
	Wetlands	None	None	None	None
	Utilities - aerial	None	None	None	None
	Utilities - underground	None	None	None	None
Local & Regional Issues	Concerns	Pedestrian Safety	Bicycle safety, existing tree near school	Potential conflict with existing tree at school	Requires shift of centerline of roadway
	Aesthetics	Unchanged	Improved	Improved	Improved
	Community Character	Unchanged	Improved	Improved	Improved
	Economic Impacts	Potentially negative	Positive	Positive	Positive
	Conformance to Town Plan	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	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	N/A	2	2	2
	Number of Roadway Crossings	N/A	1	1	1

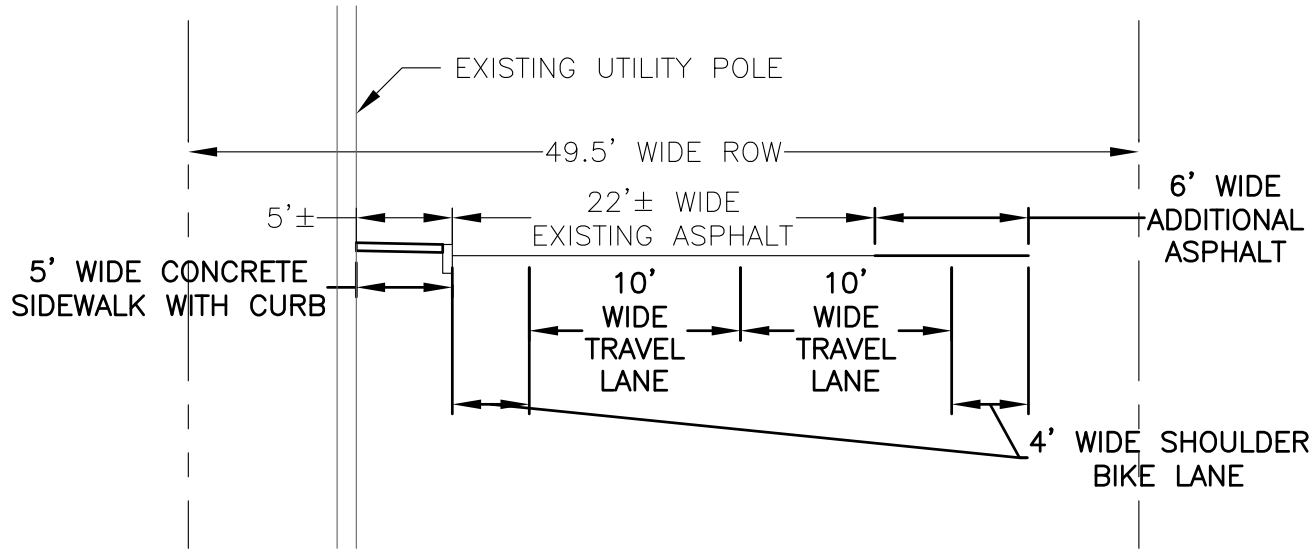
Cross sections of the alternatives for Carlton Avenue are shown in Figure 3-3. In addition to the summary of characteristics shown in Table 3-6, each of the alternatives was evaluated for construction characteristics, impacts, local and regional issues, permits, and safety. This information is presented in an Evaluation Matrix in Table 3-7. One historic house is located along the north side of Carlton Avenue and two historic houses are located on the south side of the street. If improvements remain in the right-of-way these properties are not anticipated to be impacted.

The addition of pedestrian and/or bicycle improvements to Carlton Avenue would provide a connection from the center of the Village, where the majority of the public services are located, to the Cambridge Elementary School.



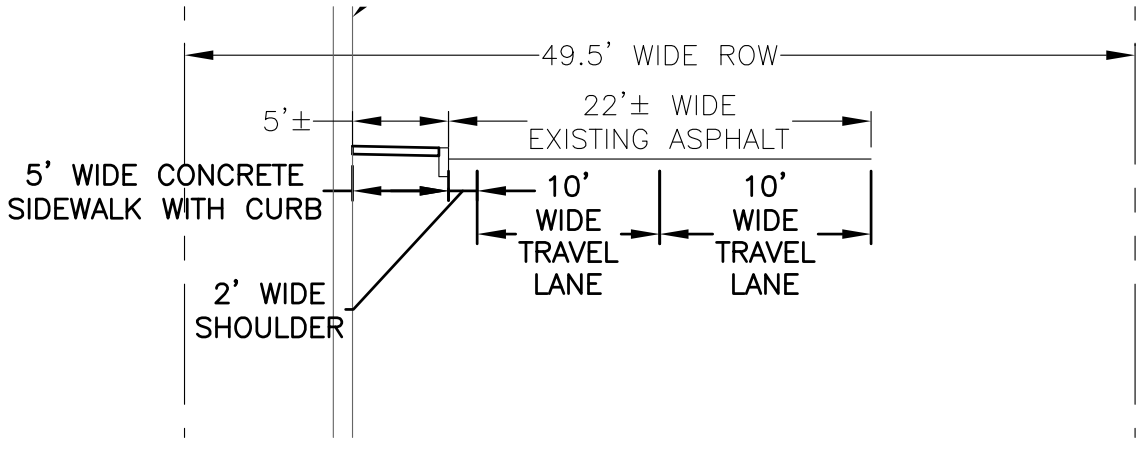
CARLTON AVENUE EXISTING CONDITIONS

NOT TO SCALE



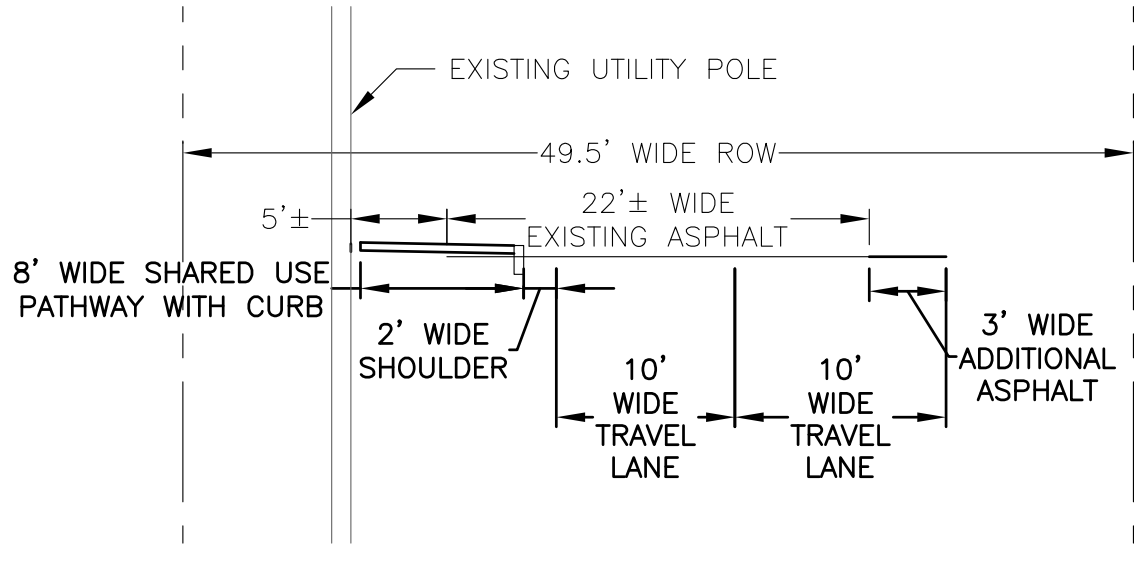
ALTERNATIVE 2

NOT TO SCALE



ALTERNATIVE 1

NOT TO SCALE



ALTERNATIVE 3

NOT TO SCALE

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Project #	7150020
Project Mgr.	AJD
Design	AJD
Drawn	EAE
Checked by	R.E. DUFRESNE
Date	SEPTEMBER 2015
Scale	AS SHOWN
Approved by	APPROVED BY

BICYCLE AND PEDESTRIAN IMPROVEMENTS STUDY
STP BP13(15)

CARLTON AVENUE ALTERNATIVE DETAILS

JEFFERSONVILLE, VERMONT

FIG 3-3

DWG. NO. CARLTON AVE.dwg

SHEET 1 OF 1

FILE: J:\Jeffersonville VT\Jeffersonville Sidewalk 7150020\CADD\Figures\Alternative\CARLTON AVE.dwg May 09, 2016 - 9:42am

Table 3-6
Carlton Avenue Alternatives
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Segment: Carlton Avenue		
Alternative	**Description**	**Characteristics**
Alternative-1	5' wide Concrete Sidewalk with granite curb and no bike lanes, add crosswalk and bulb outs across Main Street.	• Conflict with an existing catch basin • No bicycle facilities • Provides improved pedestrian safety
Alternative-2	5' wide Concrete Sidewalk with granite curb and 4' wide bike lanes, add crosswalk and bulb outs across Main Street.	• Conflict with an existing catch basin • Requires 6 feet of additional asphalt on the south side • Provides improved pedestrian and bicycle facilities • Bicycle facilities are not separated from the roadway
Alternative-3	8' wide Asphalt Shared Use pathway with curb, add crosswalk and bulb outs across Main Street.	• Conflict with an existing catch basin • Provides bicycle and pedestrian facilities separated from the roadway • Requires the addition of 3 feet of asphalt on the south side

Find a better way to organize all the alternatives. It's impossible to follow the report with how many are listed.

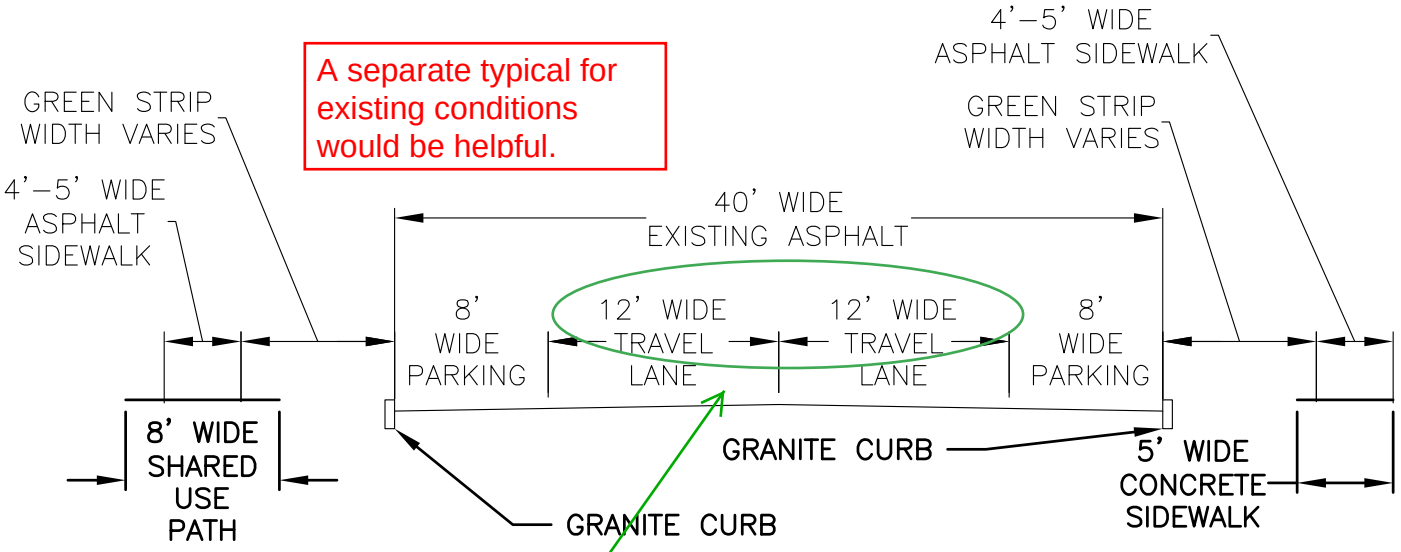
Table 3-7
Carlton Avenue Evaluation Matrix
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Category		Do Nothing	Carlton Avenue		
			Alternative-1	Alternative-2	Alternative-3
Description			Concrete Sidewalk with Granite Curb and NO bike lanes	Concrete Sidewalk with Granite Curb and bike lanes	Asphalt Shared Use pathway with curb
Construction Characteristics	Length (ft)	0	720	720	720
	Width (ft)	0	5	5' sidewalk, 4' asphalt bike lanes	3
	Surface	0	Concrete	Concrete	Asphalt
	New Impervious (sf)	0	3,600	7,920	2,160
Impacts	Ag. Lands	None	None	None	None
	Archaeological	None	None	None	None
	Historical	None	None	None	None
	Hazardous materials	None	None	None	None
	Floodplains	None	None	None	None
	Fish & Wildlife	None	None	None	None
	Rare, Threatened & Endangered Species	None	None	None	None
	Public Lands - Sect. 4(f)	None	None	None	None
	LWCP - Sect. 6(f)	None	None	None	None
	Noise	None	None	None	None
	Wetlands	None	None	None	None
	Utilities - aerial	None	None	None	None
	Utilities - underground	None	1 storm drain conflict	1 storm drain conflict	1 storm drain conflict
Local & Regional Issues	Concerns	Pedestrian Safety	Bicycle Safety	Requires additional paved width	Requires additional paved width
	Aesthetics	Unchanged	Improved	Improved	Improved
	Community Character	Unchanged	Improved	Improved	Improved
	Economic Impacts	Potentially negative	Positive	Positive	Positive
	Conformance to Town Plan	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	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	Potential	Potential	Potential
Safety	Number of Driveway Crossings	N/A	4	4	4
	Number of Roadway Crossings	N/A	0	0	0

Cross sections of the alternatives for Main Street are shown in Figures 3-4 and 3-5. In addition to the summary of characteristics shown in Table 3-8, each of the alternatives was evaluated for construction characteristics, impacts, local and regional issues, permits, and safety. This information is presented in Evaluation Matrices in Tables 3-9 and 3-10. Main Street is within the Jeffersonville Historic District and Main Street is within the Jeffersonville Historic District and improvements should be limited to the existing right-of-way and minimize disturbance to properties as much as possible. In addition, improvements should be consistent with the historic nature of the Village.

Improvements to the Main Street sidewalks would provide ADA compliant access to the Public Library and multiple stores, restaurants and businesses in the center of the Village.

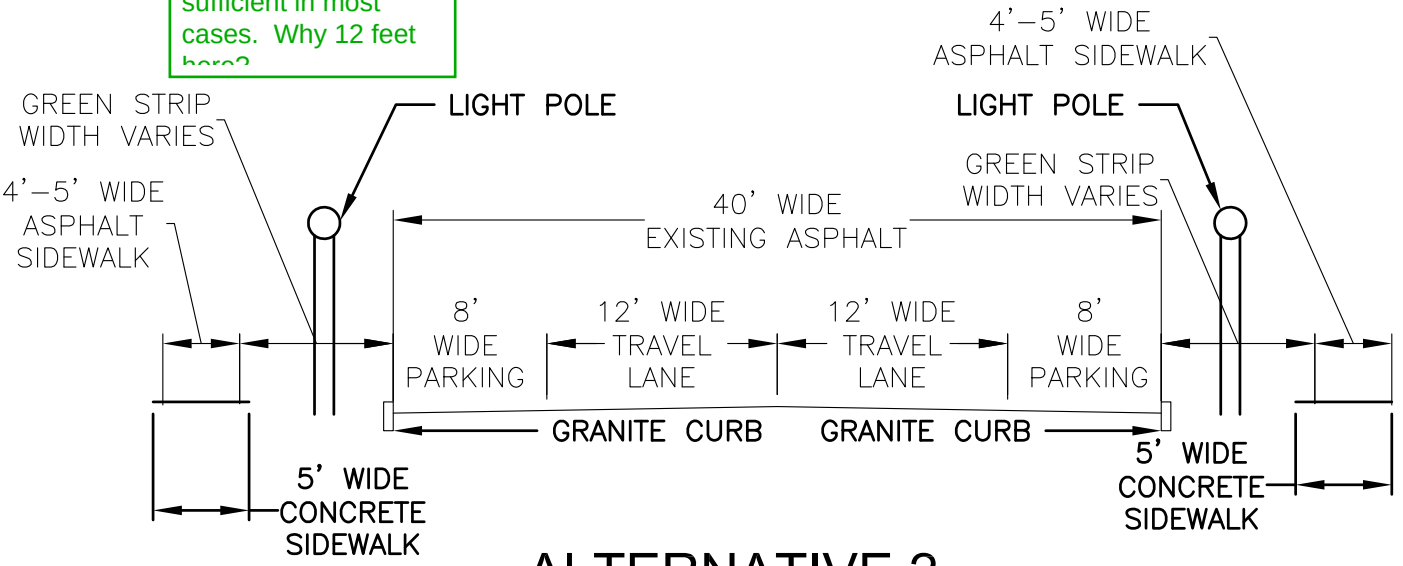
A separate typical for existing conditions would be helpful.



ALTERNATIVE 1

NOT TO SCALE

11 foot lanes are sufficient in most cases. Why 12 feet here?



ALTERNATIVE 2

NOT TO SCALE

NOTE:
1. SHARROWS PAINTED FOR BICYCLE TRAFFIC EVERY 250–FEET.
2. LIGHT POLES APPROXIMATELY EVERY 100–FEET.

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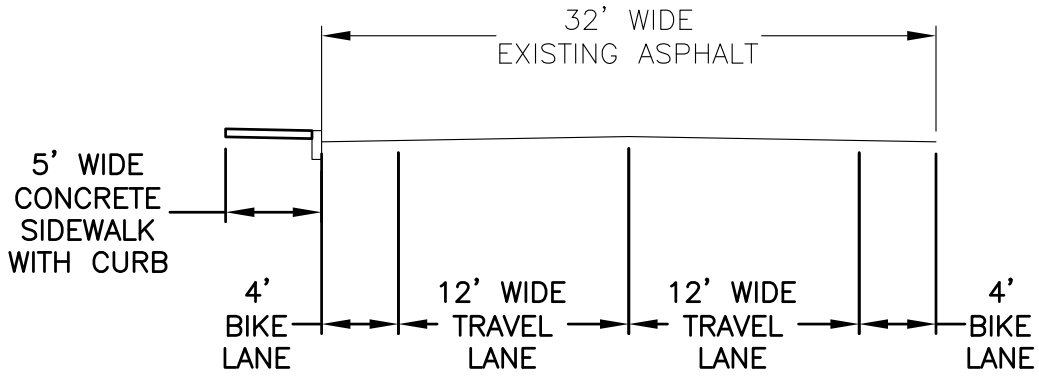
FIGURE 3-4

MAIN STREET
CARLTON AVE TO OLD MAIN ST
ALTERNATIVE DETAILS

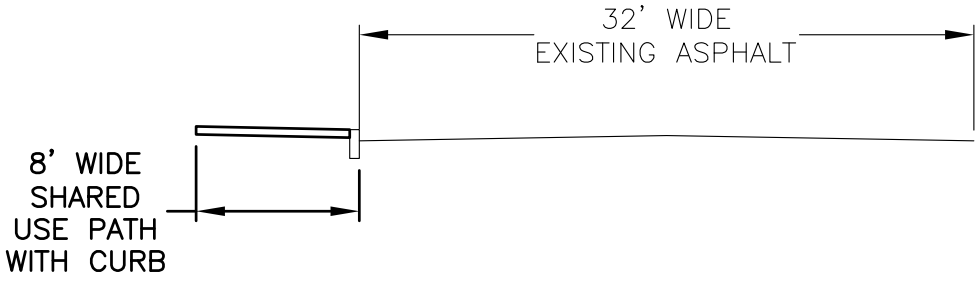
JEFFERSONVILLE, VERMONT

PROJECT NO. 7150020
PROJECT MJR. AJD
SCALE AS SHOWN
DATE SEPT., 2015
DRAWING NO. MAIN STREET.dwg



ALTERNATIVE 1

NOT TO SCALE



ALTERNATIVE 2

NOT TO SCALE

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FIGURE 3-5

MAIN STREET
OLD MAIN ST TO VT-15
ALTERNATIVE DETAILS

JEFFERSONVILLE, VERMONT

PROJECT NO. 7150020
PROJECT MJR. AJD
SCALE AS SHOWN
DATE SEPT., 2015
DRAWING NO. MAIN STREET.dwg

Table 3-8
Main Street Alternatives
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Segment: Main Street – Carlton to Old Main Street		
Alternative	**Description**	**Characteristics**
Alternative-1	Replace existing sidewalk to meet ADA requirements with 5' wide concrete on east, with west side being 8' wide asphalt, add granite curb, add crosswalk at Library, improve crosswalk at School St and Depot St, add bulb outs for crosswalks	• Requires storm drainage improvements • Conflicts with existing parking • Separates bicycle traffic from vehicular traffic • Improves crosswalks • Improves aesthetics of Village core • Additional ROW research required
Alternative-2	Replace existing sidewalk with 5' wide concrete to meet ADA requirements, add granite curb, add sharrows, add crosswalk at Library, improve crosswalk at School St and Depot St, add bulb outs for crosswalks. Add lighting.	• Requires storm drainage improvements • Conflicts with existing parking • Does not separate bicycle traffic from vehicular traffic • Improves crosswalks • Improves aesthetics of Village core • Additional ROW research required
Segment: Main Street – Old Main Street to VT 15		
Alternative	**Description**	**Characteristics**
Alternative-1	5' wide Concrete Sidewalk with granite curb on south side, 4' wide bike lanes	• Requires storm drainage improvements • Bicycle traffic provided a lane but not physically separated from vehicular traffic • May require floodplain permitting
Alternative-2	8' wide asphalt path with granite curb on south side	• Requires storm drainage improvements • Separates bicycle traffic from vehicular traffic • May require floodplain permitting

Under whose jurisdiction? This seems like a potential show-stopper and I worry that it is buried in this table

Table 3-9
Main Street (Carlton to Old Main) Evaluation Matrix
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Category		Do Nothing	Main Street (Carlton Ave to Old Main St) Alternative-1	Alternative-2
Description			Replace existing sidewalk to meet ADA requirements, with west side being 8' wide, add curb, addition of crosswalk at Library, School St and Depot St, bulb outs for crosswalks	Replace existing sidewalk to meet ADA requirements, add curb, add sharrows, addition of crosswalk at Library, School St and Depot St, bulb outs for crosswalks
Construction Characteristics	Length (ft)	0	1030	1030
	Width (ft)	0	Existing sidewalk 4'+/-, Proposed Sidewalk 5' wide east, 8' wide west	Existing sidewalk 4'+/-, Proposed Sidewalk 5' wide
	Surface	0	Concrete sidewalk, asphalt path	Concrete
	New Impervious (sf)	0	4120	2060
Impacts	Ag. Lands	None	None	None
	Archaeological	None	None	None
	Historical	None	None	None
	Hazardous materials	None	None	None
	Floodplains	None	None	None
	Fish & Wildlife	None	None	None
	Rare, Threatened & Endangered Species	None	None	None
	Public Lands - Sect. 4(f)	None	None	None
	LWCP - Sect. 6(f)	None	None	None
	Noise	None		
	Wetlands	None	None	None
	Utilities - aerial	None	1 utility pole	1 utility pole
	Utilities - underground	None	4 new catch basins, approximately 750LF of storm drain pipe	4 new catch basins, approximately 750LF of storm drain pipe
Local & Regional Issues	Concerns	Pedestrian Safety	Bicycle Safety, parking	Bicycle Safety, parking
	Aesthetics	Unchanged	Improved	Improved
	Community Character	Unchanged	Improved	Improved
	Economic Impacts	Potentially negative	Positive	Positive
	Conformance to Town Plan	No	Yes	Yes
	Satisfies Purpose & Need	No	Yes	Yes
Permits	ACT 250	No	No	No
	401 Water Quality	No	No	No
	404 COE permit (<3,000 SF - Self Verification)	No	No	No
	Stream Alteration	No	No	No
	Conditional Use Determination	No	No	No
	Storm Water Discharge	No	No	No
	Lakes & Ponds	No	No	No
	T & E Species	No	No	No
	SHPO	No	No	No
Safety	Number of Driveway Crossings	N/A	11 West Side (Existing) 11 East Side (Existing)	11 West Side (Existing) 11 East Side (Existing)
	Number of Roadway Crossings	N/A	1 West Side (Existing) 2 East Side (Existing) 1 new crosswalk	1 West Side (Existing) 2 East Side (Existing) 1 new crosswalk

Table 3-10
Main Street (Old Main to VT 15) Evaluation Matrix
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Category		Do Nothing	Main Street (Old Main Street to VT 15) Alternative-1	Alternative-2
Description			Concrete Sidewalk with Granite Curb on south side, 4' wide bike lanes	8' wide asphalt path with Granite Curb on south side
Construction Characteristics	Length (ft)	0	460	460
	Width (ft)	0	5	8
	Surface	0	Concrete	Asphalt
	New Impervious (sf)	0	2,300	3,680
Impacts	Ag. Lands	None	None	None
	Archaeological	None	None	None
	Historical	None	None	None
	Hazardous materials	None	None	None
	Floodplains	None	Potential	Potential
	Fish & Wildlife	None	None	None
	Rare, Threatened & Endangered Species	None	None	None
	Public Lands - Sect. 4(f)	None	None	None
	LWCP - Sect. 6(f)	None	None	None
	Noise	None		
	Wetlands	None	None	None
	Utilities - aerial	None	None	None
	Utilities - underground	None	1 catch basin	1 catch basin
Local & Regional Issues	Concerns	Pedestrian Safety	Bicycle Safety	Tree conflict at corner
	Aesthetics	Unchanged	Improved	Improved
	Community Character	Unchanged	Improved	Improved
	Economic Impacts	Potentially negative	Positive	Positive
	Conformance to Town Plan	No	Yes	Yes
	Satisfies Purpose & Need	No	Yes	Yes
Permits	ACT 250	No	No	No
	401 Water Quality	No	No	No
	404 COE permit (<3,000 SF - Self Verification)	No	No	No
	Stream Alteration	No	No	No
	Conditional Use Determination	No	No	No
	Storm Water Discharge	No	No	No
	Lakes & Ponds	No	No	No
	T & E Species	No	No	No
	SHPO	No	No	No
Safety	Number of Driveway Crossings	N/A	1	1
	Number of Roadway Crossings	N/A	0	0

Table 3-11
Upper Pleasant Valley Road Alternatives
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Segment: Upper Pleasant Valley Road		
Alternative	**Description**	**Characteristics**
Alternative-1	5' wide Concrete Sidewalk (East Side) with granite curb and no bike lanes	• Conflicts with existing storm drains • Improvements would be over the existing water main • Conflicts with existing utility poles • Requires storm drainage piping and catch basins • Potential wetland impacts • No bicycle facilities provided • Provides improved pedestrian facilities
Alternative-1W	5' wide Concrete Sidewalk (West Side) with granite curb and no bike lanes	• Conflicts with parking at The Mix and Smuggler's Notch Inn • Fill required along steep bank • No bicycle facilities provided
Alternative-2	5' wide Concrete Sidewalk (East side) with Granite Curb and 3' wide bike lanes	• Conflicts with existing storm drains • Improvements would be over the existing water main • Conflicts with existing utility poles • Requires storm drainage piping and catch basins • Potential wetland impacts • On-road bicycle facilities provided • Provides improved pedestrian facilities
Alternative-2W	5' wide Concrete Sidewalk (West side) with Granite Curb and 3' wide bike lanes	• Conflicts with parking at The Mix and Smuggler's Notch Inn • Fill required along steep bank • On-road bicycle facilities provided • Provides improved pedestrian facilities
Alternative-3	8' wide Asphalt Shared Use pathway on West side with curb	• Conflicts with parking at The Mix and Smuggler's Notch Inn • Fill required along steep bank • Pedestrian and bicycle facilities separated from the roadway

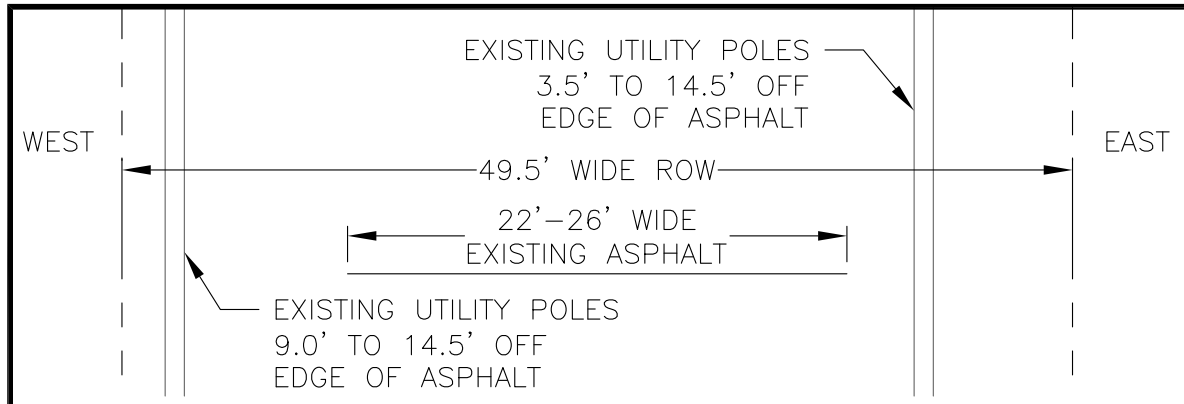
Cross sections of the alternatives for Upper Pleasant Valley Road are shown in Figure 3-6.
In addition to the summary of characteristics above, each of the alternatives was evaluated for construction characteristics, impacts, local and regional issues, permits, and safety, this information is presented in an Evaluation Matrix in Table 3-12.
A house located along the project route on Upper Pleasant Valley Road is listed on the State Register of Historic Places but it is likely no longer eligible for inclusion due to changes since listing. Improvements in the area of this house will occur in the right-of-way so no impacts to the historic resource are anticipated. See Appendix D for additional information.


Image 3-6: Upper Pleasant Valley Road looking north

Upper Pleasant Valley Road connects one of the most populated areas outside of the center of the Village and an area identified for future residential development to the amenities of the Village. The public commented that Upper Pleasant Valley Road has a large population of school aged students that would utilize bicycle and pedestrian facilities on Upper Pleasant Valley Road to travel to and from Cambridge Elementary School.

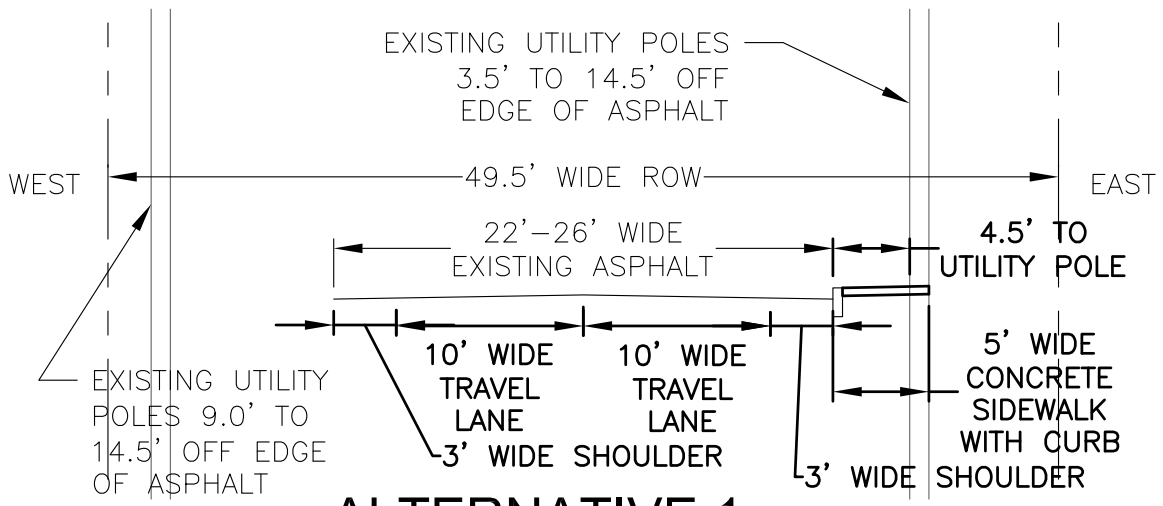
During the study, a collision between a vehicle and a bicycle occurred on Upper Pleasant Valley Road near 235 Upper Pleasant Valley Road. A copy of the police report documenting this accident is included in Appendix A.

It should be noted that th Traffic Operations section of the Agency will need to be contacted to evaluate the proposed crosswalks and the removal of the existing crosswalk. Please contact Amy Gamble 802-4773251 or amy.gamble@vermont.gov for more information.



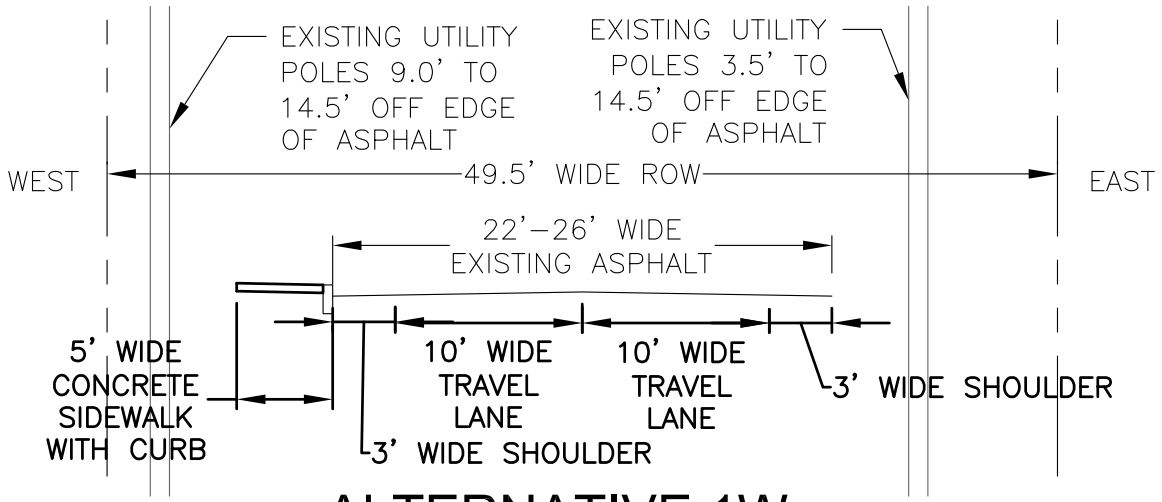
UPPER PLEASANT VALLEY ROAD
EXISTING CONDITIONS

NOT TO SCALE



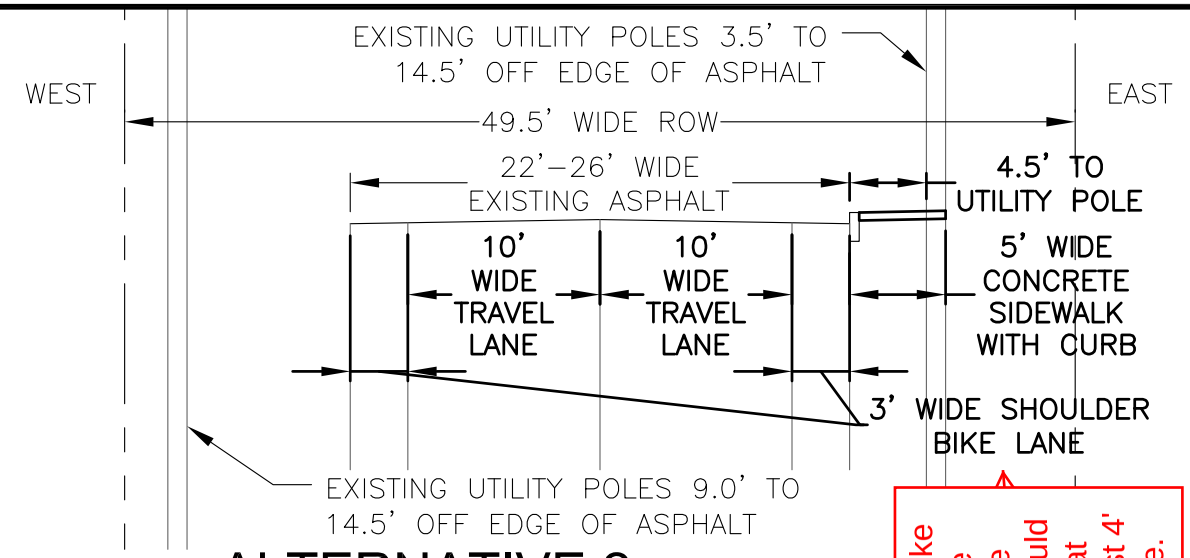
ALTERNATIVE 1

NOT TO SCALE



ALTERNATIVE 1W

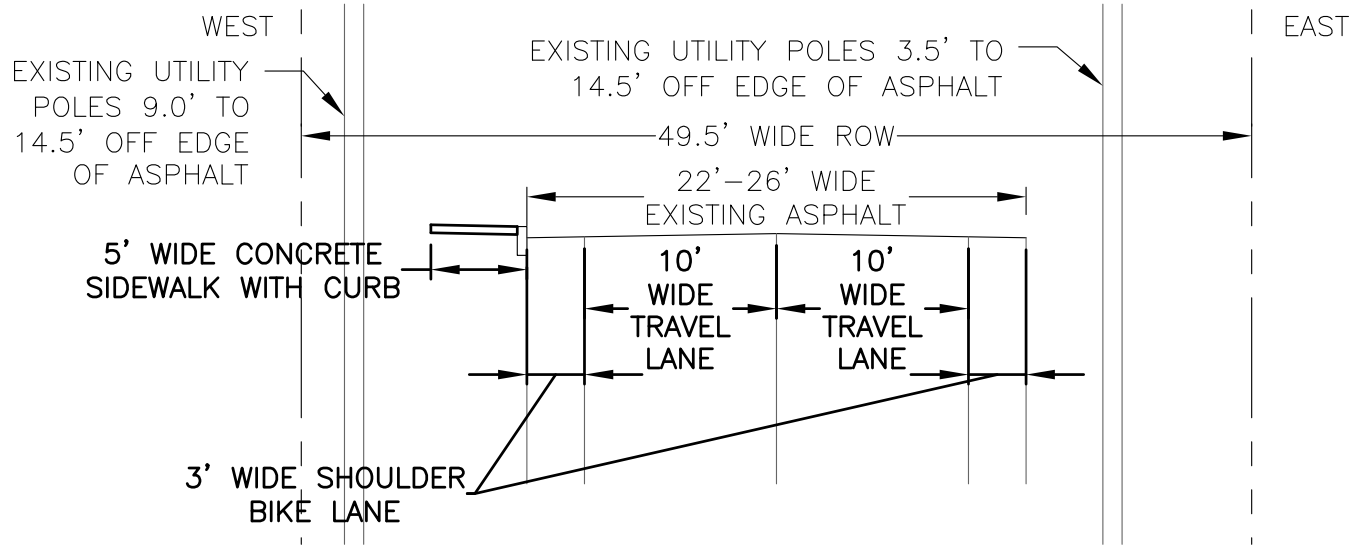
NOT TO SCALE



ALTERNATIVE 2

NOT TO SCALE

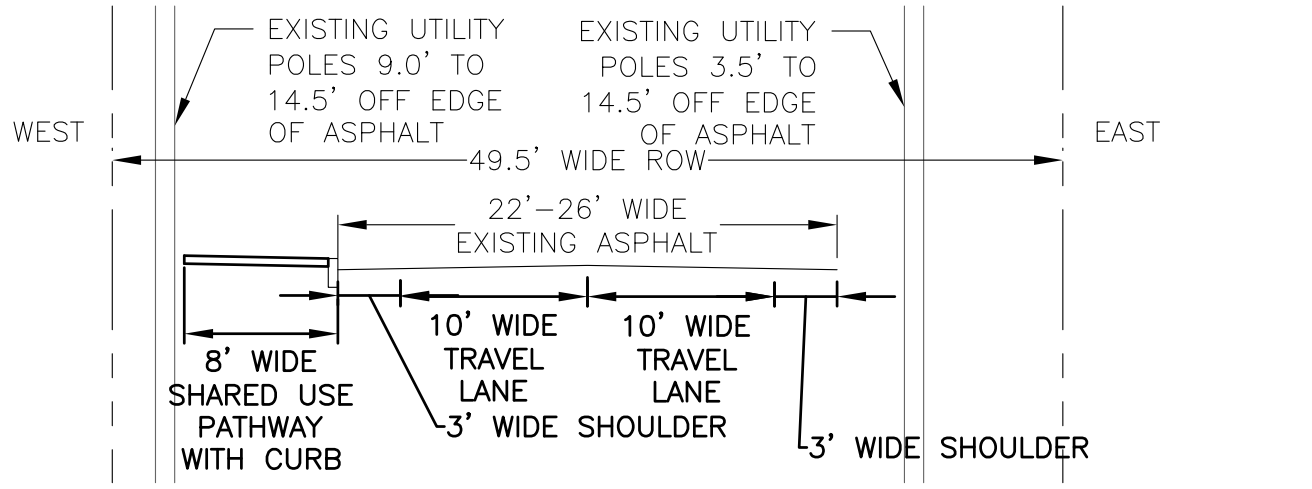
1. BICYVLE SIGNAGE AND STRIPING TO BE PROVIDED FOR BIKE LANES



ALTERNATIVE 2W

NOT TO SCALE

1. BICYCLE SIGNAGE AND STRIPING TO BE PROVIDED FOR BIKE LANES



ALTERNATIVE 3

NOT TO SCALE

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Home page: http://www.dufresnegroup.com

Project #	7150020
Project Mgr.	AJD
Design	AJD
Drawn	EAE
Checked by	R.E. DUFRESNE
Date	SEPTEMBER 2015
Scale	AS SHOWN
Approved by	APPROVED BY

BICYCLE AND PEDESTRIAN IMPROVEMENTS STUDY
STP BP13(15)

UPPER PLEASANT VALLEY ROAD
ALTERNATIVE DETAILS

JEFFERSONVILLE, VERMONT

FIG 3-6

DWG. NO. Upper Pleasant Valley Road.dw

SHEET 1 OF 1

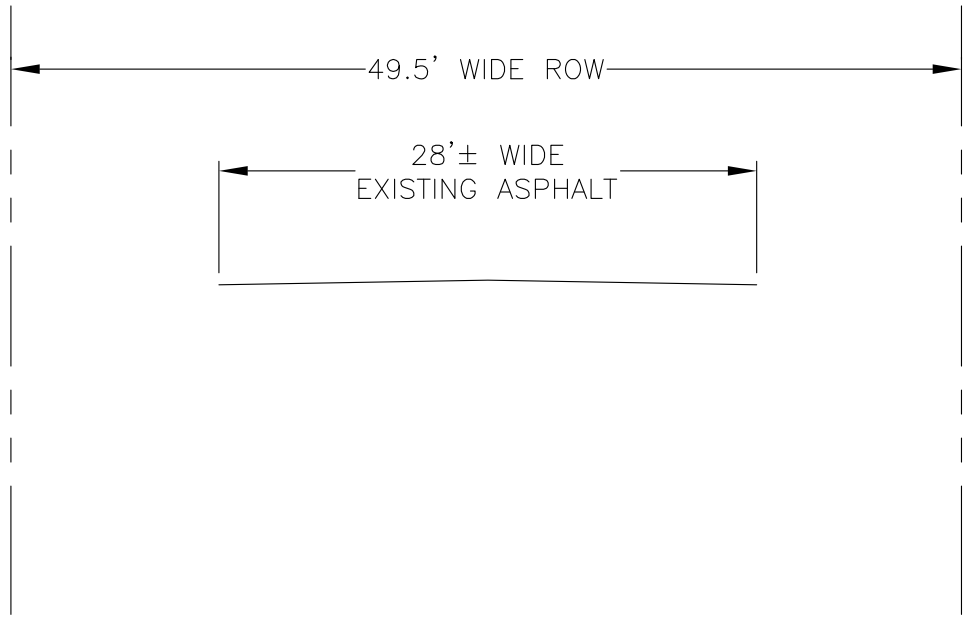
Table 3-12
Upper Pleasant Valley Road Evaluation Matrix
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 29, 2016

Category		Do Nothing	Upper Pleasant Valley Road				
			Alternative 1	Alternative 1W	Alternative 2	Alternative 2W	Alternative 3
Description			Concrete Sidewalk (East Side) with Granite Curb and NO bike lanes	Concrete Sidewalk (West Side) with Granite Curb and NO bike lanes	Concrete Sidewalk (East side) with Granite Curb and bike lanes	Concrete Sidewalk (West side) with Granite Curb and bike lanes	Asphalt Shared Use pathway on West side with curb
Construction Characteristics	Length (ft)	0	1950	1950	1950	1950	1950
	Width (ft)	0	5	5	5' sidewalk 3' asphalt bike lanes	5' sidewalk 3' asphalt bike lanes	8
	Surface	0	Concrete	Concrete	Concrete	Concrete	Asphalt
	New Impervious (sf)	0	9,750	9,750	13,650	13,650	15,600
Impacts	Ag. Lands	None	Potential	Potential	Potential	Potential	Potential
	Archaeological	None	None	None	None	None	None
	Historical	None	None	None	None	None	None
	Hazardous materials	None	None	None	None	None	None
	Floodplains	None	None	None	None	None	None
	Fish & Wildlife	None	None	None	None	None	None
	Rare, Threatened & Endangered Species	None	None	None	None	None	None
	Public Lands - Sect. 4(f)	None	None	None	None	None	None
	LWCP - Sect. 6(f)	None	None	None	None	None	None
	Noise	None	None	None	None	None	None
	Wetlands	None	Potential	Possibly	Potential	None	None
	Utilities - aerial	None	2 utility pole relocations	None	2 utility pole relocations	None	None
	Utilities - underground	None	2 storm drain conflicts, existing water main, piping of swale	1 storm drain conflict	3 storm drain conflicts, existing water main, piping of swale	1 storm drain conflict	1 storn drain conflict
Local & Regional Issues	Concerns	Pedestrian Safety	Bicycle Safety	Parking at Smuggler's Notch Inn conflict, bicycle safety	None	Parking at Smuggler's Notch Inn conflict	Parking at Smuggler's Notch Inn conflict
	Aesthetics	Unchanged	Improved	Improved	Improved	Improved	Improved
	Community Character	Unchanged	Improved	Improved	Improved	Improved	Improved
	Economic Impacts	Potentially negative	Positive	Positive	Positive	Positive	Positive
	Conformance to Town Plan	No	Yes	Yes	Yes	Yes	Yes
	Satisfies Purpose & Need	No	Yes	Yes	Yes	Yes	Yes
Permits	ACT 250	No	No	No	No	No	No
	401 Water Quality	No	No	No	No	No	No
	404 COE permit (<3,000 SF - Self Verification)	No	No	No	No	No	No
	Stream Alteration	No	No	No	No	No	No
	Conditional Use Determination	No	No	No	No	No	No
	Storm Water Discharge	No	No	No	No	No	No
	Lakes & Ponds	No	No	No	No	No	No
	T & E Species	No	No	No	No	No	No
	SHPO	No	Potential	No	Potential	No	No
Safety	Number of Driveway Crossings	N/A	8	8	8	8	6
	Number of Roadway Crossings	N/A	3	3 existing	3	3	2

Cost information taken from 2014 Vtrans Bicycle and Pedestrian Program Unity Cost Database, Costs for Pedestrian and Bicycle Infrastructure Improvements by UNC hidhway Safety Research Center, October 2013 and Vtrans 2 Year Average Price List January 2013-Decebmer 2014
**Preliminary construction costs include utility improvements, are rounded to the nearest hundred, and are intended for planning purposes only

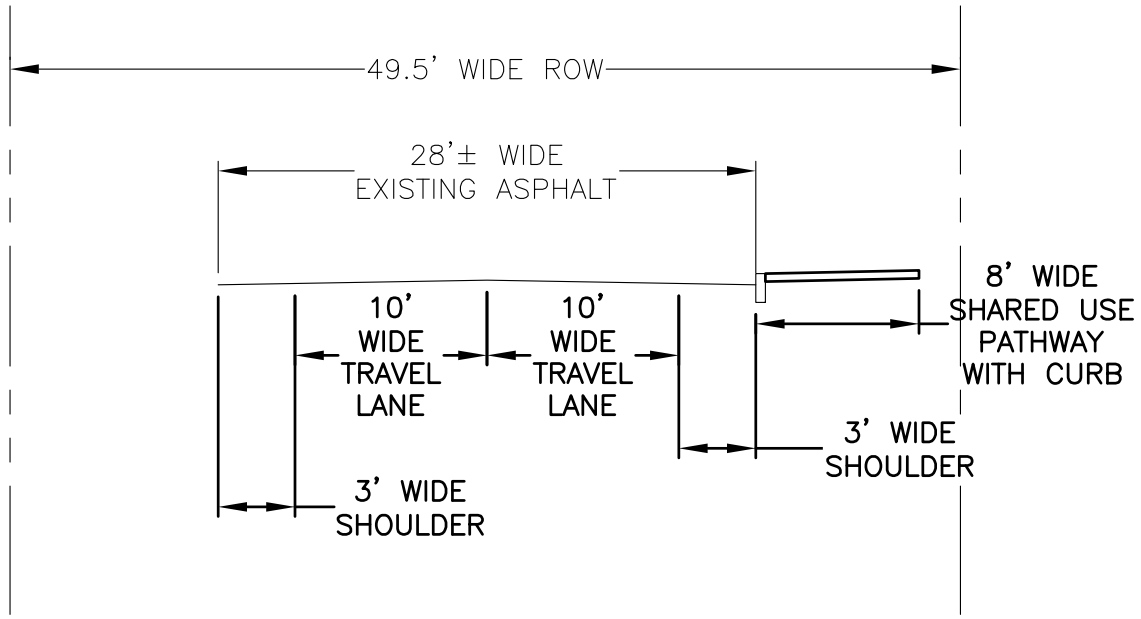
Cross sections of the alternatives for Mill Street are shown in Figure 3-7. In addition to the summary of characteristics shown in Table 3-13, each of the alternatives was evaluated for construction characteristics, impacts, local and regional issues, permits, and safety. This information is presented in an Evaluation Matrix in Table 3-14. No significant impacts beyond those listed above were identified in the review of the alternatives against these factors.

The addition of pedestrian and/or bicycle improvements to Mill Street would provide a connection from a residential area of town to the center of the Village. A well-used swimming hole and the Brewster River Park are also located on Mill Street.



MILL STREET EXISTING CONDITIONS

NOT TO SCALE



ALTERNATIVE 2

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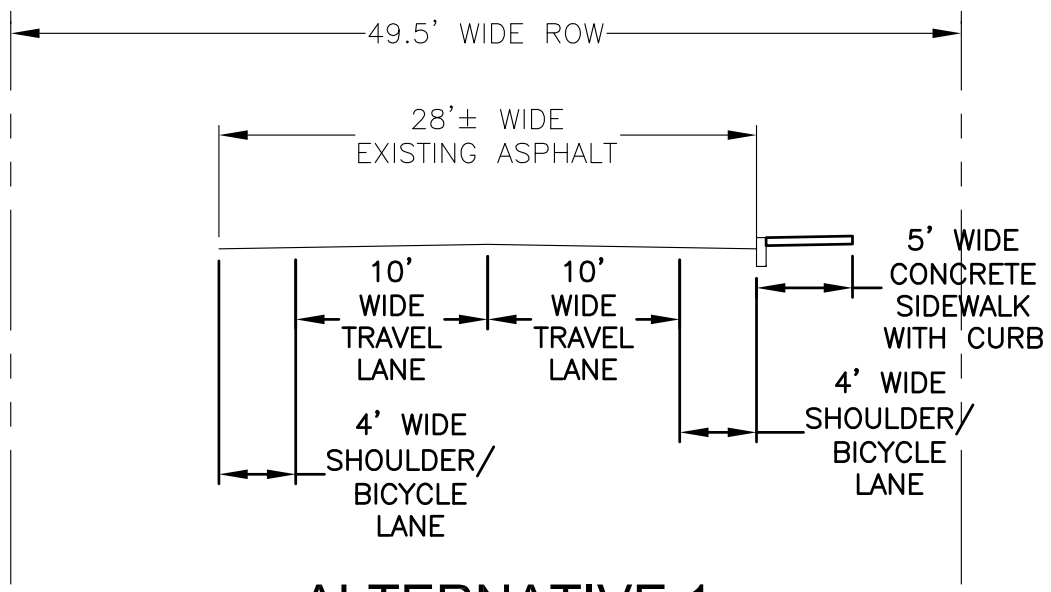
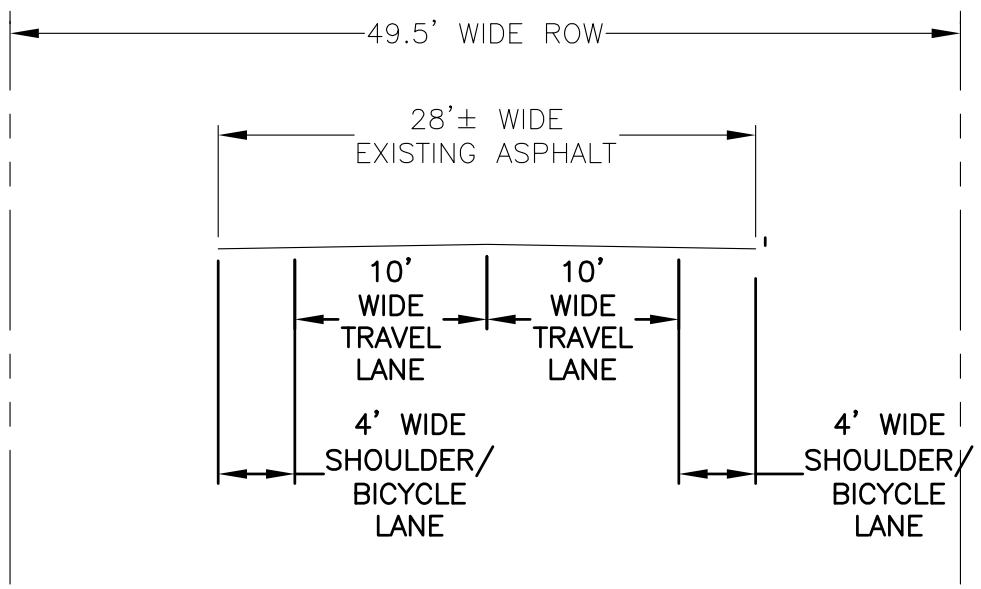


ALTERNATIVE 1

NOT TO SCALE



ALTERNATIVE3

NOT TO SCALE

NOTE:

ADDITIONAL PAVEMENT MARKINGS AND SIGNAGE TO BE PROVIDED FOR BICYCLE LANES.

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Project #	7150020
Project Mgr.	AJD
Design	AJD
Drawn	EAE
Checked by	R.E. DUFRESNE
Date	SEPTEMBER 201
Scale	AS SHOWN
Approved by	APPROVED BY

BICYCLE AND PEDESTRIAN IMPROVEMENTS STUDY
STP BP13(15)

MILL STREET
ALTERNATIVE DETAILS

JEFFERSONVILLE, VERMONT

FIG 3-7

DWG. NO. MILL STREET.dwg

SHEET 1 OF 1

Table 3-13
Mill Street Alternatives
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

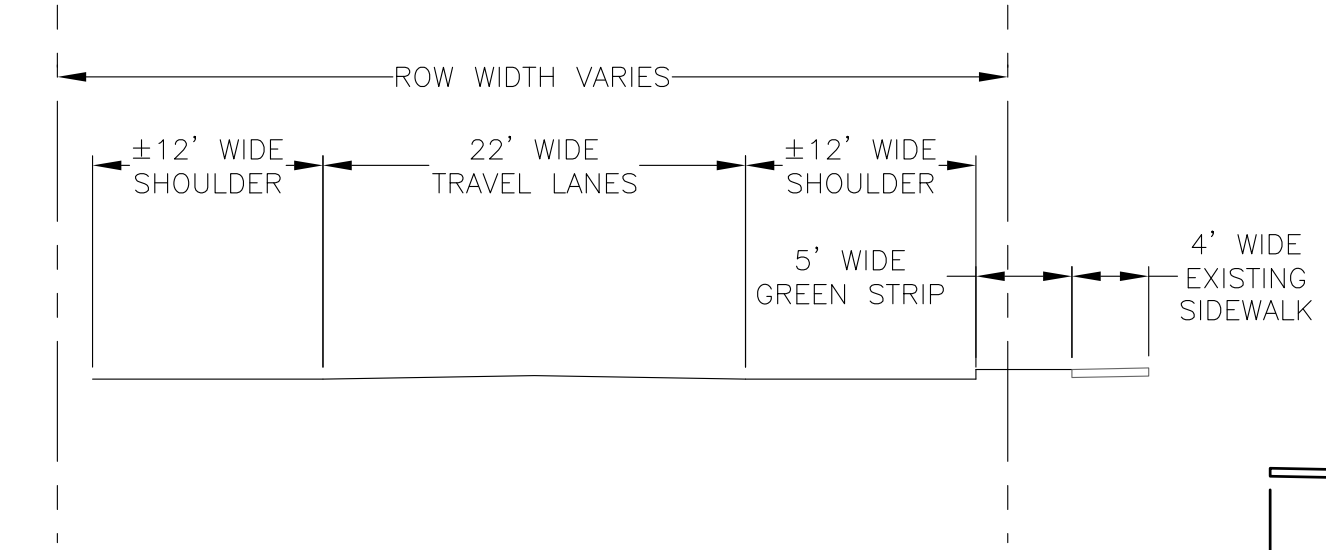
Segment: Mill Street		
Alternative	**Description**	**Characteristics**
Alternative-1	5' wide Concrete Sidewalk with granite curb and 4' wide bike lanes	• Grading and fill required along steep bank • On-road bicycle facilities • Requires the addition of storm drainage structures • Conflict with an existing utility pole • Provides connection to the recreational fields
Alternative-2	8' wide Asphalt Shared Use pathway with granite curb	• Grading and fill required along steep bank • Pedestrian and bicycle facilities separated from the roadway • Requires the addition of storm drainage structures • Conflict with an existing utility pole • Provides connection to the recreational fields
Alternative-3	Bike lanes only to swimming hole	• No pedestrian facilities • On-road bicycle facilities • Minimal improvements required

Table 3-14
Mill Street Evaluation Matrix
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Category		Do Nothing	Mill Street		
			Alternative-1	Alternative-2	Alternative-3
Description			Concrete Sidewalk with Granite Curb and 4' wide bike lanes	Asphalt Shared Use pathway with curb	Bike lanes to swimming hole
Construction Characteristics	Length (ft)	0	530	530	1375
	Width (ft)	0	5	8	0
	Surface	0	Concrete	Asphalt	Asphalt
	New Impervious (sf)	0	2,650	4,240	0
Impacts	Ag. Lands	None	None	None	None
	Archaeological	None	None	None	None
	Historical	None	None	None	None
	Hazardous materials	None	None	None	None
	Floodplains	None	None	None	None
	Fish & Wildlife	None	None	None	None
	Rare, Threatened & Endangered Species	None	None	None	None
	Public Lands - Sect. 4(f)	None	None	None	None
	LWCP - Sect. 6(f)	None	None	None	None
	Noise	None			
	Wetlands	None	None	None	None
	Utilities - aerial	None	1 utility pole	1 utility pole	None
	Utilities - underground	None	2 catch basins	2 catch basins	None
Local & Regional Issues	Concerns	Pedestrian Safety	None	None	None
	Aesthetics	Unchanged	Improved	Improved	Improved
	Community Character	Unchanged	Improved	Improved	Improved
	Economic Impacts	Potentially negative	Positive	Positive	Positive
	Conformance to Town Plan	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	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	N/A	1	1	1
	Number of Roadway Crossings	N/A	1	1	1

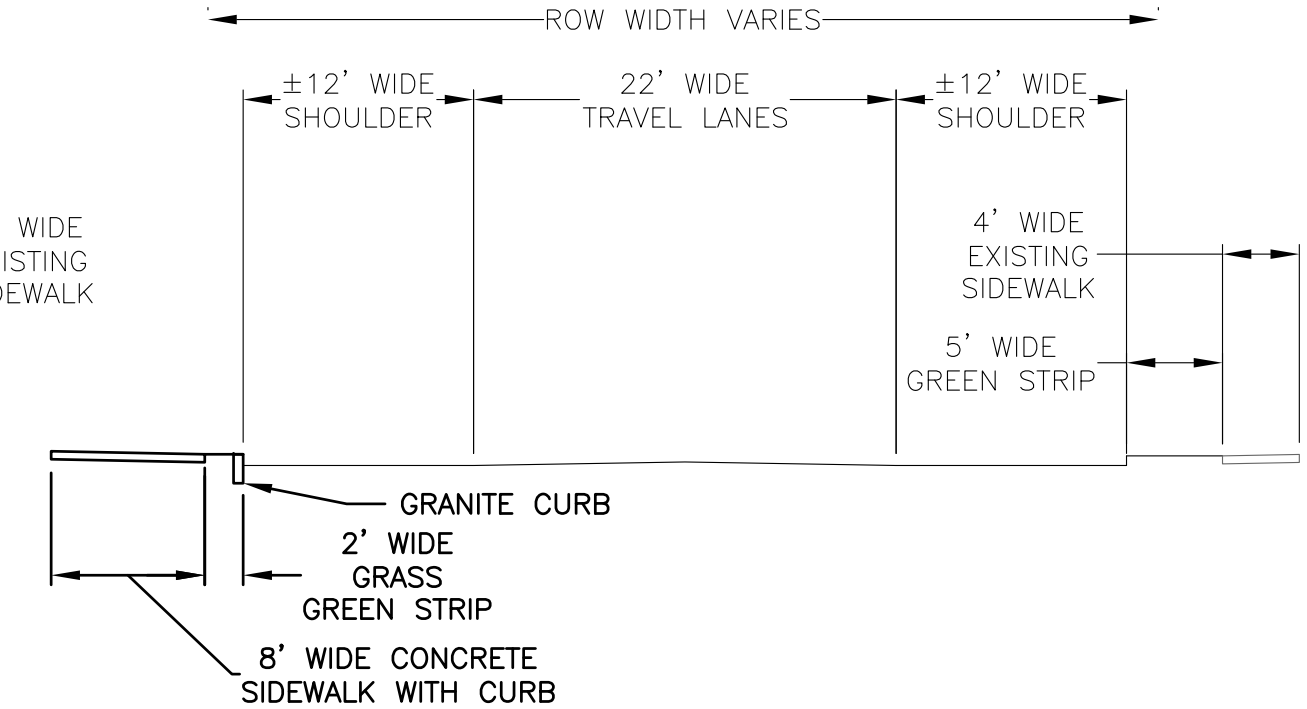
Cross sections of the alternatives for Church Street are shown in Figure 3-8. In addition to the summary of characteristics in Table 3-15, each of the alternatives was evaluated for construction characteristics, impacts, local and regional issues, permits, and safety, this information is presented in an Evaluation Matrix as Table 3-16. No significant impacts beyond those listed above were identified in the review of the alternatives against these factors. Historic structures located along Church Street are not expected to be impacted by any of the alternatives proposed above.

Amenities along Church Street include the Post Office, Fire Station and Village Offices. Improvements to the existing facilities and the addition of facilities on the south side of Church Street would improve the connection from the center of the Village to these services. All the amenities listed above are located on the south side of Church Street while the existing sidewalk is located on the north side with only one crosswalk located at the Post Office.



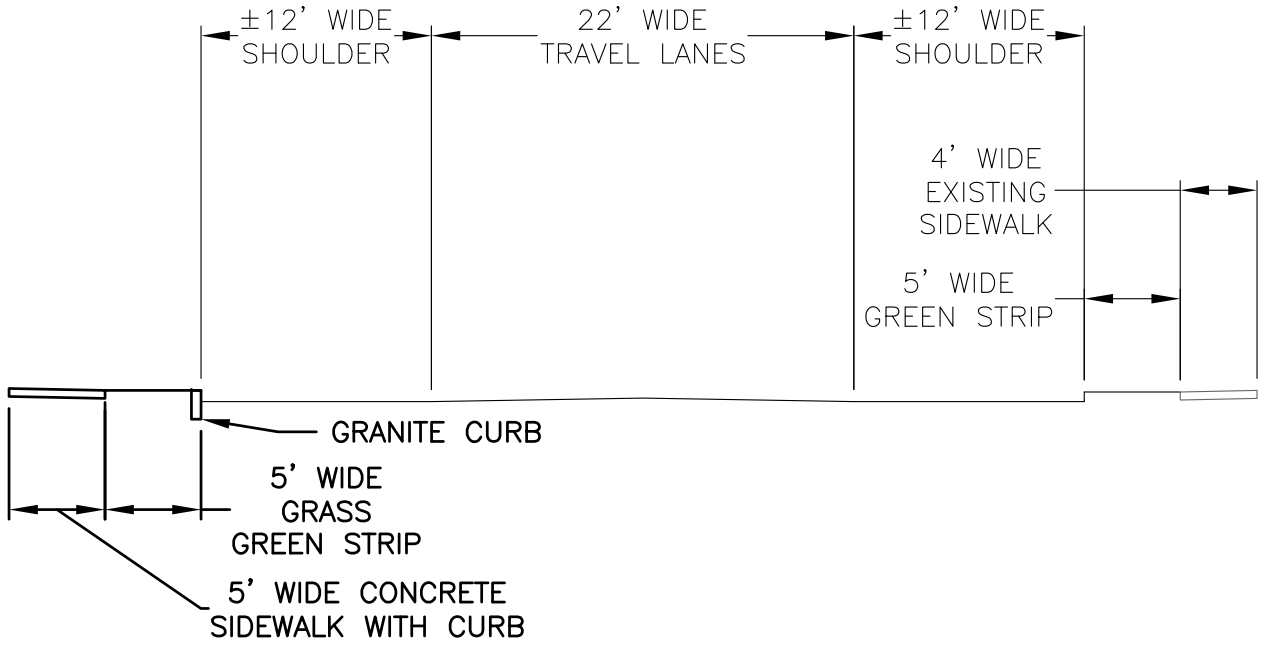
CHURCH STREET EXISTING CONDITIONS

NOT TO SCALE



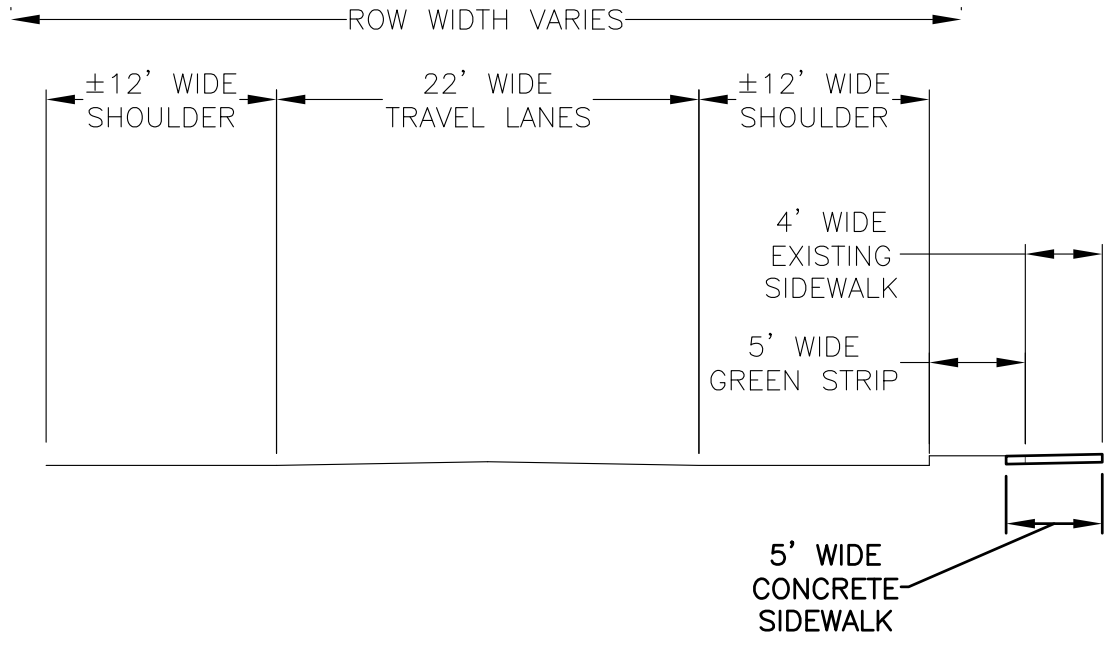
ALTERNATIVE 2

NOT TO SCALE



ALTERNATIVE 1

NOT TO SCALE



ALTERNATIVE 3

NOT TO SCALE

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Project Mgr.	AJD
Design	AJD
Drawn	EAE
Checked by	R.E. DUFRESNE
Date	SEPTEMBER 2015
Scale	AS SHOWN
Approved by	APPROVED BY

BICYCLE AND PEDESTRIAN IMPROVEMENTS STUDY
STP BP13(15)

CHURCH STREET
ALTERNATIVE DETAILS

JEFFERSONVILLE, VERMONT

FIG 3-8

DWG. NO. CHURCH STREET.dwg

SHEET 1 OF 1

FILE: J:\Jeffersonville VT\Jeffersonville Sidewalk 7150020\CADD\Figures\Alternative\CHURCH STREET.dwg May 10, 2016 - 11:31am

Table 3-15
Church Street Alternatives
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

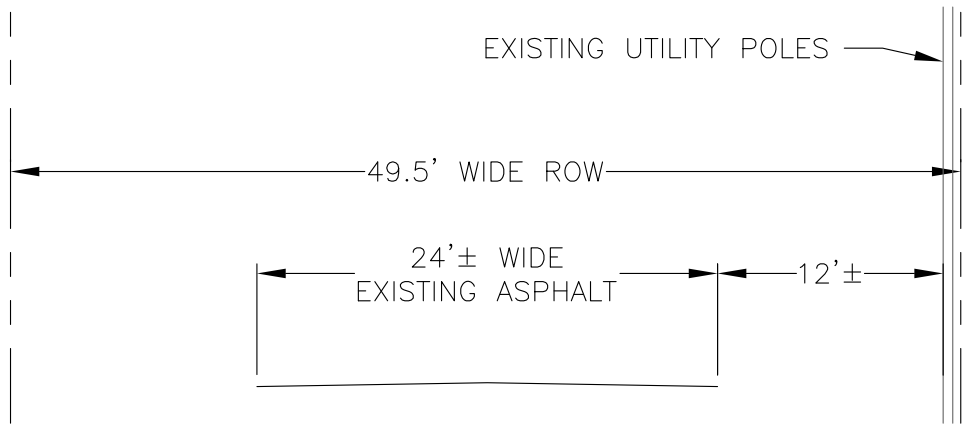
Segment: Church Street		
Alternative	**Description**	**Characteristics**
Alternative-1	5' wide Concrete Sidewalk with granite curb and green strip on south side of Church Street, add crosswalk near Upper Pleasant Valley Road (UPV) and Village offices, include bulb outs for crosswalks in parking areas.	• No separate bicycle facilities • Connection to Lamoille Valley Rail Trail (LVRT) at South end of Village • Improved crossing at Upper Pleasant Valley Road • Potential wetland impacts
Alternative-2	8' wide shared use pathway with granite curb and green strip on south side of Church Street, add crosswalk near Upper Pleasant Valley Road (UPV) and Village offices, include bulb outs for crosswalks in parking areas.	• Separate bicycle facilities • Connection to LVRT at South end of Village • Improved crossing at Upper Pleasant Valley Road • Potential wetland impacts
Alternative-3	Improve existing sidewalk to meet ADA only by replacing it with 5' wide concrete, add a crosswalk near UPV and the Village offices, include bulb outs for crosswalks	• No separate bicycle facilities • Brings current sidewalk to ADA standards

Table 3-16
Church Street Evaluation Matrix
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Category		Do Nothing	Church Street		
			Alternative-1	Alternative-2	Alternative-3
Description			Concrete Sidewalk with Granite Curb and boulevard on South Side of Church Street, crosswalk near UPV, bulb outs for crosswalks	8' wide shared use pathway and boulevard on South Side of Church Street, crosswalk near UPV, bulb outs for crosswalks	Improve existing sidewalk to meet ADA only, crosswalk near UPV and Village offices, bulbouts for crosswalks
Construction Characteristics	Length (ft)	0	920	920	930
	Width (ft)	0	5	8	5
	Surface	0	Concrete	Concrete	Concrete
	New Impervious (sf)	0	4,600	7,360	2,270
Impacts	Ag. Lands	None	None	None	None
	Archaeological	None	None	None	None
	Historical	None	None	None	None
	Hazardous materials	None	None	None	None
	Floodplains	None	None	None	None
	Fish & Wildlife	None	None	None	None
	Rare, Threatened & Endangered Species	None	None	None	None
	Public Lands - Sect. 4(f)	None	None	None	None
	LWCP - Sect. 6(f)	None	None	None	None
	Noise	None	None	None	None
	Wetlands	None	Potential	Potential	Potential
	Utilities - aerial	None	None	None	1 utility pole support wire conflict
	Utilities - underground	None	6 catch basins	6 catch basins	1 catch basin
Local & Regional Issues	Concerns	Pedestrian Safety	None	None	None
	Aesthetics	Unchanged	Improved	Improved	Improved
	Community Character	Unchanged	Improved	Improved	Improved
	Economic Impacts	Potentially negative	Positive	Positive	Positive
	Conformance to Town Plan	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	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	N/A	7	7	8 (Existing)
	Number of Roadway Crossings	N/A	2 (Existing) 1 new crosswalk	2 (Existing) 1 new crosswalk	2 (Existing) 2 new crosswalks

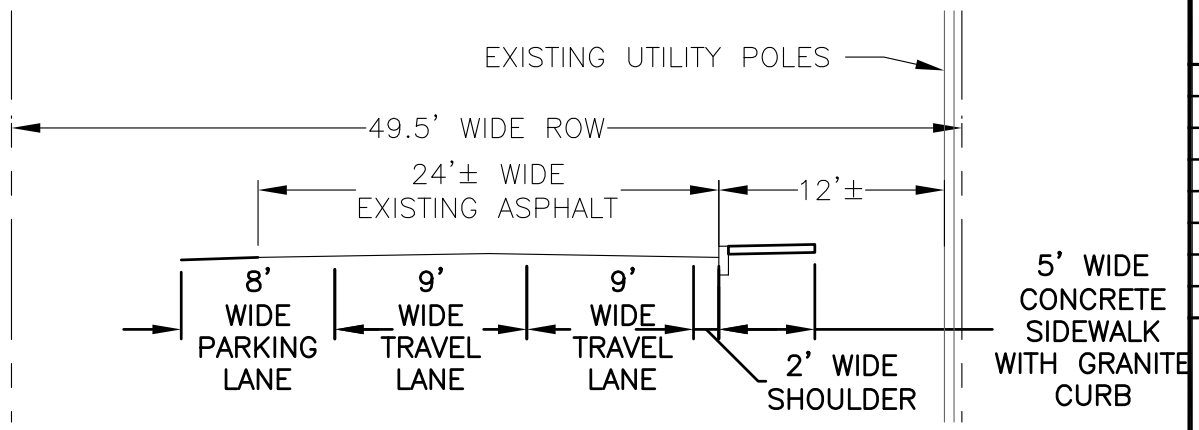
Cross sections of the alternatives for Old Main Street are shown in Figure 3-9. In addition to the summary of characteristics shown in Table 3-17, each of the alternatives was evaluated for construction characteristics, impacts, local and regional issues, permits, and safety, this information is presented in an Evaluation Matrix in Table 3-18. No significant impacts beyond those listed above were identified in the review of the alternatives against these factors.

Old Main Street provides a connection to the Community Center, the Farmer's Market and the makeshift connection to the Greenway Path under the VT Route 15 bridge.



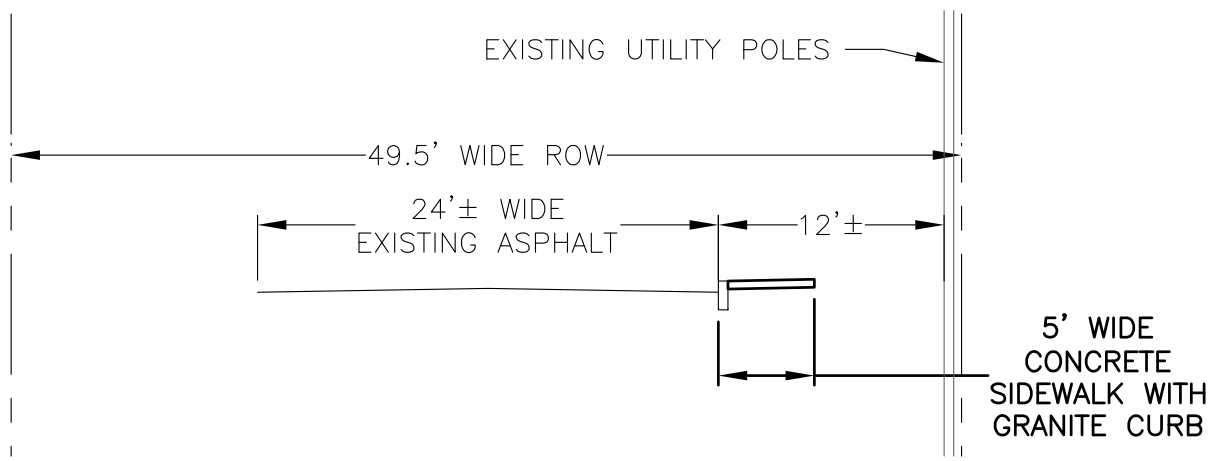
OLD MAIN STREET EXISTING CONDITIONS

NOT TO SCALE



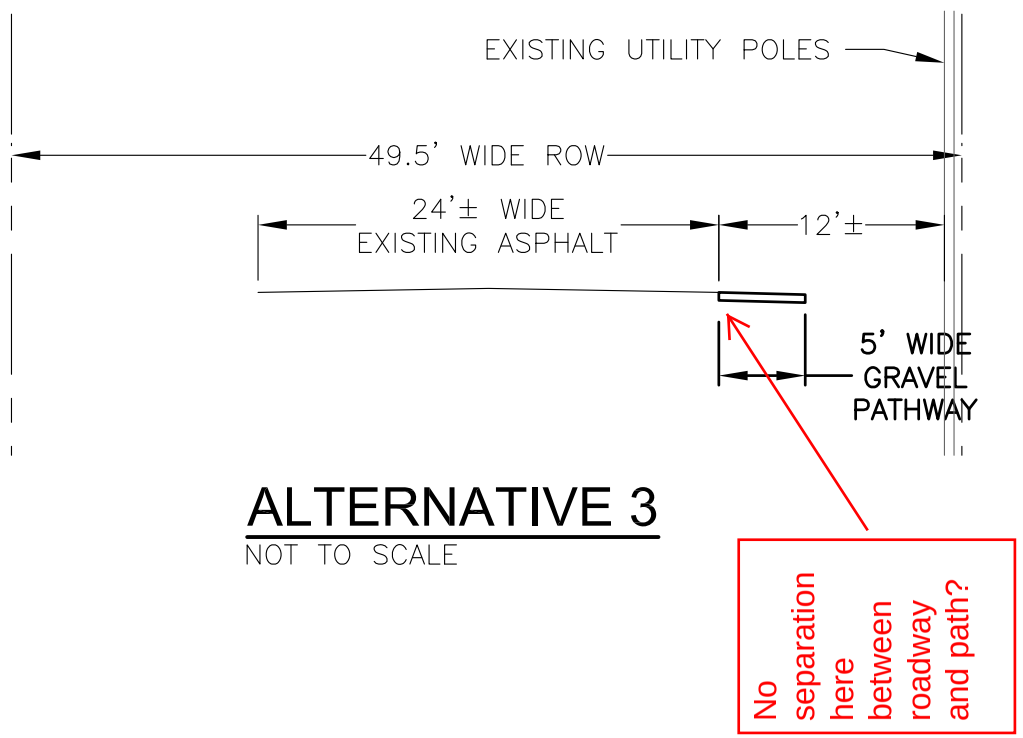
ALTERNATIVE 2

NOT TO SCALE



ALTERNATIVE 1

NOT TO SCALE



ALTERNATIVE 3

NOT TO SCALE

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Project #	7150020
Project Mgr.	AJD
Design	AJD
Drawn	EAE
Checked by	R.E. DUFRESNE
Date	SEPTEMBER 201
Scale	AS SHOWN
Approved by	APPROVED BY

BICYCLE AND PEDESTRIAN IMPROVEMENTS STUDY
STP BP13(15)

OLD MAIN STREET
ALTERNATIVE DETAILS

JEFFERSONVILLE, VERMONT

FIG 3-9

DWG. NO. OLD MAIN STREET.

SHEET 1 OF 1

Table 3-17
Old Main Street Alternatives
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Segment: Old Main Street		
Alternative	**Description**	**Characteristics**
Alternative-1	5' wide Concrete Sidewalk with granite curb and no bike lanes	• Potential archaeologically sensitive area • Two existing Historic District structures close to road • No bicycle facilities • Connection to crossing under VT 15 bridge • Connection to community center
Alternative-2	5' wide Concrete sidewalk with granite curb and parallel parking	• Potential archaeologically sensitive area • Two existing Historic District structures close to road • No bicycle facilities • Connection to crossing under VT 15 bridge • Connection to community center • Parking control during events on green
Alternative-3	Gravel pathway	• Potential archaeologically sensitive area • No bicycle facilities • Connection to crossing under VT 15 bridge • Connection to community center • Additional maintenance may be required

Table 3-18
Old Main Street Evaluation Matrix
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Category		Do Nothing	Old Main Street		
			Alternative-1	Alternative-2	Alternative-3
Description			Concrete Sidewalk with Granite Curb and NO bike lanes	Concrete Sidewalk with Granite Curb and parallel parking	Gravel pathway
Construction Characteristics	Length (ft)	0	400	400	400
	Width (ft)	0	5	8' wide parking, 5' wide sidewalk	5' wide gravel pathway
	Surface	0	Concrete	Asphalt	Gravel
	New Impervious (sf)	0	2,000	3,600	2,000
Impacts	Ag. Lands	None	None	None	None
	Archaeological	None	Potential Phase 1 Assessment required	Potential Phase 1 Assessment Required	Potential Phase 1 Assessment Required
	Historical	None	None	None	None
	Hazardous materials	None	None	None	None
	Floodplains	None	100-yr flood zone	100-yr flood zone	100-yr flood zone
	Fish & Wildlife	None	None	None	None
	Rare, Threatened & Endangered Species	None	None	None	None
	Public Lands - Sect. 4(f)	None	None	None	None
	LWCP - Sect. 6(f)	None	None	None	None
	Noise	None			
	Wetlands	None	None	None	None
	Utilities - aerial	None	None	1 utility pole	1 utility pole
	Utilities - underground	None	None	None	None
Local & Regional Issues	Concerns	Pedestrian Safety	Bicycle Safety, parking	Bicycle Safety	Bicycle Safety
	Aesthetics	Unchanged	Improved	Improved	Improved
	Community Character	Unchanged	Improved	Improved	Improved
	Economic Impacts	Potentially negative	Positive	Positive	Positive
	Conformance to Town Plan	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	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	Potential	Potential	Potential
Safety	Number of Driveway Crossings	N/A	3	4	4
	Number of Roadway Crossings	N/A	0	0	0

Table 3-19
Vermont Route 15 Alternative
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Segment: VT Route 15		
Alternative	**Description**	**Characteristics**
1	8' wide Asphalt Shared Use pathway and boulevard	• Potential wetland and floodplain impacts • Requires improvements to existing culverts • No crossing to businesses on the West side of VT 15 provided • Provides pedestrian connection between businesses in Village and on east side of VT 15

The existing and proposed cross sections for VT Route 15 are shown in Figure 3-10.

Table 3-20
Depot Street Alternative
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

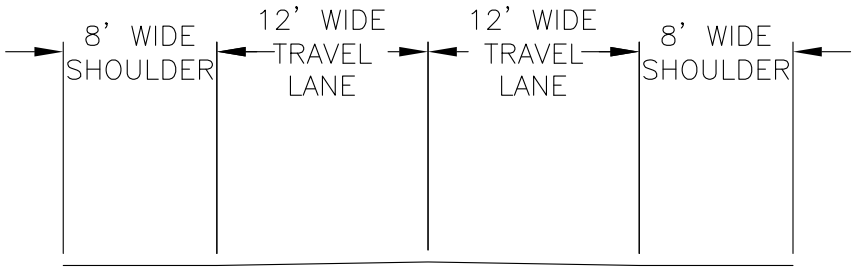
Segment: Depot Street		
Alternative	**Description**	**Characteristics**
1	5' wide Concrete Sidewalk with granite curb and no bike lanes	• No bicycle facilities • Existing sidewalk in poor condition

The existing and proposed cross sections for Depot Street are shown in Figure 3-11.

Table 3-21
Maple Street Alternative
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

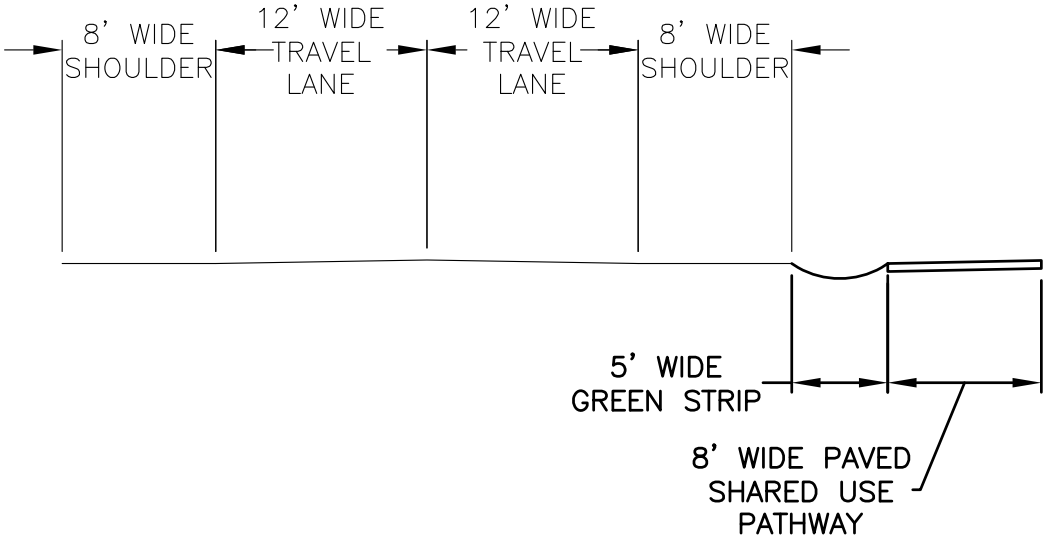
Segment: Maple Street		
Alternative	**Description**	**Characteristics**
1	Replace existing sidewalk with 5' wide concrete sidewalk	• Existing sidewalk in poor condition • May require trimming and/or removal of large trees

The existing and proposed cross sections for Maple Street are shown in Figure 3-12.



VT ROUTE 15 EXISTING CONDITIONS

NOT TO SCALE



ALTERNATIVE 1

NOT TO SCALE

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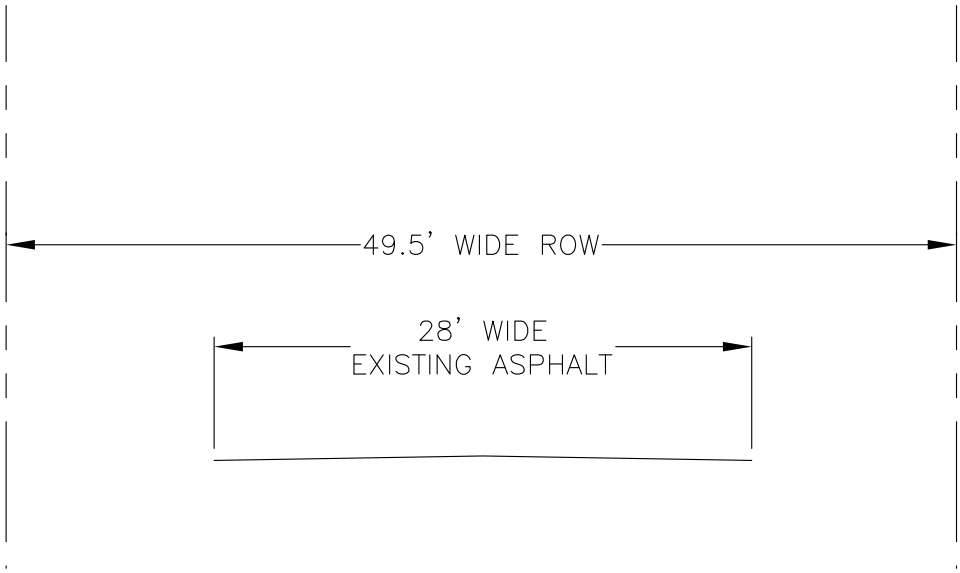
FIGURE 3-10

VT ROUTE 15
ALTERNATIVE DETAILS

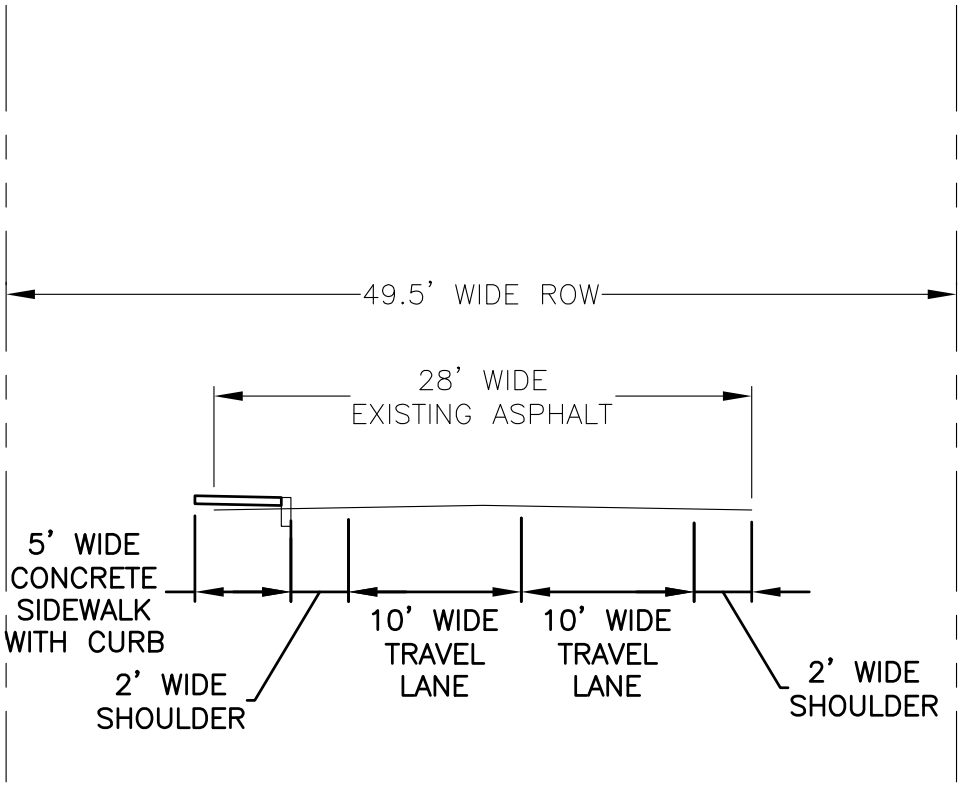
JEFFERSONVILLE, VERMONT

PROJECT NO. 7150020
PROJECT MJR. AJD
SCALE AS SHOWN
DATE SEPT., 2015
DRAWING NO. VT-15.dwg



DEPOT STREET EXISTING CONDITIONS

NOT TO SCALE



ALTERNATIVE 1

NOT TO SCALE

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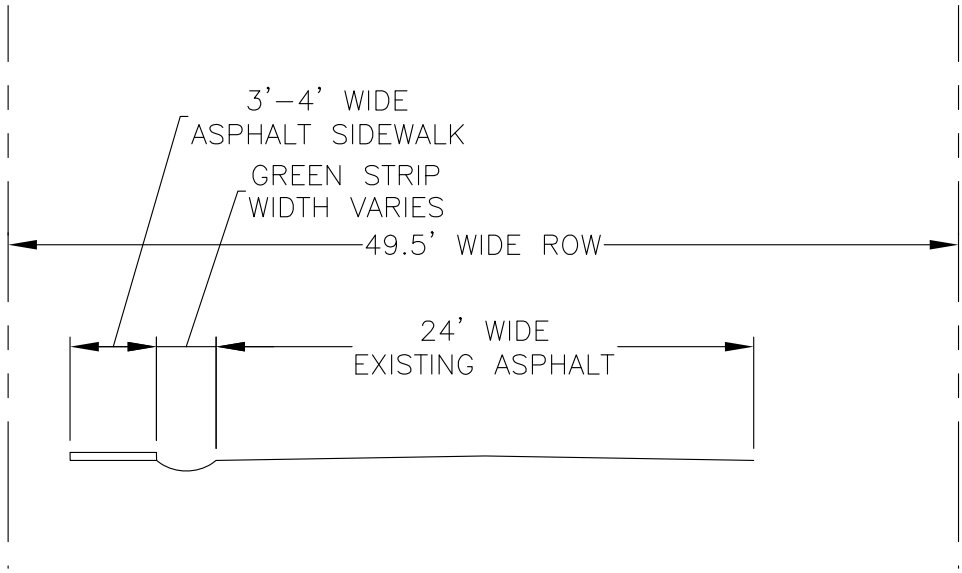
FIGURE 3-11

DEPOT STREET
ALTERNATIVE DETAILS

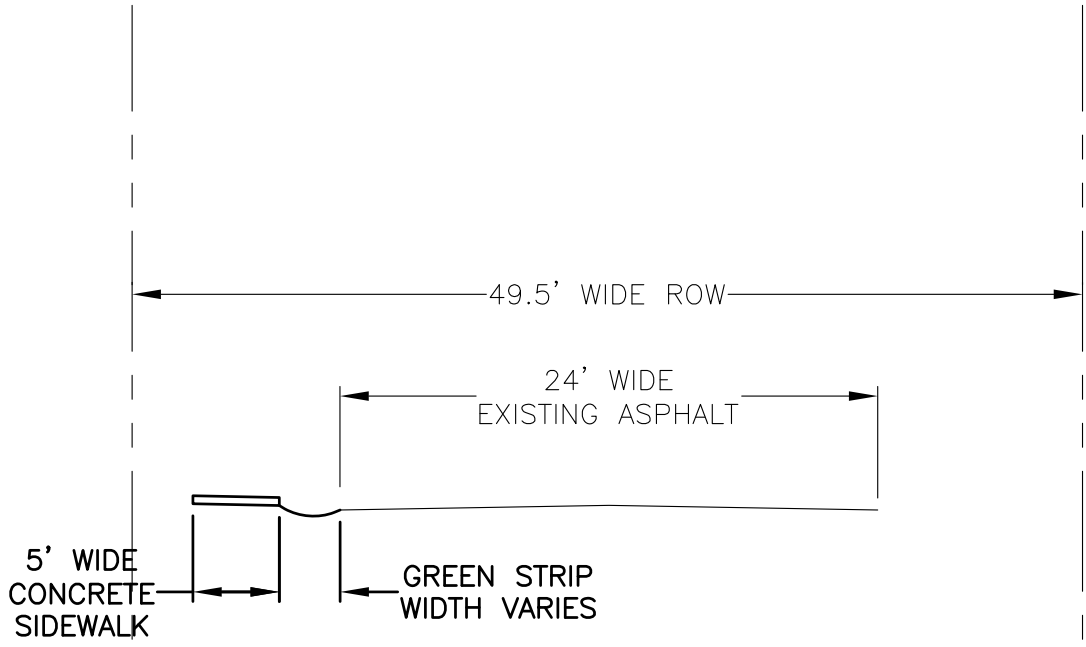
JEFFERSONVILLE, VERMONT

PROJECT NO. 7150020
PROJECT MJR. AJD
SCALE AS SHOWN
DATE SEPT., 2015
DRAWING NO. DEPOT STREET.dwg



MAPLE STREET EXISTING CONDITIONS

NOT TO SCALE



ALTERNATIVE 1

NOT TO SCALE

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FIGURE 3-12

MAPLE STREET
ALTERNATIVE DETAILS

JEFFERSONVILLE, VERMONT

PROJECT NO. 7150020
PROJECT MJR. AJD
SCALE AS SHOWN
DATE SEPT., 2015
DRAWING NO. MAPLE STREET.dwg

In addition to the summary of characteristics above, 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 3-22. Although there are historic structures along Depot Street and Main Street, if improvements are maintained in the right-of-way, these structures are not anticipated to be impacted.

Table 3-22
VT Route 15/Depot Street/Maple Street Evaluation Matrix
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Category		Do Nothing	VT Route 15	Depot Street	Maple Street
Description			Asphalt Shared Use pathway and boulevard	Concrete Sidewalk with Granite Curb and NO bike lanes	Replace existing sidewalk with concrete sidewalk
Construction Characteristics	Length (ft)	0	1800	290	800
	Width (ft)	0	8	5	5
	Surface	0	Asphalt	Concrete	Concrete
	New Impervious (sf)	0	14,400	290	800
Impacts	Ag. Lands	None	None	None	None
	Archaeological	None	None	None	None
	Historical	None	None	None	None
	Hazardous materials	None	None	None	None
	Floodplains	None	100-yr flood zone	None	None
	Fish & Wildlife	None	None	None	None
	Rare, Threatened & Endangered Species	None	None	None	None
	Public Lands - Sect. 4(f)	None	None	None	None
	LWCP - Sect. 6(f)	None	None	None	None
	Noise	None			
	Wetlands	None	Potential	None	None
	Utilities - aerial	None	None	None	None
	Utilities - underground	None	4 culverts	None	None
Local & Regional Issues	Concerns	Pedestrian Safety	Conflicts with Mobil landscaping	Bicycle Safety, parking	Potential conflict with existing tree
	Aesthetics	Unchanged	Improved	Improved	Improved
	Community Character	Unchanged	Improved	Improved	Improved
	Economic Impacts	Potentially negative	Positive	Positive	Positive
	Conformance to Town Plan	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	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	Potential	Potential
Safety	Number of Driveway Crossings	N/A	4	2	2
	Number of Roadway Crossings	N/A	0	0	0

Other areas discussed with the sidewalk committee for potential future improvements include:

- Pedestrian route from Mihean Drive to the Post Office.
- Cross country connection between Mill Street and the Cambridge Elementary School.
- Connection between Church Street and Greenway Path near the Village Offices.
- Improvements to existing crosswalks for function and signage, specifically relocation of the crosswalk crossing Church Street near the Post Office to match existing pedestrian movement.
- Crossing of VT Route 15 to connect to the Greenway Path.

Following the receipt of public comments, segments were prioritized and preferred alternatives were identified as presented in Table 3-23. Generally the public and the Village recognize the intersection of Mill, Church and Main Streets as the highest priority; however, the Vermont Agency of Transportation has identified this intersection for reconstruction and the Village would like to focus on the area around Cambridge Elementary School at this time to avoid installing improvements that may need to be removed with the reconstruction of the intersection. Public Comments are included in Appendix B.

Vermont Safe Routes to School issued a report titled 'Cambridge Elementary School Safe Routes to School Travel Plan' addressing critical areas within the Village that require improvements to increase the safety of students walking or bicycling to the Cambridge Elementary School. Areas of concern identified in the Travel Plan include Carlton Avenue, School Street, the three way intersection of Main Street, Church Street and Mill Street and Upper Pleasant Valley Road. The Travel Plan identified the lack of adequate sidewalks and crosswalks in these areas as a barrier to students travelling to and from School. The full Travel Plan is included in Appendix E.

Table 3-23
Segment Prioritization
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Segment	Priority based on Local Concerns Meeting (5 responses)	Priority based on Alternatives Meeting (3 comments)	Priority based on Town Meeting Survey (35 responses)	Priority based on Segment Prioritization Meeting (4 comments)	Conclusions
Main/Church/Mill	1	1	1	1	Although this area is consistently identified as highest in priority, there is an upcoming VTrans project to address safety at this intersection
Carlton Avenue	2	2	6	2	Improving pedestrian facilities around the Cambridge Elementary School is a high priority. The existing parking area next to the Union Bank will need to be reclaimed after the bank relocates to allow for the installation of a sidewalk. Alternative 1 – concrete sidewalk with granite curb was identified as the preferred alternative.
School St	2	3	2	3	Completing the pedestrian loop from the Cambridge Elementary School is a high priority. Alternative 1 – concrete sidewalk with granite curb was identified as the preferred alternative
Main Street (Church to Old Main)	Not ranked	7	5	4	Once the connections are made with pedestrian facilities to the School, the next priority should be to improve the downtown pedestrian facilities in a phased manner. Alternative 2 – replace existing sidewalk with concrete, install granite curb, add crosswalks and lighting was identified as the preferred alternative.

Table 3-23 (cont'd)
Segment Prioritization
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Upper Pleasant Valley Road	3	4	9	5	This area of the Village is an area identified for future growth. Temporary pedestrian facilities may be installed by the Town and/or Village until funds are available for more permanent facilities to be installed.
Mill St	6	8	3		Village to contact VTrans about painting to provide shoulders for bike lanes and addition of signage as a first phase.
Church St	Not ranked	9	4		Existing sidewalks to be upgraded in the future.
VT 15	4	12	9		Other projects are planning for means of crossing VT 15 to link to the Greenway Path. Although a crossing of VT 15 was discussed, since it is being considered in other projects, it was not further examined as part of this study. Completion of the loop on the Village side of VT 15 will be a future project and is currently a lower priority.
Old Main	5	13	7		As there is currently little traffic on Old Main Street, improvements here are a lower priority.
Main Street (Old Main to VT 15)	Not ranked	11	8		Lower priority, future project.
Depot St	Not ranked	6	10		Lower priority project that could be completed by the Village on their own.
Maple St	Not ranked	10	11		Lower priority project to be completed in the future.

Provide an overall ped network map showing all the prioritized alternatives and how they fit together. Ditto with the bike network.

IV. 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 4-1. The proposed alternatives fit generally within the public right-of-way. Areas where the recorded road right-of-way differs from the assumed right-of-way width in property record surveys will need to be reviewed more closely when designs in those areas proceed and will likely require coordination with landowners. Particularly, areas on Mill Street and Upper Pleasant Valley Road have conflicts between the recorded road right-of-way and assumed right-of-way on property record surveys. Surveys that show conflicts are attached in Appendix C. Church Street also had several different right-of-way widths recorded. Property record surveys and the record layout for Church Street area also attached in Appendix C. In addition, a record survey for the right-of-way for Main Street was not located during the project research. Several surveys on Main Street assume a width of 3 rods, or 49.5 feet however, the existing roadway and sidewalk extends outside of the assumed 49.5 foot right-of-way and therefore will require additional research.

If there are no state access issues i.e. Sec 1111 permit, then it should probably be stated to show the issues was looked at.

Table 4-1
Right of Way Summary
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Any rail crossings or rail ROW issues?

Street	ROW Width	Documentation
School Street (TH 55)	40 feet	Laid out 40 ft wide in April 1910 as recorded in Book 24, Page 418 of the Cambridge Land Records.
Carlton Avenue (TH 55)	3 rods (49.5 feet)	No record layout observed. An assumed width of 3 rods (49.5 feet) is shown on various record surveys.
Main Street (VT 108)	3 rods (49.5 feet)	No record layout observed. An assumed width of 3 rods (49.5 feet) is shown on various record surveys.
VT Route 15	Varies	No record layout was observed. Various widths as shown on VT Highway ROW Plans for Project F 030 2(1).
Old Main Street (TH 73)	3 rods (49.5 feet)	No record layout was observed. Book 42, Page 374 of the Cambridge Land Records references TH 73 (old VT 15) as being 3 rods wide (49.5 feet).
Mill Street (VT 108)	Conflict between 82.5 feet in land records and 3 rods (49.5 feet)	General Records Book B, Page 294 dated January 7, 1827 is assumed to be the layout for VT 108 and describes a width of 82.5 feet. An assumed width of 3 rods (49.5 feet) is shown on various record surveys.
Upper Pleasant Valley Road	Conflict between 4 rods (66 feet) and 3 rods (49.5 feet)	No record layout was observed. VT Highway ROW Plans for Project RS 0233 (1) SA depict a 4 rod (66 ft) right-of-way. An assumed width of 3 rods (49.5 feet) is shown on various record surveys.

Table 4-1 (cont'd
Right of Way Summary
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

Church Street (VT 108)	Conflict between records of 49.5 feet, 82.5 feet and 99 feet	VT Highway ROW Plans for Project F 030 2(1) assume a 3 rod right-of-way. General Records Book B, Page 294 dated January 7, 1827 is assumed to be the layout for VT 108 and describes a width of 82.5 feet. Various record surveys along this street depict various widths of 49.5 ft, 82.5 ft, and 99 ft.
Maple Street (TH 53)	3 rods (49.5 feet)	No record layout observed. An assumed width of 3 rods (49.5 feet) is shown on various record surveys.
Depot Street (TH 53/54)	3 rods (49.5 feet)	No record layout observed. An assumed width of 3 rods (49.5 feet) is shown on various record surveys.

Helpful if the utility company names are identified.

Temporary construction easements and permanent easements may be necessary and should be obtained during the design and construction phase of the project once limits of disturbance have been identified. 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 is included as Figure 4-1 and Figure 4-2.

A Traffic Management Plan and Traffic Control plan will need to be developed for this project

V. Utility Impacts

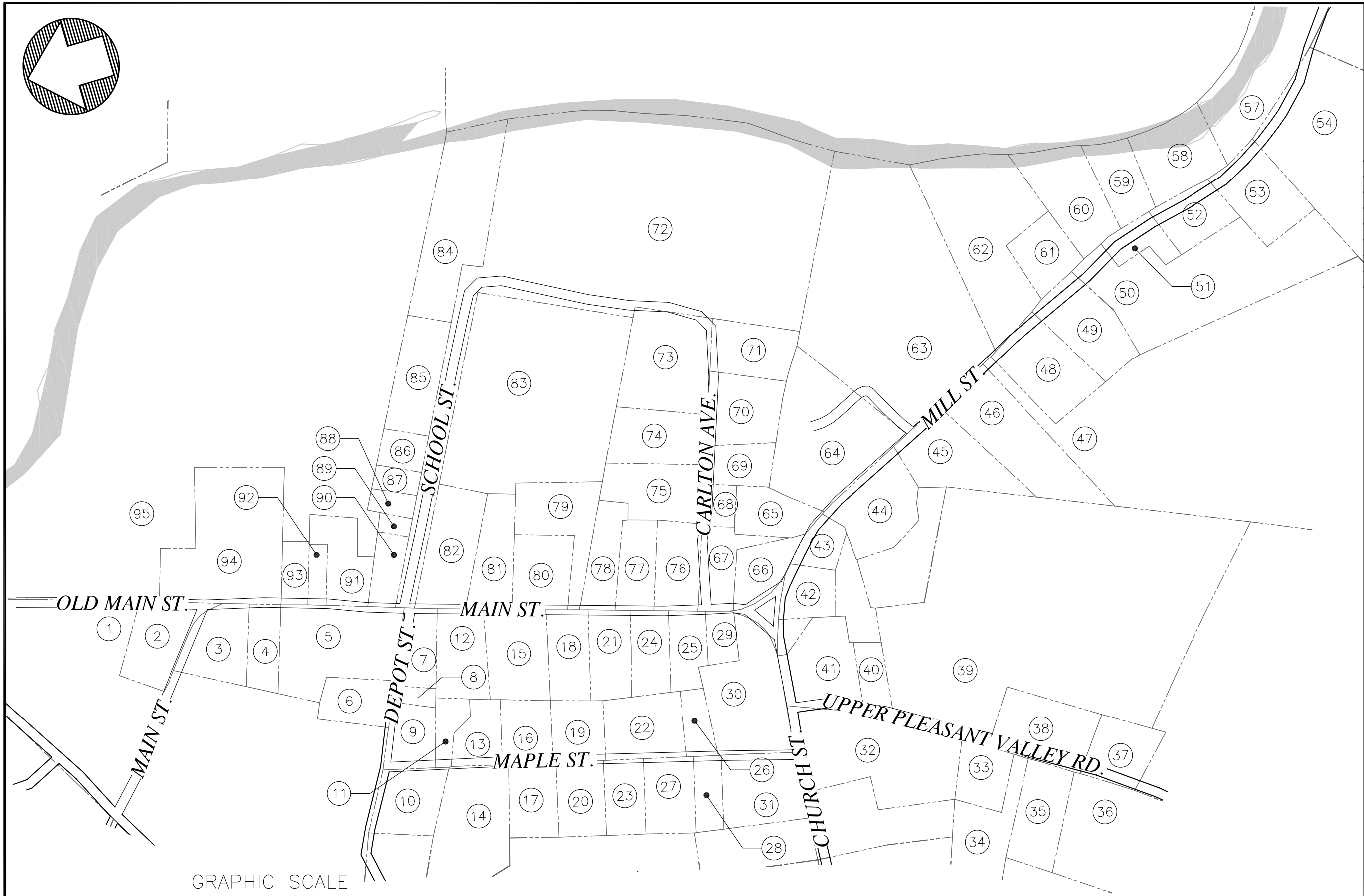
Can or how will utility issues be handled?

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

1. The municipal sewer collection system serves the majority of the study area.
2. The municipal water distribution system serves the majority of the study area.
3. Numerous overhead electrical cable, TV, and communication lines exist throughout the project area.
4. Several storm drainage structures are located in the study area.

Any gas lines?

The Village of Jeffersonville owns and operates the water and wastewater systems and therefore, any conflicts with those utilities will be coordinated though the Village. The stormwater collection system is owned by the Vermont Agency of Transportation and will require their review for any modifications. Conflicts with utility poles in the project area can typically be



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DUFRESNE GROUP
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Project #	7150020
Project Mgr.	AJD
Design	AJD
Drawn	EAE
Checked by	R.E. DUFRESNE
Date	MAY 2016
Scale	AS SHOWN
Approved by	APPROVED BY

MASTER PLAN AND SCOPING STUDY
BICYCLE AND PEDESTRIAN IMPROVEMENTS STP BP13(15)

PARCEL MAPPING

JEFFERSONVILLE, VT

FIG 4-1

DWG. NO. PARCEL MAPPING.d

SHEET 1 OF 1

NO.	OWNER	PARCEL NO.
1	UNION BANK	15-50-05.00
2	JEAN JENKAUSKAS	15-50-04.00
3	JEFFREY WELLS	15-50-06.00
4	KURT & JANE REINEKE	15-50-07.00
5	THEODORE HOADLEY & JOHN GUYETTE	15-50-09.00
6	TODD M. BAILEY	15-50-10.00
7	JAYME O. & KIERSTEN BECHTOLDT	15-50-27.00
8	TIFFANY BARKER	15-50-26.00
9	VALERIE D. THOMPSON	15-50-25.00
10	PHILIP FITZPATRICK	15-50-11.00
11	KYLE & JENNIFER BROWN	15-50-28.00
12	CHRISTOPHER MESICK	15-50-34.00
13	MARY D. PAULMAN	15-50-29.00
14	ROGER & MURIEL MANN REV. TRUST	01-20-08.00
15	DEBORAH A. BOUTIN & DANIEL HERMAN	15-50-35.00
16	GARY L. HOPPER	15-50-30.00
17	THOMAS A. LATSHAW, JR	15-50-15.00
18	SHERYL R. WILKINS	15-50-36.00
19	NICOLE D. GILBERT	15-50-31.00
20	CHARLES R. & NANCY GUYETTE	15-50-16.00
21	PAUL ANDRE TINGAUD & KAYE AMANDA LASS	15-50-37.00
22	M & A, LLC	15-50-32.00
23	SUSAN TAYLOR	15-50-17.00
24	LUCILLE R. BROOKER	15-50-38.00
25	CARMEN M. O'DONALD	15-50-39.00
26	M & A, LLC	15-50-32.01
27	WILLIAM SANDER	15-50-18.00
28	ROBERT & JEAN GAGNER	15-50-19.00
29	LANDON A. KITTELL	15-50-40.00
30	SECOND CONGREGATION CHURCH	15-50-33.00
31	MARK & ANN MALLETT	15-50-20.00
32	PATRICK L. & LISA J. MARTIN	15-50-46.00
33		15-50-48.00
34	GARY S. CHICOINE & TERRY A. CALLAHAN	15-50-47.00
35	GARY E. & SHARON E. MCNALLY	15-50-49.00
36	ELIZABETH S. REYNOLDS TRUST	15-50-50.00
37	WILLIAM & DAVID SANDER	15-50-51.00
38	JOSEPH D. ALLEN & DAPHNE S. BAKER	15-50-52.00
39	ERIC M. & AMY W. HALE	01-20-28.01
40	JOHN & MEAGHAN REESE	15-50-53.00
41	LOCKE P. FLEURY	15-50-54.00
42	TIMOTHY & STEPHANIE HEAGHNEY	15-50-56.00
43	VILLAGE OF JEFFERSONVILLE	15-50-57.00
44	RICHARD MULVANEY & FRANCES M. TODD	15-50-60.00
45	NANCY LANGDELL	15-50-61.00
46	RUDOLPH & ELEANOR ERNO REV. TRUST	15-50-62.00
47	NONE	01-20-59.00
48		01-20-60.00
49	JOHN J. III & PATRICIA A. BEAN	01-20-61.00
50	TREVOR & LESLIE THOMPSON	01-20-62.00
51	CHAD & LINDA BLASCH	01-20-63.01
52	ALBERT & WENDY CHAMPNEY	01-20-63.00
53	JUSTIN PRATT	01-20-64.00
54	CAROL TAYLOR	01-20-71.00
55	JUDITH GATES	01-20-72.00
56	WILLIAM SANDER	01-20-76.00
57	NONE	01-20-70.00
58	HAROLD & RENA DEZOTELLE	01-20-69.00
59	MICHAEL & ANTONIA CONTOIS	01-20-68.00
60	JOHN & BARBARA CASE	01-20-67.00
61	MARC LALIBERTE & MAUDE ARCAND	01-20-66.00
62	TOWN OF CAMBRIDGE	01-20-65.00
63	TOWN OF CAMBRIDGE	15-50-94.00
64	GARY & KIM MARTIN	15-50-93.00
65	RUDOLPH & ELEANOR ERNO REV. TRUST	15-50-88.00
66	DOUGLAS L. & DARLENE L. GRAY	15-50-86.00
67	HANLEY'S INC.	15-50-85.00
68	DOUGLAS L. & DARLENE L. GRAY	15-50-87.00
69	ARLIE NOLAN WILLIAMSON	15-50-89.00
70	RODNEY R. & TAMMIE M. KELLEY	15-50-90.00
71	DUSTIN S. DEARBORN	15-50-91.00
72		
73	DAVID R. & JANE N. PORTER	15-50-84.00
74	TIMOTHY & RENEE RUSSELL	15-50-83.00
75	CHARLES LEWIS & CARRIE ADII	15-50-82.00
76	UNION BANK	15-50-79.00
77	60 MAIN, LLC	15-50-78.00
78	BREWSTER RIVER HOUSING LTD PTN	15-50-77.00
79	JANE M. GEORGE	15-50-76.00
80	JANE M. GEORGE	15-50-76.01
81	CHARLES TERRY & JANE M. SHAW	15-50-75.00
82	BARBARA & MYRON LAFOUNTAIN	15-50-74.00
83	TOWN OF CAMBRIDGE SCHOOL	15-50-81.00
84	EDWARD & MONIQUE GRIMM	15-50-73.00
85	PAUL N. & LAURIE D. CARTWRIGHT	15-50-72.00
86	BARIAN – LUNDIE, LLC	15-50-71.00
87	GEORGE R. JR & THAMASIS TITUS	15-50-70.00
88	CAMBRIDGE HISTORICAL SOCIETY	15-50-69.00
89		15-50-68.00
90	WINDRIDGE FARM, LLC	15-50-67.00
91	WINDRIDGE FARM, LLC	15-50-66.00
92	BRYAN FOUNDATION, INC	15-50-66.01
93	CRESCENDO CLUB LIBRARY ASSOCIATION	15-50-65.00
94	CAMBRIDGE HISTORICAL SOCIETY	15-50-64.00
95	SISYPHUS, LLC	15-50-63.00

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Project #	7150020
Project Mgr.	AJD
Design	AJD
Drawn	EAE
Checked by	R.E. DUFRESNE
Date	MAY 2016
Scale	AS SHOWN
Approved by	APPROVED BY

MASTER PLAN AND SCOPING STUDY
BICYCLE AND PEDESTRIAN IMPROVEMENTS STP BP13(15)

PROPERTY TABLE

JEFFERSONVILLE, VT

FIG 4-2

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SHEET 1 OF 1

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resolved with sufficient coordination and little to no cost to the municipality if the relocation is within the right-of-way. For the highest priority segments, the only conflicts identified are related to the storm drainage system and therefore modifications will be coordinated through VTrans.

VI. Natural and Cultural Resources

We compiled Geographic Information System (GIS) data available from the Agency of Natural Resources, VT Center for Geographic Information, the Village of Jeffersonville and Lamoille County Planning Commission to identify natural and cultural resources in the project area including:

Natural Resources

A. Wetlands
   1) Areas of potential wetlands were identified near areas identified for improvement and should work occur in those 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 were shown previously in Figure 3-1. No mapped wetlands are located in the project area. None of the potential wetland areas are located near the priority segments on Carlton Avenue, School Street or Main Street.

Be sure to work with ANR Floodplains Section ASAP

B. Lakes/Ponds/Streams/Rivers (stormwater discharge and erosion/sediment control implications).
   1) No Lakes/Ponds/Streams/Rivers will be directly impacted by this project.

What about them? Expand

C. Floodplains
   1) Alternatives for lower priority segments that include improvements in the floodplain are included in this study. Provisions will need to be made during design of these improvements to meet Village, State and Federal regulations to avoid increasing the base flood elevation.

D. Endangered Species
   1) No endangered species were identified in the project area.

E. Flora/Fauna
   1) No endangered flora/fauna was identified in the project area.

F. Stormwater
   1) A construction stormwater permit will be required but can be simplified if the disturbed area will be less than one acre.
   2) A stormwater operational permit may be required once the disturbed area exceeds one acre.

5,000sqft of new impervious

G. Hazardous Wastes
   1) Hazardous Waste areas located in the project area are not expected to have any impact on the project. Provisions for working in and around contaminated soils should be included in contract documents developed during Final Design in the

Should include ANR Map showing Hazardous Waste

event that unanticipated contaminated soils are encountered. Hazardous waste areas adjacent to areas proposed for improvements are shown in Figure 6-1 and include:

a. Cambridge Elementary School – underground fuel oil tanks removed, groundwater enforcement standards met and site closed in 2000.
b. Cambridge Town Garage – multiple tanks, outside of limits of proposed improvements.
c. Jeffersonville Fire Station – during construction of the new fire station, contaminated soils were identified and removed.
d. Madonna Mobil – contamination associated with underground storage tanks, which have since been removed. Additional investigation recommended to allow for closure of site.
e. Bell-Gates Lumber Corporation – On-site contamination found, level of contamination found to be below regulatory limits and site was closed in 2008.
f. Jolley Property – Brownfields site currently under cleanup. Areas of contamination outside area to be impacted by proposed improvements.

H. Forest Land

1) There is no Forest Land identified in the project area.

Jeffersonville also has improvements planned as part of the Flood Hazard Mitigation Plan and all improvements should be coordinated with that Plan to ensure continuity.

A preliminary Act 250 project review sheet was completed for these improvements. The project review sheet identified that stormwater, wetlands and floodplain permits may be required as noted above.

Any well heads that need to be considered?

Cultural Resources

1. Historic
2. Archaeological
3. Architectural
4. Public Lands
5. Agricultural Lands

One area of the Village that was identified for improvements, Old Main Street, was identified as being potentially archaeologically sensitive as shown previously in Figure 3-1. The study is located within the National Register - Listed Jeffersonville Historic District. Two properties, one located on Mill Street and one on VT Route 15 are listed on the State Historic Register. A third property on Upper Pleasant Valley Road is also listed but has undergone alterations and may have lost its historic significance as a result. Project work should aim to remain in the right-of-way and should it need to extend out of the right-of-way, plans should aim for the least amount of disturbance to the historic properties as possible. Once plans for improvements are developed, they should be provided to the Vermont Division for Historic Preservation for review. The Historical and Archaeological reports are included in Appendix D.

VTrans will review, not DHP.

VII. Preliminary Project Cost Estimate

As presented in Section 3, the highest priority segments are Carlton Avenue, School Street and Main Street. Given the expense of completing Main Street as one project, the Sidewalk Committee suggested the following phasing for Main Street:

1. Carlton Avenue to School Street
2. School Street to Old Main Street
3. Church Street to Depot Street
4. Depot Street to Old Main Street

Tables 7-1 through 7-6 show the cost estimates of the highest priority segments. A summary table showing the total cost estimates of each segment is shown in Table 7-7. 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.

Table 7-1
Carlton Avenue Total Project Cost Estimate
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

DESCRIPTION	ESTIMATED QUANTITY	UNITS	UNIT PRICE	TOTAL COST
5' wide Concrete Sidewalk with Granite Curb	720.00	LF	$ 240.00	$172,800
Storm Drainage Structures	1.00	EA	$ 3,560.00	$3,560
Storm Drainage Pipe	20.00	FT	$ 58.00	$1,160
Crosswalks	1.00	EA	$ 770.00	$ 770
ADA ramp	2.00	EA	$ 1,200.00	$2,400
Subtotal Construction Cost				$180,690
Contingency				$37,910
Total Construction Cost				$218,600
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				$33,000
Construction Phase Engineering (15% of Total Construction Cost)				$33,000
Local Project Management (10% of Total Construction Cost)				$22,000
Legal and Fiscal (3% of Total Construction Cost)				$7,000
			Total Project Cost	**$313,600**

Indicate % for contingency.

Table 7-2
School Street Total Project Cost Estimate
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

DESCRIPTION	ESTIMATED QUANTITY	UNITS	UNIT PRICE	TOTAL COST
5' wide Concrete Sidewalk with Granite Curb	570.00	LF	$ 240.00	$136,800
Crosswalks	1.00	EA	$ 770.00	$770
ADA ramp	2.00	EA	$ 1,200.00	$2,400
Subtotal Construction Cost				$139,970
Contingency				$28,930
Total Construction Cost				$168,900
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				$25,000
Construction Phase Engineering (15% of Total Construction Cost)				$25,000
Local Project Management (10% of Total Construction Cost)				$17,000
Legal and Fiscal (3% of Total Construction Cost)				$5,000
			Total Project Cost	**$240,900**

Table 7-3
Main Street Phase 1 (Carlton Avenue to School Street)
Total Project Cost Estimate
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

DESCRIPTION	ESTIMATED QUANTITY	UNITS	UNIT PRICE	TOTAL COST
5' wide Concrete Sidewalk with Green Space and Granite Curb	600.00	LF	$ 240.00	$144,000
Storm Drainage Structures	3.00	EA	$ 3,560.00	$10,680
Storm Drainage Pipe	40.00	FT	$ 58.00	$2,320
Crosswalks (Across Main at Carlton and end of School)	2.00	EA	$ 770.00	$1,540
ADA ramp	6.00	EA	$ 1,200.00	$7,200
Striping for parallel parking	250.00	LF	$ 3.50	$875
Excavation of Surfaces for Green Strip	75.00	CY	$ 20.00	$1,500
Topsoil	85.00	CY	$ 30.00	$2,550
Seeding	25.00	LB	$ 10.00	$250
Lighting	6.00	EA	$ 5,000.00	$30,000
Subtotal Construction Cost				$ 200,915.00
Contingency				$ 41,985.00
Total Construction Cost				$ 242,900.00
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				$36,000
Construction Phase Engineering (15% of Total Construction Cost)				$36,000
Local Project Management (10% of Total Construction Cost)				$24,000
Legal and Fiscal (3% of Total Construction Cost)				$7,000
			Total Project Cost	**$345,900**

Table 7-4
Main Street Phase 2 (School Street to Old Main Street)
Total Project Cost Estimate
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

DESCRIPTION	ESTIMATED QUANTITY	UNITS	UNIT PRICE	TOTAL COST
5' wide Concrete Sidewalk with Green Space and Granite Curb	400.00	LF	$ 240.00	$96,000
Storm Drainage Structures	3.00	EA	$ 3,560.00	$10,680
Storm Drainage Pipe	160.00	FT	$ 58.00	$9,280
Crosswalks (School St and across Main at Library)	2.00	EA	$ 770.00	$1,540
ADA ramp	4.00	EA	$ 1,200.00	$4,800
Striping for parallel parking	140.00	LF	$ 3.50	$490
Excavation of Surfaces for Green Strip	50.00	CY	$ 20.00	$1,000
Topsoil	60.00	CY	$ 30.00	$1,800
Seeding	20.00	LB	$ 10.00	$ 200
Lighting	5.00	EA	$ 5,000.00	$25,000
Subtotal Construction Cost				$150,790
Contingency				$31,910
Total Construction Cost				$182,700
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				$27,000
Construction Phase Engineering (15% of Total Construction Cost)				$27,000
Local Project Management (10% of Total Construction Cost)				$18,000
Legal and Fiscal (3% of Total Construction Cost)				$5,000
			Total Project Cost	**$259,700**

Table 7-5
Main Street Phase 3 (Church Street to Depot Street)
Total Project Cost Estimate
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

DESCRIPTION	ESTIMATED QUANTITY	UNITS	UNIT PRICE	TOTAL COST
5' wide Concrete Sidewalk with Green Space and Granite Curb	620.00	LF	$ 240.00	$148,800
Storm Drainage Structures	4.00	EA	$ 3,560.00	$14,240
Storm Drainage Pipe	40.00	FT	$ 58.00	$2,320
Crosswalks (Across Depot St)	1.00	EA	$ 770.00	$770
ADA ramp	2.00	EA	$ 1,200.00	$2,400
Striping for parallel parking	250.00	LF	$ 3.50	$875
Excavation of Surfaces for Green Strip	200.00	CY	$ 20.00	$4,000
Topsoil	200.00	CY	$ 30.00	$6,000
Seeding	60.00	LB	$ 10.00	$600
Lighting	7.00	EA	$ 5,000.00	$35,000
Subtotal Construction Cost				$215,005
Contingency				$44,995
Total Construction Cost				$260,000
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				$39,000
Construction Phase Engineering (15% of Total Construction Cost)				$39,000
Local Project Management (10% of Total Construction Cost)				$26,000
Legal and Fiscal (3% of Total Construction Cost)				$8,000
			Total Project Cost	**$372,000**

Table 7-6
Main Street Phase 4 (Depot Street to Old Main Street)
Total Project Cost Estimate
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

DESCRIPTION	ESTIMATED QUANTITY	UNITS	UNIT PRICE	TOTAL COST
5' wide Concrete Sidewalk with Green Space and Granite Curb	370.00	LF	$ 240.00	$88,800
Storm Drainage Structures	3.00	EA	$ 3,560.00	$10,680
Storm Drainage Pipe	20.00	FT	$ 58.00	$1,160
ADA ramp	2.00	EA	$ 1,200.00	$2,400
Striping for parallel parking	150.00	LF	$ 3.50	$525
Excavation of Surfaces for Green Strip	30.00	CY	$ 20.00	$600
Topsoil	40.00	CY	$ 30.00	$1,200
Seeding	15.00	LB	$ 10.00	$150
Lighting	4.00	EA	$ 5,000.00	$20,000
Subtotal Construction Cost				$125,515
Contingency				$26,985
Total Construction Cost				$152,500
Engineering:				
Design Phase Engineering (15% of Total Construction Cost)				$23,000
Construction Phase Engineering (15% of Total Construction Cost)				$23,000
Local Project Management (10% of Total Construction Cost)				$15,000
Legal and Fiscal (3% of Total Construction Cost)				$5,000
			Total Project Cost	**$218,500**

Table 7-7
Total Project Cost Estimate Summary for Priority Segments
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

PROJECT	TOTAL ESTIMATED COST (2016 Dollars)
Carlton Avenue	$ 313,600
School Street	$240,900
Main Street Phase 1 (Carlton Ave to School Street)	$345,900
Main Street Phase 2 (School Street to Old Main Street)	$ 259,700
Main Street Phase 3 (Church Street to Depot Street)	$372,000
Main Street Phase 4 (Depot Street to Old Main Street)	$218,500

As shown in Tables 7-1 through 7-7 the total project cost estimates include Construction, Contingency, Final Design Engineering, Construction Phase Engineering, Local Project Management and Legal and Fiscal expenses for construction of improvements on the priority segments. 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.

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

- Stormwater General Permit to Construct
- NEPA Categorical Exclusion
- Section §1111 Permit

Any hydraulic studies needed?

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.

VIII. Maintenance

Useful Life

The materials selected for the preferred alternatives are concrete for sidewalks and granite for curbs due to durability and aesthetics. The estimated useful life of these materials from different guidance documents is outlined in Tables 8-1 and 8-2:

Table 8-1
Sidewalk Useful Life Estimates
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

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 8-2
Curb Useful Life Estimates
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

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.

Maintenance

The Village of Jeffersonville owns and maintains the existing sidewalks and will do the same for any additional bicycle or pedestrian facilities added as a result of this project. The Village 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.

IX. Public Involvement

A Local Concerns Meeting was conducted on July 14, 2015 to obtain input from the public on preferences, anticipated user groups and regarding the purpose and need for the project. Approximately 12 people attended and 9 written comments were received, see Appendix B for written public comment. Based on this meeting a draft Purpose and Need Statement was developed and segments were identified.

An Alternatives Presentation Meeting was held on November 24, 2015. The Purpose and Need Statement was developed based on the Local Concerns Meeting and several alternatives were presented. The Purpose and Need Statement was approved. Minutes and public comments from the Alternatives Presentation Meeting are included in Appendix B. Public comment was also solicited at Town Meeting, a summary of those comments and rankings is also included in Appendix B.

A Segment Prioritization Meeting was held on April 12, 2016. The public comments were reviewed and the priority segments were identified as discussed in Section 3. For each priority segment, a preferred alternative was identified. Minutes from the Segment Prioritization Meeting are included in Appendix B.

X. Compatibility with Planning Efforts

The Village of Jeffersonville has been aware of the need for improved pedestrian and bicycle facilities in their community and region for several years and has been laying down the groundwork to complete these improvements. The Village and the Town of Cambridge have identified the need for bicycle and pedestrian improvements in their Town and Village plans and completed an infrastructure assessment in 2012 to review the condition of the existing pedestrian infrastructure. To continue these efforts, a Sidewalk Steering Committee was formed in 2014 consisting of Village public officials, business owners, and residents.

The Lamoille County Planning Commission has identified the following policies in the Lamoille County Regional Plan:

- Acknowledge bicycling and walking as legitimate forms of transportation.
- Refer to the State Bicycle and Pedestrian Facility Planning and Design Manual for all bicycle and pedestrian design specifications and provide this guidance to municipalities as necessary.
- Advocate for continued and increased funding of all programs providing resources for bicycle and pedestrian projects, such as the Transportation Enhancement and Bicycle & Pedestrian grant programs administered by VTrans.
- Promote the removal of hazards to bicycle travel on highways during routine maintenance; remove such hazards as scattered gravel, especially in the springtime after winter sanding and salting.
- Promote and practice bicycle and pedestrian-friendly highway design at the municipal and State levels.
- Plan for the integration of bicycles with other modes through techniques such as include bike racks on transit vehicles, providing bike parking at places of employment and commerce, and at community centers, improvement of shoulders on highways, and construction of bike paths.
- Encourage local and State highway transportation projects to implement shoulder widths that are appropriate for the existing traffic conditions.
- Assist in the design and implementation of traffic calming measures in village centers and other densely developed settlements where pedestrian travel is viable.
- Encourage municipalities to require consideration of bicycle and pedestrian transportation in development plans through local ordinances and project review processes.
- Assist municipalities in planning for the improvement of existing and future sidewalk network including the development of pedestrian-gathering places including attractive benches, lighting, and information kiosks.
- Facilitate the implementation of the Lamoille Valley Rail Trail as an interim use of the rail corridor.
- Pursue the implementation of the Lamoille Valley Rail Trail and municipal connections to the trail, as well as other direct pathway connections between municipalities.
- Encourage the planning, design, and implementation of the extension of the Stowe Recreation Path to the Stowe Mountain Resort.

Both the Regional Transportation and Village Plans support the project.

XI. Project Time Line

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 11-1.

Table 11-1
Project Schedule
Jeffersonville STP BP 13(15)
Jeffersonville, Vermont
April 19, 2016

PROJECT TASK	DATE
Receive Study Approval	June 2016
Submit Funding Application for Final Design Funds	July 2016
Receive Approval of Funding Application	August 2016
Grant Agreement Executed	October 2016
Procurement for Design Services	January 2017
Complete Topographic Survey of Project Areas	May 2017
Final Design Plans and Specifications Advertised for Bid	April 2019

Notes:

1. The project schedule is based on several items beyond the control of the Dufresne Group or the Village of Jeffersonville, 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.

XII. Viability

The Village of Jeffersonville has been proactively working towards improving the pedestrian and bicycle facilities in the Village. The improvement of pedestrian facilities in the area of the Cambridge Elementary School was a clear priority throughout this study. The Safe Routes to School Program completed a site visit during this study and prepared a report of the recommended improvements in the area of the Cambridge Elementary School, see Appendix E for the report from Safe Routes to School. With the completion of this study, the Village of Jeffersonville has a prioritized plan for moving forward with improvements to their Village to better serve alternative modes of transportation.

Funding Alternatives

The Town of Cambridge and Village of Jeffersonville do 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 Village 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 by the last week of July.

The Transportation Alternatives Program, also administered by the Local Projects section, is an option for funding design. The Transportation Alternatives Program has an award range of $20,000 to $300,000 and the local match is 20%. A minimum of 50% of the local match must be a cash expenditure, with the remainder of the local match as "in-kind" services; however, an in-kind match is not required and the entire local match may be a cash expenditure.

Smaller projects may be able to be completed using local funds such as crosswalk improvements and providing interim pedestrian facilities in locations such as Upper Pleasant Valley Road or from Mill Street to the school across school property near Cambridge Rescue.

Appendix A

Vermont State Police Press Release

DUFRESNE GROUP
CONSULTING ENGINEERS

VSP Press Releases

Headquarters | 45 State Drive | Waterbury, VT 05671 | 802-241-5000

The Vermont State Police disseminate press releases for significant criminal or public safety incidents and arrests, but it is not intended to document every public contact or response to a call-for-service. If you have a question regarding an incident or case, please contact your local state police barracks or the public information officer. Please note press releases are available on this blog for 6 months following their public release. Please contact the public information officer if you need access to one that is older.

Search

March 13, 2016

Press Release/motor vehicle crash/Cambridge/VSP Williston/16A101262

STATE OF VERMONT

DEPARTMENT OF PUBLIC SAFETY

VERMONT STATE POLICE

PRESS RELEASE

MOTOR VEHICLE CRASH

CASE#:16A101262

TROOPER: Metayer

STATION:VPS Williston

CONTACT#:802-878-7111

DATE/TIME:03/12/16 at approximately 12:30

LOCATION: Upper Pleasant Valley Road, Cambridge, VT

VEHICLE #1

OPERATOR: John Amadon

AGE:65

SEAT BELT? N/A

CITY, STATE OF RESIDENCE: Cambridge, VT

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DESCRIPTION OF VEHICLE: Trek bicycle

DAMAGE TO VEHICLE:

VEHICLE #2

OPERATOR: Sara Irish

AGE:40

SEAT BELT? Y

CITY, STATE OF RESIDENCE: Cambridge, VT

DESCRIPTION OF VEHICLE: 2003 Chevy Venture

DAMAGE TO VEHICLE: Passenger front bumper/fender and windshield

INJURIES

V # / NAME / CITY, STATE OF RESIDENCE / AGE / SEAT BELT? / NATURE OF INJURY

V#1/Amadon/Cambridge, VT/65/multiple injuries legs, pelvis and shoulder

HOSPITAL:UVM Medical Center

WEATHER: Clear and Sunny

ROAD COND: Clear and Dry

SUMMARY OF CRASH:

On 03/12/16 at approximately 12:30 pm Vermont State Police-Williston received a report of a vehicle vs. bicycle crash near 235 Upper Pleasant Valley Rd. in Cambridge. Cambridge Rescue and Vermont State Police responded.

Investigation into this crash revealed that John Amadon age 65 of Cambridge was riding his bicycle on Upper Pleasant Valley Rd. Amadon attempted to turn left and cross the roadway. As he did so he collided with a 2003 Chevy Venture mini-van being operated by Sara Irish, age 40 of Cambridge. Both Amadon and Irish were traveling southbound on Upper Pleasant Valley Rd. at the time the crash occurred.

Amadon was transported from the scene by Cambridge Rescue and was taken to UVM Medical Center for treatment of his injuries. Amadon appeared to have sustained several non-life threatening injuries.

The preliminary investigation revealed Amadon attempted to cross Upper Pleasant Valley Rd. It does not appear that Amadon signaled his intention to cross the roadway. Irish was traveling in the same lane as Amadon and was approaching him from behind. As Amadon began turning from his lane of travel to the left, Irish attempted to avoid the bicyclist but was unable to do so. The contact occurred in this crash in the center of the roadway near the double yellow center line. As Amadon was attempting to turn left in front of Irish, Irish swerved to the left and braked aggressively in an attempt to avoid a collision. Irish was unable to avoid Amadon and the bicycle struck the mini-van in the passenger side front corner of the vehicle.

No Court action is anticipated in this case.

Trooper Jacob Metayer

Vermont State Police

Williston Barracks

Phone (802) 878-7111

Fax (802) 878-2742

Email: jacob.metayer@vermont.gov

Please note my new email address is jacob.metayer@vermont.gov

Newer Post Home Older Post

Appendix B

Public Comments

DUFRESNE GROUP
CONSULTING ENGINEERS

Jeffersonville STP BP13(15)
Kick-off Meeting

June 20, 2015

Jeffersonville, VT

Dufresne Group
459 Portland Street
Suite 102
Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605 Fax: (802) 748-4512

I. Introduction:

Village of Jeffersonville

- Jay Allen, Trustee
- Linda Comstock, Sidewalk committee
- Jean Jenkauskas, Planning Commission, Hazard Advisory Committee
- Jay is going to solicit members of the business community and school to join the Sidewalk committee.

Local Project Manager, LCPC, Rob Moore

Dufresne Group, Andrea Day, PE
Office Phone: 802-748-8605
E-mail: aday@dufresnegroup.com

II. Line of Communications

The Local Project Manager, Rob Moore will provide the line of communication between the Village and Dufresne Group.

III. Meeting Summary

- Project Cost Savings
  - There may be potential project cost savings that can be realized by holding meetings either concurrently or on the same day.
  - These cost savings cannot be quantified now but as the costs will be billed based on the actual amount of time required to complete the project up to the budget provided, the total cost of the project may come in under budget as a result of these efficiencies.
- Public Meetings
  - Getting the public to come to meetings and provide their input is one of the most challenging aspects of these types of projects. We will need to work together to provide notices in the community to try and get the public to provide their input. This includes posting paper notices around town, posting on Front Porch Forum and in the paper.
  - Local Concerns meeting – preliminary dates July 14 or 21. Jay to verify availability of committee members and Rob to verify all VTrans timing requirements are being met.

- General Project Areas Discussion
  - Bicycle lanes and street lights to be incorporated into the projects.
  - Upper Pleasant Valley Road pedestrian and bicycle facilities to extend up to Jeffersonville Heights Road or potentially Williamson Road.
  - Along VT15
    - The path or sidewalk needs to be able to withstand flood conditions.
    - The idea of pervious pavement or reinforced grass was brought up.
    - As part of the flood resiliency plan there will be plantings installed along VT15 that will need to be coordinated with any sidewalks or paths.
    - A separated path or sidewalk along VT15 may be easier for snow removal and better for pedestrian comfort. ← Why?
  - The intersection of Church Street/Mill Street/Main Street near the liquor store and Hanley's is a problem. ← Why?
  - The study will include review of the his[illegible]illage.
- Parking
  - Parking is generally uncontrolled in the Village. Conflicts between parking and bicycle and pedestrian traffic will be reviewed as part of the study.
  - The Union Bank will be moving to the end of Maple Street. Since parking is an issue, the idea to tear down the existing Union Bank at the corner Carlton Ave and Main Street was brought up.
  - A parking lot at the Jolly parcel should be looked at as a way to alleviate parking along Main Street.
- Other items of discussion
  - Overhead utilities
    - It can be costly to re-locate overhead utilities underground.
    - Areas where utilities and pedestrian or bicycle facilities conflict with existing utilities will be identified as part of the study.
  - Americans with Disabilities Act (ADA)
    - All federally funded projects must comply with ADA.
    - If the Town or Village complete a project without federal funds they may not have to comply with ADA.
  - Energy Savings
    - Quantifying the amount of energy savings by providing improved and additional bicycle and pedestrian facilities is difficult but a discussion of energy savings may be helpful in future grant applications.
  - The CCTA commuter bus currently stops at Green Mountain Joinery and the Post Office. ← Was this mentioned in the study?
  - Other data may be available [illegible] the Greenway/Brewster Pathway work. Rob will try and track down additional information from these projects.

- A member of the Brewster River Pathway committee should be encouraged to participate to provide a more comprehensive picture of the recreational facilities around and in Jeffersonville.
- A repaving project for VT15 is scheduled to occur in the next couple of years. Rob will begin discussions with Jim Cota from the Maintenance District to see if there is any way to tie some of the Village bicycle, pedestrian or flood resiliency plan improvements in with that project.

- Site Walk
  - Existing sidewalks that do not currently meet ADA standards are an eligible expense.
  - VT15
    - There are currently not a lot of pedestrian crossings of VT15 so it may be difficult to meet the VTrans requirements for a crossing.
    - The scoping study will identify the bicycle and pedestrian needs for crossing VT15 and outline options. LCPC will continue to work with the Village and Town to explore options with VTrans and provide information about those options for inclusion in the study.
  - Church Street
    - The existing crossing to the post office does not match current pedestrian travel.
    - Most pedestrians cross closer to Upper Pleasant Valley Road and Maple Street.
    - During the site visit we witnessed walkers coming down Upper Pleasant Valley Road, cross Church Street at Maple Street and continue down Maple Street.
    - The existing sidewalks are approximately 4 feet wide which does not meet the ADA minimum of 5 feet.
  - Upper Pleasant Valley Road
    - Existing width 24 feet
    - On the East Side – existing utility poles, water main, storm drain and swale
    - Extend improvements up to Jeffersonville Heights to serve approximately 30-35 houses and multi-unit apartments across from Jeffersonville Heights Road.
    - Mihean Drive off of Upper Pleasant Valley Road may provide a connection to Church Street if permission across private property can be obtained.
    - Access to the back of the post office parking lot may be possible from the Fairpoint property.
    - A large student population lives up Upper Pleasant Valley and improvements need to accommodate students traveling to school.

- Mill Street Intersection
  - Discussions have occurred in the past about reconfiguring the intersection into a “Tee” intersection which would alleviate the parking and traffic conflicts at Hanley’s and the Liquor store.
  - A close review of the right-of-way adjacent to the liquor store needs to occur due to the parking, pedestrian and traffic conflicts there.
  - Communication with the business owners in this area from the start of the project is important.
- Mill Street
  - Extend improvements up to Cambridge Rescue building at a minimum.
  - Potential connection along soccer field from Mill Street to the school.
- School Street, Carlton Avenue Loop
  - Intersection of Carlton Avenue and Main Street has turning radius and sight distance issues for buses
  - Parking and dumpsters at the end of Carlton Avenue reduce pedestrian and bicycle safety
  - The School Street and Carlton Avenue loop has been one way in the past but has been met by objections.
  - A sidewalk used to be located on the southern side of School Street on the street side of the poles but it has since been paved over.
- Main Street
  - Parking in front of Hanley’s, 158 Main and the Mary Elizabeth Center and Preschool are challenges to bicycle and pedestrian improvements.
  - Existing sidewalks are approximately 4.5 feet wide which does not meet ADA width requirements and in very poor condition in some areas.
- Old Main Street
  - A farmer’s market is held on Wednesdays at the end of Old Main Street and parking is difficult during the market
  - A connection to the Greenway planned to go under the bridge has been delayed and it is currently just a footpath.
  - The senior center access will be off Old Main Street and pedestrian and bicycle improvements should extend to that driveway at a minimum.
  - No existing bicycle or pedestrian facilities.

- Preliminary Project Priorities
  - 1. School Street/Carlton Avenue Loop
  - 2. Upper Pleasant Valley Road to Jeffersonville Heights with multiple alternatives for tying in to Church Street (Mihean Drive, Fairpoint Property, etc.)

- 3. Main Street
- Mill Street intersection is a high priority in relation to safety

Jeffersonville Scoping Study
STP BP 13(15)
Segment Alternatives Meeting

April 15, 2016

Village of Jeffersonville, VT

Dufresne Group
459 Portland Street
Suite 102
Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605
Fax: (802) 748-4512

I. On April 12, 2016 a meeting was held at the Jeffersonville Village Offices to discuss prioritization of segments and selection of alternatives in relation to the Jeffersonville STP BP13(15) Scoping Study. The following is a summary of notes taken at the meeting.

II. The following individuals attended the meeting:

Individual	Representing
Jay Allen	Village Trustee, Project Committee
Donna Rooney	School, Project Committee
Kim Martin	Project Committee
Larry Wyckoff	Cambridge Selectboard
Rob Moore	Local Project Manager
Andrea Day, PE	Dufresne Group

III. A discussion of anticipated change in VTrans LTF funding and local match from 90/10 to 50/50 for scoping studies and 80/20 for design and construction occurred.

IV. A discussion of project costs for VTrans funded projects versus locally funded projects and potential reduction in cost if a municipality is able to locally fund a project occurred.

V. Brief presentation by Dufresne Group

VI. Review of Priority segments

a. Main/Church/Mill Intersection – identified as the highest priority however, due to pending changes at the intersection with an upcoming VTrans project, pedestrian improvements will not be a priority at this time. This discussion will also be included in the report.

b. School Street and Carlton Avenue – viewed as the second highest priorities and the areas where the planning effort should be spent at this time. The two projects should be presented separately to allow for phasing.

c. Main Street – to improve downtown and complete the Carlton Ave and School Street loop, improvements on Main Street are viewed as the next priority after School Street and Carlton Avenue. The existing sidewalks are in poor condition and with replacement would improve the image of the Village.

d. Upper Pleasant Valley Road – improvements on Upper Pleasant Valley Road were discussed and may be next in priority after Main Street however, it is likely that in the meantime some temporary improvements can be installed by the Town and/or Village. Discussion of providing a route across lots to the back of the Post Office parking lot occurred. This would avoid the conflict with the Mix and Smuggler's Notch Inn parking. Phasing of Upper Pleasant Valley should be added to the scoping study with the first phase being to Mihean Drive to make costs more manageable.

e. Crossing of VT 15 was discussed but is being included in other projects in Jeffersonville. A discussion of the necessity of the crossing will be included in the report but it will not be included as a priority segment.

VII. Identification of preferred alternatives for each priority segment

a. School Street

i. **Alternative 1** – Concrete sidewalk with granite curb on south side at an estimated cost of $164,000 was identified as the preferred alternative. The bicycle traffic to and from the school is viewed as much less than the pedestrian traffic.

b. Carlton Avenue

i. **Alternative 1** – Concrete sidewalk with granite curb on north side at an estimated cost of $211,000 was identified as the preferred alternative. The bicycle traffic to and from the school is viewed as much less than the pedestrian traffic. To provide for a direct route adjacent to the existing Union Bank the Village will need to reclaim the parking area for the installation of a sidewalk in the right-of-way. A crosswalk to the west side of Main Street will be included with this alternative.

c. Main Street

i. After discussion of the importance of parking and retaining the green strip due to the historic image of the Village, a sidewalk with a green space and parallel parking on each side was identified as the preferred alternative throughout the Village on Main Street. The Village will pursue development of a municipal parking lot off Depot Street to address the loss of and lack of parking. Main Street improvements will need to be phased and the following phasing schedule was developed:

1. Carlton Street to School Street
2. School Street to Old Main Street
3. Church Street to Depot Street
4. Depot Street to Old Main Street

VIII. Next Steps

a. The alternatives for the priority segments will be further developed with the phasing discussed.

b. The draft report will be prepared and presented to the Village Trustees and Cambridge Selectboard at a joint meeting on May 23, 2016.

Dufresne Group
459 Portland Street
Suite 102
Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605 Fax: (802) 748-4512
E-mail: info@dufresnegroup.com

Memo

To: Village of Jeffersonville

CC: Rob Moore, LCPC, Scott Gurley, VTrans

From: Andrea Day, PE

Date: December 4, 2015

Re: Jeffersonville STP BP13(15) Alternatives Presentation Meeting

---

On November 24, 2015 a meeting was held at the Jeffersonville Village Offices to present alternatives in relation to the Jeffersonville STP BP13(15) Scoping Study. The following individuals attended:

Individual	Representing
Jay Allen	Village Trustee, Project Committee
Bill Sander	Village Trustee
Tom Wyckoff	Village Trustee
Donald Lange	Village Trustee
Larry Wyckoff	Cambridge Selectboard
Rob Moore	LPM, LCPC
Jean Jenkauskas	Resident, Project Committee
Keith Morris	Resident
Kim Martin	Resident
John Amadon	Resident
Andrea Day, PE	Dufresne Group

The following summary of notes taken at the meeting. Please notify me if you have any corrections or additions to these minutes.

- The meeting commenced at 7:20pm.
- Andrea Day gave a power point presentation on the Alternatives for pedestrian and bicycle improvements.
- The purpose and need statement, public comments and priorities determined from the local concerns meeting were reviewed and all in attendance were in

general agreement that the loop to provide access to the school and the Main/Church/Mill intersection are the highest priority areas.

- Material selections for improvements were discussed and cost differences were reviewed.
- Alternatives were presented with estimated costs.
- Due to the cost of some of the improvements, such as along Upper Pleasant Valley Road, phasing options were discussed and the Upper Pleasant Valley preferred alternative will be broken into phases with the first phase ending at Mihean Drive.
- Improvements proposed for the floodplain were discussed and the need to avoid increasing the elevation of the ground surface in the floodplain and options for mitigating any increases in ground elevation or impervious surface were discussed. The use of a permeable surface was also discussed. Plugging of the permeable surface with sand from the roadways was brought up as a maintenance concern.
- At the conclusion of the presentation there were no unanimous preferred alternatives identified. Attendees were encouraged to visit www.DufresneGroup.com to review the presentation and fill out the questionnaire to identify their preferred alternatives after they had a chance to consider the information presented.
- The meeting concluded at approximately 9:30pm.

Local Concerns Meeting Questionaire

July 14, 2015 - Jeffersonville Vt

1. Purpose of the Project: To create safe pedestrian and bicycle routes in the Village of Jeffersonville for children getting to and from school, and for people, young and old to enter the village from surrounding trails and to patronize municipal buildings and businesses within the village center.

2. Need for Project: The need for the project is to improve and expand safe routes for children to school, and for villagers, shoppers, and recreational users to access businesses and municipal buildings in the village center.

3. Priority of pedestrian improvements:

School Street and Carlton Ave Loop 1

Mill St, Church St. and Upper Pleasant Valley Rd intersection leading to Main St. 2

Upper Pleasant Valley Rd to Jeff Heights. 2

Maple St and Depot St. 3

Church and Main St. 3

Old Main St. 4

VT Route 15 Loop 5

Sidewalk Preference: separated from road by grass strip, 5 ft width in village center, 4 ft width in outlying areas, constructed of concrete.

Jay Allen

99 Upper Pleasant Valley Rd, Jeff

644-6638

jayallen201@gmail.com

Andrea Day

From: Rob Moore <Rob@lcpcvt.org>
Sent: Monday, July 13, 2015 10:14 AM
To: Andrea Day
Subject: FW: Bike and Ped paths in Jeffersonville

Andrea,
Public comment via email 1 of 2...
Please add to the comments we will receive tomorrow night.
Thanks!

From: Rob Moore
Sent: Wednesday, July 08, 2015 9:01 AM
To: 'jchaudoir@smuggs.com'
Cc: Chaudoir, Merideth; Jay Allen (jayallen201@gmail.com)
Subject: RE: Bike and Ped paths in Jeffersonville

Joel,
Thanks for the note. I will share this with the Village Committee.

From: Joel Chaudoir [mailto:jchaudoir@smuggs.com]
Sent: Tuesday, July 07, 2015 8:11 AM
To: Rob Moore
Cc: Chaudoir, Merideth
Subject: Bike and Ped paths in Jeffersonville

Rob,
So happy to read about the meeting and the efforts Jeffersonville is making toward multi modal traffic considerations. The lack of multi modal consideration in the state of Vermont is shocking to me. I understand that the grant is for the town proper, which is great start. However I would include in the planning, access points for paths coming from neighboring locations, especially the 108 S. Smugglers Notch corridor and the Pleasant valley corridor. I assume it would integrate the Lamoille river pathway in the both the Cambridge direction and Johnson directions. Would it create a loop circumferenceing the village? That would be nice. I hope to see updates posted to Front Porch Forum.

Thanks

Joel Chaudoir, LEED AP
Senior Project Manager
Smugglers Notch Resort
4323 VT. RT. 108 South
Jeffersonville, VT 05464
(O) 802.644.1202
(C) 802.730.2018

Andrea Day

From: Rob Moore <Rob@lcpcvt.org>
Sent: Monday, July 13, 2015 10:14 AM
To: Andrea Day
Subject: FW: Pedestrian Study

Andrea,
Public comment via email 2 of 2...
Please add to the comments we will receive tomorrow night.
Thanks!

From: Rob Moore
Sent: Wednesday, July 08, 2015 8:59 AM
To: 'Terry Gilmore'
Cc: Jay Allen (jayallen201@gmail.com)
Subject: RE: Pedestrian Study

Thanks for your note. I will share it with the Village Committee.

From: Terry Gilmore [mailto:terrysg1959@gmail.com]
Sent: Tuesday, July 07, 2015 7:57 AM
To: Rob Moore
Subject: Pedestrian Study

I will be out of town on the 14th but would like to voice a couple items.

The first is safety to and at the school. There is no signage for the speed limits at the school. At the high school it is very clear it is 10 MPH. Here the signage indicates 25 MPH leading to the school; which is way too fast. Many go that speed in front of the school. I had asked the school board about this but they did not respond. There are alot of children, cars, bus's etc and someone is really going to get hurt some day. My son; a few years ago; ran out from between my car and another to get across the (yes I should have been in better control) parking area to the school and fortunately the car was going very slow and stopped; my son actually ran into that car very hard. Had that person been going faster it would have been bad.
The second is when I drop the kids at school the children walking to school have only the street to walk up. I go slow but am usually "holding up" the car behind me who wants to go faster.

I love the bike path but it keeps washing out behind Aubuchon's. I there any fix to shore up the bank? And I agree that it would be great to access the path from the area by the silos for those coming out of the village to the path. Perhaps the path between Tatro's and the bridge?

Thank You,

--
Terry Gilmore

Andrea Day

From: Donna Rooney <drooney@cesvt.net>
Sent: Wednesday, August 05, 2015 11:09 AM
To: Rob Moore; Andrea Day
Subject: Re: safe routes to school -Cambridge Elementary

1) purpose of project - safe walkways and bike path connections in the village of Jeff.

2) 1 - Hanley's/108/CHurch/Main intersection
2 - school street/carlton ave
3 - Old Main/Church connection to bikepath/greenway/railtrail.
4 - Upper pleasant valley
5 Vt Route 15

3) maintain grass area between road and sidewalks priority
concrete or asphalt
width - wide enough for two people walking with strollers or wheelchair to meet each other and not have to stop or step off path/walkway

4) other - round about crossing area Rte 15 to Greenway

Thank you,
Donna Rooney

On Tue, Aug 4, 2015 at 8:07 AM, Rob Moore <Rob@lcpcvt.org> wrote:

> Great, thanks Donna!
>
> The feedback sheet is the last page of the attachment.
>
> You can mail or scan that page back to me at your convenience.
>
> Let me know if you have any questions.
>
> Have a great day!
>
> **From:** Donna M. Rooney [mailto:drooney@cesvt.net]
> **Sent:** Monday, August 03, 2015 8:46 PM
> **To:** Rob Moore <Rob@lcpcvt.org>
> **Subject:** Re: safe routes to school -Cambridge Elementary
>
> Hello Rob,
>
> Happy to help in any way regarding travel plan to CES...

Best for me to meet before 10:30am as I work at 11. 802-730-4655.

I have misplaced the flyer with link for feedback from the last meeting at CES.

Peace, Donna

Donna M. Rooney sent from my iPad

CES I.A Student Support Services

CES Mentoring Program Coordinator

CES America Reads Program Coordinator

CES Macgriff Reading Program Coordinator

PO Box 160; 186 School Street

Jeffersonville, VT 05464

DRooney@cesvt.net

On Aug 3, 2015, at 11:36 AM, Rob Moore <Rob@lcpcvt.org> wrote:

> Hi Mary,
>
> I hope you are enjoying summer.
>
> We wanted to check in and offer our services for the next step of the program. I believe Maren is prepared to assemble some data (with input from the school) and produce the "travel plan" for CES. Basically, this entails a map that shows travel patterns of students and a short write-up explaining the data. With this information in hand, the school and the Village can engage in planning activities that directly benefit the school children.
>
> We are fairly open between now and the last week of August.
>
> Please let us know what is best for you.

I've added a few folks to cc who are interested in supporting the program at CES, and may be available to participate in next steps.

Thanks,

Rob

Robert Moore

Regional Transportation Planner

Lamoille County Planning Commission

P.O. Box 1637 • 52 Portland Street, 2nd Floor

Morrisville, VT 05661

rob@lcpcvt.org • 802-888-4548 x109

--

Donna M. Rooney
CES Mentoring Coordinator
CES America Reads Coordinator
CES Macgriff Reading Coordinator
Cambridge Elementary School
PO Box 160; 186 School Street
Jeffersonville, VT 05464
Office: 802-644-8821 Ext 144
New Email: DRooney@cesvt.net

Andrea Day

From: Littlebuddha <jaheba@myfairpoint.net>
Sent: Thursday, July 16, 2015 3:58 PM
To: Rob Moore; Andrea Day
Cc: JOSEPH ALLEN
Subject: Jeffersonville questionnaire
Attachments: Sidewalks Questionnaire (July 2015).pdf

Hi Andrea, Rob,

Here's my questionnaire (let me know if you need it to be more legible!)

Also, here are some other comments:
The folks at Sunrise Physical Therapy are looking out lots of big windows at everything going by on Route 15 for 40+ hrs./week and have some interesting observations:

- they sometimes hold their breath watching people walking the Route 15 loop, especially when it's young parents pulling children in kiddie wagons or what-have-you.
- they *really* hold their breath watching kids playing on the grass within 15' of the highway, while their parents are in line at the Burger Barn.

Thanks again for everything - really enjoyed the meeting Tuesday night and looking forward to what comes of it.

Best,
Jean Jenkauskas

Jeffersonville
STP BP 13(15)
Local Concerns Meeting

July 14, 2015

Jeffersonville, VT

DUFRESNE GROUP
CONSULTING ENGINEERS

459 Portland Street
Suite 102
Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605 Fax: (802) 748-4512
E-mail: aday@dufresnegroup.com

1. What should the purpose of this project be?
   - Safety
   - Encouraging walking, biking etc for health + environmental benefits
   - Integration with other efforts/projects such as flood mitigation and Trails Network development to synergize/maximize benefits of all projects.
   - Increase "appeal" of Community, particularly by maintaining character of Village (particularly in the Historic District)
2. How would you prioritize the following areas for pedestrian improvements (enter numbers 1-5 with 1 being highest priority)?

2	School Street and Carlton Avenue Loop
3	Upper Pleasant Valley Road
5	Mill Street
6	Old Main Street
4	VT Route 15 Loop
1	Other: Hanley's • triangle • Church • Pleasant Valley Road • Smugglers' Notch Inn • Maple St Segment / Intersections

3. What are your preferences for:

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

   ① NOT on outside curve of sharp turns (i.e., intersection of Main/Old Main) - cars go too fast and often miss turn; someone could get injured or killed. (Also, there is a great deal of sand from winter plowing that would need to be cleaned up each spring. ② Along roads, but separated by green spaces wherever possible

   Surface type (i.e. asphalt, concrete, gravel): Permeable pavement wherever possible (cost permitting)
4. Other concerns or comments?

   Floodplain locations

   Snowplows tearing sidewalks up

   Would like to see strong links (where possible) with specific flood mitigation efforts under way or being considered: ① access to bike path near where old Rt bridge will be replaced & the flood mitigation culvert ② vegetation along the floodchute area along Route 15 ③ floodplain restoration areas
5. If you are willing, please provide your contact information so we can contact you with any follow up questions.

   Name: JEAN JENKALSKAS
   Address: PO BOX 162 • JEFFERSONVILLE, VT 05464
   Phone Number: (802) 644-5048
   Email: JAHEBA@MYFAIRPOINT.NET

Andrea Day

From: Jeffrey Wells <wellselectricinc@aol.com>
Sent: Sunday, July 19, 2015 6:05 PM
To: Andrea Day
Subject: Jeffersonville sidewalk project

Hi Andrea,

A few concerns about the proposed sidewalk in Jeffersonville village and a possible solution. I live on the corner of Main and old Main, at 221 Main Street. At the last meeting there was a proposal for the existing sidewalk in town to continue around the corner towards the roundabout. By measuring, I came up with the sidewalk needing to be at a minimum of 20 feet to allow for both a green space and a side walk. By doing so, it would create approximately a three foot slope into our property. We believe that a sidewalk along this route would be too close in proximity to the corner of our house and also require the removal of a very old shade tree. We do not want have our privacy diminished. The loss of this land and tree line would also lower our property value. We are letting it be known that we are not willing to give up any of our land along this proposed route.

Perhaps an alternative to avoid such an issue would be to extend the proposed side walk from the end of Main Street, through the field currently used for the Farmers Market, and include a crosswalk leading towards the village property previously known as Gates Property. This would be also beneficial to the farmers market and the Elizabeth Preschool by providing a safe crossing section. I look forward to continuing this discussion and proposal at the next Sidewalk Committee meeting.

Sincerely,

Jeffrey Wells
wellselectricinc@aol.com

DUFRESNE GROUP
CONSULTING ENGINEERS

Jeffersonville
STP BP 13(15)
Local Concerns Meeting

July 14, 2015

Jeffersonville, VT

459 Portland Street
Suite 102
Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605 Fax: (802) 748-4512
E-mail: aday@dufresnegroup.com

1. What should the purpose of this project be?

   Safety + aesthetics
   → especially school children + elderly; also visitors

2. How would you prioritize the following areas for pedestrian improvements (enter numbers 1-5 with 1 being highest priority)?

(1)	School Street and Carlton Avenue Loop
5 4	Upper Pleasant Valley Road
4	Mill Street
6	Old Main Street
(3)	VT Route 15 Loop
(2)	Other: ~~Depot Street to Maple~~ Carlton to Church St.

3. What are your preferences for:

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

   Whatever works best for the flow

   Width: 5' minimum

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

4. Other concerns or comments?

   upgrade speed limit signs
   upgrade lighting to LED + vintage pole design

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

   Name: Deb Bouton *
   Address: 105 Main St Jeff
   Phone Number: 238 6147
   Email: dboutonvt@gmail.com

   * Mailing address = P.O. Box 303 05464

Jeffersonville
STP BP 13(15)
Local Concerns Meeting
July 14, 2015
Jeffersonville, VT

Submitted by:
Gary Chicoine
Jeffersonville resident
July 15, 2015

1) **What should the purpose of the project be?** Three points need to be stressed in the statement of purpose: 1) safety of pedestrians and cyclists, 2) improvement of and expansion of walking/biking infrastructure, 3) preservation of small country village look and feel.
2) **How would I prioritize the following areas for pedestrian improvements?**
   2d – School Street/Carlton Ave loop
   3d – Upper Pleasant Valley Road
   5th – Mill Street
   6th – Old Main Street
   4th – VT Rte 15 loop
   1st – Section of Main St starting at Carlton Ave and running south/southwest around BLIND corner onto Church St west to Maple St intersection with Mill St dumping traffic into it.
3) **What are my preferences for location, width, and surface type of sidewalks/Improvements?** Sidewalks should be separated from road by grassy strip and, where appropriate, curbs. Sidewalks should be 5' in width and made of poured concrete.
4) **Other comments and concerns:** As I stated twice in last night's meeting the confluence of busy roads in the intersection referenced in #2 above (Main, Church, and Mill) must be a separate and specifically named segment of this project. It is the busiest and most treacherous pedestrian/cyclist area in the entire village. This intersection must be evaluated and planned for on a holistic basis. Improvements on these three streets outside of this immediate area can then be dealt with as separate downstream project segments.
5) **Contact info:**
   Gary S. Chicoine
   88 Upper Pleasant Valley Road
   PO Box 397
   Jeffersonville, VT
   Cell tel: 802-851-5052
   Email: gchicoine@myfairpoint.net

Jeffersonville
STP BP 13(15)
Local Concerns Meeting
July 14, 2015
Jeffersonville, VT

DUFRESNE GROUP
CONSULTING ENGINEERS
459 Portland Street
Suite 102
Saint Johnsbury, Vermont 05819
Tel: (802) 748-8605 Fax: (802) 748-4512
E-mail: aday@dufresnegroup.com

1. What should the purpose of this project be?
To develop a safe means for pedestrians and cyclists to maneuver throughout town and to from rail trail. Currently, the infrastructure does not allow for safe navigation and is very dated.

2. How would you prioritize the following areas for pedestrian improvements (enter numbers 1-5 with 1 being highest priority)?

School Street and Carlton Avenue Loop	1
Upper Pleasant Valley Road	5
Mill Street	4
Old Main Street	3
VT Route 15 Loop	2
Other:	

3. What are your preferences for:
Location (i.e. east or west side, separated or adjacent to road, etc.): no preference

Width: wider than std sidewalk

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

4. Other concerns or comments? curbs need to be incorporated

5. If you are willing, please provide your contact information so we can contact you with any follow up questions.
Name: Matt Niklaus
Address: 296 Craig Lane Jeffersonville
Phone Number: 802-760-7371
Email: MNiklaus99@yahoo.com

Jeffersonville Alternatives Meeting, November 24, 2015			Comments	Preferred Alternatives
Main/Church/Mill Street Intersection	**Alternative 1**	Sidewalk improvements on the east and west sides of intersection from Carlton Ave to Maple Street, widen sidewalk on west to 8' and addition of a crosswalk at Carlton Ave	would allow students to walk to school safely	
	Alternative 2	Sidewalk improvements from Carlton Ave to Maple Street on the east and west sides of intersection, sharrows and addition of a crosswalk at Carlton Ave		
School Street	**Alternative 1**	Concrete Sidewalk on south side only with Granite Curb and NO bike lanes	Would allow students to walk around the school block safely on "Walk it Wednesdays" (school based activity that encourages physical fitness)	
	Alternative 2	Concrete Sidewalk on south side only with Granite Curb and bike lanes		
	Alternative 3	Asphalt Shared Use pathway on south side only with curb		
Carlton Avenue	**Alternative 1**	Concrete Sidewalk with Granite Curb on north side and NO bike lanes	Would allow students to walk around the school block safely on "Walk it Wednesdays" (school based activity that encourages physical fitness)	
	Alternative 2	Concrete Sidewalk with Granite Curb on north side and bike lanes		
	Alternative 3	Asphalt Shared Use pathway with curb on north side		
Upper Pleasant Valley Road	**Alternative 1**	Concrete Sidewalk (East Side) with Granite Curb and NO bike lanes	Provide safe walk to school for students	
	Alternative 1w	Concrete Sidewalk (West Side) with Granite Curb and NO bike lanes		
	Alternative 2	Concrete Sidewalk (East side) with Granite Curb and bike lanes		
	Alternative 3	Asphalt Shared Use pathway on West side with curb		
	Alternative 4	Concrete Sidewalk (West side) with Granite Curb and bike lanes		
VT Route 15		Asphalt Shared Use pathway and boulevard		
Old Main Street	**Alternative 1**	Concrete Sidewalk with Granite Curb and NO bike lanes	Would allow students to walk around the school block safely on "Walk it Wednesdays" (school based activity that encourages physical fitness)	
	Alternative 2	Concrete Sidewalk with Granite Curb and parallel parking		
	Alternative 3	Gravel pathway east side		
Mill Street	**Alternative 1**	Concrete Sidewalk with Granite Curb on north side and 3' wide bike lanes to rescue	Provide safe walk to school for students	
	Alternative 2	Asphalt Shared Use pathway with curb on north side to rescue		
	Alternative 3	Bike lanes only to swimming hole		

Jeffersonville Alternatives Meeting, November 24, 2015			Comments	Preferred Alternatives
Church Street	Alternative 1	Concrete Sidewalk with Granite Curb and boulevard on South Side of Church Street, crosswalk near UPV, bulb outs for crosswalks	Provide safe walk to school for students	
	Alternative 2	8' wide shared use pathway and boulevard on South Side of Church Street, crosswalk near UPV, bulb outs for crosswalks		
	Alternative 3	Improve existing sidewalk to meet ADA only, crosswalk near UPV and Village offices, bulbouts for crosswalks		
Main Street (Carlton Ave to Old Main St)	Alternative 1	Replace existing sidewalk to meet ADA requirements, with west side being 8' wide, add curb, addition of crosswalk at Library and bulb outs for crosswalks	Provide safe walk to school for students	
	Alternative 2	Replace existing sidewalk to meet ADA requirements, add curb, add sharrows, addition of crosswalk at Library and bulb outs for crosswalks		
Main Street (Old Main Street to VT 15)	Alternative 1	Concrete Sidewalk with Granite Curb on south side, 4' wide bike lanes	Safe access to bike path for riding, snowshoeing, xcountry skiing for students and community residents	
	Alternative 2	8' wide asphalt path with Granite Curb on south side		
Depot Street		Concrete Sidewalk with Granite Curb and NO bike lanes on south side	Provide safe walk to school for students	
Maple Street		Replace existing sidewalk with concrete sidewalk	Provide safe walk to school for students	

Name Sue Reed, CES school nurse
Address 232 Burnor Road Jeffersonville
Phone Number 802 644-8821 x 140
Email sreed@cesvt.net

Please return to Rob Moore at rob@lcpcvt.org or Andrea Day at aday@dufresnegroup.com

Jeffersonville Alternatives Meeting, November 24, 2015			Comments	Preferred Alternatives
Main/Church/Mill Street Intersection	**Alternative 1**	Sidewalk improvements on the east and west sides of intersection from Carlton Ave to Maple Street, widen sidewalk on west to 8' and addition of a crosswalk at Carlton Ave	$176K	Preferred - a bit cheaper
	Alternative 2	Sidewalk improvements from Carlton Ave to Maple Street on the east and west sides of intersection, sharrows and addition of a crosswalk at Carlton Ave	$190K	
School Street	**Alternative 1**	Concrete Sidewalk on south side only with Granite Curb and NO bike lanes	$164K	
	Alternative 2	Concrete Sidewalk on south side only with Granite Curb and bike lanes	$176K	
	Alternative 3	Asphalt Shared Use pathway on south side only with curb	$140K	preferred
Carlton Avenue	**Alternative 1**	Concrete Sidewalk with Granite Curb on north side and NO bike lanes	$211K	
	Alternative 2	Concrete Sidewalk with Granite Curb on north side and bike lanes	$234K	
	Alternative 3	Asphalt Shared Use pathway with curb on north side	$201K	preferred
Upper Pleasant Valley Road	**Alternative 1**	Concrete Sidewalk (East Side) with Granite Curb and NO bike lanes	$667K	
	Alternative 1w	Concrete Sidewalk (West Side) with Granite Curb and NO bike lanes		
	Alternative 2	Concrete Sidewalk (East side) with Granite Curb and bike lanes	$688K	
	Alternative 3	Asphalt Shared Use pathway on West side with curb	$485K	
	Alternative 4	Concrete Sidewalk (West side) with Granite Curb and bike lanes	$583K	preferred
VT Route 15		Asphalt Shared Use pathway and boulevard	$393K Probably done last, if done at all	
Old Main Street	**Alternative 1**	Concrete Sidewalk with Granite Curb and NO bike lanes	$115K	
	Alternative 2	Concrete Sidewalk with Granite Curb and parallel parking	$126K	
	Alternative 3	Gravel pathway east side	$29K	preferred
Mill Street	**Alternative 1**	Concrete Sidewalk with Granite Curb on north side and 3' wide bike lanes to rescue	$165K	
	Alternative 2	Asphalt Shared Use pathway with curb on north side to rescue	$139K	preferred
	Alternative 3	Bike lanes only to swimming hole	$2K	

Jeffersonville Alternatives Meeting, November 24, 2015			Comments	Preferred Alternatives
Church Street	Alternative 1	Concrete Sidewalk with Granite Curb and boulevard on South Side of Church Street, crosswalk near UPV, bulb outs for crosswalks	$296K	
	Alternative 2	8' wide shared use pathway and boulevard on South Side of Church Street, crosswalk near UPV, bulb outs for crosswalks	$258K	
	Alternative 3	Improve existing sidewalk to meet ADA only, crosswalk near UPV and Village offices, bulbouts for crosswalks	$256K	Preferred
Main Street (Carlton Ave to Old Main St)	Alternative 1	Replace existing sidewalk to meet ADA requirements, with west side being 8' wide, add curb, addition of crosswalk at Library and bulb outs for crosswalks	$682K	Preferred
	Alternative 2	Replace existing sidewalk to meet ADA requirements, add curb, add sharrows, addition of crosswalk at Library and bulb outs for crosswalks	$726K	
Main Street (Old Main Street to VT 15)	Alternative 1	Concrete Sidewalk with Granite Curb on south side, 4' wide bike lanes	$141K	Preferred
	Alternative 2	8' wide asphalt path with Granite Curb on south side	$118K	
Depot Street		Concrete Sidewalk with Granite Curb and NO bike lanes on south side	$84K	Needs to be done
Maple Street		Replace existing sidewalk with concrete sidewalk	$149K	Needs to be done

Name Jay Allen Total cost = $2.772M

Address 99 Upper Pleasant Valley Rd

Phone Number 644-6638

Email jayallen201@gmail.com

Please return to Rob Moore at rob@lcpcvt.org or Andrea Day at aday@dufresnegroup.com

Jeffersonville Alternatives Meeting, November 24, 2015			Comments	Pref. Alts. SAFETY	Pref. Alts. Aesthetics	Pref. PHASE
Main/Church/Mill Street Intersection	**Alternative 1**	Sidewalk improvements on the east and west sides of intersection from Carlton Ave to Maple Street, widen sidewalk on west to 8' and addition of a crosswalk at Carlton Ave	When Union Bank vacates its current site, traffic congestion & parking issues in this area might lessen, depending on new use. The site could potentially become a parking area. (This is probably unlikely, but, maybe worth keeping in mind.)	1		I
	Alternative 2	Sidewalk improvements from Carlton Ave to Maple Street on the east and west sides of intersection, sharrows and addition of a crosswalk at Carlton Ave			1	
School Street	**Alternative 1**	Concrete Sidewalk on south side only with Granite Curb and NO bike lanes	Alt.#1 (concrete w/granite curbs) would have a stronger aesthetic effect (Historic District). Re: Alt.#2 - If traffic is calmed, would the need for bike lanes on this block lessen?		3	I
	Alternative 2	Concrete Sidewalk on south side only with Granite Curb and bike lanes				
	Alternative 3	Asphalt Shared Use pathway on south side only with curb		3		
Carlton Avenue	**Alternative 1**	Concrete Sidewalk with Granite Curb on north side and NO bike lanes	Alt.#1 (concrete w/granite curbs) would have a stronger aesthetic effect (Historic District). Re: Alt.#2 - If traffic is calmed, would the need for bike lanes on this block lessen?		2	I
	Alternative 2	Concrete Sidewalk with Granite Curb on north side and bike lanes				
	Alternative 3	Asphalt Shared Use pathway with curb on north side		2		
Upper Pleasant Valley Road	**Alternative 1**	Concrete Sidewalk (East Side) with Granite Curb and NO bike lanes	Could Alternatives 1w, 3, or 4 be built mostly on the west, then, cross-over to a short section on the east opposite the Inn?			I
	Alternative 1w	Concrete Sidewalk (West Side) with Granite Curb and NO bike lanes			4	
	Alternative 2	Concrete Sidewalk (East side) with Granite Curb and bike lanes				
	Alternative 3	Asphalt Shared Use pathway on West side with curb		4		
	Alternative 4	Concrete Sidewalk (West side) with Granite Curb and bike lanes				
VT Route 15		Asphalt Shared Use pathway and boulevard	Could be 10% - 15% shorter if a path is built on the park portion of the Jolley parcel with this section connecting to it?	12	12	IV
Old Main Street	**Alternative 1**	Concrete Sidewalk with Granite Curb and NO bike lanes	Other projects that are further along in their development stages (flood mitigation, trail planning, potential parking solutions) may alter usage &/or scope of improvements needed in these areas. (See also additional comments below.)		13	IV
	Alternative 2	Concrete Sidewalk with Granite Curb and parallel parking				
	Alternative 3	Gravel pathway east side		13?		
Mill Street	**Alternative 1**	Concrete Sidewalk with Granite Curb on north side and 3' wide bike lanes to rescue			5	II
	Alternative 2	Asphalt Shared Use pathway with curb on north side to rescue		5		
	Alternative 3 *(modified)*	Bike lanes only to swimming hole	Alt.#3: **Extend bike lanes to COVERED Bridge/Brewster River Park** (w/cost increase to ~5K?) [Would VTrans pay for doing this?]	8	8	III
Church Street	**Alternative 1**	Concrete Sidewalk with Granite Curb and boulevard on South Side of Church Street, crosswalk near UPV, bulb outs for crosswalks	Historic District / Village Core Alt.#1 & #2: Consider additional crosswalk in area of Mann's Meadow/Madonna Mobil? Alt.#1 & #2: Consider removing existing sidewalk?			III
	Alternative 2	8' wide shared use pathway and boulevard on South Side of Church Street, crosswalk near UPV, bulb outs for crosswalks		9		
	Alternative 3	Improve existing sidewalk to meet ADA only, crosswalk near UPV and Village offices, bulbouts for crosswalks				
	Alternative 4 *(new)*	Improve existing sidewalk to concrete w/Granite Curb, crosswalk near UPV and Village offices, bulbouts for crosswalks			9	

Jeffersonville Alternatives Meeting, November 24, 2015			Comments	Pref. Alts. SAFETY	Pref. Alts. Aesthetics	Pref. PHASE
Main Street (Carlton Ave to Old Main St)	Alternative 1	Replace existing sidewalk to meet ADA requirements, with west side being 8' wide, add curb, addition of crosswalk at Library and bulb outs for crosswalks	Horsehead posts in front of Village Sampler are ICONIC! (so would recommend caution with disturbin them). There used to be a stunning matching weathervane on top of the building (caused a big uproar in community when it was stolen).	7	7	II
	Alternative 2	Replace existing sidewalk to meet ADA requirements, add curb, add sharrows, addition of crosswalk at Library and bulb outs for crosswalks				
Main Street (Old Main Street to VT 15)	Alternative 1	Concrete Sidewalk with Granite Curb on south side, 4' wide bike lanes	Might only need to be half as long as currently depicted if a path is built on the park portion of the Jolley parcel with this section connecting to it?	11	11	III
	Alternative 2	8' wide asphalt path with Granite Curb on south side				
Depot Street		Concrete Sidewalk with Granite Curb and NO bike lanes on south side	**If additional parking is created (and possible CCTA relocation?) near smaller silo on Village/Park property , this would be an important segment.**	6	6	II
Maple Street		Replace existing sidewalk with concrete sidewalk	Historic District / Village Core	10	10	III

Additional Comments:

PHASED APPROACH:

PHASE I - Emphasis on SAFETY. These are all critical areas.

PHASE II - These three areas (along with Phase I areas) would strengthen the link between key areas of the Village Core (please note comments pertaining to Depot Street in particular) and, potentially, the aesthetic appearance of the Historic District.

PHASE III - These four areas further connectivity to/aesthetics of the Village Core and the Historic District. (Please note addition of another of the Mill Street alternatives - extending bike lane to the Covered Bridge/Brewster River Park - included in this phase.)

PHASE IV - Scope of improvements needed in these areas may change in next few years, particularly once the Jolley parcel is converted to public use green space Would recommend letting flood mitigation & trail planning projects, potential parking resolutions, etc. evolve further before determining actual needs.

AESTHETICS / MASTER PLAN

The second preferences column lists the alternatives I would pick if safety was/is less of a concern (and money no object!) I'd be curious to see a Master Plan rendering that incorporated 5' concrete sidewalks w/granite curbs throughout the HISTORIC DISTRICT, giving a more unified, aesthetic appearance to this important asset. Even if many phases are not actually implemented anytime soon (or, ever), it would still be good to consider the overall impression/appearance of a fully-implemented plan - where should sidewalks be uniform?, where would this not make much difference?, etc. (so we don't build something, then later, wish we'd taken this into account).
That said, too much emphasis here could run the risk of "over-gentrifying" Jeffersonville!

OLD MAIN STREET ***(Where can I get more info about the Archeologically-sensitive areas here?)***

[Hopefully, these don't come across as NIMBY comments! (Or, should that be NIMFY?!) Just, have been looking at this area for a long time.]

Re: Alt.#1: Aesthetically, this might tie in nicely with improvements to the rest of the Village. (A boulevard here might be a detriment?)

Re: Alt.#2: Not sure how much of an issue delineated parking on Old Main Street is. Even under current conditions, parking for dozens of people attending multiple events at the Bryan Gallery throughout the year, lunchtime crowd overflow from 158 Main, etc., has always seemed quite orderly. That said, if delineated parallel parking areas here would be of benefit, would recommend: 1) not making it look overly developed to avoid degrading the agricultural character (old farmhouses, gardens, etc.) of this portion of the Historic District; 2) maintaining access to compost bins by many local gardeners (incl. Community Gardens); and, 3) try to keep the increase of impervious surface area in the 100-yr. floodplain to a minimum.

Re: Alt.#3: This might be good as a temporary measure, providing a clear link to the imminent Trailhead (at the Community Center) and the unimproved path (under the Rt. 15 bridge) to the bikepath. I don't think it's a good alternative for the long-term (re: maintenance, aesthetics, etc.)

All in all, although these alternatives would provide good linkage with the rest of the Village, I don't think there's a lot of "bang for the buck" ($5.8K to 78K local share) with them when it comes to addressing safety issues.

OTHER

- Mimizing encroachments on peoples' front lawns is generally good.
- Optimizing boulevard areas is generally good.

SUMMARY

- SAFETY is the main issue and needs to be addressed. The "Phase I" areas are critical.
- Everything else (Phases II-IV) is, to some degree, gravy. If local matches are not fully funded by grants, concerns about any additional tax burden on businesses & residents could easily outweigh the benefits of implementing these alternatives.

Name	Jean Jenkauskas	Please return to Rob Moore at rob@lcpcvt.org or Andrea Day at aday@dufresnegroup.com	
Address	PO Box 162		
Phone Number	(802) 644-5048		
Email	jaheba@myfairpoint.net		

Appendix C

Right of Way and Surveys

DUFRESNE GROUP
CONSULTING ENGINEERS

Truline
LAND SURVEYORS, INC.

448 SUMMER STREET, SUITE 102
ST. JOHNSBURY, VT 05819-2159
PHONE/FAX: (802) 748-3946 / truline448@gmail.com

August 21, 2015

Dufresne Group
Attn. Andrea J. Day, PE
459 Portland Street
St. Johnsbury, VT 05819

Re: Jeffersonville Street Project Right-of-Ways, Cambridge, VT

Dear Andrea,

Following is a report for each of the highways for the Oak Street Drainage Project area.

VT Route 15:	No record layout was observed. Various width as shown on VT Highway ROW Plans for Project F 030 2(1).
Main Street (VT 108):	No record layout observed. An assumed width of 3 rods (49.5 ft) is shown on various record surveys.
Old Main Street (TH 73):	No record layout was observed. Book 42, Page 374 of the Cambridge Land Records references TH 73 (old VT 15) as being three rods wide (49.5 ft).
School Street (TH 55):	Laid out as 40 ft wide in April 1910 as recorded in Book 24, Page 418 of the Cambridge Land Records.
Carlton Avenue (TH 55):	No record layout observed. An assumed width of 3 rods (49.5 ft) is shown on various record surveys.
Mill Street (VT 108):	General Records Book B, Page 294 dated January 7, 1827 is assumed to be the layout for VT 108 and describes a width of 82.5 feet. An assumed width of 3 rods (49.5 ft) is shown on various record surveys.

Upper Pleasant Valley Rd.:	No record layout was observed. VT Highway ROW Plans for Project RS 0233 (1) SA depict a 4 rod (66 ft) right-of-way. An assumed width of 3 rods (49.5 ft) is shown on various record surveys.
Church Street (VT 108):	VT Highway ROW Plans for Project F 030 2(1) assume a 3 rod right-of-way. General Records Book B, Page 294 dated January 7, 1827 is assumed to be the layout for VT 108 and describes a width of 82.5 feet. Various record surveys along this street depict various widths of 49.5 ft, 82.5 ft and 99 ft.
Maple Street (TH 53):	No record layout observed. An assumed width of 3 rods (49.5 feet) is shown on various record surveys.
Depot Street (TH 53/54):	No record layout observed. An assumed width of 3 rods (49.5 feet) is shown on various record surveys.

Please review and contact me with any questions. If copies of any of the documents are needed please let me know.

Sincerely,

Shane B. Clark, LS
Truline Land Surveyors

MAIN STREET
VT. RTE. 108
30 VT. RTE. 15

CARLTON AVENUE

DEEDED 225'
VOL. 28, PG. 278

CONC. DOCK

MASONRY SMOKE HOUSE

HANLEY'S GENERAL STORE & APARTMENTS
PROPERTY OF
HANLEY'S INC.
VOL. 46, PG. 266

PROPERTY OF
DONALD & ELIZABETH REYNOLDS
VOL. 75, PG. 290

ITEM 250
ANGLE IRON

TRACTOR TIRE

HOUSE

71.0'

DEEDED 71' VOL. 45, PG. 95

PROPERTY OF
ARLIE NOLAN WILLIAMSON
VOL. 42, PG. 236

MAGNETIC NORTH 1991

PORCH

S22-25W
9.9'

S61-51E 61.0'

32.6'

S68-17E

22.3'

69.1'

S55-05E 91.4'

4.34'

STAIRWAY

LOT 2
PROPERTY OF
ERNO
VOL. 60,
PG. 309

LOT 1
PROPERTY OF
ERNO
VOL 45
PG 139

S22-28W 93.3'

S68-06E 5.9'

SHED ENCROACHMENT BY A. WILLIAMSON

SHED

LOT 3
PROPERTY OF
ERNO
VOL. 113 PG. 380
0.276 ACRES TO RIGHT OF WAY LIMIT

61.85'

S40-23W

REPLACED
½" IRON PIPE

½" IRON BAR, PROBABLE OLD SIGN FOUNDATION ACCORDING TO R. ERNO

CHORD N14-50W 59.7'

±169' ALONG RIGHT OF WAY

RUDY'S HARDWARE STORE & APARTMENTS
0.173 ACRES TO RIGHT OF WAY LIMIT - LOT 1&2

LANDSCAPED TRAFFIC ISLAND

CHURCH ST.

SIDEWALK

S22-34W 40.9'

N 40-57E 105.1'

30.8'

S23-08W

HOUSE

GARAGE

PORCH

3/4" IRON PIPE

BOUNDARY AGREED TO BETWEEN WILLIAMSON AND ERNO

COR. 6 TO COR. 5
S47-42W 102.1'

S47-42W 99.85'

PROPERTY OF
CLAYTON & MARY LOU WILLIAMSON
VOL. 51, PG. 185

N40-57E 6.2'

±90.4' ALONG RIGHT OF WAY LIMIT

N21-02W 90.1'

CHORD

ITEM 249

S47-42W 2.25'

CORNER & NO MARKER SET

DRIVEWAY

MILL STREET

VERMONT ROUTE 108

TO STOWE

MILL ST.
121

LEGEND

- PROPOSED PROPERTY LINE
- RIGHT OF WAY LIMIT
- EDGE OF TRAVELED HIGHWAY
- EDGE OF PAVEMENT
- BUILDING LINE
- CENTERLINE TRAVELED WAY
- FIRE HYDRANT
- UTILITY POLE
- SET 5/8" RE-BAR
- EXISTING MARKER
- CALCULATED POINT
- CORNER NUMBER

1.0 THE INFORMATION GATHERED AND CONSIDERED DURING COMPILATION OF THIS MAP IS AS FOLLOWS:
1.1 A SURVEY MAP ENTITLED "PLAT OF SURVEY FOR RAYMOND C. WILLIAMSON IN THE VILLAGE OF JEFFERSONVILLE, VT. IN THE TOWN OF CAMBRIDGE, VT.", DATED MAY 1973, PREPARED BY JOHN A. WARREN AND RECORDED IN THE CAMBRIDGE LAND RECORDS.
1.2 NO INFORMATION HAS BEEN RECOVERED FROM THE PUBLIC LAND RECORDS OR COMMON KNOWLEDGE OF THE LAND OCCUPIED BY MAIN STREET OR MILL STREET. A THREE ROD RIGHT OF WAY HAS BEEN ASSUMED FOR MILL STREET AND WAS LOCATED 25 FEET MORE OR LESS EASTERLY OF THE CENTERLINE. CORNER 7 WAS LOCATED ON THE APPROXIMATE EAST LINE OF THE EAST SIDE OF THE MAIN STREET SIDEWALK. THIS IS THE APPROXIMATE MAIN STREET RIGHT OF WAY LIMIT.
1.3 FIELD SURVEY MEASUREMENTS WERE OBTAINED USING A THEODOLITE AND ELECTRONIC DISTANCE METER. MAGNETIC BEARINGS SHOWN WERE EXTENDED FROM A SURVEY OF THE HANLEY PROPERTY LOCATED ON MILL STREET.
1.4 ABSTRACTS FROM THOSE PARTICULAR DEEDS TO WHICH SPECIFIC REFERENCE IS MADE ON THIS MAP AND DEEDS OF PREVIOUS TITLEHOLDERS. ONLY DEEDS WHICH ARE A MATTER OF PUBLIC RECORD HAVE BEEN EXAMINED AND UTILIZED IN THIS SURVEY PROVIDED THEY ARE PROPERLY INDEXED.
1.5 ORAL EVIDENCE SUPPLIED BY RUDOLPH ERNO, CLAYTON WILLIAMSON, KIM HANLEY AND ARLIE NOLAN WILLIAMSON.

2.0 THE METHOD OF DETERMINATION OF THE PARCEL BOUNDARIES WAS AS FOLLOWS:
2.1 CORNER 1 WAS LOCATED ON THE NORTHEASTERLY RIGHT OF WAY LIMIT OF MILL STREET ON THE SOUTHWESTERLY EXTENSION OF A LINE FROM CORNER 3 THROUGH CORNER 2.
2.2 CORNERS NUMBERED 2, 5 AND 8 WERE LOCATED AT EXISTING IRON PIPES. CORNER 2 WAS TAKEN AS EFFECTIVE MONUMENTATION OF A POINT ON THE WESTERLY BOUNDARY OF THE FORMER JACQUES PROPERTY AND A POINT ON THE EASTERLY BOUNDARY OF THE FORMER HANLEY PROPERTY. CORNER 8 WAS TAKEN AS EFFECTIVE MONUMENTATION OF A POINT DIVIDING THE ERNO PROPERTY. CORNER 5 WAS TAKEN AS EFFECTIVE MONUMENTATION OF THE SOUTHEASTERLY CORNER OF ARLIE WILLIAMSON PROPERTY AND THE NORTH-WESTERLY CORNER OF CLAYTON AND MARY WILLIAMSON PROPERTY.
2.3 CORNER 3 WAS LOCATED AT THE DEEDED DISTANCE OF 71 FEET SOUTHERLY OF CARLTON AVE. CENTERLINE IN LINE WITH THE DRIP LINE OF THE FORMER JACQUES HOUSE.
2.4 CORNER 4 WAS LOCATED AT THE DEEDED DISTANCE OF 71 FEET SOUTHERLY OF CARLTON AVE. CENTERLINE ON THE LINE FROM CORNER 5 TO A POINT LOCATED AT THE DEEDED DISTANCE OF 225 FEET EASTERLY OF THE NORTHEASTERLY CORNER OF HANLEY'S STORE.
2.5 CORNER 9 WAS LOCATED ON THE NORTHEASTERLY RIGHT OF WAY LIMIT OF MILL STREET ON THE LINE FROM CORNER 5 THROUGH ITEM 249.
2.6 CORNER 7 WAS LOCATED AT A POINT IN AGREEMENT BETWEEN KIM HANLEY AND RUDOLPH ERNO OF THE BETWEEN STORE BUILDINGS. CORNERS NUMBERED 10, 12, AND 13 WERE LOCATED AT THE DEEDED DISTANCE OF 9 FEET EASTERLY OF THE STOREHOUSE BUILDING AS CALLED FOR IN VOL. 45, PG. 421.
2.8 CORNER 11 WAS LOCATED ON THE NORTH FACE OF THE SO-CALLED STOREHOUSE FOUNDATION 5 FEET EAST OF THE EAST PORTION OF SAID BUILDING.
3.0 DUE TO LACK OF FIELD EVIDENCE MENTIONED IN DEEDS (BUILDINGS, SIDEWALK, IRON PIPES, GARDEN) ALL CORNERS ARE APPROXIMATE AND SHOULD BE AGREED TO BETWEEN ADJOINING LANDOWNERS.
4.0 NO ATTEMPT HAS BEEN MADE TO IDENTIFY OR DELINEATE ON THIS MAP ANY EASEMENTS, RIGHTS OF WAY, PUBLIC LAND LOCATION, ENCROACHMENTS, OBJECTIONS TO TITLE, ETC., EXCEPT AS NOTED ON THIS MAP.
5.0 I HEREBY CERTIFY THAT THE ACREAGE AND MEASUREMENTS BETWEEN CORNERS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. HOWEVER DUE TO LACK OF FIELD EVIDENCE AND VAGUE DEED DESCRIPTIONS, BOUNDARIES ILLUSTRATED HEREON HAVE NOT BEEN CONFIRMED WITH THEIR DEEDED LOCATIONS. THIS MAP IS BASED ON INFORMATION CONTAINED IN THE GENERAL NOTES.

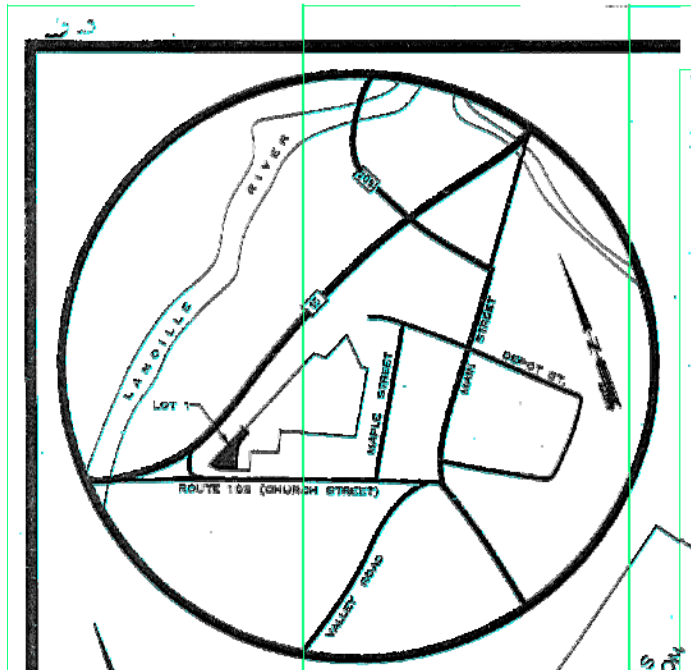
80' 100' 120' 140' 160' 180' 200' 220' 240'

PROPERTY OF
RUDOLPH & ELEANOR ERNO
VOL. 45, PG. 139, VOL. 60, PG. 309, VOL. 113, PG. 380
VT. RTE. 108 VILLAGE OF JEFFERSONVILLE, VT.

HANNON ASSOCIATES
LICENSED LAND SURVEYOR
RR 1, BOX 196
JEFFERSONVILLE, VT. 05464

DATE: JUNE 20, 1992 SCALE: 1" = 20'
DRAWN BY: TWT CHECKED: WH
SURVEYED BY: WH, DR 7PM,
PLAT NO.: 92-228

STATE OF VERMONT
WILLIAM H. HANNON No. 594 REGISTERED LAND SURVEYOR
SURVEYOR



LOCATION PLAN
NTS

GAS STATION

JACK CORSE
N/F

A

(S27°38'20"E 39.00')

N62°04'00"E
(172.19')

(S62°04'00"W 49.27')

(L=87.23')
(R=55.67')

REMAINING LANDS OF
FRANCONIA VALLEY ASSOCIATES
N/F
(±5.3 ACRES)

(N88°47'08"W 90.01')
N88°47'08"W 90.14'

(N88°14'07"W 80.41')
N88°14'00"W 80.45'

F. FORTIN
N/F

D. NEELEY
N/F

80.00'

LOT 1
0.42 ACRES

102.48'
(S21°44'00"W)

100.85'
S21°44'00"W

N62°04'00"E
157.51'

MAGNETIC

SET NEW PIPE TO REPLACE MISSING PIPE

49.25'
N36°35'00"W

(N68°42'00"W 106.08')
S68°42'00"E

B

156.10'

(N68°42'00"W 80.02

STATE OF VERMONT
N/F

TO CAMBRIDGE VILLAGE

4 ROD R.O.W. LIMITS (99')
FROM CAMBRIDGE LAND RECORDS

4 ROD R.O.W. LIMITS (49.5')
FROM VT. HIGHWAY PLANS
PROJ. F 030-2(1)

VERMONT ROUTE 108

TO SMUGGLERS NOTCH

BOUNDARY LINE

○	IRON PIPE SHOWN ON PLAN BY WILLARD L. GOVE L.S.(NOT FOUND)
⊙	IRON PIPE FOUND
⊛	REBAR FOUND
■	CONCRETE MONUMENT TO BE SET
●	IRON PIPE TO BE SET
N/F	NOW OR FORMERLY
(S82°04'00"W 49.27') / 49.25' N36°35'00"W	LAMOUREUX & STONE DATA / GOVE SURVEY DATA

NOTES:

1. BEARINGS ARE BASED ON THE ABOVE REFERENCED SURVEY BY WILLARD L. GOVE L.S. .
2. FOLLOWING COMPLETION OF CONSTRUCTION, THE OWNER(S) SHALL RETAIN A LICENSED LAND SURVEYOR AND REQUEST THAT HE/SHE SET THE CONCRETE MONUMENTS AND IRON PIPES INDICATED ON THIS PLAT. LAMOUREUX AND STONE WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY THAT MAY ARISE FROM THE FAILURE TO HAVE BEEN NOTIFIED BY THE OWNER(S) OR THEIR SUCCESSORS AND REQUESTED TO SET THE CONCRETE MONUMENTS AND IRON PIPES SHOWN ON THIS PLAT.

TOWN OF CAMBRIDGE
RECEIVED FOR RECORD _____ A.D. 19___
AT _____ O'CLOCK _____ MINUTES
AND RECORDED IN _____
ATTEST: _____ TOWN CLERK

THE BOUNDARY INFORMATION FOR LOT 1 FROM POINT "A" COUNTER-CLOCKWISE TO POINT "B" WAS TAKEN FROM A PLAT ENTITLED, " A TRANSIT & TAPE SURVEY, DR. ROGER W. AND MURIEL S. MANN PROPERTY", DATED JULY 31, 1978, BY WILLARD L. GOVE L.S., AS RECORDED IN PLAT VOL. VI, PAGE 40, IN THE CAMBRIDGE TOWN RECORDS. THE OTHER BOUNDARIES OF LOT 1 WERE SURVEYED BY LAMOUREUX & STONE CONSULTING ENGINEERS INC. . THIS PLAT CONFORMS WITH THE REQUIREMENTS OF 27 VSA 1403. DATED THIS 22nd DAY OF June, 1993

Douglas L. Henson L.S.

STATE OF VERMONT
DOUGLAS L. HENSON No. 856
REGISTERED LAND SURVEYOR

CHURCH ST. / VT 15 125

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

date	description	by
	REVISIONS	

THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:

- ☐ SKETCH/CONCEPT
- ☐ PRELIMINARY
- ■ FINAL
- ☐ RECORD DRAWING

OF SHEETS: 1

A PORTION OF LANDS OF
FRANCONIA VALLEY ASSOCIATES
ROUTE 108 JEFFERSONVILLE, VT

PROPERTY PLAT

proj. no. 90-04
survey DJG/DLH
design DJG
drawn LHA
checked DLH
date 4-7-93
scale 1"=20'
sht. no. PL-1

LAMOUREUX & STONE
Consulting Engineers Inc.
14 Morse Drive
Essex Jct., VT 05452
(802) 878-4450
27 High Street
St. Albans, VT 05478
(802) 524-5245

GENERAL NOTES

1.0 THE INFORMATION GATHERED AND CONSIDERED DURING COMPILATION OF THIS MAP IS AS FOLLOWS:

1.1 A SURVEY MAP ENTITLED "BOUNDARY SURVEY FOR TOWN OF CAMBRIDGE, VERMONT, FORMER BRICK CHURCH & TOWN HALL PROPERTY, CHURCH STREET JEFFERSONVILLE, VT.", DATED NOV. 14, 1996, PREPARED BY HANNON ASSOC., INC., TO BE RECORDED IN THE CAMBRIDGE LAND RECORDS.

1.2 A SURVEY MAP ENTITLED "PLAT OF SURVEY OF LOTS ON THE SOUTH SIDE OF MAIN STREET IN THE VILLAGE OF JEFFERSONVILLE, VT." DATED SEPT 1973, REVISED 1975, PREPARED BY JOHN A MARSH AND RECORDED IN THE CAMBRIDGE LAND RECORDS, PLAT BOOK 3, MAP NUMBER 12.

1.3 A SURVEY MAP ENTITLED "REVISED PLAN OF LAND IN JEFFERSONVILLE, CAMBRIDGE, VERMONT PROPERTY OF HOWARD C. AND LINDA L. CARY, DATED SEPT. 1975, JOB # 73-93, PREPARED BY J.P.R. ASSOCIATES AND RECORDED IN THE CAMBRIDGE LAND RECORDS, PLAT BOOK 3, MAP NUMBER 13.

1.4 A SURVEY MAP ENTITLED "NEW ENGLAND TELEPHONE & TELEGRAPH CO., BOSTON, MASS., PROPERTY SURVEY JEFFERSONVILLE, VERMONT," DATED NOV. 19, 1954, PREPARED BY FRED C. KOERNER, C. E..

1.5 ORAL EVIDENCE SUPPLIED BY JOHN BUSHEY OF VERMONT AOT, AND ROBERT REYNOLDS THROUGH RUDY ERNO; CAROL LOCKE & HOWARD CARY.

1.6 NO INFORMATION HAS BEEN RECOVERED FROM THE PUBLIC LAND RECORDS TO CONFIRM OWNERSHIP OF CHURCH STREET/VERMONT ROUTE 108. A THREE ROD RIGHT OF WAY HAS BEEN ASSUMED ACCORDING TO TITLE 19 V.S.A., SECTION 36, AND JOHN BUSHEY. HOWEVER, THE HISTORICAL RIGHT OF WAY MAY BE FIVE RODS WIDE.

1.7 FIELD SURVEY MEASUREMENTS WERE OBTAINED USING A THEODOLITE AND ELECTRONIC DISTANCE METER. MAGNETIC BEARINGS SHOWN WERE EXTENDED FROM A SURVEY ENTITLED "PROPERTY OF RUDOLPH & ELEANOR ERNO, VOL. 48, PG. 138, VOL. 60, PG. 309, VOL. 113, PG. 380, VT. RTE. 108 VILLAGE OF JEFFERSONVILLE, VT.", PREPARED BY HANNON ASSOCIATES AND RECORDED IN THE CAMBRIDGE LAND RECORDS, PLAT BOOK 7, MAP 41. BEARINGS SERVE TO DEFINE THE ANGULAR RELATIONSHIP BETWEEN THE COURSES SHOWN. DISTANCES ARE ENTERED HEREON IN FEET.

1.8 ABSTRACTS FROM THOSE PARTICULAR DEEDS RECOVERED IN THE CAMBRIDGE LAND RECORDS TO WHICH SPECIFIC REFERENCE IS MADE ON THIS MAP AND DEEDS OF PREVIOUS TITLEHOLDERS. ONLY DEEDS WHICH ARE A MATTER OF PUBLIC RECORD IN THE TOWN OF CAMBRIDGE HAVE BEEN EXAMINED AND UTILIZED IN THIS SURVEY PROVIDED THEY HAVE BEEN PROPERLY INDEXED.

2.0 THE METHOD OF DETERMINATION OF THE PARCEL BOUNDARIES WAS AS FOLLOWS:

2.1 CORNERS NUMBERED 1,2,3 & 4 WERE LOCATED AT POINTS IN CONFORMANCE WITH THE HANNON SURVEY MENTIONED IN NOTE 1.1.

2.2 CORNERS NUMBERED 5,6, & 7 WERE LOCATED AT POINTS IN CONFORMANCE WITH MARSH SURVEY MENTIONED IN NOTE 1.2 AND VOL. 48, PAGES 359 & 369 OF THE CAMBRIDGE LAND RECORDS.

2.3 CORNERS NUMBERED 8 & 9 WERE LOCATED AT EXISTING IRON PIPES POINTED OUT BY MARK PECOR AS HIS TRUE CORNERS, SAID CORNERS ARE SUBSTANTIALLY IN THE LOCATION ILLUSIRATED ON THE MARSH SURVEY MENTIONED IN NOTE 1.2.

2.4 CORNERS NUMBERED 10 & 11 WERE LOCATED ON A LINE AT THE DEEDED DISTANCE OF 62.5 FEET WESTERLY OF AND PARALLEL TO THE LINE FROM CORNER 1 TO CORNER 2. CORNER 10 WAS LOCATED 165 FEET SOUTHERLY OF AND PERPENDICULAR TO THE NORTHWESTERLY CORNER OF THE BRICK CHURCH IN CONFORMANCE WITH VOL. 17, PAGE 436 AND VOL. 118, PAGE 207 OF THE CAMBRIDGE LAND RECORDS. CORNER 11 WAS LOCATED ON THE SOUTHERLY RIGHT OF WAY LIMIT OF CHURCH STREET, VT. ROUTE 108, IN ACCORDANCE WITH JOHN BUSHEY OF VERMONT AGENCY OF TRANSPORTATION. HOWEVER, THE HISTORICAL RIGHT OF WAY MAY BE MUCH WIDER.

3.0 NO ATTEMPT HAS BEEN MADE TO IDENTIFY OR DELINEATE ON THIS MAP ANY EASEMENTS, RIGHTS OF WAY, PUBLIC LAND LOCATION, ENCROACHMENTS, OBJECTIONS TO TITLE, ETC., EXCEPT AS NOTED ON THIS MAP.

4.0 THIS PROPOSED SUBDIVISION MAY REQUIRE LOCAL, STATE, AND/OR FEDERAL PERMITS, WHICH IS THE SOLE RESPONSIBILITY OF THE LANDOWNERS.

LEGEND

- SET 5/8" REBAR
- 3 CORNER NUMBER
- EXISTING IRON PIPE
- EXISTING 5/8" REBAR
- EXIST. MARBLE MONUMENT
- PLANTED BUSHES
- PROPERTY LINE
- PROPOSED PROPERTY LINE
- RIGHT OF WAY LIMIT
- EDGE OF PAVEMENT
- ℄ CENTERLINE OF TRAVELED WAY

ASSUMED 3 ROD RIGHT OF WAY CLAIMED BY JOHN BUSHEY OF VT. A.O.T., SEE NOTE 1.6

POSSIBLE LOCATION OF HISTORICAL RIGHT OF WAY RECOVERED IN TOWN RECORDS BOOK 8, PAGES 294-296.

TO VERMONT ROUTE 15

CAMBRIDGE FIRE STATION

PROPERTY OF COREY & MELISSA MERCY VOL. 129, PG.202

APPROX. LOCATION OF LINE DEPICTED ON RICH SURVEY

BOUNDARY DEPICTED ON MARSH SURVEY

REPLACED EXIST. 5/8" REBAR

N20-11E, 12.75'

S68-19E 81.35'

N59-34W 173.3'

DEEDED 99'

S68-08E, 97.85'

DEEDED 62.8'

1 1/2" IRON PIPE CLAIMED BY HOWARD CARY TO HAVE BEEN THE COMMON REYNOLDS, BELL, & CARY CORNER PRIOR TO 1975 DEEDS.

S50-21W, 12.15'

APPROXIMATE POSSESSION LINE & PROBABLE DEEDED BOUNDARY IN VOL.49, PG. 31 THIS BOUNDARY SHOULD BE CONFIRMED BY NEW WRITINGS.

S48-19W, 90.15'

BELL/REYNOLDS BOUNDARY PER MARSH SURVEY.

CLOTHESLINE POLE

S43-45E, 99.9'

S51-43W, 100.25'

PROPERTY OF HOWARD & LINDA CARY VOLUME 49, PAGE 223 VOLUME 46, PAGE 359

PROPERTY OF MILDRED BELL & CAROL TAYLOR VOLUME 116, PAGE 416

DEEDED 165'

N 21-55 E, 164.6'

DEEDED 161.5'

N 67-51 W, 161.3'

PROPERTY OF MARK PECOR VOL. 68, PG. 417

ITEM 100, IP, 0.9' ELY. OF BOUNDARY

REYNOLDS LAND IS SUBJECT TO A RIGHT OF WAY IN FAVOR OF THE TOWN OF CAMBRIDGE FOR ACCESS TO AND TO REPAIR THE MEETING HOUSE BUILDING; SEE VOLUME 26, PAGE 82, AND VOLUME 6, PAGE 300.

PROPERTY OF W. TIMBERS AND C. PRATT VOL. 116 PG. 423

PROPOSED BOUNDARY

PROPERTY OF REYNOLDS VOLUME 111, PAGE 508 VOLUME 32, PAGE 449 VOLUME 46, PAGE 360

N56-09W, 115.15

S27-53W 141.3'

N56-09W 72.0'

LOT B

S 27-52 W 156.9'

PROPERTY OF CONCOLOR, INC. VOLUME 129, PAGE 136

PROPERTY OF REYNOLDS TO BE CONVEYED TO THE TOWN OF CAMBRIDGE 0.245 ACRE

ITEM 135 EXIST. 3/4" IRON PIPE

ITEM 176, EXSTING 4" BY 4" MARBLE MONUMENT S6-09E 11.55' FROM REBAR

HOUSE

SANITARY SEWER LINE NO EASEMENT RECOVERED

PROPERTY OF REYNOLDS TO BE CONVEYED TO THOMAS & KATHLEEN KONTOS .538 ACRE TO CENTERLINE OF CHURCH STREET .503 ACRE TO CHURCH STREET RIGHT OF WAY LIMIT

49.5'

24.75'

℄ CHURCH STREET

SIDEWALK

VT. ROUTE 108

11 S68-53E 1

S68-53E, 62.5'

N22-05E 44.25'

LOT A

N68-39W 139.4'

MAPLE STREET

ITEM 117

N22-05E 120.7'

44.0'

HOUSE

S 22-05 W 76.7'

SAVES OVERHANG BOUNDARY

OLD TOWN HALL AND BRICK CHURCH

PROPERTY OF TOWN OF CAMBRIDGE VOLUME 60, PAGES 436, 497 & 498

N22-05E 165.0'

S68-35E 72.0'

ITEM 114

S68-35E 67.0'

PROPOSED BOUNDARY

PORCH

SMUGGLERS NOTCH INN

N22-17E 109.3'

TO MAIN STREET

APPROX. LOCATION MINIMUM 20' WIDE SEWER EASEMENT IN FAVOR OF VILLAGE OF JEFFERSONVILLE AND TOWN OF CAMBRIDGE, SEE VOL. 88 PAGES 211 & 253

U.S.G.S. DISK S85-01-30E 3299' FROM ITEM 117

℄ UPPER VALLEY ROAD

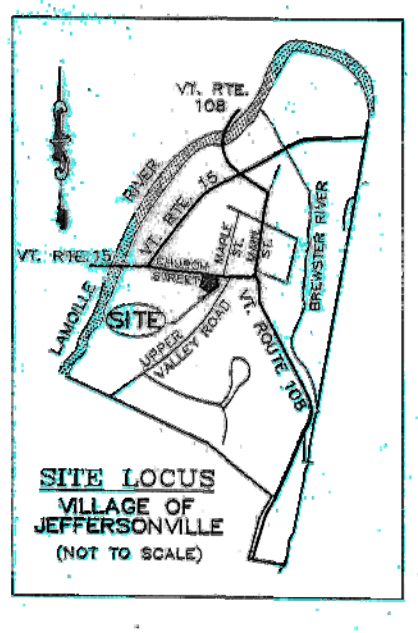
TELEPHONE BUILDING

PAVED PARKING AREA

DRIVE

TO UNDERHILL

CHURCH ST. 144



SITE LOCUS
VILLAGE OF JEFFERSONVILLE
(NOT TO SCALE)

MAGNETIC 1991

GRAPHIC SCALE IN FEET

50 30 10 0 50 100 150 200 250 300 350 400 450 500 550

BOUNDARY SURVEY FOR
ROBERT & MARY REYNOLDS
FORMER ROBERT & MAE REYNOLDS PROPERTY
CHURCH STREET JEFFERSONVILLE, VT.

HANNON ASSOCIATES, INC.
LICENSED LAND SURVEYOR
RR1, BOX 196
JEFFERSONVILLE, VT. 05464

DATE: DECEMBER 26, 1996
SCALE: 1"=50'
DRAWN BY: WH
SURVEYED BY: WH, RE, JPH
PLAT NO.: 96342

STATE OF VERMONT WILLIAM H. HANNON No. 594 REGISTERED LAND SURVEYOR

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND IN MY PROFESSIONAL OPINION, THIS MAP IS TRUE AND CORRECT BASED ON INFORMATION MENTIONED IN THE NOTES AND PHYSICAL EVIDENCE FOUND IN THE FIELD.

William H. Hannon

7H

GENERAL NOTES

1.0 THE INFORMATION GATHERED AND CONSIDERED DURING COMPILATION OF THIS PLAT IS AS FOLLOWS:

1.1 A SURVEY PLAT ENTITLED "BOUNDARY SURVEY FOR TOWN OF CAMBRIDGE, VERMONT, FORMER BRICK CHURCH & TOWN HALL PROPERTY, CHURCH STREET JEFFERSONVILLE, VT.", DATED NOV. 14, 1988, PREPARED BY HANNON ASSOC., INC., RECORDED IN THE CAMBRIDGE LAND RECORDS SLIDE 144.

1.2 A SURVEY PLAT ENTITLED "PLAT OF SURVEY OF LOTS ON THE SOUTH SIDE OF MAIN STREET IN THE VILLAGE OF JEFFERSONVILLE, VT." DATED SEPT. 1973, REVISED 1979, PREPARED BY JOHN A. MARSH, AND RECORDED IN THE CAMBRIDGE LAND RECORDS, SLIDE 31S.

1.3 A SURVEY PLAT ENTITLED "REVISED PLAN OF LAND IN JEFFERSONVILLE, CAMBRIDGE, VERMONT PROPERTY OF HOWARD C. AND LINDA L. CARY", DATED SEPT. 1978, JOB # 73-93, PREPARED BY J.P.R. ASSOCIATES AND RECORDED IN THE CAMBRIDGE LAND RECORDS, SLIDE 28.

1.4 A SURVEY PLAT ENTITLED "BOUNDARY SURVEY FOR ROBERT & MARY REYNOLDS, FORMER ROBERT AND MAE REYNOLDS PROPERTY, CHURCH STREET, JEFFERSONVILLE, VT." DATED DEC. 28, 1986, PREPARED BY HANNON ASSOCIATES, INC. AND RECORDED IN SLIDE 144 CAMBRIDGE LAND RECORDS.

1.5 A SURVEY PLAT ENTITLED " BOUNDARY SURVEY AND SUBDIVISION OF LAND OF CENTRAL VERMONT PUBLIC SERVICE CORP., JUNE 21, 1990. VOL.42/PG. 387", JEFFERSONVILLE DISTRIBUTION SUBSTATION, DATED AUG. 31, 1990, REVISED 3 MAY 1998, DRAWING NO. L-380, PREPARED BY WILLIAM H. JOHNSON AND RECORDED IN SLIDES 118 AND 139 CAMBRIDGE LAND RECORDS.

1.6 A SURVEY PLAT ENTITLED "PLAT OF LAND TO BE PURCHASED FROM ROGER W. & MURIEL S. MANN CAMBRIDGE-VERMONT", DATED 1960, DWG. # L-196 PREPARED BY CENTRAL VERMONT PUBLIC SERVICE CORPORATION, RECORDED IN VOL. 42, PG. 389 AND VOL. 43, PG. 257 CAMBRIDGE LAND RECORDS.

1.7 ORAL EVIDENCE SUPPLIED BY JOHN BUSHEY OF VERMONT AGENCY OF TRANSPORTATION AND HOWARD CARY.

1.8 NO INFORMATION HAS BEEN RECOVERED FROM THE PUBLIC LAND RECORDS TO CONFIRM OWNERSHIP OF CHURCH STREET, VERMONT ROUTE 108. A THREE ROD RIGHT OF WAY HAS BEEN ASSUMED ACCORDING TO TITLED 19 V.S.A., SECTION 36, AND JOHN BUSHEY. HOWEVER THE HISTORICAL RIGHT OF WAY MAY BE FIVE RODS (82.5') WIDE OR WIDER AS DEPICTED ON THE MARSH SURVEY MENTIONED IN NOTE 1.2.

1.9 FIELD SURVEY MEASUREMENTS WERE OBTAINED USING A THEODOLITE AND ELECTRONIC DISTANCE METER. MAGNETIC BEARINGS SHOWN WERE EXTENDED FROM A SURVEY PREPARED FOR RUDOLPH & ELEANOR ERNO RECORDED IN SLIDE 121 OF THE CAMBRIDGE LAND RECORDS. BEARINGS SERVE TO DEFINE THE ANGULAR RELATIONSHIP BETWEEN THE COURSES SHOWN. DISTANCES ARE ENTERED HEREON IN FEET, ±0.05FT.

1.10 ABSTRACTS FROM THOSE PARTICULAR DEEDS RECOVERED IN THE CAMBRIDGE LAND RECORDS TO WHICH SPECIFIC REFERENCE IS MADE ON THIS MAP AND DEEDS OF PREVIOUS TITLEHOLDERS.. ONLY DEEDS WHICH ARE A MATTER OF PUBLIC RECORD IN THE TOWN OF CAMBRIDGE HAVE BEEN EXAMINED AND UTILIZED IN THIS SURVEY PROVIDED THEY HAVE BEEN PROPERLY INDEXED.

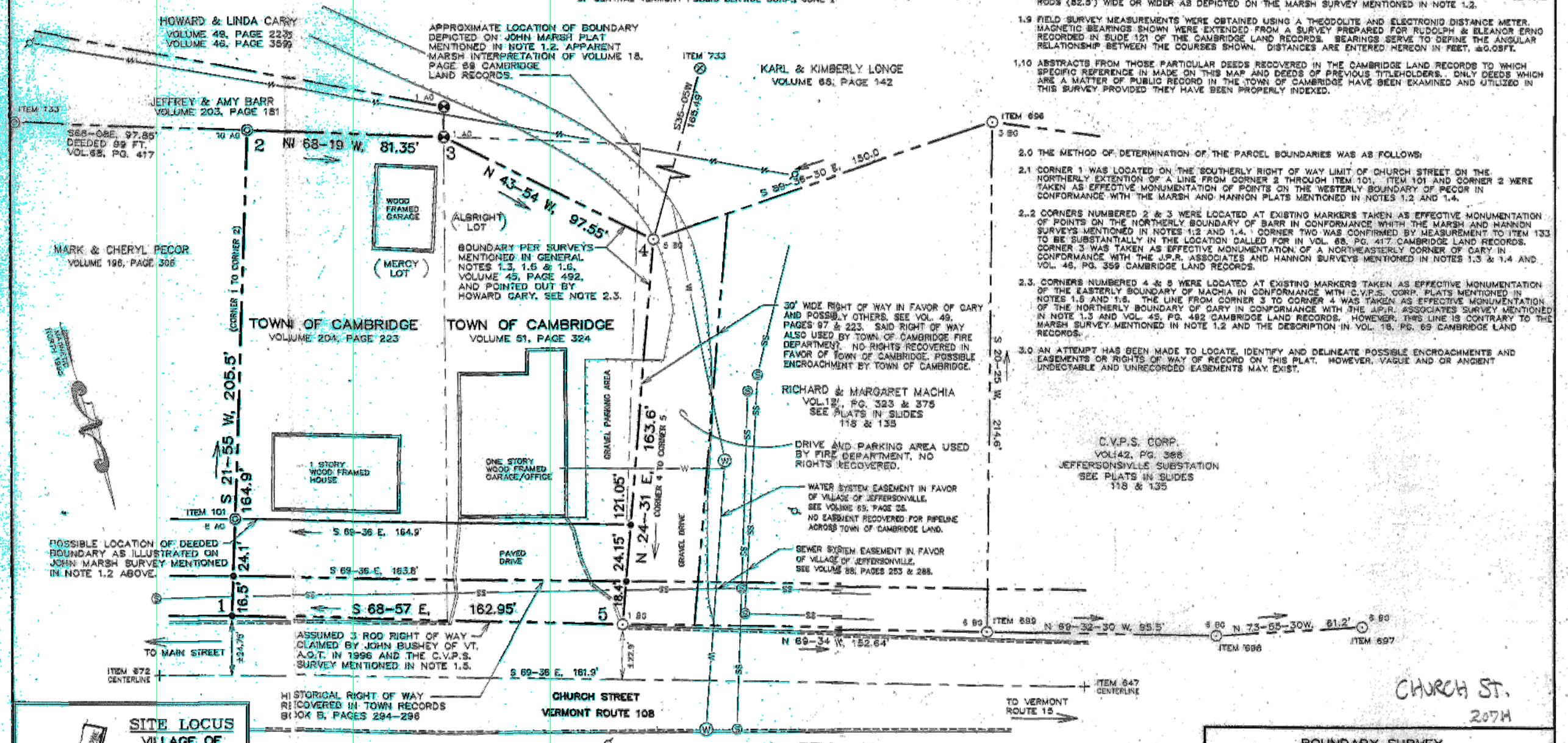
2.0 THE METHOD OF DETERMINATION OF THE PARCEL BOUNDARIES WAS AS FOLLOWS:

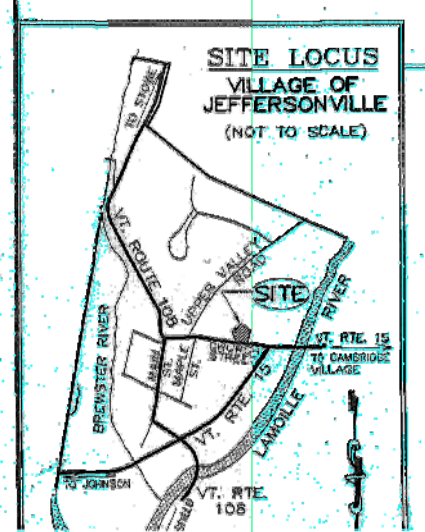
2.1 CORNER 1 WAS LOCATED ON THE SOUTHERLY RIGHT OF WAY LIMIT OF CHURCH STREET ON THE NORTHERLY EXTENTION OF A LINE FROM CORNER 2 THROUGH ITEM 101. ITEM 101 AND CORNER 2 WERE TAKEN AS EFFECTIVE MONUMENTATION OF POINTS ON THE WESTERLY BOUNDARY OF PECOR IN CONFORMANCE WITH THE MARSH AND HANNON PLATS MENTIONED IN NOTES 1.2 AND 1.4.

2.2 CORNERS NUMBERED 2 & 3 WERE LOCATED AT EXISTING MARKERS TAKEN AS EFFECTIVE MONUMENTATION OF POINTS ON THE NORTHERLY BOUNDARY OF BARR IN CONFORMANCE WHITH THE MARSH AND HANNON SURVEYS MENTIONED IN NOTES 1.2 AND 1.4. CORNER TWO WAS CONFIRMED BY MEASUREMENT TO ITEM 133 TO BE SUBSTANTIALLY IN THE LOCATION CALLED FOR IN VOL. 68, PG. 417 CAMBRIDGE LAND RECORDS. CORNER 3 WAS TAKEN AS EFFECTIVE MONUMENTATION OF A NORTHEASTERLY CORNER OF CARY IN CONFORMANCE WITH THE J.P.R. ASSOCIATES AND HANNON SURVEYS MENTIONED IN NOTES 1.3 & 1.4 AND VOL. 48, PG. 359 CAMBRIDGE LAND RECORDS.

2.3. CORNERS NUMBERED 4 & 5 WERE LOCATED AT EXISTING MARKERS TAKEN AS EFFECTIVE MONUMENTATION OF THE EASTERLY BOUNDARY OF MACHIA IN CONFORMANCE WITH C.V.P.S. CORP. PLATS MENTIONED IN NOTES 1.5 AND 1.6. THE LINE FROM CORNER 3 TO CORNER 4 WAS TAKEN AS EFFECTIVE MONUMENTATION OF THE NORTHERLY BOUNDARY OF CARY IN CONFORMANCE WITH THE J.P.R. ASSOCIATES SURVEY MENTIONED IN NOTE 1.3 AND VOL. 45, PG. 492 CAMBRIDGE LAND RECORDS. HOWEVER, THIS LINE IS CONTRARY TO THE MARSH SURVEY MENTIONED IN NOTE 1.2 AND THE DESCRIPTION IN VOL. 18, PG. 69 CAMBRIDGE LAND RECORDS.

3.0 AN ATTEMPT HAS BEEN MADE TO LOCATE, IDENTIFY AND DELINEATE POSSIBLE ENCROACHMENTS AND EASEMENTS OR RIGHTS OF WAY OF RECORD ON THIS PLAT. HOWEVER, VAGUE AND OR ANCIENT UNDETECTABLE AND UNRECORDED EASEMENTS MAY EXIST.





PARCEL AREA

0.75 ACRE ENCOMPASSED BY CORNERS MARKED 1,2,3,4 & 5
0.68 ACRE TO HISTORICAL RIGHT OF WAY LIMIT
0.59 ACRE TO JOHN MARSH SURVEYED LINE
0.83 ACRE TO CENTERLINE OF CHURCH STREET

LEGEND

- 3 — CORNER NUMBER
- SET 5/8" REBAR 1992
- EXISTING 1" IRON PIPE
- CALCULATED POINT
- UTILITY POLE
- FL, AG, BG — MONUMENTATION REVEAL: FL=FLUSH AG=ABOVE GRADE; BG=BELOW GRADE
- EXISTING C.V.P.S. 3/4" ALUMINIUM BAR
- EXISTING BOUNDARY LINE
- RIGHT OF WAY LIMIT
- EDGE OF PAVEMENT
- CENTERLINE ROAD
- OVERHEAD UTILITY LINES
- EDGE OF GRAVEL DRIVE
- SEWER MANHOLE AND PIPELINE
- WATER VALVE AND PIPELINE

GRAPHIC SCALE IN FEET
30 15 0 30 60 90 120 150 180 210 240 270 300 330

BOUNDARY SURVEY
TOWN OF CAMBRIDGE FIRE STATION LOT
VOLUME 51, PAGE 324
VOLUME 204, PAGE 223
CHURCH STREET JEFFERSONVILLE, VT.

WILLIAM H. HANNON
LICENSED LAND SURVEYOR
774 BAKERSFIELD ROAD
JEFFERSONVILLE, VT. 05464

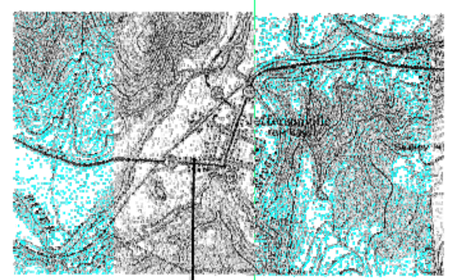
STATE OF VERMONT WILLIAM H. HANNON No. 594 REGISTERED LAND SURVEYOR

DATE: SEPTEMBER 2006
SCALE: 1"=30'
DRAWN BY: WHH
SURVEYED BY: WHH
PLAT NO.: 06415

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND IN MY PROFESSIONAL OPINION, THIS MAP IS TRUE AND CORRECT BASED ON INFORMATION MENTIONED IN THE NOTES AND PHYSICAL EVIDENCE FOUND IN THE FIELD.

William H. Hannon

5 B

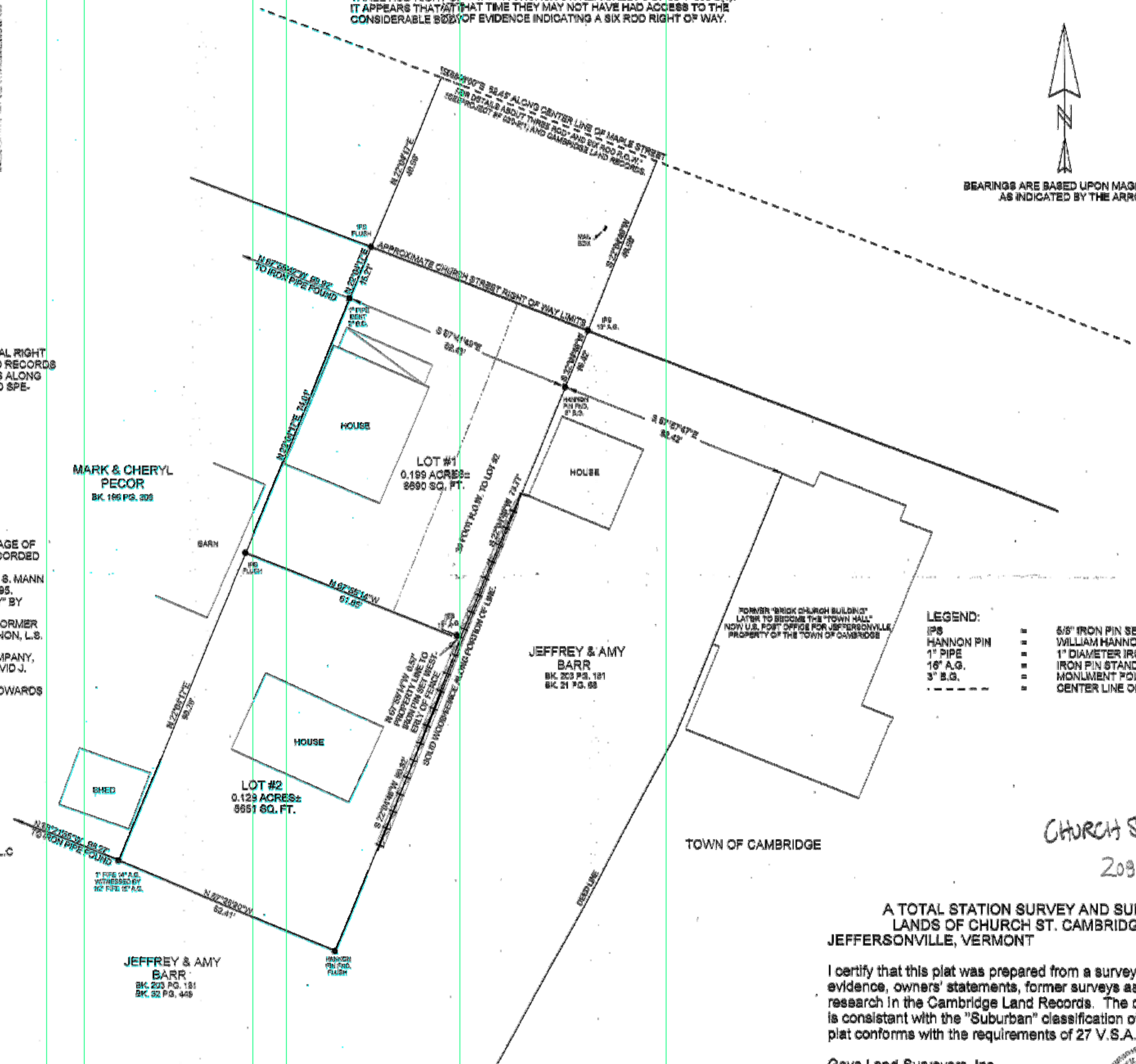

LOCATION OF PROPERTY

SIX ROD RIGHT OF WAY*
THE OPINION HELD IN THIS SURVEY REGARDING THE HISTORICAL RIGHT OF WAY WIDTH OF CHURCH STREET WAS DEVELOPED BY LAND RECORDS RESEARCH WHICH REVEALED THAT MOST OF THE HOUSE LOTS ALONG CHURCH STREET WERE ORIGINALLY CREATED AND DESCRIBED SPECIFICALLY TO ACCOMMODATE A 6 ROD RIGHT OF WAY.

THREE ROD RIGHT OF WAY*
THE VERMONT AGENCY OF TRANSPORTATION HELD THE STATUATORY THREE ROD RIGHT OF WAY FOR CHURCH ST. REF. SHEET 5 OF 58 F 030-2(1). IT APPEARS THAT AT THAT TIME THEY MAY NOT HAVE HAD ACCESS TO THE CONSIDERABLE BODY OF EVIDENCE INDICATING A SIX ROD RIGHT OF WAY.

FORMER SURVEYS REFERENCED:
1. "LOTS ON THE SOUTH SIDE OF MAIN STREET IN THE VILLAGE OF JEFFERSONVILLE" BY JOHN A. MARSH, L.S. DATED 9/73, RECORDED IN MAP SLIDE #28.
2. "A TRANSIT & TAPE SURVEY DR. ROGER MANN & MURIEL S. MANN PROPERTY" BY THIS COMPANY DATED 7/21/76 MAP SLIDE #95.
3. "A TRANSIT & TAPE SURVEY THE CHOUINARD PROPERTY" BY THIS COMPANY DATED 4/19/80 MAP SLIDE #95.
4. "BOUNDARY SURVEY FOR ROBERT & MARY REYNOLDS FORMER ROBERT & MAE REYNOLDS PROPERTY" BY WILLIAM H. HANNON, L.S. DATED 12/26/86 MAP SLIDE 144.
5. "A TOTAL STATION SURVEY BREWSTER RIVER LAND COMPANY, L.L.C. FORMER ROGER & MURIEL MANN PROPERTY" BY DAVID J. PEATMAN, L.S. DATED 9/21/99.
6. "A TOTAL STATION SURVEY LANDS OF CONSTANCE G. EDWARDS BY THIS COMPANY DATED 6/06/07.

SOURCE OF TITLE:
1. CHRISTOPHER J. PRATT TO CHURCH ST. CAMBRIDGE, L.L.C WARRANTY DEED DATED 3/12/03 AND RECORDED IN BOOK 217 PAGE 94-95.
2. WILLIAM W. TIMBERS TO CHURCH ST. CAMBRIDGE, L.L.C QUIT CLAIM DEED DATED 3/12/03 AND RECORDED IN BOOK 196 PAGE 437-438.



BEARINGS ARE BASED UPON MAGNETIC NORTH AS INDICATED BY THE ARROW.

LEGEND:

IPS	=	5/8" IRON PIN SET WITH YELLOW CAP
HANNON PIN	=	WILLIAM HANNON, L.S. 5/8" IRON PIN FO
1" PIPE	=	1" DIAMETER IRON PIPE FOUND
16" A.G.	=	IRON PIN STANDS 16" ABOVE GRADE
3" B.G.	=	MONUMENT FOUND 3" BELOW GRADE
- - - - - -	=	CENTER LINE OF ROAD

SCALE 1" = 20'
0 10 20 40 60

JOB #93708060 7

CHURCH ST.
209 B

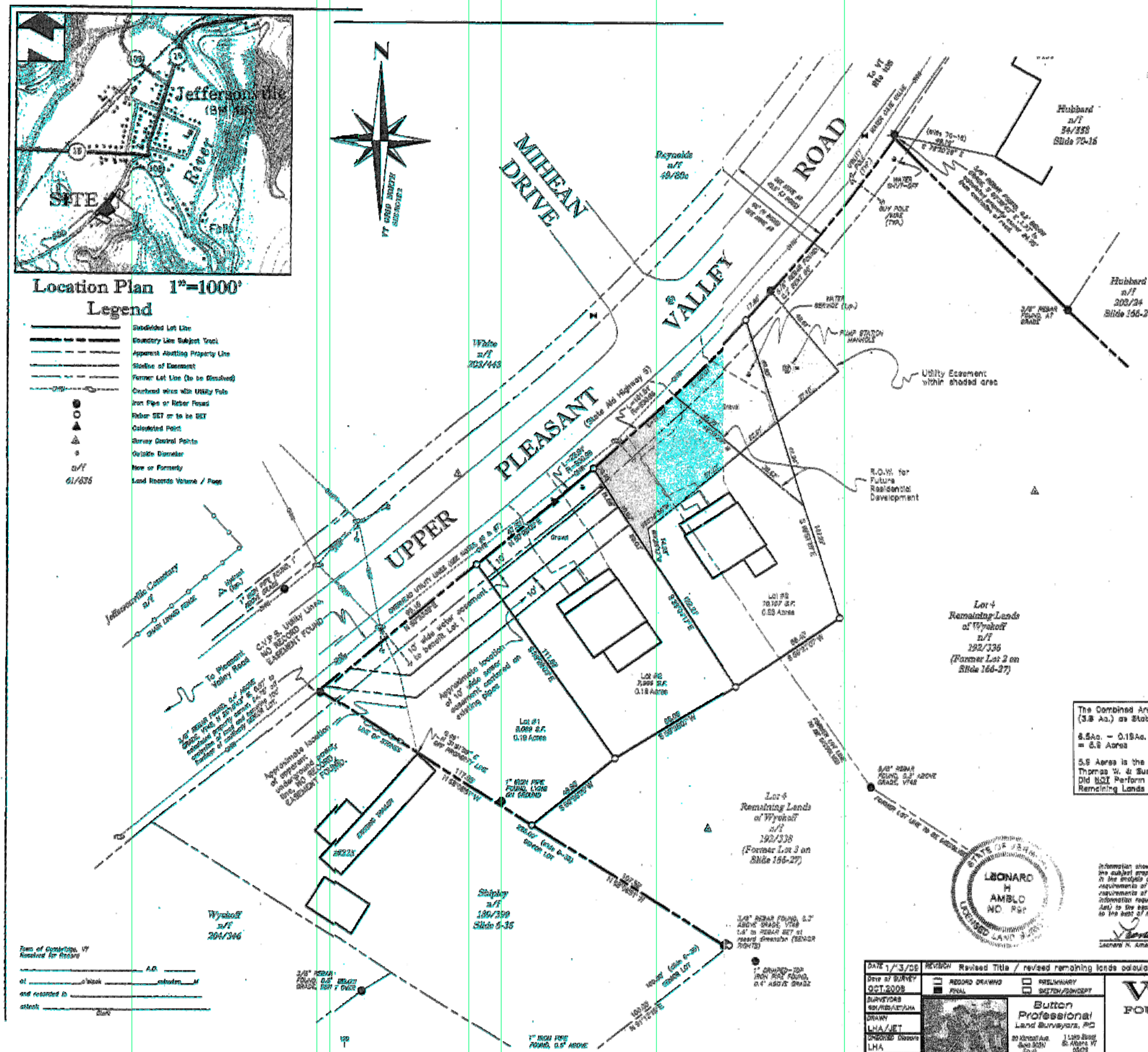
A TOTAL STATION SURVEY AND SUBDIVISION
LANDS OF CHURCH ST. CAMBRIDGE, L.L.C.
JEFFERSONVILLE, VERMONT SCALE 1" =

I certify that this plat was prepared from a survey based upon field evidence, owners' statements, former surveys as indicated and research in the Cambridge Land Records. The degree of precision is consistant with the "Suburban" classification of surveys. This plat conforms with the requirements of 27 V.S.A. Section 1403.

Gove Land Surveyors, Inc.

Willard L. Gove
August 6, 2007

STATE OF VERMONT WILLARD L. GOVE NO. 475 LICENSED LAND SURVEYOR



Notes: [illegible]

The Combined Area of former Lot 2 (2.7Ac.) & former Lot 3 (3.8 Ac.) as Stated on Slide 166-27 is 6.5 Acres.

6.5Ac. − 0.19Ac. (Lot 1) − 0.18Ac. (Lot 2) − 0.23Ac. (Lot 3) = 5.9 Acres

5.9 Acres is the Calculated Area of Remaining Lands of Thomas W. & Susan M. Wyckoff (Lot 4 shown hereon). BAPLS Did NOT Perform a Boundary Survey of the Perimeter of the Remaining Lands of Thomas W. & Susan M. Wyckoff.

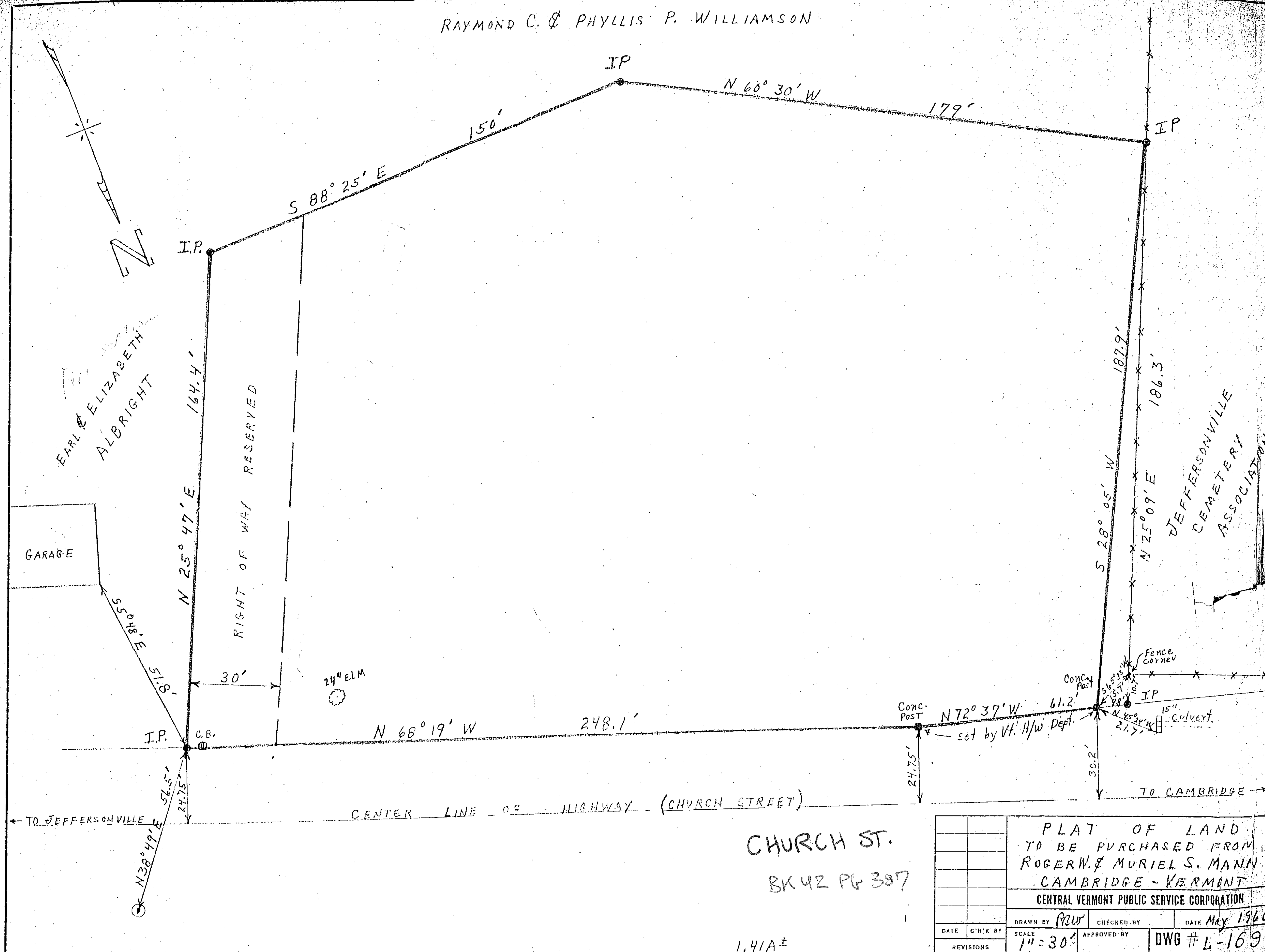
UPPER PLEASANT VALLEY
212A

Information shown on this property plat is a faithful portrayal of circumstances pertinent to the subject property. A collaboration of field, parcel and pertinent record evidence was used in the analysis of boundary conclusions shown hereon. This property plat complies with the requirements of Vermont Statute Title 27, Section 1403, (A) through (E), and with the requirements of Vermont Statute Title 27, Section 1403, (A) through (G), and contains all information required by T. 27A V.S.A. section 3-105 (Vermont Common Interest Ownership Act), to the best of my knowledge and belief.

Leonard H. Amblo, L.S. VT #522, NY # 50438 — 1-14-2009
Dated

STATE OF VERMONT — LEONARD H AMBLO NO. 522 — LICENSED LAND SURVEYOR

DATE 1/13/09	REVISION Revised Title / revised remaining lands calculation		BY LHA
Date of SURVEY OCT.2008	RECORD DRAWING / FINAL / PRELIMINARY / SKETCH/CONCEPT	WestView FOUR LOT SUBDIVISION PLAT OF LANDS OF THOMAS W. & SUSAN M. WYCKOFF	Date of Plat 10/30/08
SURVEYORS	Button Professional Land Surveyors, PC		JOB# JEFR0003
DRAWN LHA/JET			
CHECKED LHA		VOLUME 192, PAGE 336 VOLUME 192, PAGE 338 SLIDE 166-27	PLAT SHEET #
SCALE 1"=30'	This Material is Copyrighted	UPPER PLEASANT VALLEY ROAD JEFFERSONVILLE VT.	1OF


RAYMOND C. & PHYLLIS P. WILLIAMSON
IP
N 60° 30' W
179'
IP
150'
S 88° 25' E
I.P.
N
EARL & ELIZABETH ALBRIGHT
164.4'
N 25° 47' E
RIGHT OF WAY RESERVED
187.9'
186.3'
S 28° 05' W
N 25° 09' E
JEFFERSONVILLE CEMETERY ASSOCIATION
GARAGE
S 50° 48' E 51.8'
30'
24" ELM
Fence Corner
Conc. Post
IP
Conc. Post
N 72° 37' W 61.2'
set by Vt. H/W Dept.
15" Culvert
21.7'
I.P.
C.B.
N 68° 19' W
248.1'
24.75'
30.2'
56.5'
24.75'
N 38° 49' E
TO CAMBRIDGE
← TO JEFFERSONVILLE
CENTER LINE OF HIGHWAY (CHURCH STREET)
CHURCH ST.
BK 42 PG 397
1.41 A±

PLAT OF LAND
TO BE PURCHASED FROM
ROGER W. & MURIEL S. MANN
CAMBRIDGE - VERMONT

CENTRAL VERMONT PUBLIC SERVICE CORPORATION

DRAWN BY RBW	CHECKED BY		DATE May 1960
SCALE 1" = 30'	APPROVED BY		DWG # L-169
DATE	C'H'K BY	REVISIONS	

Appendix D

Historical and ArchaeologicalReports

DUFRESNE GROUP
CONSULTING ENGINEERS

HISTORIC RESOURCES REVIEW FOR THE JEFFERSONVILLE BICYCLE AND PEDESTRIAN PATH STUDY, JEFFERSONVILLE, LAMOILLE COUNTY, VERMONT

Looking north on Main Street from the intersection of Main and Church streets, ca. early 1900s.

Submitted by:
Catherine A. Quinn
Consulting Archaeology Program
University of Vermont
111 Delehanty Hall
180 Colchester Avenue
Burlington, VT 05405
UVM CAP Report No. 916

November 2015

HISTORIC RESOURCES REVIEW FOR THE JEFFERSONVILLE BICYCLE AND PEDESTRIAN PATH STUDY, JEFFERSONVILLE, LAMOILLE COUNTY, VERMONT

Prepared for:

Andrea J. Day, PE
Project Manager, Marketing Director
Dufresne Group
459 Portland Street
St. Johnsbury, VT 05819

Submitted by:

Catherine A. Quinn
Consulting Archaeology Program
University of Vermont
111 Delehanty Hall
180 Colchester Avenue
Burlington, VT 05405
UVM CAP Report No. 916

November 2015

TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

This Historic Resources Review for the Jeffersonville Bicycle and Pedestrian Path Study, located in the Village of Jeffersonville, within the Town of Cambridge, Lamoille 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 Village of Jeffersonville with compliance under Section 106 of the National Historic Preservation Act of 1966 and its amendments and, if required, Section 4(f) of the Department of Transportation Act of 1966, and its amendments.

This proposed project was reviewed for compliance under Section 106 of the National Historic Preservation Act of 1966 and its amendments and 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 and evaluating 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 on September 18, 2014; all current photographs were taken during the site visit. 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 Online Research Center of the Vermont Division for Historic Preservation, and the online Landscape Change Program of the University of Vermont, and included the National Register of Historic Places and State Register files, review of historic maps, town histories, and images.

PROJECT LOCATION AND DESCRIPTION

The proposed Jeffersonville Bicycle and Pedestrian Path project study area is located along Main Street, Depot Street, School Street, Carlton Avenue, Church Street, Mill Street (VT Route 108), Upper Pleasant Valley Road, and VT Route 15, in the Village of Jeffersonville (Figure 1). Potential project work includes the construction of new sidewalks and improvements to existing sidewalks, with the goal of completing the Village sidewalk network. Improvements to existing facilities may require widening by one to two feet to meet ADA code. One identified priority area is around the Cambridge Elementary School, along School and Carlton streets. The project is in the scoping phase, so plans are not yet developed.

The majority of the project area lies within the National Register-listed Jeffersonville Historic District, along Main Street, Depot Street, School Street, Carlton Avenue and Church Street, with additional areas along Mill Street, Upper Pleasant Valley Road and VT Route 15, where several individual State Register-listed buildings are located (Figure 2). Historic resources in these areas that have the potential to be impacted by the project are identified below.

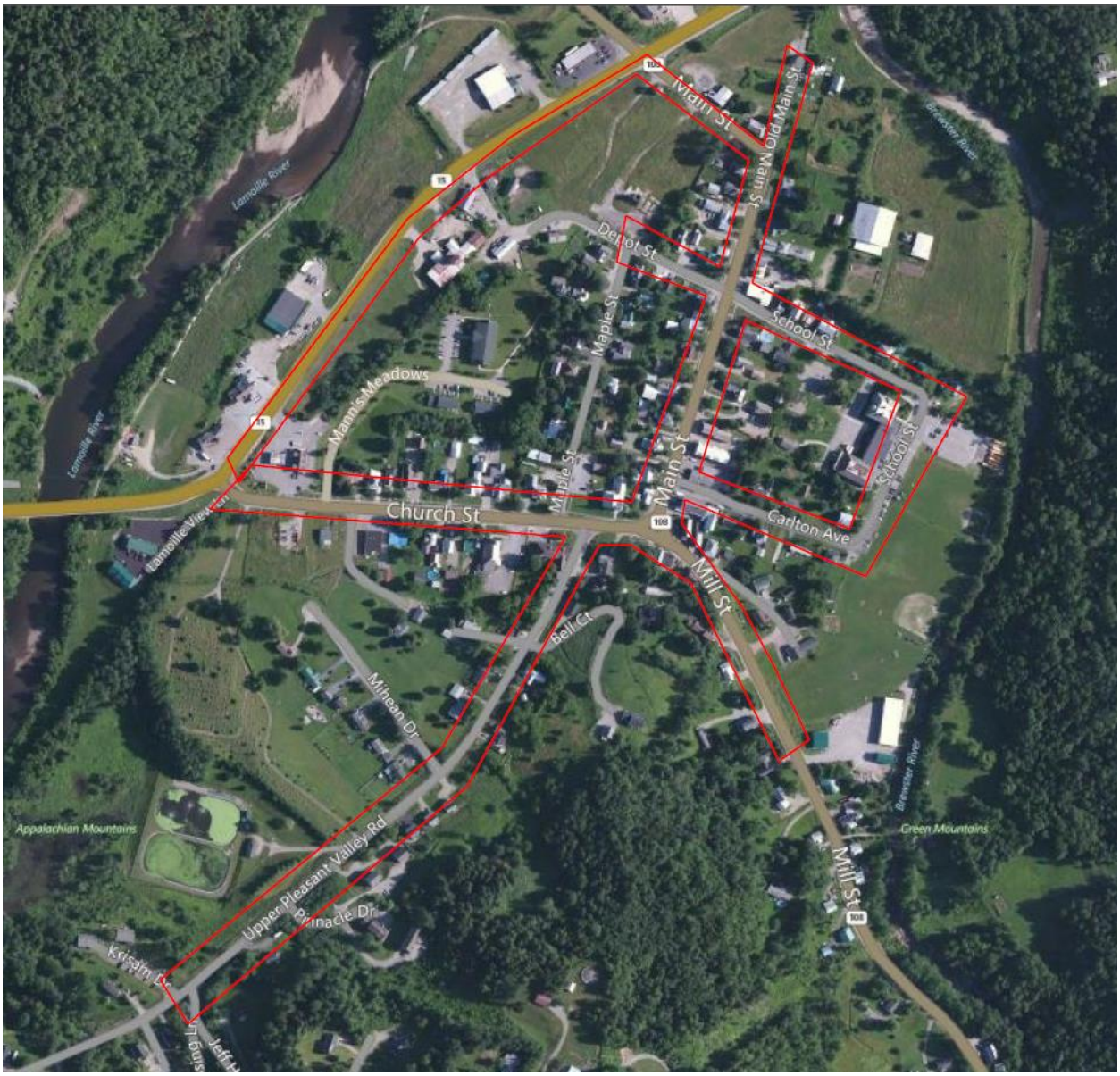


Figure 1. Image showing the location of the Jeffersonville Bicycle and Pedestrian Path project study area in Jeffersonville, Vermont (image provided by Dufresne Group).

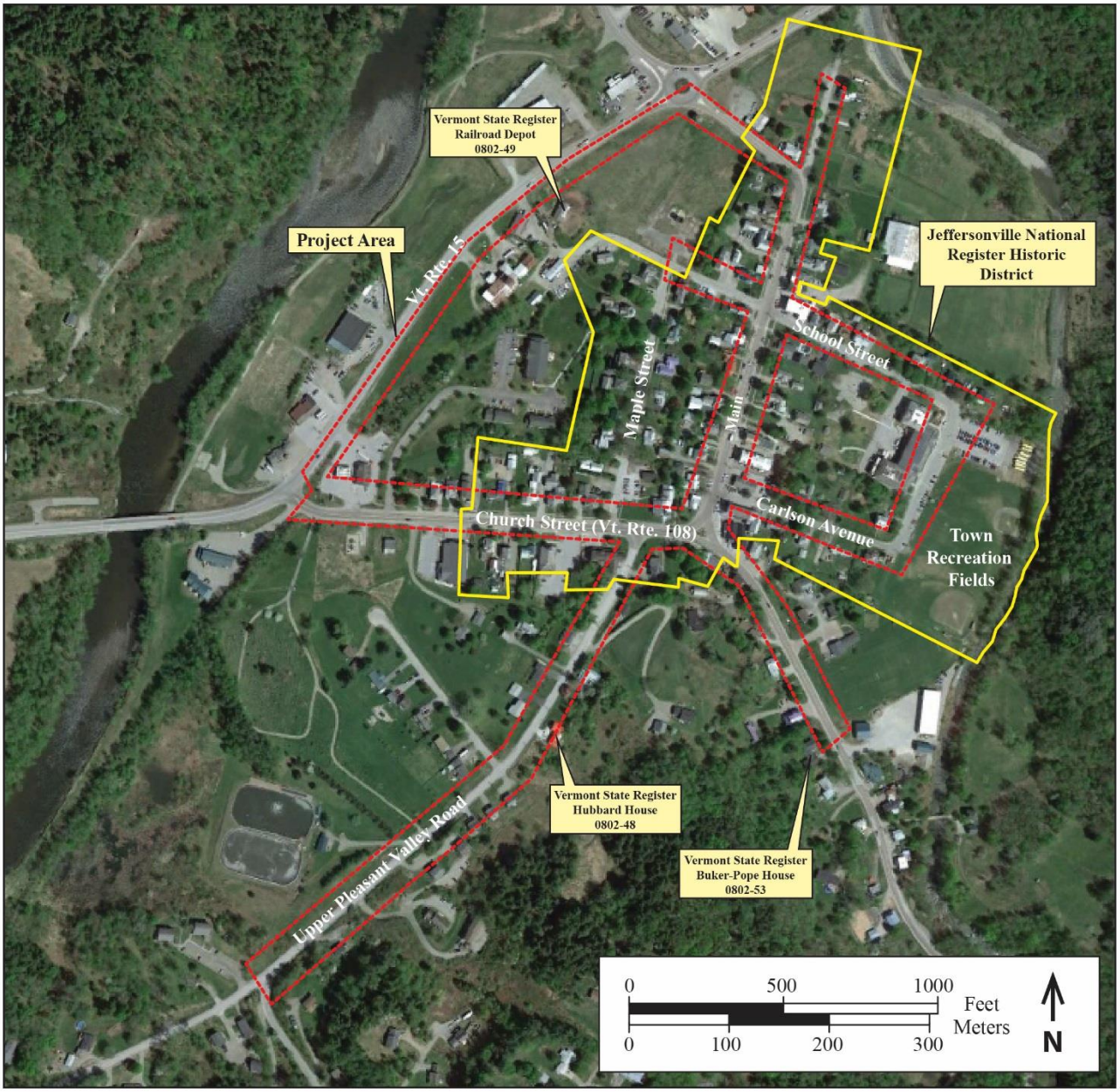


Figure 2. Image showing the location of the Jeffersonville Bicycle and Pedestrian Path project study area, the National Register-listed Jeffersonville Historic District, individual State Register-listed historic resources, and the Town Recreation Fields.

HISTORIC RESOURCES AND SIGNIFICANCE

Jeffersonville History Summary

Jeffersonville, originally named Cambridge Center, was first settled after ca. 1780 by Jonah Brewster from Bennington, Vermont and developed during the early 19th century near water power on the Brewster River (NPS 1987). By 1859, there was a starch manufactury, clothing works, saw mill, wheelrights and grist mill along the river, on present day Mill Street (Figure 3) (Walling 1859). Within the boundaries of the current Jeffersonville Historic District at this time, there were numerous residences, a hotel, an academy, a church, two blacksmith shops, a joinery and a store, concentrated along present day Church and Main streets (see Figure 3). The arrival of the Burlington and Lamoille Railroad in 1877, lead to increased commercial development and residential construction as opportunities with the lumber industry expanded (NPS 1987). Beers' 1878 *Atlas of the Counties of Lamoille and Orleans, Vermont,* depicts the growing number of buildings along Church, Main and Water (Mill) streets, and shows the new railroad line at the west edge of the village (Figures 4 and 5).

At the end of the 19th century and turn of the 20th century, commercial development and the construction of additional residences spread northward up Main Street, and houses were built along Maple Street (historically named Park Street), which was opened in 1889 (NPS 1985) (Figures 6 – 10). Jeffersonville continued to grow into the 20th century. School Street was created ca. 1920, when the school building was moved and enlarged there, and shortly after, Carlton Street was created (NPS 1985). The lumbering industry continued to grow in Jeffersonville during the 20th century with the Bell-Gates Lumber Company, which operated ca. 1945 – 2000 and was located at the northwest edge of the village (Figures 11 and 12) (St. Albans Daily Messenger 1991; Google Earth Historical Imagery). Tourism increased in the mid-1900s, and continues today, with the development of the Smuggler's Notch ski area, south of Jeffersonville, along VT Route 108. VT Route 15, which formerly ran through Jeffersonville along Main Street, was relocated to bypass the village in 1959 and the very northern end of Main Street, now called "Old Main Street" appears to have been relinquished as a Town Highway on November 30, 1959 (VTrans 1961) (Figure 13). Since the relocation of VT Route 15, additional development has occurred along the new route, outside of the downtown village area and beyond the boundaries of the Jeffersonville Historic District.

Jeffersonville Historic District

Description: The majority of the study area is located within the National Register-Listed Jeffersonville Historic District (Figure 14; NPS 1987). The District includes a mix of residential, commercial, public, religious and agricultural buildings, with contributing resources dating from the early 1800s through the first few decades of the 20th century. 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. There are a total of 63 primary historic buildings (many with associated garages, carriage houses or barns), plus one historic structure (a war monument) that contribute to the District's significance. Fifty-two of these contributing buildings, plus the monument, have the potential to be affected by the project; 11 buildings, located along Maple Street where no project work is proposed, do not have the potential to be impacted by the project as currently defined. Two properties within the study area that were contributing at the time of the NR listing are no longer extant; these buildings include numbers 41 (and 41A), and 59 (and 59A) (see Figure 14).

Statement of Significance and Eligibility: The Jeffersonville Historic District was added to the National Register of Historic Places on April 10, 1987 (NPS 1987). The District is significant under National Register Criteria C in the areas of Architecture and Commerce. The Jeffersonville Historic District is a largely intact and unified Vermont river valley village with well-preserved resources that attest to the longevity of the village's viability, and its development through time as a prosperous farming, residential, commercial, and tourism center. Buildings in the Jeffersonville Historic District document the change in architectural styles through time, from the early 19th to the early decades of the 20th century, and in general possess a high level of integrity. Taken together, the historic resources of the Village of Jeffersonville form a cohesive assemblage, united by their history and their setting on the wide, scenic valley plain formed by the Lamoille and Brewster rivers. Although some changes have taken place in the District, including the loss of two properties and alterations to some buildings, overall, the Jeffersonville Historic District has not been negatively impacted and retains its integrity of location, design, setting, workmanship, feeling and association and is considered a significant historic resource and remains eligible for inclusion on the National Register.

Resources within the District that have the potential to be affected by the project are identified with maps and images below, grouped by their street location within the project area.

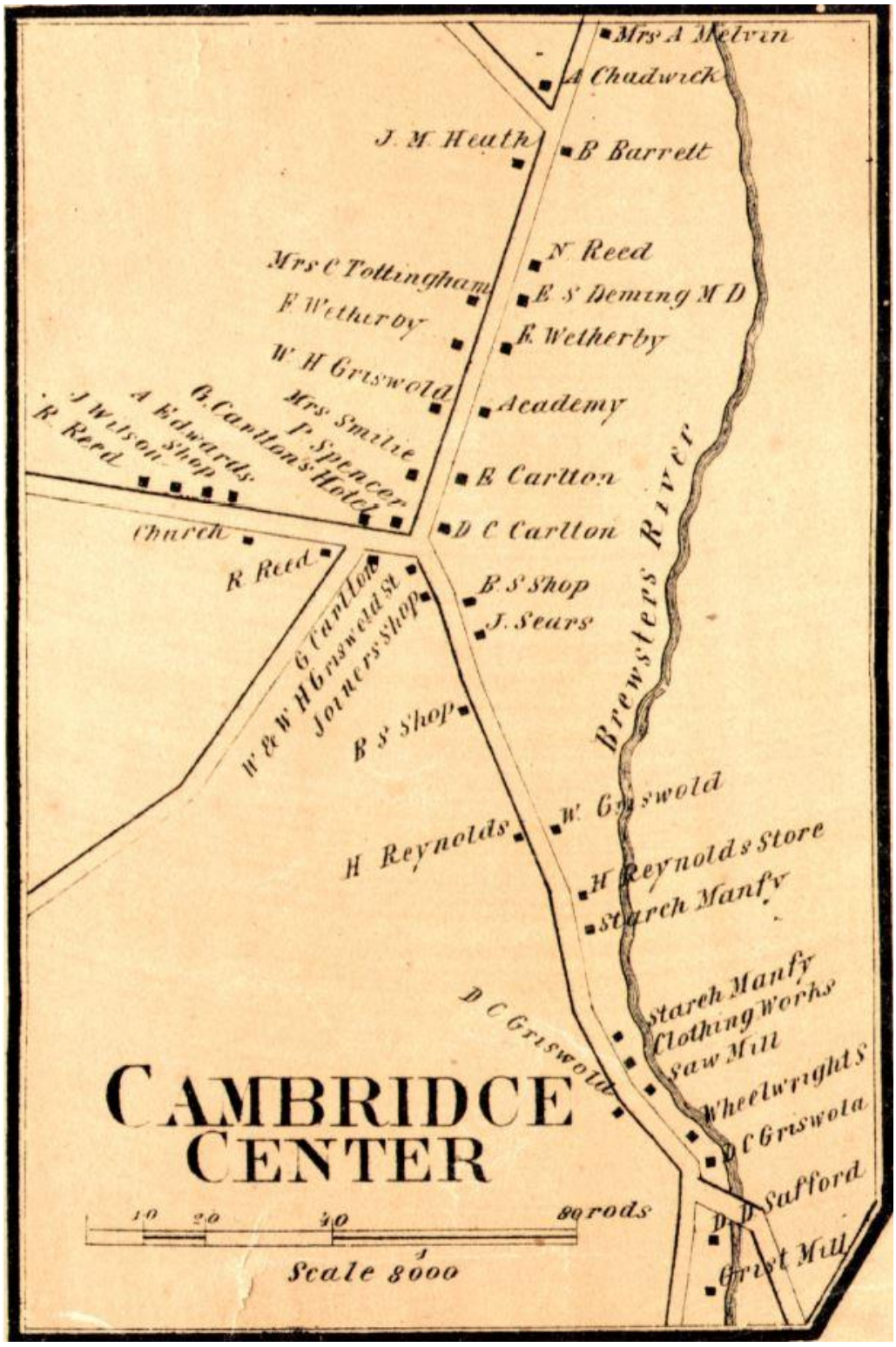


Figure 3. Detail of "Cambridge Center", now Jeffersonville, from H. F. Walling's 1859 *Map of the Counties of Orleans, Lamoille and Essex, Vermont*.

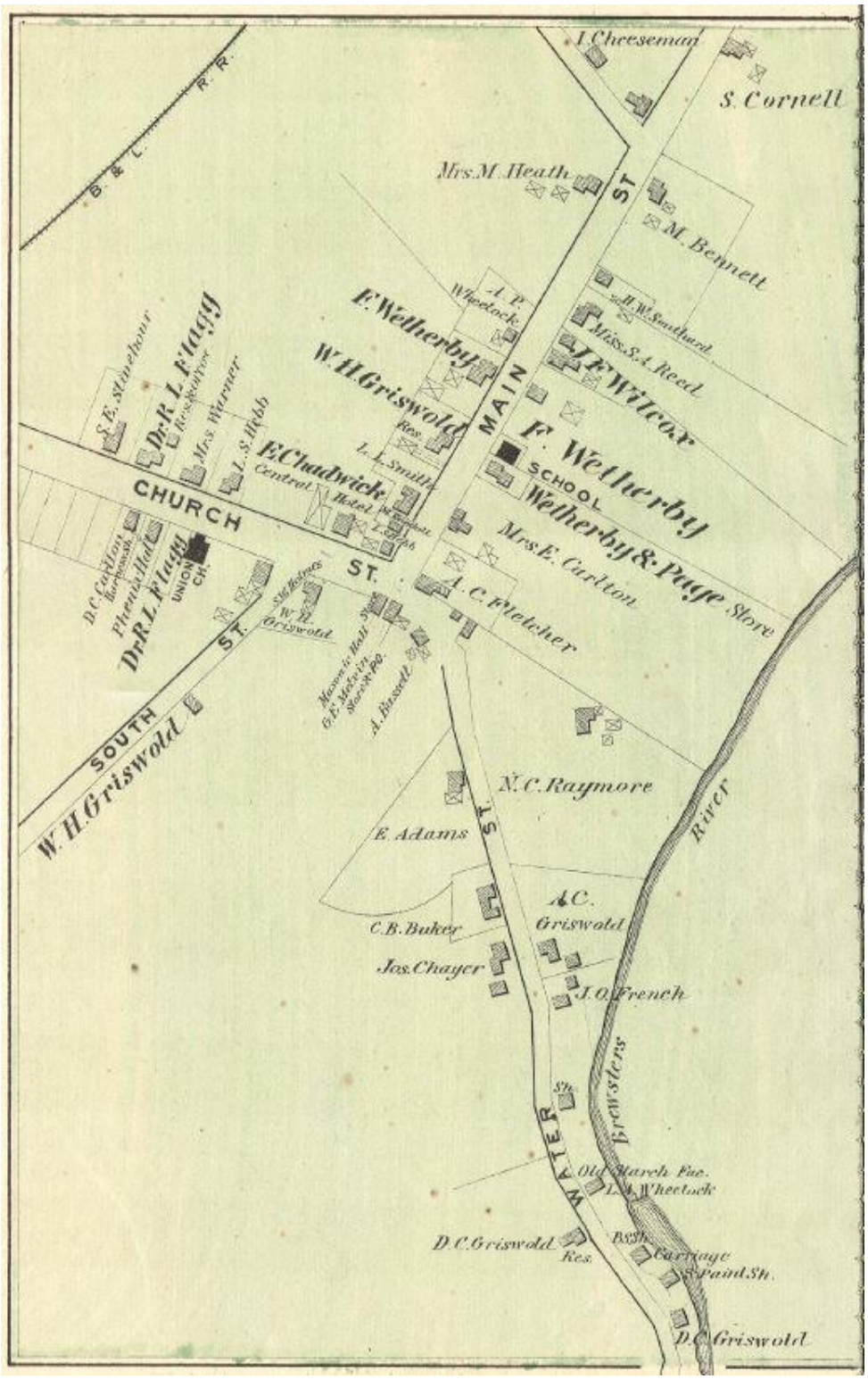


Figure 4. Detail of "Cambridge Center, Jeffersonville P.O.", now Jeffersonville, from F. W. Beers' 1878 *Atlas of the Counties of Lamoille and Orleans, Vermont*.

Figure 5. Historic photograph looking east on Church Street, ca. 1880 (UVM Landscape Change Program LS02131_000).

Figure 6. Historic postcard looking northeast at the intersection of Main and Church streets, ca. early 1900s (UVM Landscape Change Program LS00466_000).

Figure 7. Historic glass negative image looking north on Main Street from the intersection of Main and Church streets, ca. early 1900s (UVM Landscape Change Program LS21185_000).

Figure 8. Historic postcard looking north on Main Street from the intersection of Main and Church streets, ca. early 1900s (UVM Special Collections, Post Card Collection).

Figure 9. Historic postcard looking north on Main Street from just north of the present day intersection of Main and Carlton streets, ca. early 1900s (UVM Special Collections, Post Card Collection).

Figure 10. Historic "birds eye view" photograph looking east across the Lamoille River at the Village of Jeffersonville, ca. early 1900s (UVM Landscape Change Program LS00309_000).

Figure 11. Photograph of the Bell-Gates Lumber Company, looking southwest, with VT Route 15 at right, April 30, 1975 (UVM Landscape Change Program LS61940_000).

Figure 12. Photograph of the Bell-Gates Lumber Company, looking northeast, with VT Route 15 at left, April 30, 1975 (UVM Landscape Change Program LS61944_000).

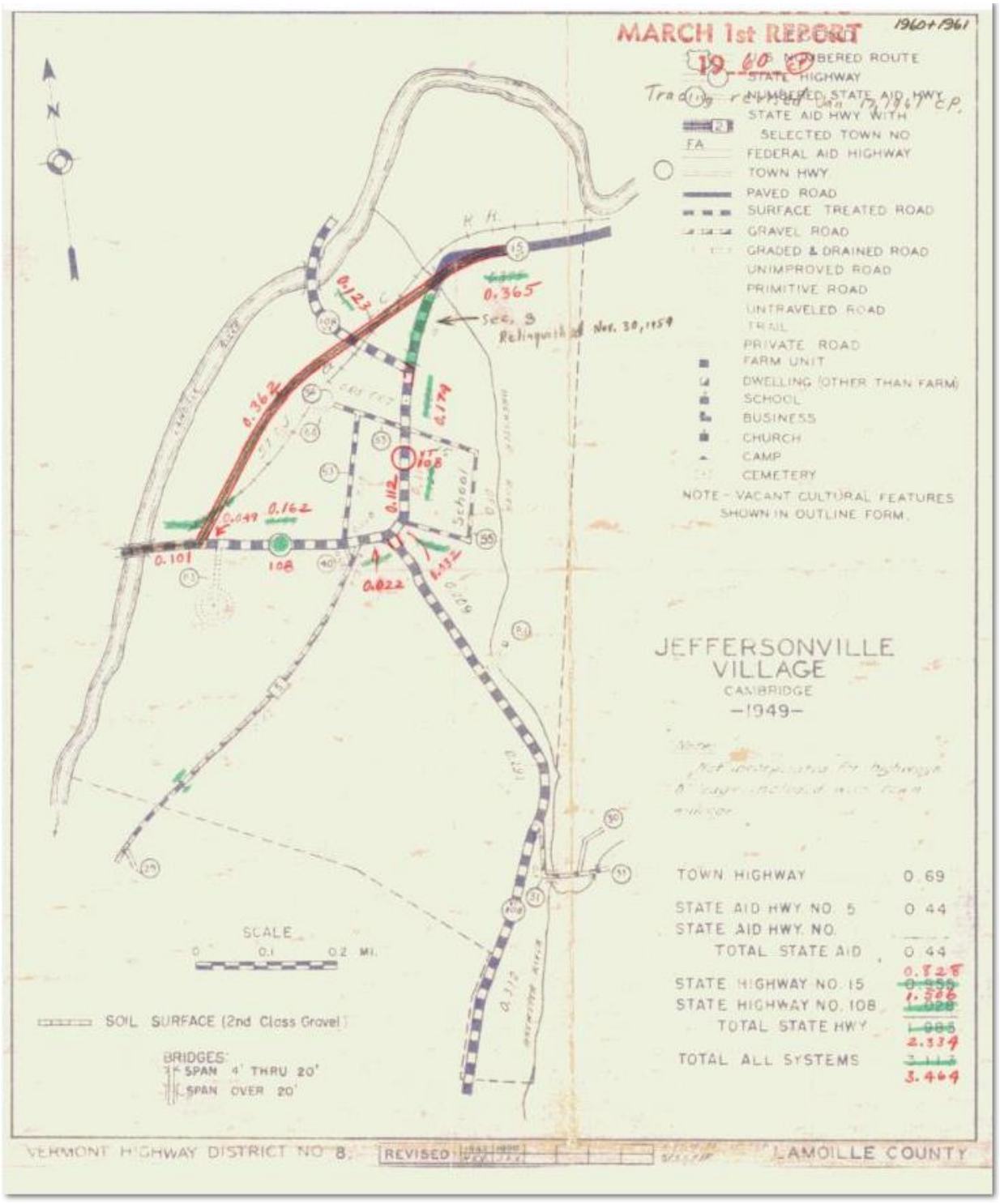
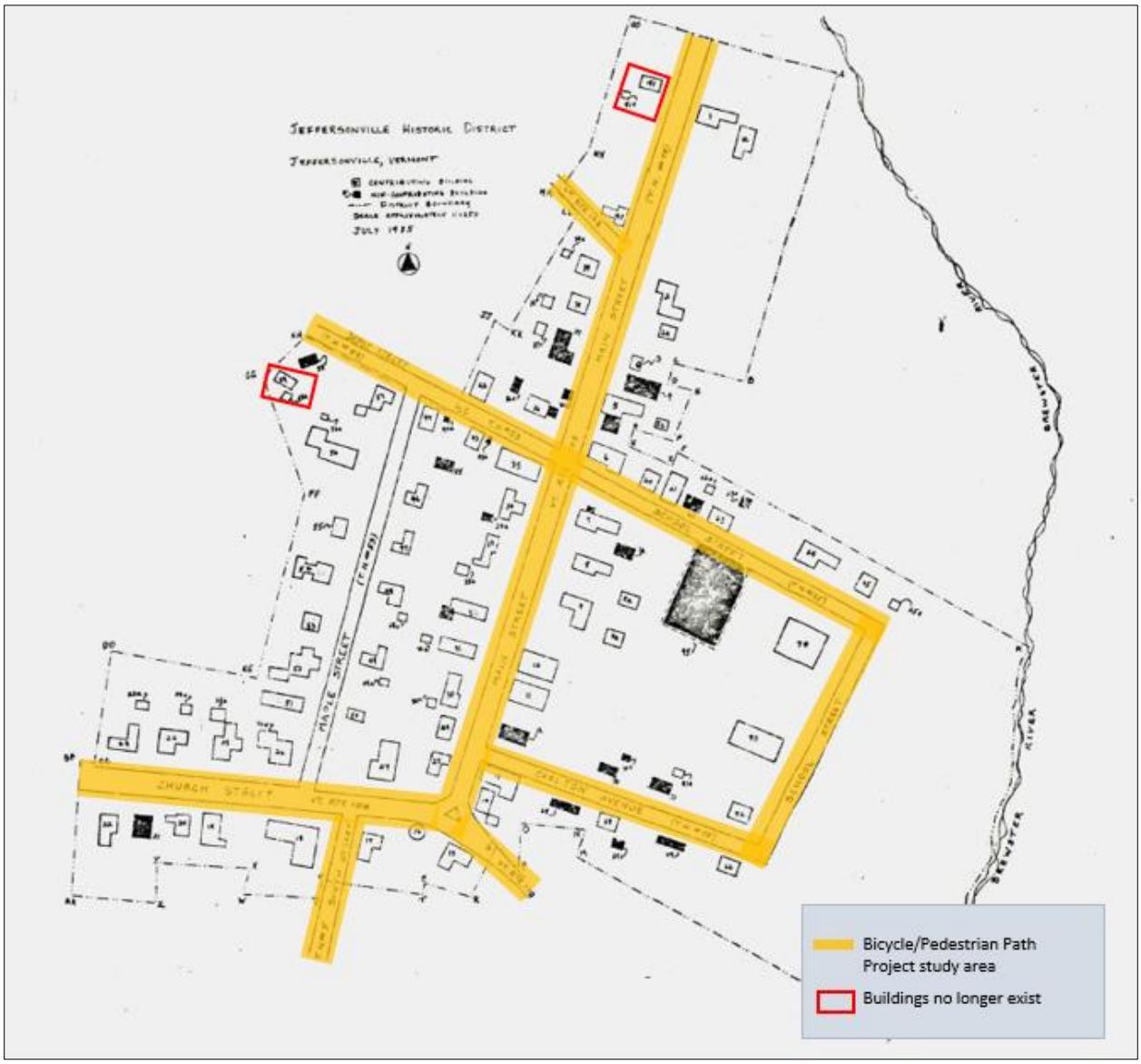


Figure 13. Vermont Agency of Transportation Town Highway map for Jeffersonville Village showing the new alignment of VT Route 15 and indicating a relinquishment of the north portion of Main Street in 1959 (VTrans 1961).

Figure 14. Sketch map of the National Register-listed Jeffersonville Historic District with the



Jeffersonville Bicycle and Pedestrian Path project study area added, and buildings that no longer exist noted; contributing resources to the District are in white and non-contributing resources in black (NPS 1987).

Old Main Street (Figures 15 – 17)

Figure 15. Northern portion of the Jeffersonville Bicycle and Pedestrian Path project study area along Old Main Street, with contributing resources to the National Register-listed Jeffersonville Historic District indicated.

Figure 16. View south of NR building #1 along the east side of Old Main Street in the northern portion of the study area.

Figure 17. View northwest of NR building #40 along the west side of Old Main Street in the northern portion of the study area.

Main Street, north of School and Depot Streets (Figures 18 – 27)

Figure 18. Northern portion of the Jeffersonville Bicycle and Pedestrian Path project study area along Main Street, north of School and Depot streets, with contributing resources to the National Register-listed Jeffersonville Historic District indicated.

Figure 19. View south of NR building #2 along the east side of Main Street in the northern portion of the study area, with existing sidewalk in front.

Figure 20. View northeast of NR building #3 along the east side of Main Street in the northern portion of the study area, with existing sidewalk in front.

Figure 21. View northeast of NR building #5 along the east side of Main Street in the northern portion of the study area, with existing sidewalk in front.

Figure 22. View south of NR building #5, in background, along the east side of Main Street in the northern portion of the study area, with existing sidewalk in front; non-contributing building #4 at left.

Figure 23. View northeast of NR building #6 along the east side of Main Street in the northern portion of the study area.

Figure 24. View east of NR building #36, located along the west side of Main Street, but view from Depot Street, in the northern portion of the study area.

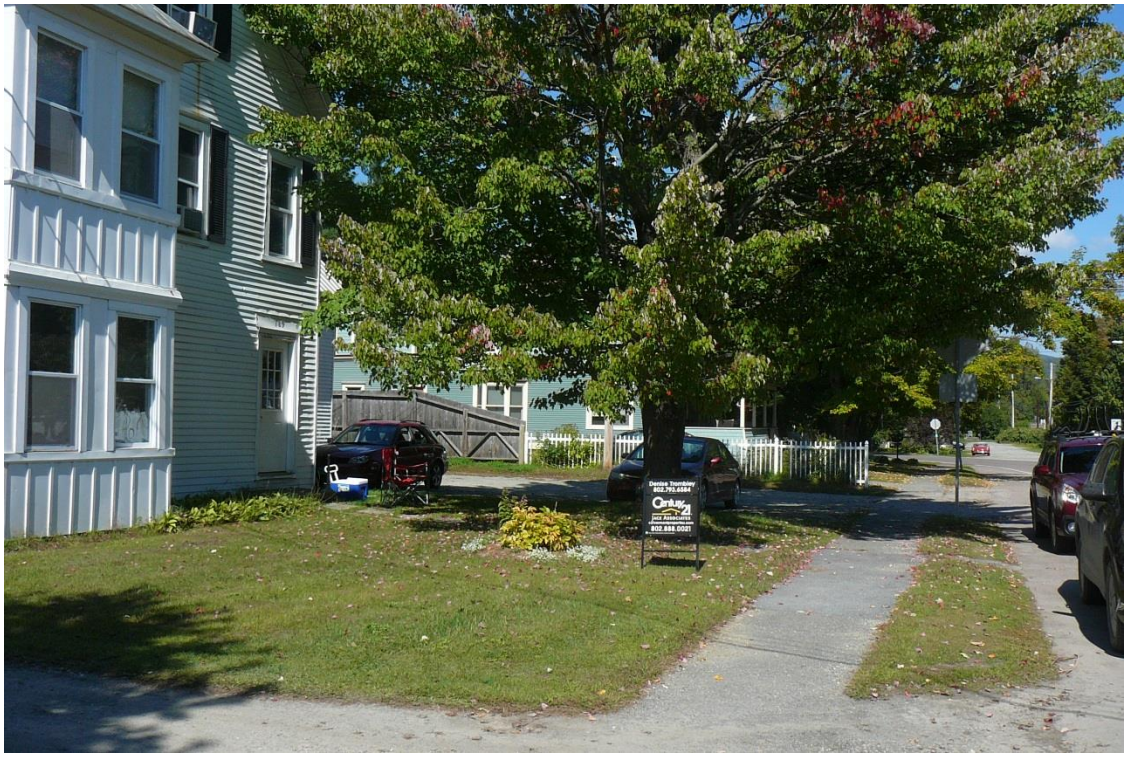


Figure 25. View north of existing sidewalk along the west side of Main Street in the northern portion of the study area; non-contributing building at left, NR building #38 in background.

Figure 26. View north of NR building #38, along the west side of Main Street in the northern portion of the study area, with existing sidewalk in front.

Figure 27. View southwest of NR building #39, behind trees, along the west side of Main Street in the northern portion of the study area.

Main Street, North of Church Street, and South of School and Depot Streets (Figures 28 – 44)

Figure 28. Central portion of the Jeffersonville Bicycle and Pedestrian Path project study area along Main Street, north of Church Street, and south of School and Depot streets, with contributing resources to the National Register-listed Jeffersonville Historic District indicated.

Figure 29. View south of NR building #7, along the east side of Main Street in the central portion of the study area, with existing sidewalk in front.


Figure 30. View northeast of NR building #8, along the east side of Main Street in the central portion of the study area, with existing sidewalk in front.

Figure 31. View northeast of NR building #9, along the east side of Main Street in the central portion of the study area, with existing sidewalk in front.

Figure 32. View southeast of NR buildings #10 (left), #11 (center) and #13 (right), along the east side of Main Street in the central portion of the study area (non-contributing building #12 is between #11 and #13).

Figure 33. View south of NR buildings #10 (foreground) and #11 (center) along the east side of Main Street in the central portion of the study area, with existing sidewalk in front.

Figure 34. View northeast (right to left) of NR buildings #13 (right), #12 (non-contributing), #11 (center), and #10 (background), along the east side of Main Street in the central portion of the study area.

Figure 35. View northeast of NR buildings #14 (right) and #13 (center), along the east side of Main Street in the central portion of the study area.

Figure 36. View northwest of NR building #14 from Mill Street.

Figure 37. View southwest of NR building #28, along the west side of Main Street, at the intersection with Church Street, in the central portion of the study area, with existing sidewalk in front.

Figure 38. View southwest of NR buildings #29 (right) and #28 (center), along the west side of Main Street, in the central portion of the study area, with existing sidewalk in front.

Figure 39. View north of NR buildings #30 (left) and #31 (center) along the west side of Main Street in the central portion of the study area, with existing sidewalk in front.

Figure 40. View north of NR buildings #31 (NR building #32 behind trees at center), along the west side of Main Street in the central portion of the study area, with existing sidewalk in front.

Figure 41. View southwest of NR building #33 along the west side of Main Street in the central portion of the study area, with existing sidewalk in front.


Figure 42. View northeast of NR building #34 along the west side of Main Street in the central portion of the study area, with existing sidewalk in front.

Figure 43. View southwest of NR building #35 along the west side of Main Street, at the Depot Street intersection, in the central portion of the study area; NR building #34 at left.

Figure 44. View northwest in front of NR building #35 along the west side of Main Street, at the Depot Street intersection, in the central portion of the study area.

Depot Street (Figures 45 – 49)

Figure 45. Central portion of the Jeffersonville Bicycle and Pedestrian Path project study area along Depot Street, with contributing resources to the National Register-listed Jeffersonville Historic District indicated.

Figure 46. View northwest of NR building #42 along the north side of Depot Street, in the central portion of the study area.

Figure 47. View west of NR buildings #35 (left) and #43 (center) along the south side of Depot Street, in the central portion of the study area; with existing sidewalk in front.

Figure 48. View southeast of NR building #44 along the south side of Depot Street, in the central portion of the study area, at the northeast corner of Maple Street, with existing sidewalk in front.

Figure 49. View southwest of NR building #57 along the south side of Depot Street, in the central portion of the study area, at the northwest corner of Maple Street.

School Street (Figures 50 – 56)

Figure 50. Eastern portion of the Jeffersonville Bicycle and Pedestrian Path project study area along School Street, with contributing resources to the National Register-listed Jeffersonville Historic District indicated.

Figure 51. View northwest (right to left) of NR buildings #63, #62 (non-contributing), #61, #60 and #6, along the north side of School Street in the eastern portion of the study area.

Figure 52. View west on School Street in the eastern portion of the study area with NR buildings #60 at right foreground, and #6 at right background; non-contributing buildings at left.

Figure 53. View east of NR buildings #64 (left) and #65 (background), along the north side of School Street in the eastern portion of the study area.

Figure 54. View east of NR buildings #64 (left) and #65 (background), along the north side of School Street in the eastern portion of the study area.

Figure 55. View southeast of NR building #74, along the south side of School Street in the eastern portion of the study area.

Figure 56. View west of NR building #74, along the west side of School Street in the eastern portion of the study area, with existing sidewalk in front.

Carlton Avenue (Figures 57 – 61)

Figure 57. Eastern portion of the Jeffersonville Bicycle and Pedestrian Path project study area along Carlton Avenue, with contributing resources to the National Register-listed Jeffersonville Historic District indicated.

Figure 58. View northwest of NR building #72, along the north side of Carlton Avenue, at the intersection with School Street, in the eastern portion of the study area.

Figure 59. View southeast of NR building #66, along the south side of Carlton Avenue, in the eastern portion of the study area.

Figure 60. View west of NR building #68, along the south side of Carlton Avenue, in the eastern portion of the study area.

Figure 61. View northwest along Carlton Avenue, in the eastern portion of the study area; NR building #68 at left center.

Church Street (Figures 62 – 72)

Figure 62. Southern portion of the Jeffersonville Bicycle and Pedestrian Path project study area along Church Street, with contributing resources to the National Register-listed Jeffersonville Historic District indicated.

Figure 63. View west of NR building #15, along the south side of Church Street, in the southern portion of the study area.

Figure 64. View west of NR structure (war monument) #16, along the south side of Church Street, in the southern portion of the study area.

Figure 65. View southeast of NR building #17, along the south side of Church Street, in the southern portion of the study area.

Figure 66. View southeast of NR building #18, along the south side of Church Street, in the southern portion of the study area; NR building #17 in background.

Figure 67. View west of NR buildings #19 (left foreground) and #20 (center), along the south side of Church Street, in the southern portion of the study area.

Figure 68. View east of NR building #22, along the south side of Church Street, in the southern portion of the study area.

Figure 69. View east of NR building #23, along the north side of Church Street, in the southern portion of the study area, with existing sidewalk in front.

Figure 70. View northeast of NR buildings #24 (left) and #25 (center), along the north side of Church Street, in the southern portion of the study area, with existing sidewalk in front.

Figure 71. View northeast of NR building #26, along the north side of Church Street, in the southern portion of the study area, with existing sidewalk in front.

Figure 72. View northeast of NR building #27, along the north side of Church Street, in the southern portion of the study area, with existing sidewalk in front.

Individual State Register-Listed Properties

Three additional, individually-listed State Register historic properties were identified within the project's area of potential effects, beyond the boundaries of the Jeffersonville Historic District (see Figure 2). All three resources are currently listed on the Vermont State Register of Historic Places; however, one property, SR #0802-48 may no longer be eligible for inclusion due to alterations.

Upper Pleasant Valley Road, Hubbard House, SR # 0802-48 (Figures 73 – 75)

Description: This 1860s or 1870s former farm house is located in the southern portion of the project area, along the east side of Upper Pleasant Valley Road, approximately 220 yards south of the road's intersection with Church Street (Figures 73 and 74). The building is not mapped in 1859, but does appear on Beers' 1878 *Atlas of the Counties of Lamoille and Orleans, Vermont,* and at that time was owned by W. H. Griswold who owned additional properties in the town, including the house (NR building #17) at the base of Upper Pleasant Valley Road (then South Street) (see Figures 3 and 4) (Walling 1859; Beers 1878; VDHP 1980). When the property was recorded on the Vermont Historic Sites & Structures Survey in 1980, it retained much of its character defining features including multi-paned windows, molded window surrounds, a four paneled front entrance door with sidelights, wood clapboard siding and Greek Revival-style trim boards on the main block (Figure 75) (VDHP 1980). Based on the 1980 photograph, it appears that renovations had begun on the attached barn, including window and siding replacement on the lower half of the building (see Figure 75). Today, the completed renovations to the barn and the house have replaced the multi-paned windows with one/one windows, removed the historic molded window surrounds, replaced the original door and sidelights, and covered-over or removed the Greek Revival-style trim boards and wood clapboard siding.

Statement of Significance and Eligibility: This property on Upper Pleasant Valley Road was added to the State Register in 1990 (VDHP 1990). Although it contributes to the history of Jeffersonville and is part of the residential building expansion that took place in the Village in the last half of the 1800s, renovations that appear to have begun in 1980, have greatly altered the character-defining features of this house and this review recommends that this resource has lost its historic significance and is no longer eligible for inclusion on the State Register of Historic Places. The property's significance and State Register status will need to be determined by the VDHP.

Mill Street, Buker-Pope House, SR # 0802-53 (Figures 76 – 78)

Description: Constructed in the 1860s or 1870s, this house is located in the southern portion of the project area, along the west side of Mill Street, approximately 230 yards south of the road's intersection with Church Street (Figures 76 and 77). The building is not mapped in 1859, but does appear on Beers' 1878 *Atlas of the Counties of Lamoille and Orleans, Vermont,* and at that time was owned by C. B. Buker, a prosperous farmer in Jeffersonville (see Figures 3 and 4) (Walling 1859; Beers 1878) (VDHP 1980). The house appears much as it did when the property was recorded on the Vermont Historic Sites & Structures Survey in 1980, and it retains many of its character defining features including its Greek Revival-style wide trim boards under the roof line, corner trim boards, clapboard siding, simple window surrounds and entryway sidelights, along with its late 1800s/early 1900s front porch with turned posts, spindle screen and balustrade (Figure 78) (VDHP 1980). Alterations since 1980 include a dormer on the ell roof slope, replacement shingles on the roof (from slate to asphalt), and changes to a side entry porch.

Statement of Significance and Eligibility: The Buker-Pope House on Mill Street was added to the State Register in 1990 (VDHP 1990). It represents the expansion in residential construction related to the success of farming and the growth in industry and commerce that took place in Jeffersonville in the last half of the 19th century. Although some changes to the building have taken place since its State Register listing, it retains its historic integrity, distinctive architectural characteristics, and qualities of location, design, setting, materials, workmanship, feeling and association. This historic resource remains eligible for inclusion on the State Register under National Register Criterion C: properties that embody the distinctive characteristics of a type, period or method of construction, under the architecture and agriculture categories.

VT Route 15, Perkins Depot, SR # 0802-49 (Figures 79 – 83)
Description: The Jeffersonville Depot, named the "Perkins Depot" on the Vermont Historic Sites & Structures Survey in 1980, was originally built ca. 1890 along the tracks of the Burlington and Lamoille County Railroad, to the southeast of where it currently stands at the terminus of Depot Street, along the east side of VT Route 15 (Figures 79 – 82) (VDHP 1980). The building was moved to its current location in 1940 and used as the house for a large farm that operated until ca. 1960 when VT Route 15 was constructed within the farm's fields to the west of the depot building (VDHP 1980). The depot appears much as it did when the property was recorded on the Vermont Historic Sites & Structures Survey in 1980, and it retains many of its character defining features including: Gothic Revival-style vergeboards with cross-bracing and at least one of its Gothic Revival-style gable end finials; Stick Style brackets, widely overhanging eaves and chamfered support rafters; and clapboard siding (VDHP 1980) (Figure 83). Since 1980, the slate roof covering has been replaced with composite shingles.

Statement of Significance and Eligibility: The Perkins Depot was added to the State Register in 1990 (VDHP 1990). The depot served the Village of Jeffersonville for 40 years, operating from ca. 1890 until the 1930s when the railroad closed. Although the building was moved about 75 feet from its original location, and has been somewhat altered, it continues to retain its recognizable railroad architecture and period character, design, materials, workmanship, feeling and association. This railroad depot building remains eligible for inclusion on the State Register under National Register Criterion C: properties that embody the distinctive characteristics of a type, period or method of construction, under the architecture and transportation categories.

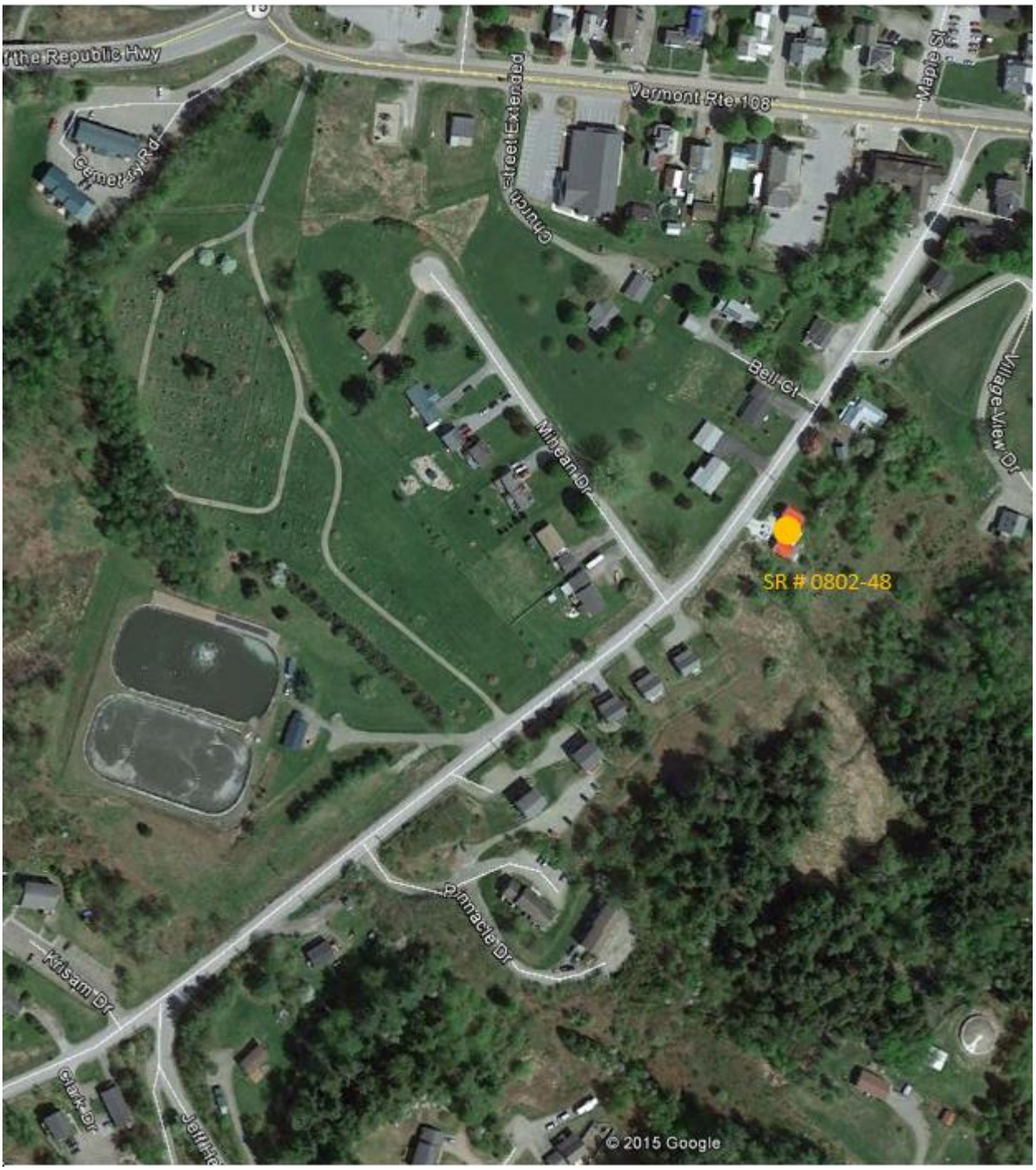


Figure 73. Southern portion of the Jeffersonville Bicycle and Pedestrian Path project study area along Upper Pleasant Valley Road, with State Register-listed house indicated.

Figure 74. View south of SR building #0802-48, along the east side of Upper Valley Pleasant Road, in the southern portion of the study area.

Figure 75. View northeast in 1980 of SR building #0802-48 along the east side of Upper Valley Pleasant Road; note siding and door/window replacement on lower half of barn (VDHP 1980).

Figure 76. Southern portion of the Jeffersonville Bicycle and Pedestrian Path project study area along Mill Street (VT Route 108), with State Register-listed house indicated.

Figure 77. View south of SR building #0802-53, along the west side of Mill Street (VT Route 108), in the southern portion of the study area.

Figure 78. View southwest in 1980 of SR building #0802-53 along the west side of Mill Street (VDHP 1980).

Figure 79. Western portion of the Jeffersonville Bicycle and Pedestrian Path project study area along VT Route 15, with State Register-listed Rail Road Depot/house indicated.

Figure 80. Historic lantern slide of the Jeffersonville Depot, February 20, 1920 (UVM Landscape Change Program LS14492_000).

Figure 81. View south of SR building #0802-49, along the east side of VT Route 15, in the western portion of the study area.

Figure 82. View south of SR building #0802-49, along the east side of VT Route 15, in the western portion of the study area; edge of VT Route 15 at right.

Figure 83. View south in 1980 of SR building #0802-53 along the west side of Mill Street (VDHP 1980).

Additional Section 4(f) Resources

For the purposes of Section 4(f) of the Department of Transportation Act, in addition to the Jeffersonville Historic District, and individual State Register-listed properties identified above, there is one publicly owned recreational facility within the project study area, the Town Recreation Fields, which would also be considered a Section 4(f) resource (Figure 84). The 7.0 acre recreation fields are located between the Brewster River and Cambridge Elementary School, along School Street, and next to the Town Garage, adjacent to Mill Street (see Figure 2) (Cambridge 2014:35). The fields are used for soccer, lacrosse and baseball, and an ice skating rink is set up in them during the winter (Cambridge/Jeffersonville 2012:17). Baseball dugouts are constructed near the south edge of the fields, close to the Brewster River and near the Town Garage. A small garden is planted along the north edge of the field, between Carlton Avenue and Mill Street. Any potential impacts to ("use of") these resources would have to be considered as part of a Section 4(f) review.

Figure 84. Image showing the Town Recreation Fields along School and Mill streets.

POTENTIAL EFFECTS

The proposed Jeffersonville Bicycle and Pedestrian Path project has the potential to affect resources in the National Register of Historic Places Jeffersonville Historic District. Although specific project plans are not yet available, and Right-of-Way lines are not known, general potential effects that may result from the proposed Jeffersonville Bicycle and Pedestrian Path Project are discussed here.

Along the east and west sides of Main Street, where narrow, asphalt sidewalks are already in place (except for a very short section in front of the library which has wider, concrete sidewalks), most buildings within the Jeffersonville Historic District may be set back far enough from the roadway to accommodate sidewalk upgrades within the ROW (e.g., see Figures 19, 26, 29, 38 and 42). In most portions of Main Street, there is a grassed area between the street and the buildings that serves as a buffer zone (e.g., see Figures 19, 22, 29 and 41). However, there are some areas where there is no buffer and the sidewalk is ill-defined, with vehicles parking totally or partially within it (e.g., see Figures 23, 32, 33, 35 and 38). In general, the east side of Main Street has a wider buffer zone than the west side of the street. Several areas without buffers on the east side of the street have metal posts along the edge of the sidewalk that delineate it from the edge of the street (see Figure 21). Some buildings along the west side of Main Street sit fairly close to the road (see Figures 26, 27 and 37), so have a greater potential to be affected by the project if use of their front yards is required.

Old Main Street, at the very north end of Main Street, currently has no sidewalks. The two Historic District buildings located here, one on each side of the street, sit fairly close to the street's edge so are more likely to be affected by the construction if a portion of their front yards is incorporated into the project (see Figures 16 and 17).

Historic buildings within the Jeffersonville Historic District on the south and north sides of Depot Street also have fairly shallow setbacks from the street (see Figures 46 – 49). Existing sidewalks are in place on the south side of the street, but there is little differentiation between the road edge and the edge of the sidewalk.

Except for a short section of concrete sidewalk in front of the school, School Street currently has no sidewalks (see Figure 56). The historic buildings along the north side of the street have fairly shallow setbacks, so have the potential to be affected by the project (see Figure 51, 53 and 54). There are no historic properties along the south side of School Street, and buildings have deeper setbacks; however, utility poles are in place at the street's edge which may complicate path placement on the south side of the street (see Figure 52). The Town Recreational Fields are located on the east side of School Street; parking spaces are in place between the fields and the street. If the project uses any Recreational Field land, Section 4(f) would be triggered. If all project work takes place outside of the fields, project work would probably not result in "constructive" (indirect) use of the park because it is unlikely that the proposed path location along School Street would substantially affect or impair the activities, features, or attributes of the park. For review of potential affects under Section 4(f), the alternative that results in the least harm to historic resources would need to be selected.

Carlton Avenue currently has no sidewalks. The single historic house on the north side of the street sits back from the street, so the proposed project could likely take place within the

road ROW (see Figure 58). On the south side of Carton Avenue, the two historic houses are closer to the road, so path placement may impact the properties (see Figures 59 and 60).

Sidewalks are in place along the north side of Church Street; Historic District buildings here have variable setbacks, but there is also a very wide shoulder, so placement of the Jeffersonville Bicycle and Pedestrian Path Project seems like it could take place without impacting historic resources (see Figures 69 – 72). The south side of Church Street currently has no sidewalks, but in most areas, there is a very wide margin between the street's edge and the historic properties (see Figures 65 – 68). At the eastern end of Church Street, where it curves around to meet Mill Street, there are two historic resources that sit very close to the street's edge, so project work here would be very constrained.

The single historic resource located on the east side of Upper Valley Pleasant Road has a front yard that abuts the road's edge (see Figure 74). Placement of the bicycle and pedestrian path in front of the house would likely require incorporating a portion of the yard, and if beyond the ROW, would affect the property. However, with further review and determination by the VDHP, this property may no longer be eligible for inclusion on the State Register so may not be considered historic.

The historic house along Mill Street may sit back far enough from the road to accommodate the project without any adverse effect (see Figures 77 and 78). However, the road does not have a wide shoulder here, and there is a drainage ditch alongside the road in front of the house.

The train depot, now located to the east of VT Route 15, appears to lie far enough back from the edge of the road to not be adversely affected by the placement of the Jeffersonville Bicycle and Pedestrian Path Project (see Figures 79 and 82). There is also a fairly wide shoulder along VT Route 15.

Throughout the project area, other possible project elements that would have the potential to affect historic resources would be the addition of any new lighting, signage, traffic calming measures, signalized crosswalks, etc. Such elements should, when applicable, be as compatible as possible (for example any lighting fixtures) and locations of all elements should minimize impact to resources, for example, by limiting their placement directly in front of historic buildings which could visually impact the view of the building.

SUMMARY

The Village of Jeffersonville with the assistance of Dufresne Group is conducting a study of the proposed Jeffersonville Bicycle and Pedestrian Path project, located in the Village of Jeffersonville, Town of Cambridge, Lamoille County, Vermont. The study area is located within the National Register-Listed Jeffersonville Historic District, and adjacent to three additional individual historic properties that are listed on the State Register. For compliance under Section 106 of the National Historic Preservation Act of 1966 and its amendments, all historic resources were evaluated for their significance and their potential to be affected by project work.

The Jeffersonville Historic District was determined to retain its integrity and significance and remains eligible for inclusion on the National Register. Two of the individual historic properties, one located on Mill Street and the other along VT Route 15, also retain integrity and significance. The property on Upper Pleasant Valley Road has been greatly altered and this review recommends that this resource has lost its historic significance and is no longer eligible for inclusion on the State Register of Historic Places. This property's significance and State Register status will need to be determined by the VDHP.

Currently, there are sidewalks in place in much of the Village core area, and historically sidewalks were present within the Village, so in general, path construction and upgrades should be considered compatible with the historic resources and if work can be kept within existing Right-of Ways, impacts on historic resources should be limited. Given the shallow setbacks of some historic buildings, the project does have the potential to affect some resources; if project work beyond existing Right-of-Ways is necessary, then project plans should aim at the least amount of intrusion onto historic property. The placement of any associated project elements such as new lighting, signage, traffic calming measures, and signalized crosswalks should also consider effect on historic resources. For the purposes of Section 4(f) of the Department of Transportation Act, impacts to the Town Recreation Fields would also need to be considered.

Once developed, a review of project plans and alternatives will be necessary to determine specific project effects on the standing historic resources identified. Early coordination with the Vermont Division for Historic Preservation and the Vermont Agency of Transportation, if applicable, is also recommended.

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Archaeological Resources Assessment for the proposed Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont

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Report No. 900

September 3, 2015

Archaeological Site Inspection for the proposed Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont

Project Description

The Town of Jeffersonville, with the assistance of the Dufresne Group, proposes the Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont (Figure 1). The proposed project is looking into developing a series of safe and efficient bicycle and pedestrian connections within the downtown of Jeffersonville, Vermont. New sidewalks are proposed along sections of Main and Old Main Street, Carlton Ave, School Street, Mill Street, Church Street and Upper Pleasant Valley Road.

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. The closest known archaeological site is the precontact Native American site VT-LA-1, located 250 m to the northwest from the end of Old Main Street, at the confluence of the Brewster and Lamoille Rivers (see Figure 1). This site was identified in the road cut during the construction of VT Rte 108 from several stone flakes made from quartzite and chert. The site is believed to continue north of VT Rte 108 in the existing floodplain. Another site, VT-LA-32 is located 300 m further upstream the Lamoille River and represents a moderately large site on the floodplain, identified from the recovery of a biface fragment and numerous flakes of various materials, including quartzite, chert, quartz, fire-cracked rock, and pottery fragments. Both of these sites are located in similar environments as portions of the proposed project, but will not be disturbed by the proposed project.

In regard to historic period resources, both the historic 1858 Wallings map (Figure 5) and the 1879 Beers map (Figure 6) show numerous historic properties along portions of the proposed project alignment, such as along Mill Street, Main Street and Old Main Street. Since these streets existed at the time of the historic maps and thus, we would not expect portions of these historic residences to extend out into the streets, or within the proposed sidewalk alignment, since their original construction would have been constrained by the existence of these streets. Also, it is likely that the same houses depicted on the historic period maps are still in existence today. As for

the portions of the proposed project that follow Depot and School Streets and Carlton Avenue, the historic maps show that they were built in an area that had no previous residences. As a result, no historic archaeological sites are expected to be disturbed by the proposed sidewalk alignment.

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 Pulp Jeffersonville Bicycle and Pedestrian Study area scores 56 on the Predictive Model, due to its location within 90 m of the Brewster River (12), along a natural travel corridor (12), and along a major alluvial terrace (32). 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 Jeffersonville Bicycle and Pedestrian Study alignment crosses areas that contain three sensitivity factors, which are Waterbody, Kame Terrace, and Level Terrain (see Figure 1).

Field Inspection

A field inspection of the project area was carried out on August 26, 2015 by Charles Knight, Assistant Director of the UVM CAP. Knight walked the entire length of the alignment, taking soil cores throughout to determine the degree of soil disturbance in areas of potential archaeological sensitivity. The portions of the project alignment along School Street have all been disturbed by the residential development along it, as well as the construction of the large school and adjacent playground at the end the street (Figures 4 and 5). School Street and Carlton Avenue are connected by an unnamed lane behind the school, all of which has been heavily disturbed (see Figure 5). Carlton Avenue itself also has been disturbed throughout (Figure 6). At the eastern end of the avenue, closest to the Brewster River, considerable grading has occurred on the house lots (see Figure 6). To the north, Depot Street is in a similar situation in that house construction along it has disturbed the alignment of the proposed sidewalk (Figure 7). The section of the proposed alignment running along Mill Street south of the downtown will be entirely within the road's prism, which is very large considering the grade of slope (Figure 8). The intersection of Mill Street and Church Street at the south end of downtown is completely disturbed due to historic development (see Figure 8). Finally the length of Main Street is not sensitive for the existing sidewalk along it and residential and commercial development along it. However, the very end of Old Main Street, north of its intersection with Main Street is archaeologically sensitive (Figure 9). The archaeologically sensitive area covers both sides of the street and surrounds the historic house located on the east side of the street (Figure 10). The proposed project is closest to the Brewster River at this point, and little development along it has disturbed the ground (Figure 11). The portion of Main Street that veers northwest from the intersection of Main Street and Old Main Street is not archaeologically sensitive due to disturbances of the road prism and development (Figure 12).

Conclusions

The Town of Jeffersonville proposes the Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont. The UVM CAP conducted an Archaeological Resources Assessment of the proposed sidewalk alignment and identified the east and west sides of Old Main Street at the northern-most end of the proposed project alignment as archaeologically sensitive. In general, the vast majority of the project alignment has been disturbed by historic period construction of residential and commercial buildings, as well as water, sewer and electric lines, and grading to level the road. In the sensitive portion of the project, little development has occurred on the side of the road, and it is the portion of the project closest to Brewster River. As a result, a Phase I site identification survey is recommended for this archaeologically sensitive areas unless it can be avoided.

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

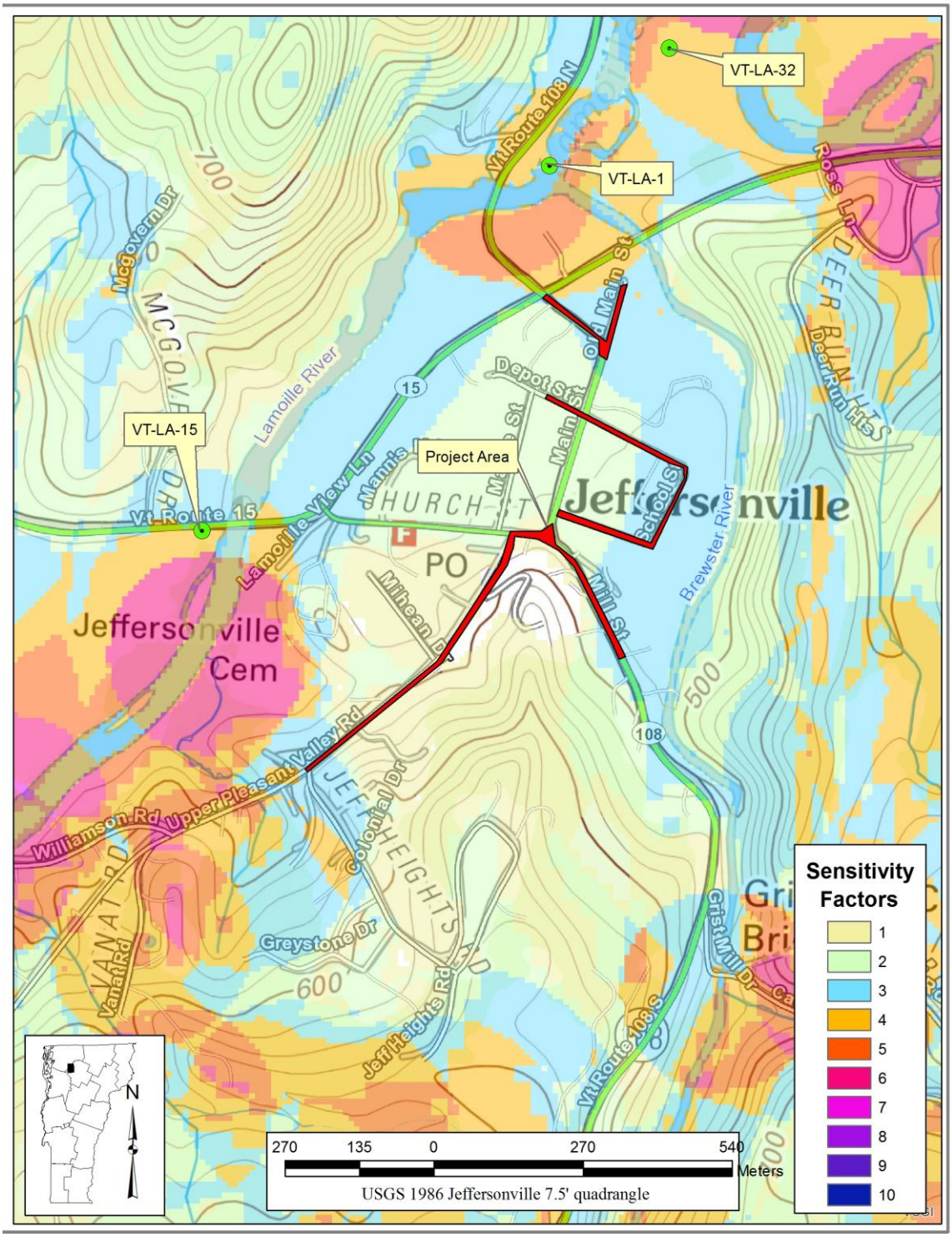


Figure 1. Map showing the location of the proposed Jeffersonville Bicycle and Pedestrian Study, in relation to archaeological sensitivity factors, Jeffersonville, Lamoille County, Vermont.

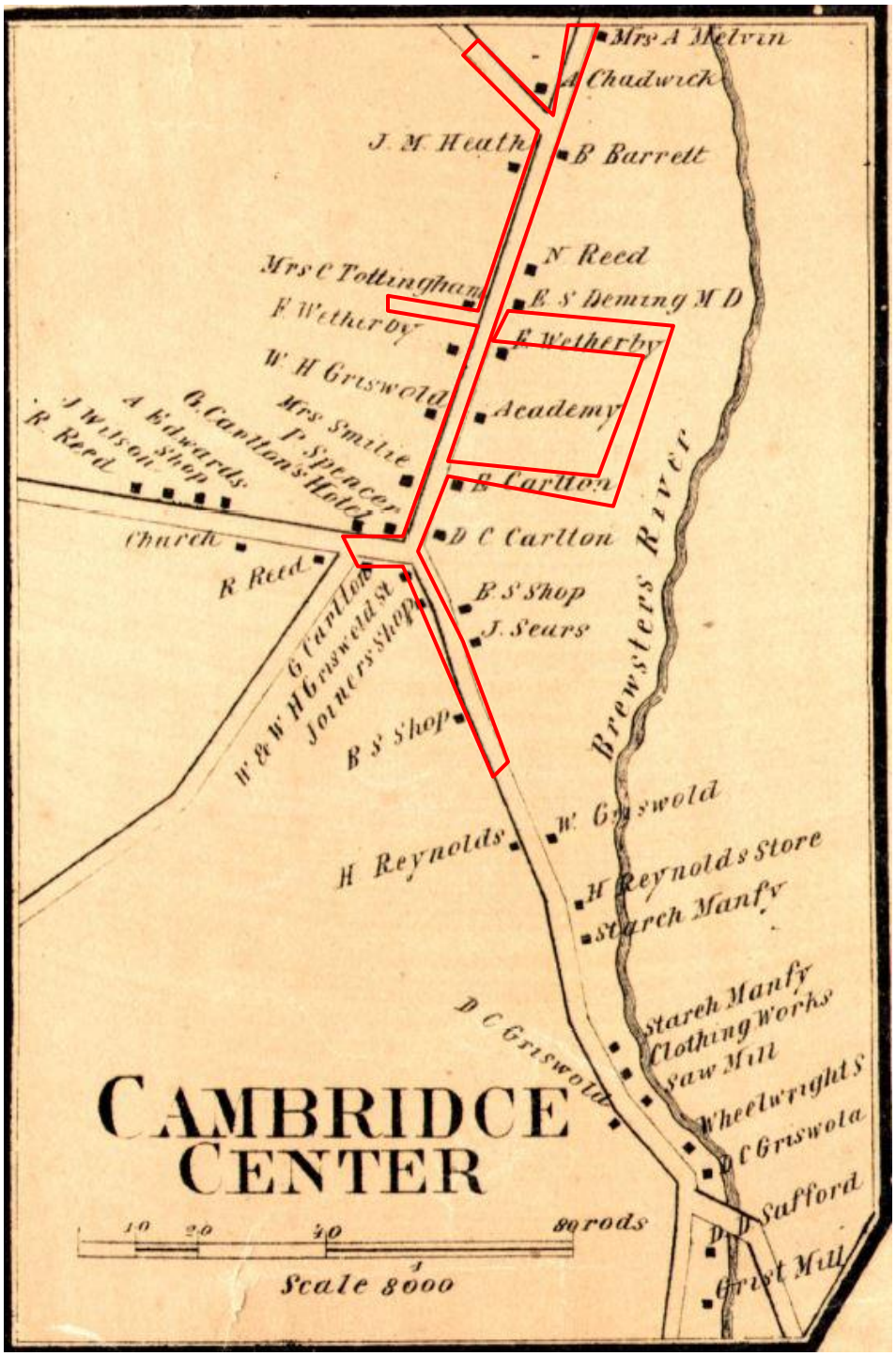


Figure 2. Historic 1859 Wallings map of Cambridge Center (Jeffersonville) showing the project alignment of the proposed Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

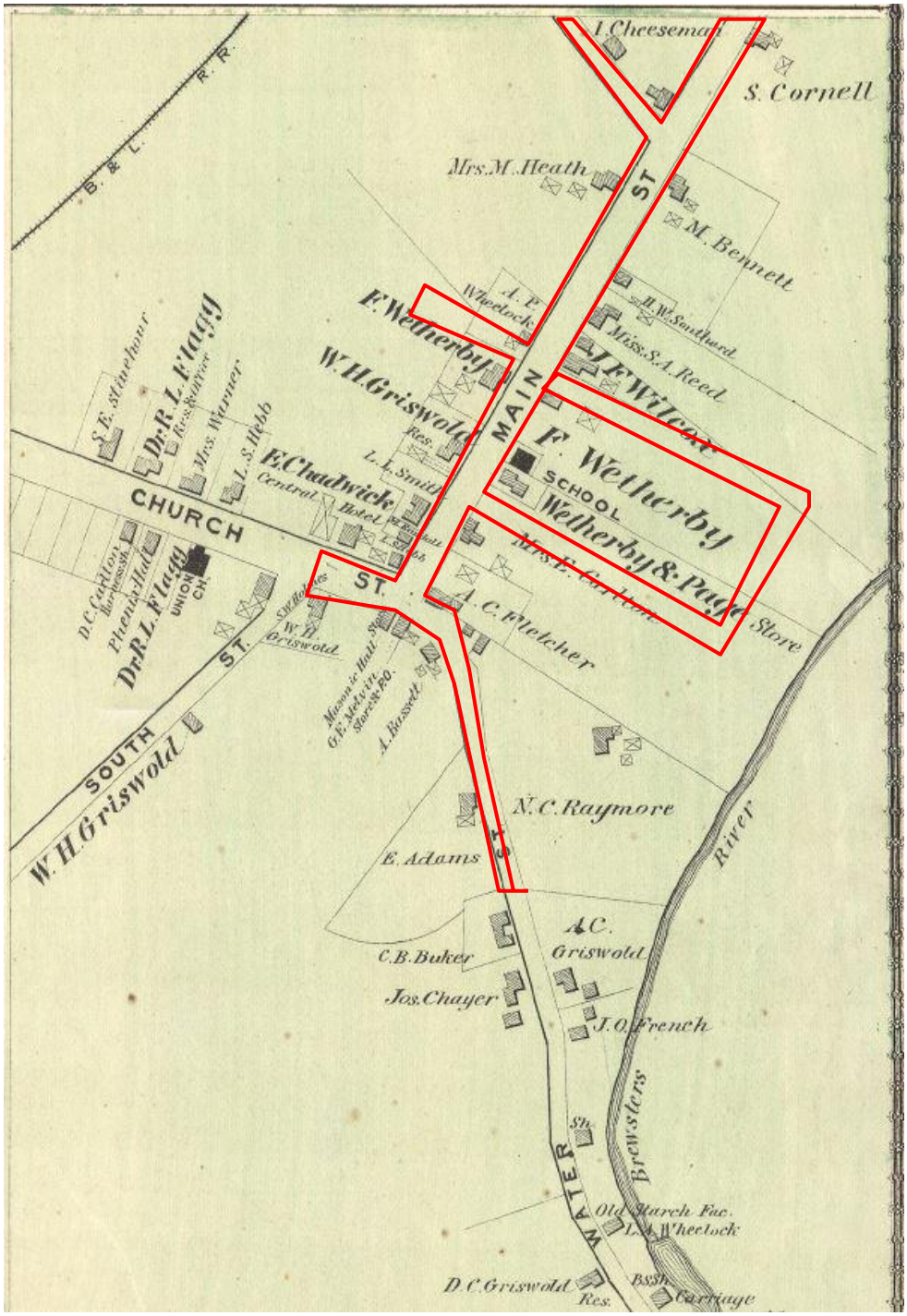


Figure 3. Historic 1878 Beer's atlas of Cambridge Center (Jeffersonville) showing the alignment of the proposed Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

a

b

Figure 4. Photos looking west (a) and east (b) along School Street for the proposed Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

a

b

Figure 5. Photos looking west along School Street from its eastern-most point (a) and south along the backside of the school (b) for the proposed Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

a

b

Figure 6. Photos looking west (a) and east (b) along Carlton Avenue for the Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

Figure 7. Photo looking west along Depot Street for the Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

a

b

Figure 8. Photos looking northwest along Mill Road near the entrance to the recreation fields (a), and northwest along Mill Road near the intersection with Church Street (b) for the Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

Figure 9. Map showing the location of the archaeologically sensitive landforms along the alignment of the proposed Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

a

b

Figure 10. Photos looking north along Old Main Street (a) and (b) north of its intersection with Main Street for the Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

a

b

Figure 11. Photos southeast (a) and east (b) at an archaeologically sensitive area at the northern terminus of Old Main Street for the Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

a

b

Figure 12. Photos looking west (a) and northwest (b) along Main Street for the Jeffersonville Bicycle and Pedestrian Study, Jeffersonville, Lamoille County, Vermont.

Appendix E

Safe Routes to School Report

DUFRESNE GROUP
CONSULTING ENGINEERS

VERMONT
Safe Routes to
SCHOOL

Cambridge Elementary School

Safe Routes to School Travel Plan

Spring 2016

Prepared with assistance from the VT SRTS Resource Center

saferoutes.vermont.gov

CONTENTS

INTRODUCTION

The Five E's

SRTS combines many different approaches to make it safer for children to walk and bicycle to school and to increase the number of children doing so.

Engineering strategies create safer environments for walking and bicycling to school through improvements to the infrastructure surrounding schools. These improvements focus on reducing motor vehicle speeds and conflicts with pedestrians and bicyclists, and establishing safer and fully accessible crossings, walkways, trails and bikeways.

Education programs target children, parents, caregivers and neighbors, teaching how to walk and bicycle safely and informing drivers on how to drive more safely around pedestrians and bicyclists. Education programs can also incorporate health and environment messages.

Enforcement strategies increase the safety of children bicycling and walking to school by helping to change unsafe behaviors of drivers, as well as pedestrians and bicyclists. A community approach to enforcement involves students, parents or caregivers, school personnel, crossing guards and law enforcement officers.

Encouragement activities promote walking and bicycling to children, parents and community members. Events such as Walk to School Day, contests such as a Frequent Walker/Bicyclist challenge, or on-going programs such as a Walking School Bus or Bicycle Train can promote and encourage walking and bicycling as a popular way to get to school.

Evaluation is an important component of SRTS programs that can be incorporated into each of the other E's. Collecting information before and after program activities or projects are implemented allow communities to track progress and outcomes, and provide information to guide program development.

- Excerpted from "Safe Routes to School: A Transportation Legacy", the report of the National Safe Routes to School Task Force

This Travel Plan represents the work of the Cambridge Elementary School Safe Routes to School Team. Our school believes that creating and maintaining this Travel Plan is a good way to ensure an on-going Safe Routes to School (SRTS) program.

SRTS programs adopted by schools like ours across the country have been shown to provide a variety of benefits to their communities. A strong SRTS program can help to:

1. Reduce traffic congestion around our school
2. Reduce costs and need for busing students to school
3. Increase our students' sense of independence and responsibility
4. Teach students fundamental safety skills
5. Strengthen our sense of community
6. Provide more transportation options for everyone

The SRTS team at Cambridge Elementary School (CES) consists of parents, teachers, and other community stakeholders who have provided input, guidance, and oversight in writing our plan.

The ideas and recommendations developed during this process will guide us in creating a well-balanced approach to building our SRTS program at CES. Our school team will use this document as a resource to plan our encouragement, education, infrastructure, enforcement, and evaluation efforts with assistance from the VT SRTS Resource Center.

The Vermont Agency of Transportation (VTrans), through the VT SRTS Resource Center, has provided technical assistance in producing this plan. With the help of the Resource Center, we have identified

infrastructure improvements that would have a positive impact on walking and biking to school. These infrastructure recommendations are considered planning level and will require further engineering analysis to determine feasibility. It is our hope that our recommendations can be the basis for grants and/or improvements initiated by the Town of Cambridge and the Village of Jeffersonville.

Members of the Cambridge Elementary School SRTS Team	
Mary Anderson, Principal	Sue Reed, School Nurse
Donna Rooney, Wellness Coordinator	Donald Lange, Village Trustee
Rob Moore, Lamoille County Planning Commission	Joyce Larro, Department of Health

TEAM VISION

The SRTS program at CES aligns with the community's efforts towards promoting active lifestyles through walking, hiking, and biking. The SRTS program goals to improve the safety and health of students who walk and bike to school also fit our school and town values.

Our vision for CES (and the surrounding town) is:

- To be a school where more students can safely bicycle and walk to school
- To encourage a more physically active student body reflecting our town's values as an active community
- To build community support and respect of pedestrians and bicyclists both on our roads and on our school grounds
- To develop a regular Walking/Biking School Bus program
- To involve all generations of residents in active transportation

This Travel Plan outlines CES's intentions for making walking to and from school more regular and safer for students and the community. Through our SRTS program we hope to reach 15% (or 13) of our students walking or biking to school during year one and 25% (or 21) of our students walking or biking to school for year two. We believe this goal is attainable through

encouraging more walking and biking in town and through educating students on safe walking and biking practices.

Cambridge Elementary School hopes to engage 100% of its student population through the next year in their Safe Routes to School program.

ABOUT THIS PLAN

Our SRTS team met twice with the VT SRTS Resource Center to develop this SRTS Travel Plan. Each meeting provided education on the benefits of SRTS and highlighted successful program components and strategies. The "engineering meeting" included a guided walk audit of the areas around our school. We also discussed education, encouragement, enforcement, and evaluation strategies which helped identify needed and complementary programs to support proposed engineering strategies. The next step is for this plan to be adopted by the school and to continue acting on the non-infrastructure recommendations.

Meeting Date	Content and Outcomes
December 2015	**Kick-off Meeting**: **How the VT SRTS Travel Plan Works** - Award of the planning assistance grant - Overview of the planning process **Engineering Meeting** - Team visioning - Opportunity and barrier discussions - Walk audit - Observed dismissal
May 2016	**Plan Review** - Reviewed the draft plan - Identified roles and continued steps for non-engineering recommendations

TRAVEL PLAN CONTEXT

CAMBRIDGE ELEMENTARY SCHOOL AND TOWN OF CAMBRIDGE OVERVIEW

CES is located in the Town of Cambridge, VT which includes the Village of Jeffersonville. Cambridge has a population of approximately 3,600 year-round residents. The town of Cambridge is focused around the intersection of VT 15 and VT 108, surrounded by a rural landscape. Its dispersed population, low-density development patterns, hilly terrain, and a general lack of bicycle and pedestrian facilities limit students living in much of the community from easily walking or biking to school.

CES is located on School Street – a Class 2 town road. It is near the intersection of VT 108 and Mill Street/VT 108, a state highway and the main road through town. The posted speed limit on both VT 108 and Mill Street is 25 miles per hour near the school.

The SRTS program at CES is a key component in the school's efforts to improve the health of its students and community as well as to increase awareness of bicycles and pedestrians within town.

Several years ago, the State of Vermont passed Complete Streets legislation which took effect July 1, 2011. Complete Streets policies ensure that state and local transportation agencies consider all users in the design and operation of the right of way to make roads safer and more accessible for everyone regardless of age or ability. Complete Streets policies, working in tandem with the SRTS travel plan, will help to define Cambridge as a walkable, bikeable, and sustainable community.

CURRENT SCHOOL DEMOGRAPHICS

CES serves the Town of Cambridge and has a total of 328 students enrolled for the 2015-2016 school year. Our school serves grades K-6. CES offers busing to all enrolled students. Six buses serve this school.

DEMOGRAPHIC	COUNT	PERCENTAGE OF STUDENT BODY
Students with Disabilities	59	18%
Limited English proficient students	0	0
DISTANCE FROM SCHOOL		
Students living within 1/4 mile of school	26	8%
Students living within 1/2 mile of school	33	10%
Students living within 1 mile of school	45	14%
Students living within 2 miles of school	63	18%
Students in grades K-3	198	60%
Students in grades 4-6	130	40%

CURRENT STUDENT TRAVEL MODES

TRAVEL MODE	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	PUBLIC TRANSIT	OTHER
Percentage of Students (AM)	4%	1%	40%	54%	0	0	0
Percentage of Students (PM)	6%	1%	51%	41%	0	0	1%

Data based on SRTS Student Tally Report administered in October 2015.

SCHOOL ARRIVAL AND DISMISSAL PROCEDURES

CES relies on policies, practices, and support activities to ensure a safe and orderly process for arrival and dismissal, regardless of how students travel to school. Parents are reminded of these procedures in the student handbook and in newsletters that are mailed to students' homes.

The school day begins at CES at 7:50 am.

Students walking, biking, and travelling by car arrive

staggered before school starts – typically between 7:30 am and 7:50 am. The school buses arrive at 7:30 am, dropping students off on the southeast side of school at the front entrance. They then proceed to the rear of the parking lot and remain there until dismissal.

Students who walk to school typically travel along Main Street, up Carlton Avenue or School Street, to the main school entrance. Students travelling by bike may leave their bicycles in the rack just north of the main entrance, between School Street and the school building.

The parking lot functions as a two-way loop in front of the school for vehicles. Vehicles can enter by either School Street or Carlton Avenue. These roads are also used by delivery vehicles loading and unloading products for businesses on Main Street.

Dismissal begins at 2:20 pm with all students dismissed at once. Students riding the bus board directly from the door on the west side of the school building. Dismissal continues until approximately 2:40 pm with students who walk and bike being dismissed through the front door (facing the parking lot). Parents who pick-up their children in grades K-2 need to park and physically pick-up their child from the classroom. Children in grades 3-6 are dismissed all at once and picked up in the lobby. School staff are present at dismissal to ensure that children are behaving properly and safely until they leave the school grounds.

ARRIVAL		
Travel Mode	**Procedure**	**Time**
Walk	Arrive staggered	7:30-7:50 am
Bike	Arrive staggered	7:30-7:50 am
School Bus	Arrives at designated time	7:45 am
Family Vehicle	Arrive staggered	7:30-7:50 am
DISMISSAL		
Travel Mode	**Procedure**	**Time**
Bus	Dismissed through rear door	2:20 pm
Family Vehicle	k-2 students: parent pick up in classroom 3-6 students: parent pick up in lobby	2:20 pm
Walk	Dismissed all at once through front door	2:20 pm
Bike	Dismissed all at once through front door	2:20 pm

EXISTING TRAVEL HABITS

Most students travel to CES via VT 108. As shown in the Student Locator Map in Attachment A, about 10% of the student population lives within a half mile of the school in the Village Center and 20% live within two miles clustered in the Jeff Heights neighborhood to the south of the school. However, the number of students who can walk or bike to school is low due to limited sidewalks and no bicycle facilities near the school. The majority of students would be served by sidewalks on School St. and Carlton Ave. On December 17th, 2015, (the day of our safety observation) one child was observed bicycling home from school and approximately 5 students were observed walking from school.

A parent survey was conducted in September and October 2015, and is included in Attachment B. Of the nearly 300 surveys distributed, 4 were returned. The survey identified the following barriers to walking to school:

- **Speed of traffic along route** (4/4)
- **Amount of traffic along route** (4/4)
- **Safety of intersections and crossings** (4/4)
- **Sidewalks or pathways are not present along entire walking route** (3/4)
- **Distance** (3/4)
- **Weather or climate** (2/4)
- **Time** (2/4)
- **Lack of adults with whom to bike or walk** (1/4)
- **Violence or crime** (1/4)
- **Child's participation in after school programs** (1/4)
- **School crossing guards are not present at key intersections along walking route** (1/4)

(Data based on SRTS Parent Survey results administered in October 2015)

Many of the issues in the list above can be addressed with either infrastructure or non-infrastructure strategies (or in some cases both). Alone, the limited responses to the parent survey do not allow us to gauge the general attitudes of the CES Community. We attempted to supplement the survey responses with conversations with parents and staff. We kept the identified issues in mind when picking the strategies that we want to accomplish.

KEY ISSUES

The team identified the following barriers to walking and biking to school:

Issue: No sidewalks to the school grounds.

There are no sidewalks leading to the school even though the school is located within the Village Center. Carlton Avenue to the south of the school and School Street to the north both connect VT 108 to the school. VT 108, also known as Main Street, is the walkable mixed-use core of the Village. Both streets are residential, and there are high traffic volumes during school arrival and dismissal.

Students walk in the road on Carlton Ave because there are no sidewalks.

Issue: A chaotic atmosphere in the school parking lot exists at arrival and dismissal times. Space to separate pedestrians from vehicles is often informal or unclear.

The volume of vehicular traffic in the school parking lot at arrival and dismissal times, combined with a lack of defined pedestrian space, creates a dangerous atmosphere for pedestrians and bicyclists on and around the school grounds. The school has a parking lot and head-in parking along the east side of Carlton Avenue/School Street by the playing fields. The school has visitor designated parking but lack of clear signage means that staff and visitors park in both areas. During dismissal, cars idle in the street and in the parking lot lanes, blocking the view and access of the school front entrance. There are no sidewalks in the parking lot, so students walk around and behind parked cars and are not always visible to drivers.

Parents travel along Carlton Ave/School St next to parked cars and students walking from the building.

Issue: Safety of the Main Street/Church Street/Mill Street intersection

Main Street, Church Street, and Mill Street (all part of VT 108) form a three-way intersection at the south end of the Village Center. Main Street is a primary route through town along with Church Street. The posted speed limit in the village is 25 mph and higher outside the village. There are no designated pedestrian crossings at the intersection. The south and east sides of the intersection lack pedestrian facilities. Main Street carries approximately 1,800 vehicles per day near the school.[1]

Lack of pedestrian accommodations and clear right-of-way make maneuvering this intersection confusing and unsafe

Issue: Lack of sidewalks on Upper Pleasant Valley and Jeff Heights Roads.

Jeff Heights, a neighborhood less than .75 miles southwest of the school, has a large school age population. The neighborhood links to the Village Center by way of Upper Pleasant Valley Road. Steep grades on Upper Pleasant Valley Road make walking and biking to school difficult for students coming from these neighborhoods. The lack of pedestrian facilities along Upper Pleasant Valley Road, poor sight lines, and the high speeds at which cars travel are barriers to walking and biking.

[1] Based on Annual Average Daily Traffic (AADT) on VT 108 Main Street from Church Street to VT 15. Vermont Agency of Transportation, *2012 (Route Log) AADTs: State Highways*, May 2013, p. 34.

TRAVEL PLAN RECOMMENDATIONS

This Travel Plan is comprised of several sections detailing activities and programs for CES to implement now and projects for us to develop over time with local officials.

Non-Engineering Strategies

The Non-Engineering Strategies in the following section identify education, encouragement, enforcement, and evaluation activities and programs suitable for our school. Information on the advantages and considerations for each strategy, and resources to help us implement each, are available in **the mini-guides available on the VT SRTS website http://saferoutes.vermont.gov/resources/miniguides**.

16–Month SRTS Activity Calendar

Our team will pursue a smaller subset of items in the non-engineering plan during the next 16 months. We will review our work periodically, adding activities that will build the SRTS program momentum. The Calendar is located in **Attachment C**.

Engineering Recommendations

With assistance from the VT SRTS Resource Center, we have identified short, medium and long-term engineering treatments to make walking and bicycling to school safer for our students. Engineering Recommendations can be found in **Attachment D,** along with typical infrastructure recommendations in the Infrastructure Glossary available at http://saferoutes.vermont.gov/resources/miniguides#infrastructure.

Snow Removal Toolkit

Snow, sleet, slush, ice, and rain impact all modes of transportation, and the timely clearance and removal of the elements are essential for the functionality and accessibility of a SRTS program. A Snow Removal Toolkit can better inform communities about snow removal policies and procedures, providing tools to increase compliance and safety. Snow removal recommendations are located in **Attachment E**.

NON-ENGINEERING STRATEGIES

We identified a number of activities and programs to promote walking and biking to school. These activities and programs, while grouped by "The Five E's," are dependent upon each other for their individual success. We plan to work on our highest priority programs this year, following up with other programs in successive years. We used the timeframe below to determine when to initiate programs:

Type	Short	Medium	Long
Encouragement, Education, Enforcement, Evaluation	*What we plan to do this school year*	*What we plan to do next school year*	*What we plan to do starting in two years*

EDUCATION STRATEGIES

The education strategies included in our 16-month activity calendar (Attachment C) are aimed at providing all students with safe walking and biking skills. Our education activities this year include:

- Provide educational materials for parents and residents regarding general safe-driving behaviors via the school newsletter, town website, town meetings, and Front Porch Forum.
- Establish 5th grade mentors through Girls on the Run to teach younger students safe walking skills.
- Incorporate WalkSmart/BikeSmart Vermont! Curriculum into 2016/2017 school year in PE class.
- Partner with other schools in the area and request the Bike Smart Trailer from Local Motion in order to supply bikes and equipment needed for on-bike skills training.
- Distribute information about the issues, particularly for children's health, of idling.

ENCOURAGEMENT STRATEGIES

Encouragement strategies included in our 16-month activity calendar will help students and their parents feel more comfortable and confident about walking and bicycling to school. Our encouragement activities this year will include:

- Host a Vermont Intergenerational Walk and Roll to School Day event on first Wednesday of May.
- Host an International Walk and Roll to School Day event on the first Wednesday of October.
- Draw signs with students to promote events.
- Encourage students to ride the bus or carpool when biking or walking is not an option.

- Distribute free or reduced-cost bicycle helmets to students in need each May.
- Develop a remote drop-off site once the school has sidewalk access so that students who live further away can walk or bike.

ENFORCEMENT STRATEGIES

Our SRTS enforcement strategies are aimed both at changing the behavior of drivers and making the town safer and more secure for students walking to and from school. Our enforcement activities this year will include:

- Invite local law enforcement on event days.
- Disseminate information about dismissal procedures and parking.
- Distribute a Safe Driver Pledge to parents.

EVALUATION STRATEGIES

Evaluation is an important component of our SRTS program. We plan to regularly complete the student tally and parent survey forms provided by the National Center for Safe Routes to School (NCSRTS). Parent surveys will help us measure the effectiveness of SRTS efforts over time. We first administered parent surveys in October 2015 and student tallies in September 2015, which provided baseline information on student travel behavior and parental perceptions.

We will continue to conduct walk audits on a regular basis to evaluate the existing walking and biking environment as well as monitor the progress of recommended projects.

Other evaluation strategies we will work on after this year are:

- Administer parent surveys annually to capture opinions of new parents and changes in overall parental perceptions.
- Collect student tally data each year to measure progress toward goals.

Keep the SRTS Travel plan updated and use it as a tool to guide future SRTS activities.

EVALUATION TOOL	LEADER	SCHEDULE
Parent Surveys	Donna Rooney	Annually in October
Student Tallies	Donna Rooney & Sue Reed	Annually in September
Walk Audits	SRTS Team and students	Every other year, within first two months of school

ENGINEERING TRAVEL PLAN

Our goal for engineering improvements is to enhance the physical environment along walking and biking routes that students use. Engineering improvements generally fall into three categories: providing sidewalks and paths, improving crossings, and implementing infrastructure associated with improving the safety of school drop-off and pick-up practices. Descriptions of typical engineering recommendations can be found in the **Infrastructure Glossary** (http://saferoutes.vermont.gov/resources/miniguides#infra)**.**

We recognize that infrastructure improvements take time to complete and are a collaborative effort among CES, the Town of Cambridge and potentially VTrans to implement. The following short, medium, and long-term timeframes are a guide for anticipated project completion, but actual timeframes may vary:

Short term	**Within 2 years**
Medium term	**Within 5 years**
Long term	**Longer than 5 years**

The SRTS team prioritized the infrastructure improvements as high, medium, or low. The factors affecting this ranking include:

- Locations with specific safety concerns

- Locations along existing student walking or bicycling routes, or with a significant number of school family residences
- Locations that are priorities for the school community

Engineering Recommendations for specific locations in the vicinity of CES can be found in **Attachment D.**

CONSIDERATIONS FOR DESIGN AND FUNDING

Design

- All infrastructure recommendations in this plan are considered "planning level" and will require further engineering analysis, design, or public input before implementation.

- Recommended changes to existing traffic patterns (adding a signal, adding a stop sign, changing lane patterns, etc.) will require a study to evaluate the potential impact that the recommendation could have on existing traffic conditions.

- Drainage, existing utilities and ADA compliance will need to be evaluated for all recommendations at the time of design. ADA guidelines recommend particular design features to accommodate persons with disabilities. ADA design considerations for curb ramps, sidewalks and paths, include appropriate slopes, landing areas, surface conditions, and use of detectable warning materials for visually impaired pedestrians, among other design features.

- Right-of-way was not evaluated as a part of this project. Recommendations assume that sufficient right-of-way exists or that a method to gain needed right-of-way will be identified as the project progresses.

- VTrans district office staff will be involved in the planning and design process for any recommendation made on the State system.

- All infrastructure recommendations should comply with federal, state, and local standards including the American Association of State Highway and Transportation Officials' (AASHTO) *Policy on Geometric Design of Highways and Streets* and the latest version of the *Manual on Uniform Traffic Control Devices* (MUTCD).

- Refer to the *Vermont Pedestrian and Bicycle Facility Planning and Design Manual* for guidelines on pedestrian and bicycle accommodations.

Funding

- A variety of funding sources may be used for the recommendations. For example, projects requiring right-of-way acquisition or existing utilities relocation are not typically eligible with SRTS funds, but may be funded through other sources.

ADDITIONAL GUIDANCE

The V SRTS Resource Center has developed a series of miniguides on topics to assist us with applying our plan. The miniguides are located at http://saferoutes.vermont.gov/resources/miniguides and include the following topics:

- Starting a Program
- Walk and Roll to School Days
- Contests and Incentives
- Teaching Walking and Biking Safety
- Walking School Buses and Bike Trains
- Measuring Success
- Safety and Enforcement
- Working with Your Community
- Walk Audit
- Travel Plan
- Infrastructure Glossary
- Arrival and Dismissal

ATTACHMENTS

A. Student Locator Map

B. Student Tally Report, September 2015 & Parent Survey Report, October 2015

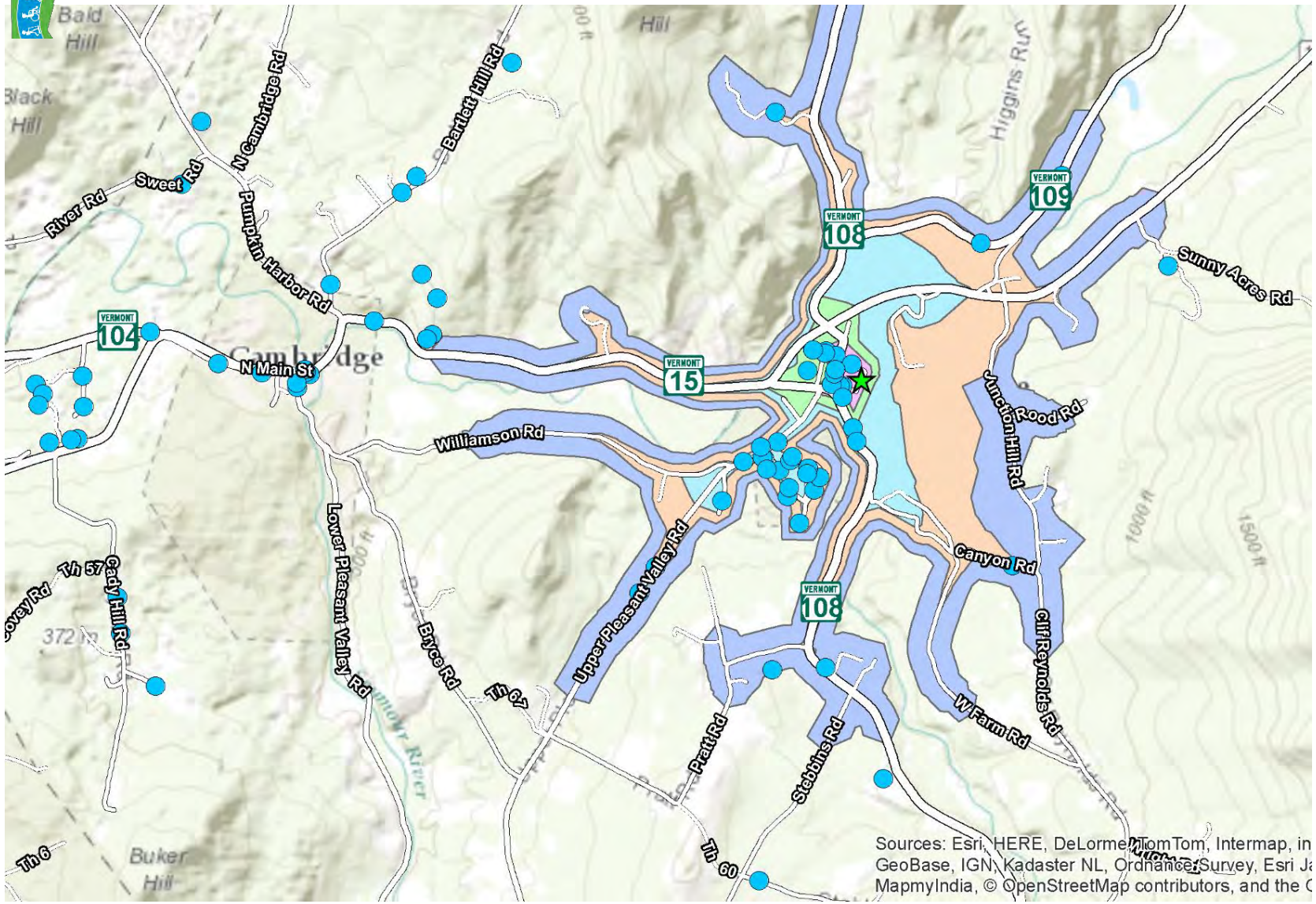
C. Non-Infrastructure Strategies Calendar

D. Location-Specific Engineering Recommendations

E. Snow Removal Best Practices

Attachment A
Student Locator Map

Cambridge Elementary School Student Locator Map

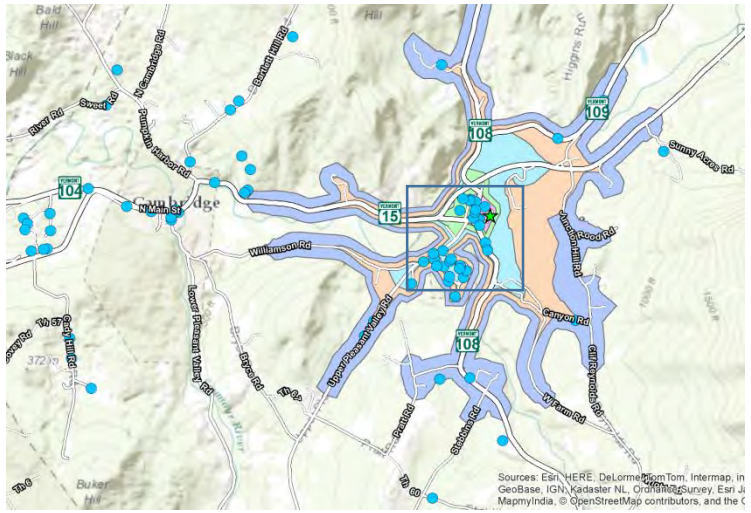


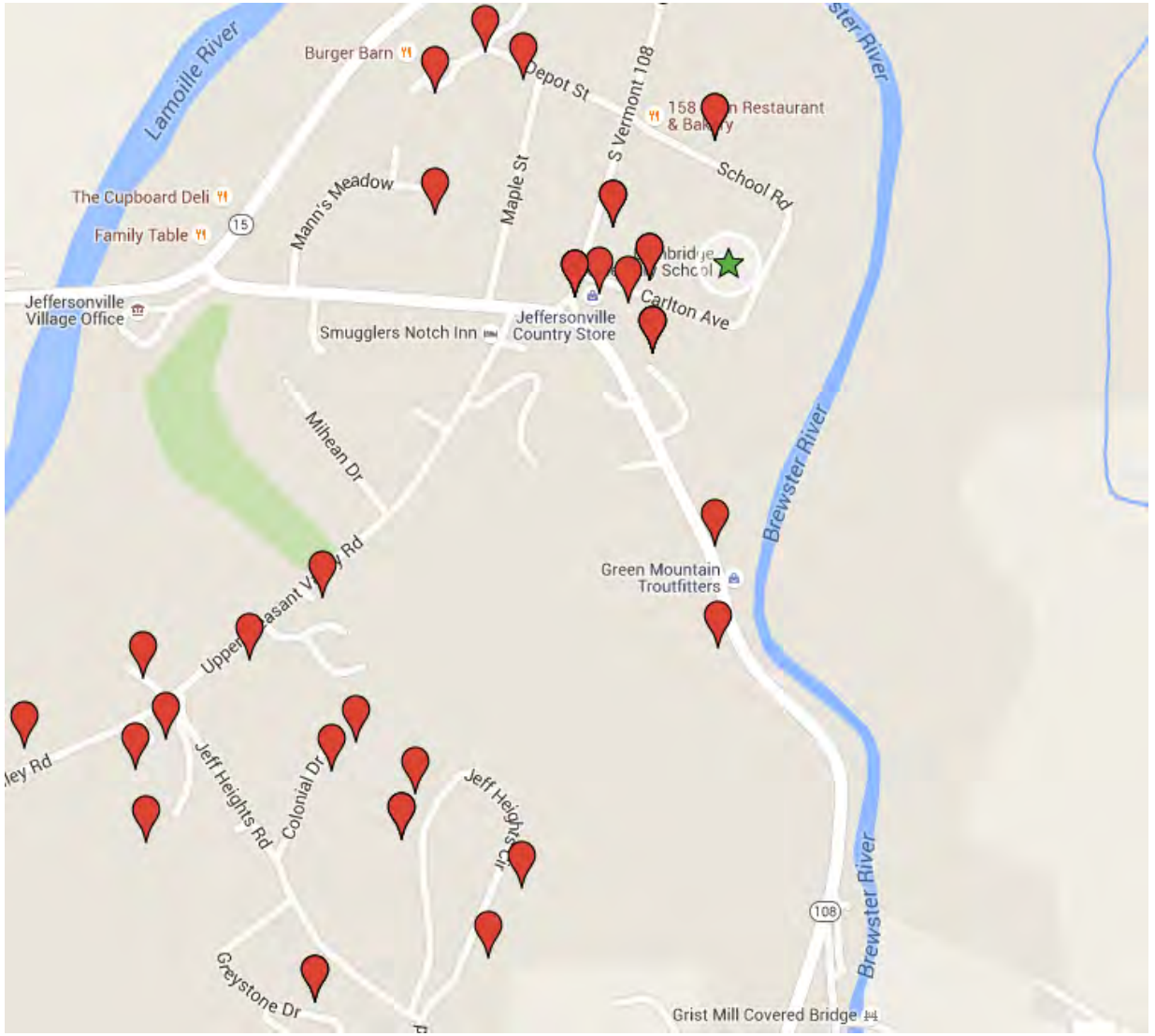
Students who live within:	Number	Percentage
0.25 mile	26	15%
0.5 mile	33	19%
1 mile	45	25%
1.5 mile	59	33%
2 miles	63	35%

School Location

Student Residence

Cambridge Elementary School Student Locator Map





Attachment B
Student Tally Report & Parent Survey Report

Student Travel Tally Report: One School in One Data Collection Period

School Name: Cambridge Elementary School

School Group: LCPC - Lamoille

School Enrollment: 0

% of Students reached by SRTS activities: 76-100%

Number of Classrooms Included in Report: 19

Set ID: 18341

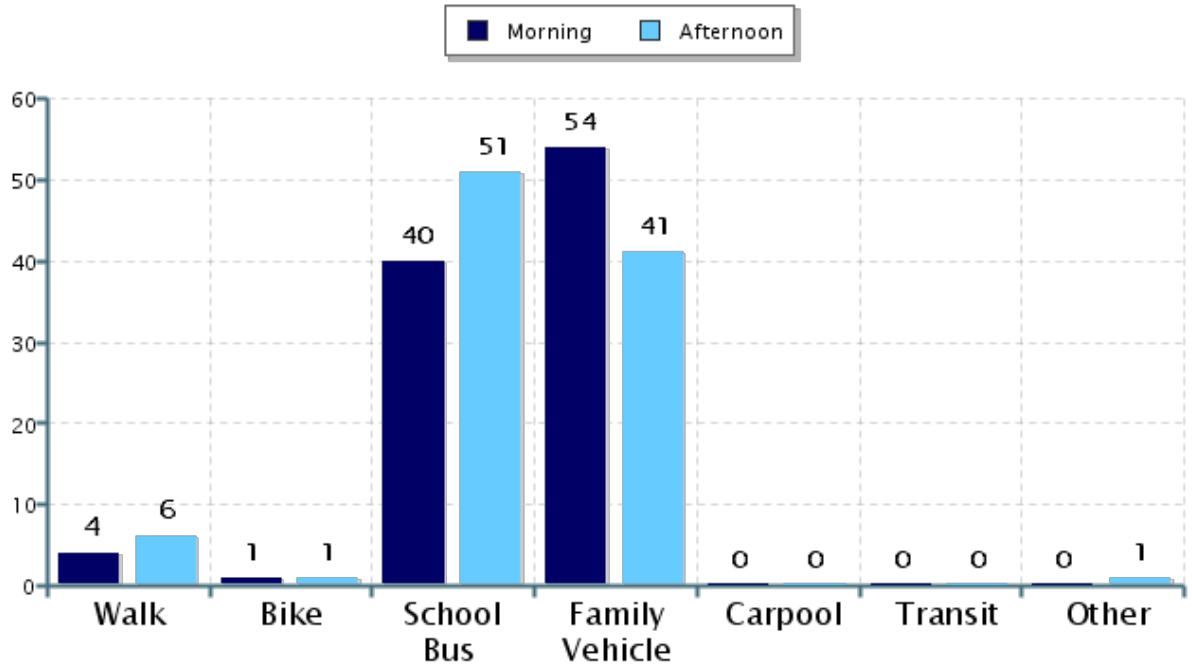
Month and Year Collected: September 2015

Date Report Generated: 09/23/2015

Tags:

This report contains information from your school's classrooms about students' trip to and from school. The data used in this report were collected using the in-class Student Travel Tally questionnaire from the National Center for Safe Routes to School.

Morning and Afternoon Travel Mode Comparison

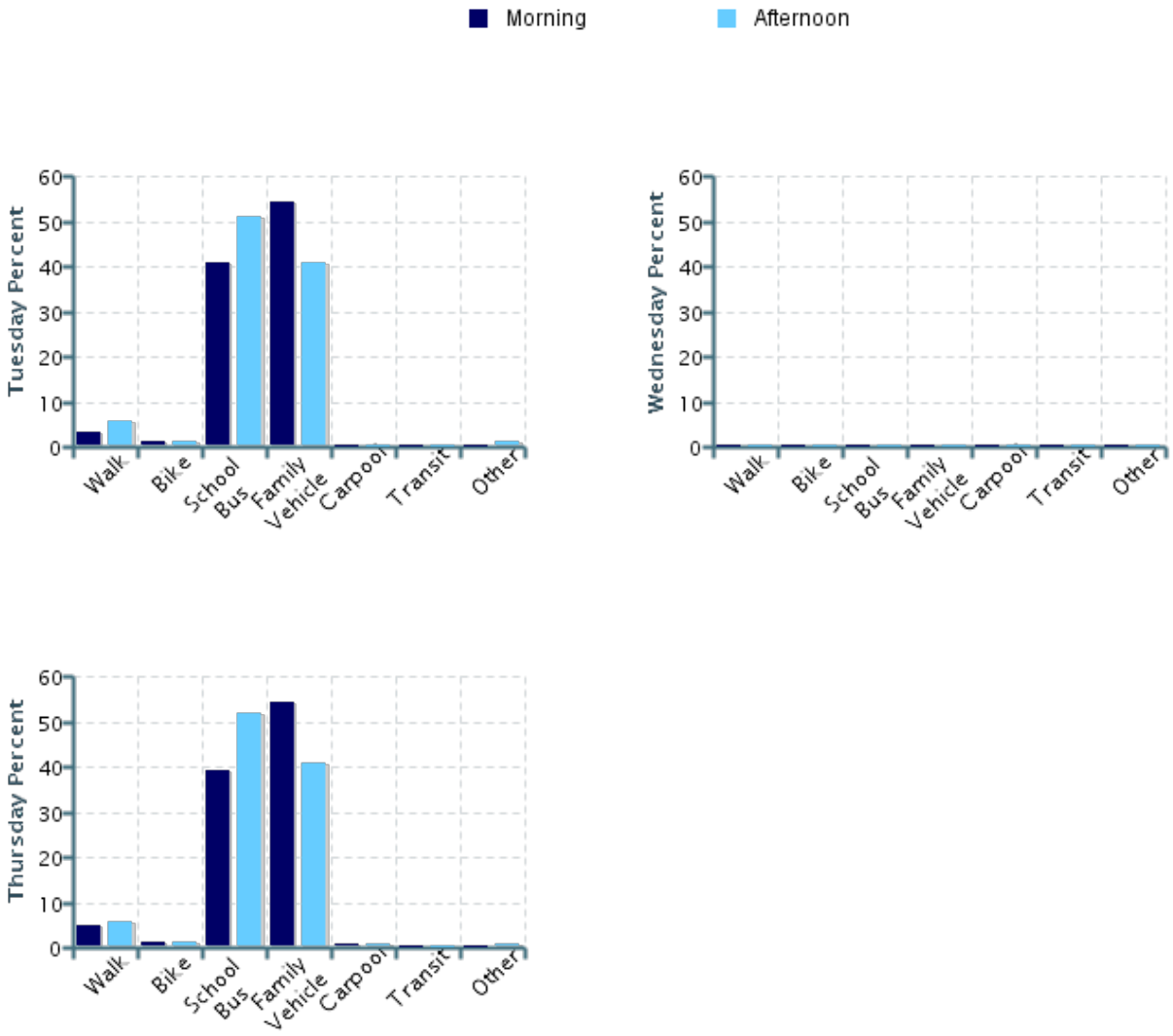


Morning and Afternoon Travel Mode Comparison

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	599	4%	1%	40%	54%	0.2%	0%	0%
Afternoon	570	6%	1%	51%	41%	0.4%	0%	0.9%

Percentages may not total 100% due to rounding.

Morning and Afternoon Travel Mode Comparison by Day

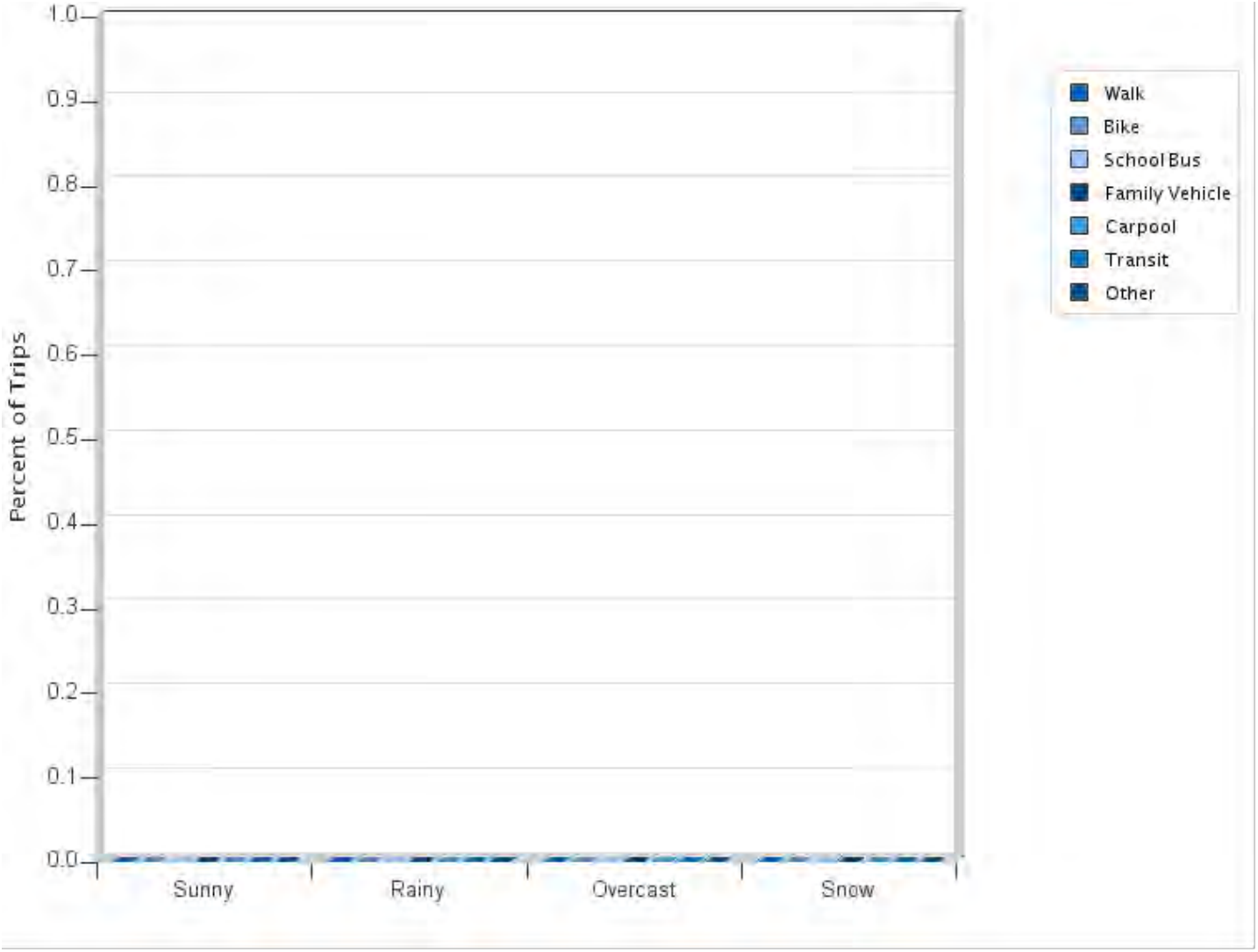


Morning and Afternoon Travel Mode Comparison by Day

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Tuesday AM	301	3%	1%	41%	54%	0%	0%	0%
Tuesday PM	282	6%	1%	51%	41%	0%	0%	1%
Wednesday AM		0%	0%	0%	0%	0%	0%	0%
Wednesday PM		0%	0%	0%	0%	0%	0%	0%
Thursday AM	298	5%	1%	39%	54%	0.3%	0%	0%
Thursday PM	288	6%	1%	52%	41%	0.7%	0%	0.3%

Percentages may not total 100% due to rounding.

Travel Mode by Weather Conditions



Travel Mode by Weather Condition

Weather Condition	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Sunny	0	0%	0%	0%	0%	0%	0%	0%
Rainy	0	0%	0%	0%	0%	0%	0%	0%
Overcast	0	0%	0%	0%	0%	0%	0%	0%
Snow	0	0%	0%	0%	0%	0%	0%	0%

Percentages may not total 100% due to rounding.

Parent Survey Report: One School in One Data Collection Period

School Name: Cambridge Elementary School

Set ID: 14319

School Group: LCPC - Lamoille

Month and Year Collected: October 2015

School Enrollment: 328

Date Report Generated: 03/08/2016

% Range of Students Involved in SRTS: 0-25%

Tags:

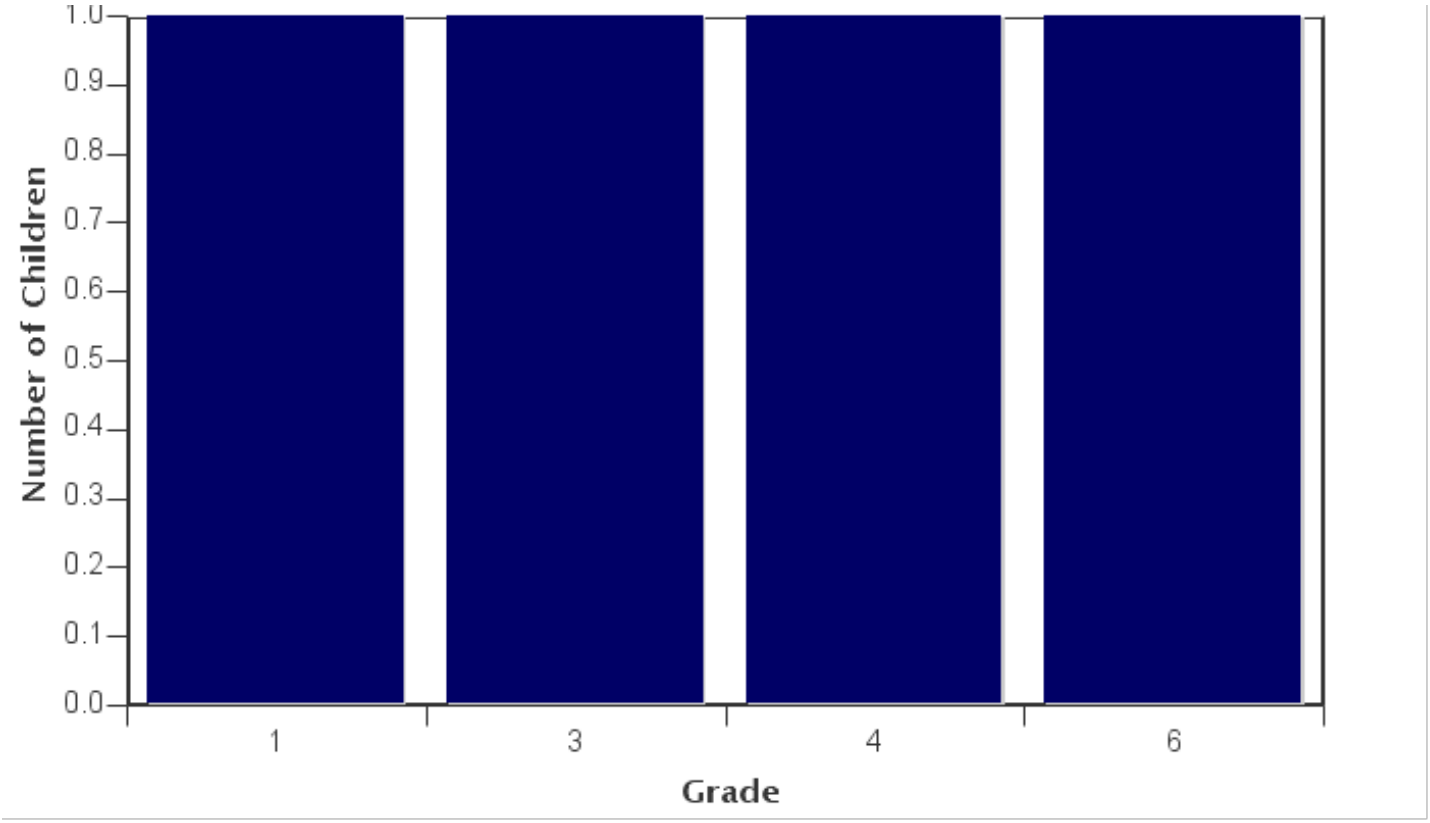
Number of Questionnaires Distributed: 300

Number of Questionnaires Analyzed for Report: 4

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

**Because less than 30 questionnaires are included in this report, each graph and table display counts rather than percentage information.

Grade levels of children represented in survey

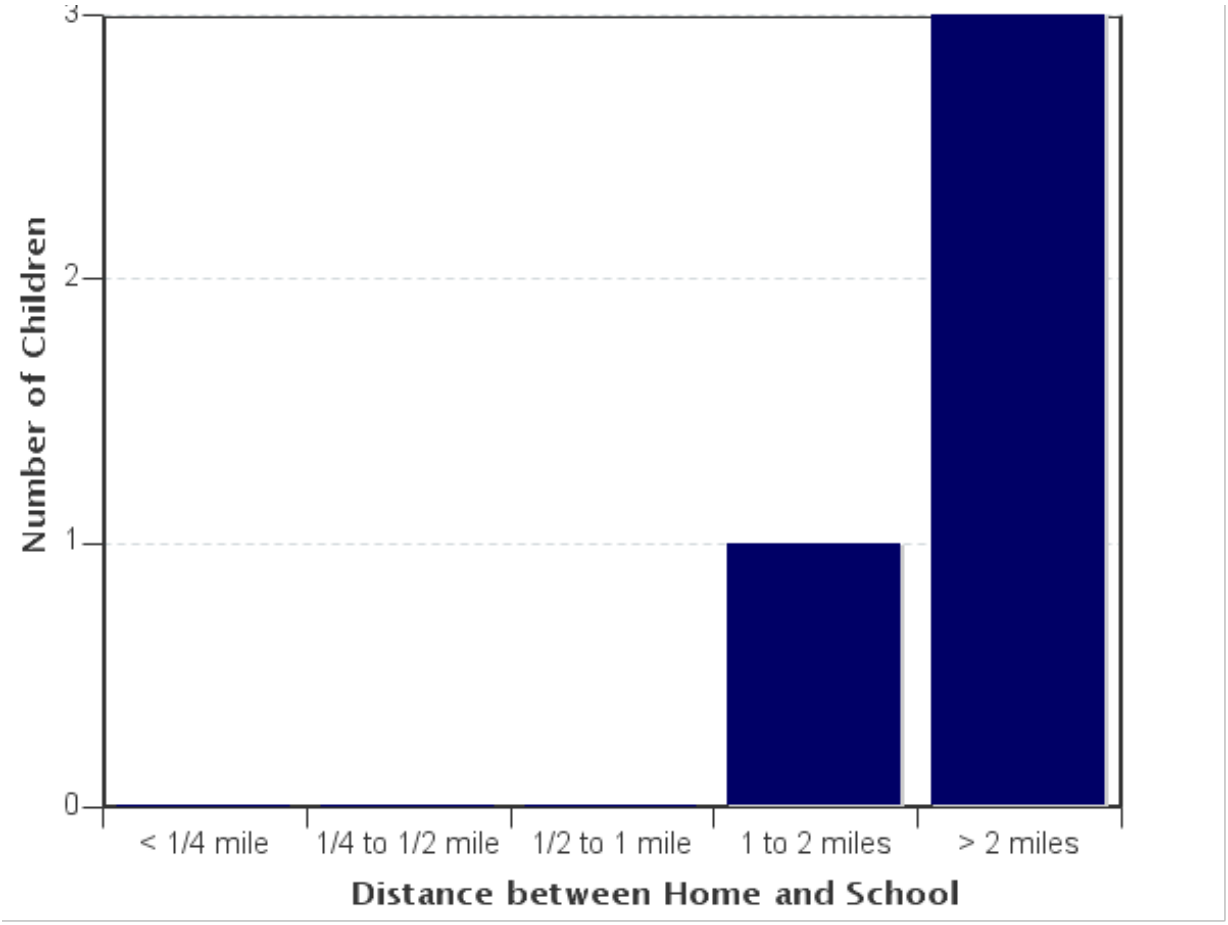


Grade levels of children represented in survey

Grade in School	Responses per grade
	Number
1	1
3	1
4	1
6	1

No response: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Parent estimate of distance from child's home to school

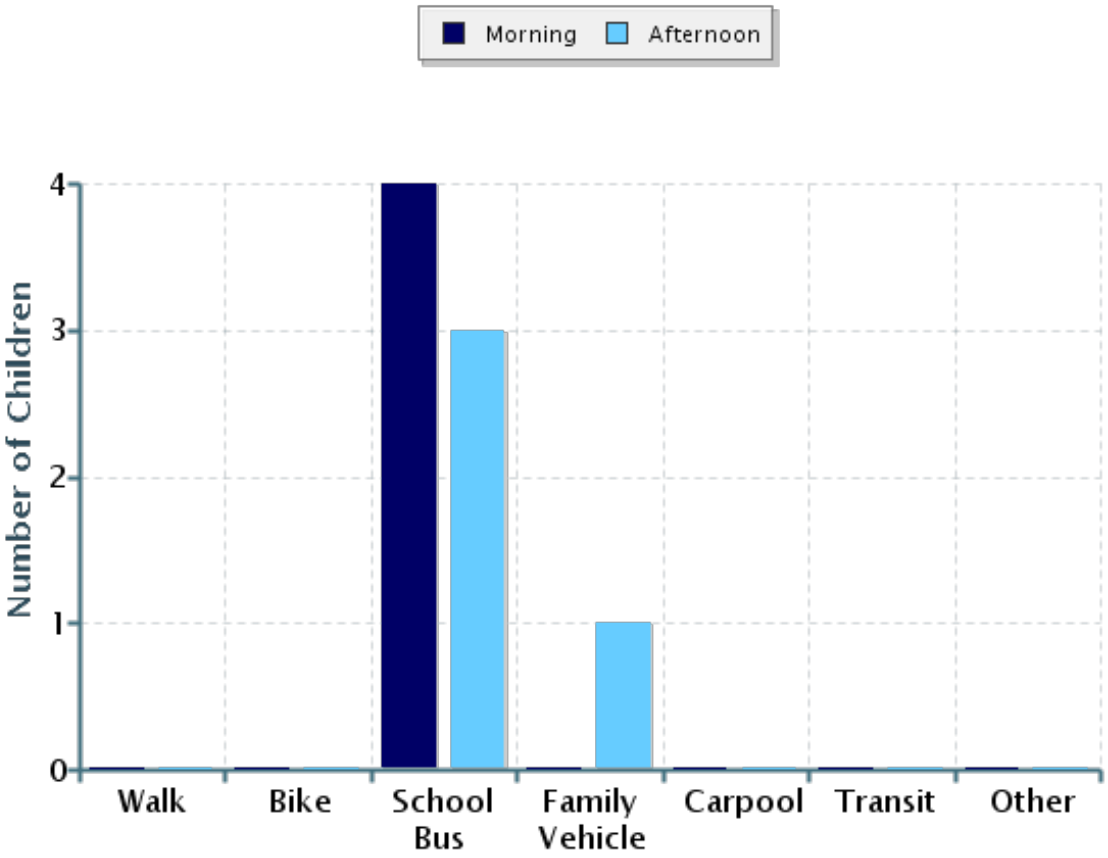


Parent estimate of distance from child's home to school

Distance between home and school	Number of children
Less than 1/4 mile	0
1/4 mile up to 1/2 mile	0
1/2 mile up to 1 mile	0
1 mile up to 2 miles	1
More than 2 miles	3

Don't know or No response: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Typical mode of arrival at and departure from school

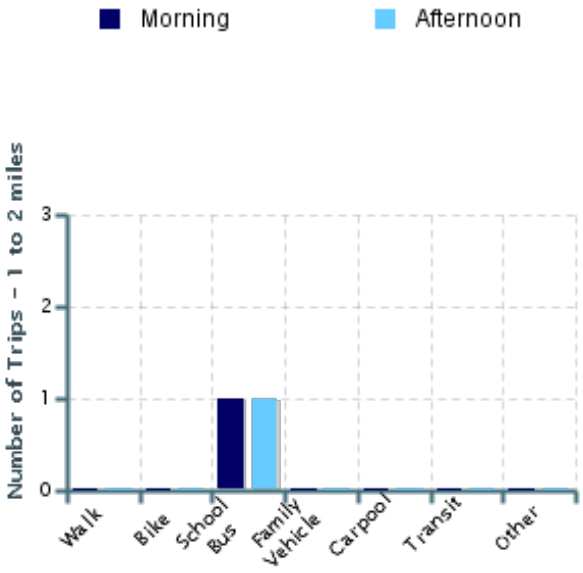


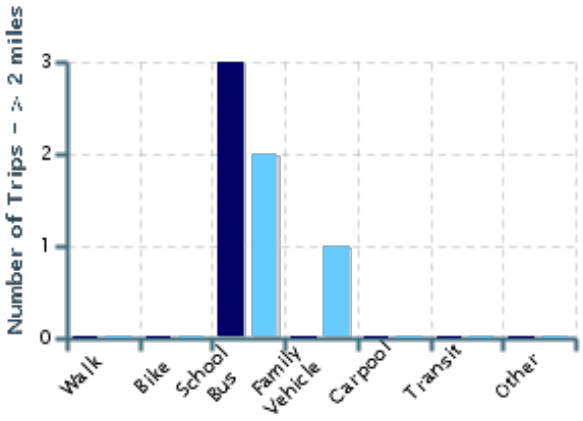
Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	4	0	0	4	0	0	0	0
Afternoon	4	0	0	3	1	0	0	0

No Response Morning: 0
No Response Afternoon: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Typical mode of school arrival and departure by distance child lives from school





Typical mode of school arrival and departure by distance child lives from school

School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	0	0	0	0	0	0	0	0
1/4 mile up to 1/2 mile	0	0	0	0	0	0	0	0
1/2 mile up to 1 mile	0	0	0	0	0	0	0	0
1 mile up to 2 miles	1	0	0	1	0	0	0	0
More than 2 miles	3	0	0	3	0	0	0	0

Don't know or No response: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	0	0	0	0	0	0	0	0
1/4 mile up to 1/2 mile	0	0	0	0	0	0	0	0
1/2 mile up to 1 mile	0	0	0	0	0	0	0	0
1 mile up to 2 miles	1	0	0	1	0	0	0	0
More than 2 miles	3	0	0	2	1	0	0	0

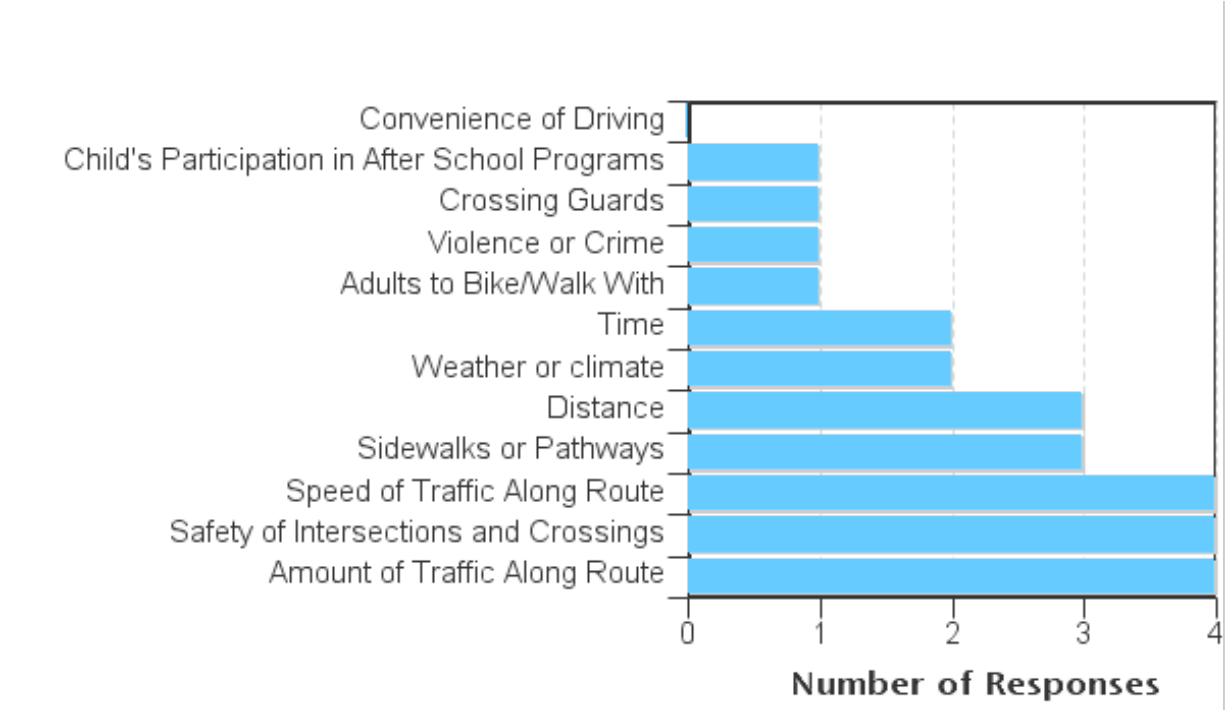
Don't know or No response: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Number of children who have asked for permission to walk or bike to/from school by distance they live from school

Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	2	0	0	0	0	2
No	2	0	0	0	1	1

Don't know or No response: 0
Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school

Issue	Child does not walk/bike to school	Child walks/bikes to school
Amount of Traffic Along Route	4	0
Safety of Intersections and Crossings	4	0
Speed of Traffic Along Route	4	0
Sidewalks or Pathways	3	0
Distance	3	0
Weather or climate	2	0
Time	2	0
Adults to Bike/Walk With	1	0
Violence or Crime	1	0

Crossing Guards	1	0
Child's Participation in After School Programs	1	0
Convenience of Driving	0	0
Number of Respondents per Category	**4**	**0**

No response: 0
Note:
--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.

Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school

Level of support	Number of children
Strongly Encourages	0
Encourages	2
Neither	1
Discourages	1
Strongly Discourages	0

Parents' opinions about how much fun walking and biking to/from school is for their child

Level of fun	Number of children
Very Fun	0
Fun	2
Neutral	2
Boring	0
Very Boring	0

Parents' opinions about how healthy walking and biking to/from school is for their child

How healthy	Number of children
Very Healthy	2
Healthy	2
Neutral	0

Unhealthy	0
Very Unhealthy	0

Comments Section

SurveyID	Comment
1407266	This was filled out for me by one of our children who has special needs.I would be much more open to this idea is we didn't live so far away from school, if there were so much traffic and it weren't so fast and if an adult was to accompany my children. Distance is the main reason in our case.
1407272	I would love to live where my child could walk or bike to school, but our road is too unsafe.
1407275	I wish we didn't live up a steep, narrow hill with fast drivers because I think walking or biking to school would be very beneficial.
1407276	We live off a very busy road, not practical for him to walk/bike to school. Also, as a walker myself, downtown Jeffersonville near school is not very walker friendly with no sideawalks near school and fast traffic

Attachment C
Non-Engineering Strategies Calendar

Attachment: Non-Infrastructure Strategies Calendar													
Activity		August	September	October	November	December	January	February	March	April	May	June	July
EDUCATION													
Provide educational materials for parents and residents regarding general safe-driving behaviors via the school newsletter, town website, town meetings, and Front Porch Forum.													
Lead													
Plan													
Implement													
Establish 5th grade mentors through Girls on the Run to teach younger students safe walking skills.													
Lead													
Plan													
Implement													
Incorporate WalkSmart/BikeSmart Vermont! Curriculum into 2016/2017 school year in PE class.													
Lead													
Plan													
Implement													
Partner with other schools in the area and request the Bike Smart Trailer from Local Motion in order to supply bikes and equipment needed for on-bike skills training.													
Lead													
Plan													
Implement													
Distribute information about the issues, particularly for children's health, of idling.													
Lead													
Plan													
Implement													

Activity		August	September	October	November	December	January	February	March	April	May	June	July
ENCOURAGEMENT													
Host a Vermont Intergenerational Walk and Roll to School Day event on first Wednesday of May.													
Lead													
Plan													
Implement													
Host an International Walk and Roll to School Day event on the first Wednesday of October.													
Lead													
Plan													
Implement													
Draw signs with students to promote events.													
Lead													
Plan													
Implement													
Encourage students to ride the bus or carpool when biking or walking is not an option.													
Lead													
Plan													
Implement													
Distribute free or reduced-cost bicycle helmets to students in need each May.													
Lead													
Plan													
Implement													
Develop a remote drop-off site once the school has sidewalk access so that students who live further away can walk or bike.													
Lead													
Plan													
Implement													

Activity		August	September	October	November	December	January	February	March	April	May	June	July
		ENFORCEMENT											
Invite local law enforcement on event days.													
Lead													
Plan													
Implement													
Disseminate information about dismissal procedures and parking.													
Lead													
Plan													
Implement													
Distribute a Safe Driver Pledge to parents.													
Lead													
Plan													
Implement													
Activity		August	September	October	November	December	January	February	March	April	May	June	July
		EVALUATION											
Parent surveys in October (annually)													
Lead													
Plan													
Implement													
Student tallies in September (annually)													
Lead													
Plan													
Implement													

Attachment D
Engineering Recommendations

Appendix C: Location-Specific Engineering Recommendations

Safe Routes to School (SRTS) engineering strategies create safer environments for walking and bicycling to school through improvements to infrastructure in and around school grounds. These improvements focus on reducing motor vehicle speeds and conflicts with pedestrians and bicyclists, as well as establishing safer and fully accessible crossings, walkways, trails, and bikeways.

The following tables provide a summary of the engineering strategies recommended for Cambridge Elementary School (CES). These recommendations were developed by Toole Design Group, LLC based on input from the CES SRTS Team. The tables include an estimate of the amount of time that is likely needed to implement the recommended improvements at each site (Estimated Time Frame). The table also indicates the priority of the proposed improvements at each site for the CES SRTS Team (Team Priority).

These recommendations are for planning purposes only and may require further engineering analysis, design, or public input before implementation and shall be in full compliance with the Manual on Uniform Traffic Control Devices for Streets and Highways, (MUTCD) Latest Edition adopted by the state.

The summary table provided below is followed by information about implementation and a map which shows where the recommendation sites are located in relation to the school.

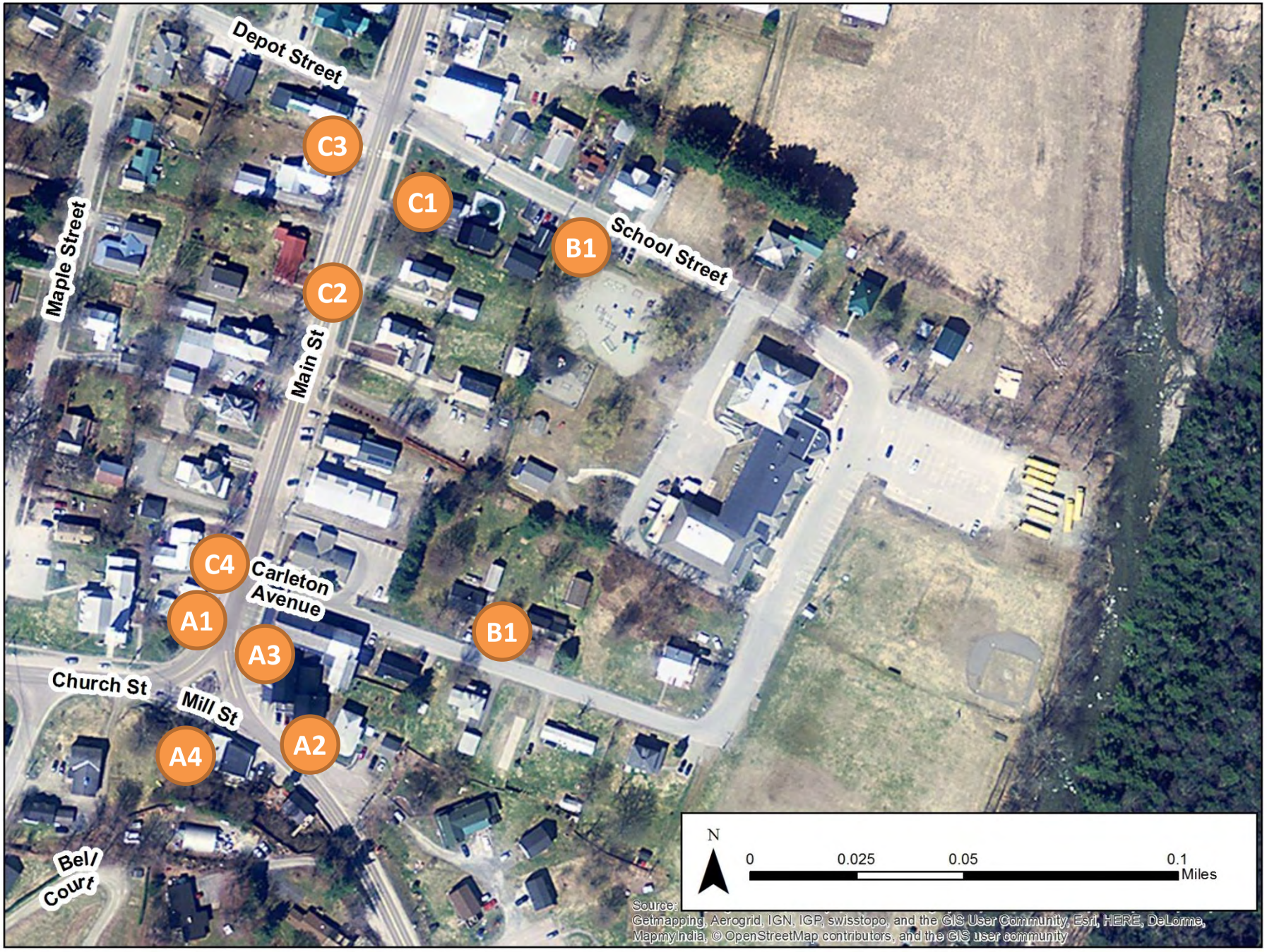
Description of Streets with Engineering Recommendations

Street name	Functional Classification	Speed Limit	AADT (2012)	Surface	Curb
VT 108/Main Street	Major Collector	25	1,800	Asphalt	None
School Street	Local	Not posted	N/A	Asphalt	None
Carlton Avenue	Local	Not posted	N/A	Asphalt	None
VT 108/Church Street	Major Collector	25	N/A	Asphalt	None
VT 108/Mill Street	Major Collector	25	4,900	Asphalt	None

Site	Need	Recommendation	Time Frame	Team Priority
A Main Street/Church Street/Mill Street	The geometry of the intersection of Church Street, Mill Street and Main Street encourages motorists to make high speed right turns from Main Street onto Church Street and from Mill Street onto Main Street. Students walking or biking to school from Upper Pleasant Valley Road and Jeff Heights Road must cross Church Street to access the sidewalk on Main Street. There are no crossing facilities at the intersection. Additionally, the approach from Church Street to Mill Street is a sharp turn with limited visibility and there are no pedestrian facilities on either road. Pedestrians walking along the east side of Main Street are exposed to vehicles entering and exiting parking spaces in front of the Jeffersonville County Store, which have no barrier between parking and the road. The excessive amount of asphalt poses potential vehicle-pedestrian conflicts.	A1. Add pedestrian crossing on Main Street at the approach to Church Street and Mill Street. Install W11-2 Pedestrian Crossing sign on Main Street on the approach to Church Street/Mill Street.	Short	High
		A2. Construct a sidewalk on the east side of Main Street and Mill Street.	Medium	High
		A3. Extend the sidewalk at the Country Store between the parking spaces and the building. Add concrete parking bumpers to prevent cars from overhanging the sidewalk.	Medium	High
		A4. Reconstruct the intersection to T Main Street at Church Street/Mill Street and restrict access on east side for parking and pedestrians only.	Long	Medium

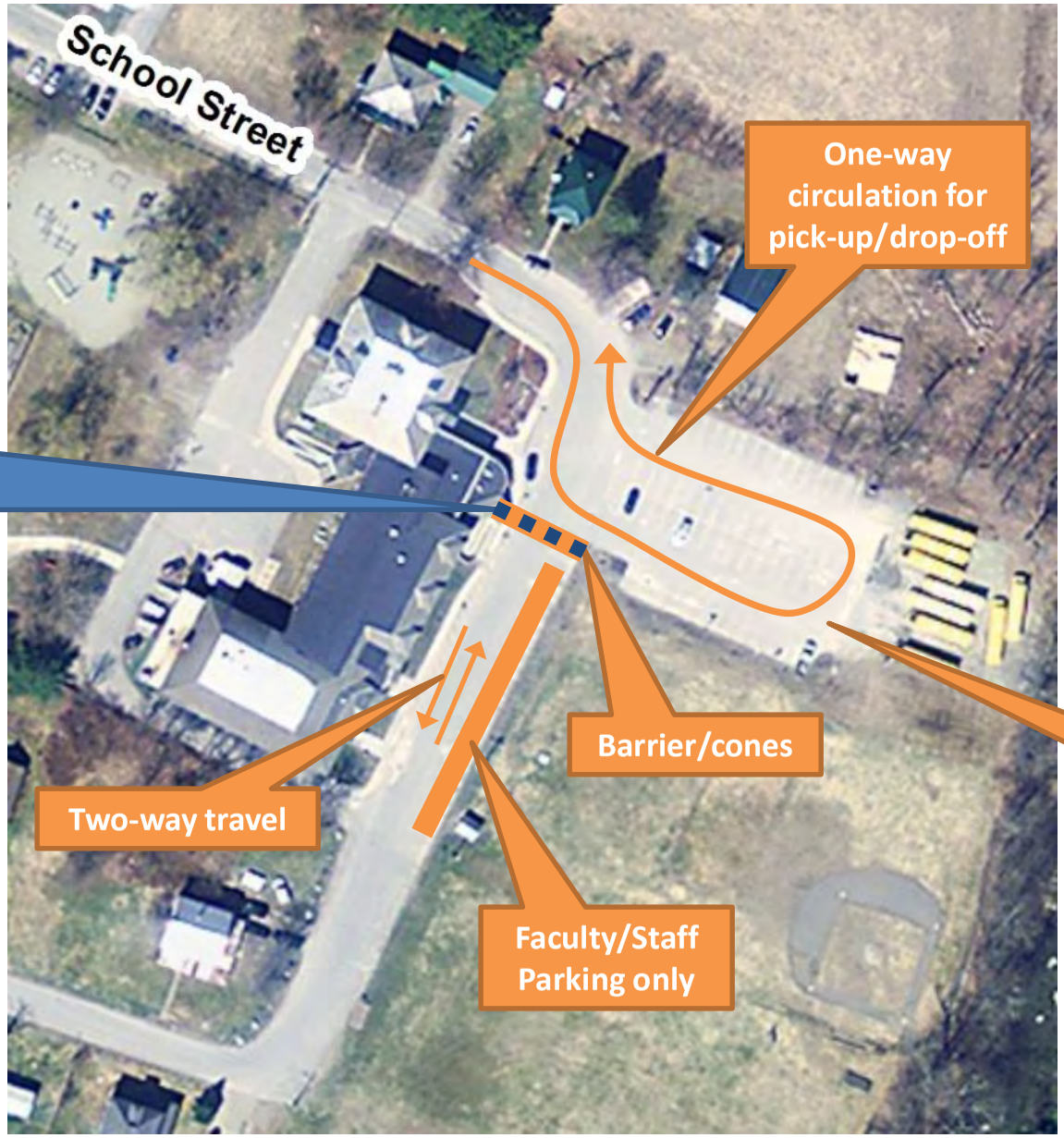
Site	Need	Recommendation	Time Frame	Team Priority
B School Street/Carlton Avenue	School Street and Carlton Avenue are the only access points to the school and lack adequate pedestrian facilities. Students walk in the road on either School Street or Carlton Avenue among cars, which can be problematic due to higher traffic volumes during school arrival and dismissal.	B1. Install a pedestrian walkway on the south side of School Street and north side of Carlton Avenue connecting the sidewalks on Main Street and the school grounds.	Short	High

Site	Need	Recommendation	Time Frame	Team Priority
C Main Street	The sidewalks on Main Street are narrow and in poor condition. Students walking or biking to school must travel down Main Street to reach the school grounds via School Street or Carlton Avenue. There is a lack of school zone markings on Main Street and no crosswalk at the intersection with Carlton Avenue.	C1. Reconstruct sidewalks along Main Street to be ADA compliant.	Long	High
		C2. Install "School zone" pavement markings (2) to supplement existing school zone signage.	Short	High
		C3. Review potential with VTrans to install an in-street pedestrian sign at the crosswalk to School Street.	Short	High
		C4. Install crosswalk at the intersection of Main Street and Carlton Avenue and review potential with VTrans to install an in-street pedestrian sign at the crosswalk.	Short	High


Depot Street
C3
C1
B1
School Street
Maple Street
C2
Main St
C4
Carleton Avenue
A1
B1
A3
Church St
Mill St
A4
A2
Bell Court
N
0
0.025
0.05
0.1
Miles
Source: Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Site	Need	Recommendation	Time Frame	Team Priority
School Parking Lot	A chaotic atmosphere in the school parking lot exists at arrival and dismissal times. Space to separate pedestrians from vehicles is often informal or unclear. The parking lot does not have designated direction of flow and School Street and Carlton Avenue are two-way roads. Drivers park in the spaces on the east side of School Street next to the playing fields where students walk from the school and must back out into the road leading to an unsafe environment when students are walking and biking to and from school grounds.	Pilot a new circulation plan as shown on next page. • Close through travel between School Street and Carlton Avenue with traffic cones or other barrier. This will give pedestrians a place to cross between parking and school that does not cross vehicle paths. • Create a one-way loop through the parking lot for parents to use during arrival and dismissal. • Students and parents walk from parking lot to school via a new crosswalk at the closure point/barrier between School Street and Carlton Avenue. • Designate parking along Carlton Avenue for faculty/staff only to minimize vehicle traffic when students are walking and biking. • Designate parking lot for faculty/staff and visitor parking.	Short	High

Parking Lot Circulation Plan



Attachment E
Snow Removal Toolkit

SNOW REMOVAL TOOLKIT

Prompt and effective snow, ice, and slush clearance on sidewalks along Safe Routes to School is critical for maintaining safe biking and walking conditions. Snow removal of bicycle and pedestrian accommodations that are designated school routes should be planned for. According to the VT Pedestrian and Bicycle Facility Design Manual Section 10.5.1, local policies should treat the clearance of snow from walkways as equally important as clearance of snow from roadways in order to maintain year-round accessibility.

Guidelines

The responsibility of all snow and ice clearance generally falls upon the property owner of the facility. A municipality's highway department is typically responsible for snow and ice removal on roads and sidewalks on public property. Private roads and sidewalks on private property are the responsibility of the property owner.

A clear, unobstructed pathway at a minimum of 48" wide should be provided on all sidewalks, curb ramps, and through crosswalks. Snow, slush, and ice should be cleared from sidewalks, to provide a clear path of 48", ideally, within 12 hours after a storm event. Designated portions of the roadway for bicycle use should also be cleared since, even in winter, some experienced bicyclists commute by bicycle.

Pedestrian walkways, curb ramps, and crosswalks or bicycle facilities should not be used for areas of snow storage. Additional consideration should also be taken to maintain adequate sight distances at all intersections and to prevent snow storage from building up too close to walkways.

Paved shared-use paths that are designated routes to school should be kept clear of snow so that students can walk to school year-round. Snow clearance is not a consideration for natural surface paths that are used for winter activities which also allow students to cross-country ski or snow-shoe to school.

Recommendations

The following six basic recommendations can assist a community in developing a strategy to improve sidewalk snow and ice clearance.

1. Create a norm of snow and ice clearance through social awareness campaigns.
2. Identify a municipal point person for snow removal.
3. Determine priority sidewalks and paths for snow clearance.
4. Improve monitoring and enforcement.
5. Design sidewalks for easier snow removal.

6. Train municipal and private snow plowing personnel on the guidelines for pedestrian and bicycle facility clearance (i.e., 48" clear path and priority routes.)

Monitoring and Enforcement

There are three primary ways in which the clearance of sidewalks can be monitored and enforced;

1. Identify who monitors and enforces.
2. Define penalties and how they will be enforced.
3. Implement a social awareness campaign.