

Amherst Village Streets Action Plan

Village Streets Study Committee



A Report to the Board of Selectmen

November 28, 2023

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Acknowledgments

The Village Streets Study Committee would like to thank the Board of Selectmen for the opportunity to serve the Town of Amherst.

Special thanks to town staff and consultants for sharing their expertise and providing dedicated support. We also want to acknowledge that public participation in this process was invaluable and greatly appreciated.

Village Streets Study Committee Members

- Tracie Adams, Chair, Planning Board Representative
- Rolf Biggers, Citizen Representative
- Christopher Buchanan, Bicycle & Pedestrian Advisory Committee Representative
- Douglas Chabinsky, Historic District Commission Representative
- Kyle Coffey, Citizen Representative
- Thomas Grella, Board of Selectmen ex-officio (non-voting member)
- William Ludt, Heritage Commission Representative

Staff Members

- Eric Slosek, Director, Department of Public Works
- Jennifer Stover, Executive Assistant
- Dr. Dean Shankle, Town Administrator
- Peter Lyon, Chair, Board of Selectmen

Consultants

- Mobycon, design consultants including representatives, Mary Elbech, Emily Thomason and Narayan Donaldson
- CMA Engineers Inc., including representative, Samuel Fortier

Executive Summary

The Village Streets Study Committee, adhering to the charter set forth by the Board of Selectmen, has diligently evaluated the consultant recommendations. This report culminates a comprehensive 14-month study, prioritizing the preservation of the distinctive character of the village, enhancing safety, and integrating extensive public input, including two open houses, an online survey, a site walk, multiple Board of Selectmen presentations, and ten public meetings.

Despite the demanding workload and timeline, the committee's dedicated efforts have culminated in a well-rounded proposal. A thorough analysis was conducted of the street network, proposed streetscapes, and intersection treatments. The recommendations are designed to honor the historical character of the village while giving important attention to the need for safety, offering a cost-effective solution that represents a win for both Amherst residents and our visitors.

The Committee expects the implementation of the recommendations within this report to take place over many years. Finding cost effective opportunities to implement these suggestions, whether by timing improvements with scheduled road work, by obtaining external funding, or a combination of both, will be important to successful execution of this vision.

Acknowledging that these improvements will happen in phases, the committee has established a prioritization for improvements:

- Priority 1: Improving the Carriage Road-Boston Post Road-Main Street-School Street Intersection.
- Priority 2: Spot Improvements at other Intersections and areas of High Need. Implementing recommended improvements at intersections and crosswalks with higher levels of pedestrian traffic.
- Priority 3: Leveraging Streetscape Design as Traffic Calming. Applying recommended streetscapes: *Local Flow Streets with Separate Pedestrian Facility* and *Shared Space with Pedestrians – Pedestrian Priority*, in that order.
- Priority 4: Other Recommended Streetscape Improvements.

Beyond establishing a priority for treatments throughout the village, each recommended streetscape is provided ideal, basic, and minimum treatment options to further accommodate budgetary constraints.

The committee strongly recommends pursuing these improvements and hiring an engineering firm for assistance in budgeting and applying for a federal infrastructure grant. This strategic move would maximize the impact of already-budgeted road construction funds by fulfilling local match requirements for the grant. Implementing these recommendations is poised to create a safer village environment that better highlights the unique historic character of our village, marking a significant accomplishment for the Amherst community.

The Village Streets Study Committee voted unanimously to adopt this report on Tuesday, November 28th, 2023.

Introduction

In the heart of our town lies the Amherst Village Historic District, a beacon of historical significance and community life. The Village Streets Study is an effort spanning over a year, now culminating in the work by the Village Streets Study Committee (VSSC). It is a study that represents a deliberate endeavor to preserve this cherished area’s distinctive character while thoughtfully enhancing its streetscapes for the benefit of current and future generations.

Anchored in a shared vision that embraces the quaint charm of the village there is a clear priority of preserving open, green spaces and safe, walkable spaces. This study aligns with years of requests expressed by the public, occasionally captured by plans conducted over time, including the [Envision Amherst 2035 Master Plan](#) (2023), the [Amherst Village Strategic Plan](#) (2015), and the [Safe Routes to School Travel Plan](#) (2013), among others. The Village Streets Study draws from the deep well of community sentiment that seeks to maintain the village’s storied ambiance while weaving in the fabric of present-day safety needs.

A significant pillar of this study has been the extensive public input period, a testament to the town’s commitment to inclusivity and responsiveness to its residents. In partnership with professional design consultants the Town has engaged in a comprehensive process to ensure that the voices of Amherst’s citizens resonate through the resulting action plan.

This report unveils the culmination of rigorous analysis, robust community dialogue, and expert collaboration. It invites readers to journey through the envisioned transformation of the Amherst Village streets—a harmonious blend of historical reverence, safe functionality, and a steadfast dedication to fostering a lively and safe community.

The Village Streets Study

The Village Streets Study was funded by the passage of Article 30 in the town warrant in March of 2022.

Village Streets Study Timeline

After the success of Article 30, the Village Streets Study was initiated in 2022.

- 1. Article 30**

Passed March 2022.

- 2. Village Streets Study**

Initiated summer 2022.

- a. Visioning Phase**

Summer 2022 – May 2023

- i. Design consultant site walk**

October 17th, 2022

- ii. Public input**

October 2022 – April 2023

- 1. Stakeholder’s Visioning Workshop**

October 18th, 2022

2. 1st open house
October 18th, 2022
3. Online survey
March 6, 2023 – April 20, 2023
4. 2nd open house
April 6th, 2023

b. Concepts Presentation & Feedback Phase

May 2023 – August 2023

- i. Conceptual presentation with high-level scenarios
Presented May 15, 2023
- ii. Creation of the Village Streets Study Committee
July 12, 2023
- iii. Final menu of design options
Delivered on August 1, 2023

c. Village Streets Study Committee

July 2023 – November 2023

- i. First meeting, July 24, 2023
- ii. Draft presentation to the Board of Selectmen, November 20, 2023

d. Final Design Recommendations

November 28, 2023

- i. A grant-worthy application that includes a finalized design.

3. Grant Application

- a. If the Board of Selectmen decides to proceed, a grant application would be submitted in 2024.

4. Construction

- a. The targeted window for implementation is during 2026 road work and is estimated to take 1-3 years to complete depending on whether additional grant funding is received.

Article 30

Amherst voters supported Article 30, which allocated funding specifically for the design and engineering work necessary to apply for federal grants, thus laying the financial and logistical groundwork for the Village Steets Study.

The key purpose of this article was to lay the groundwork for a grant application that could seize an opportunity for upcoming scheduled road work. This article provided the necessary funding to begin the design work needed to become eligible to apply for federal grant funding. Furthermore, by leveraging already-anticipated funds for road work as the required 20% local match required for grant funding, this would allow Amherst to submit a robust and realistic application for state, federal, and private grant funding.

Article 30 and its associated description is provided in the appendix.

Visioning Phase

After the success of Article 30, the Village Streets Study was initiated in the summer of 2022 by contracting with design consultants Mobycon with project lead Mary Elbech of Durham, North Carolina and CMA Engineers with lead Samuel Fortier of Amherst, New Hampshire.

The Village Streets Study began with the **Visioning Phase** (October 2022-April 2023) when Mobycon's role was generally to initiate an updated public input process, conduct a thorough on-site study, and synthesize feedback into a menu of design options, ranging from minimal to maximal, for the Town to consider. This process was led by representatives of the Town as well as Mobycon planner Emily Thomason.

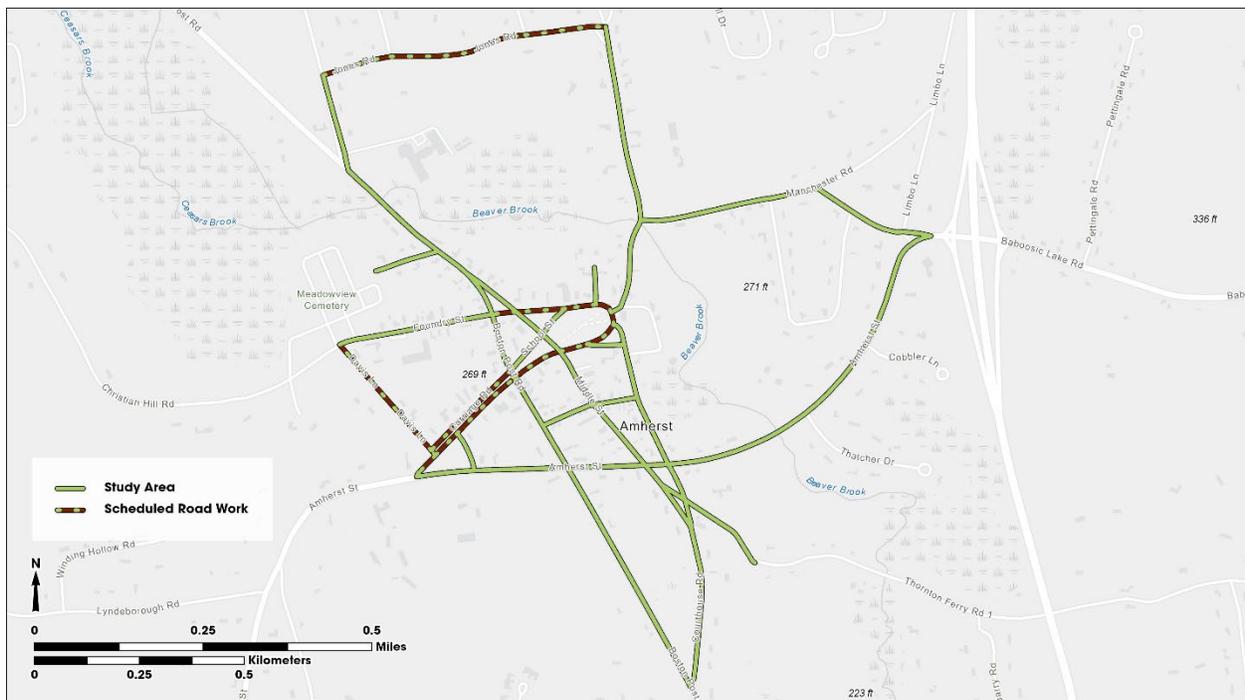


Figure 1. Village Streets Study geographical scope

Concepts Presentation & Feedback Phase

On May 15th, 2023, Mobycon presented the Board of Selectmen with various high-level, conceptual scenarios to receive broad feedback from the Town to inform the scale, character, and direction of a final menu of design options. After receiving such feedback, Mobycon delivered their [final menu of design options to the Town on August 1, 2023](#).

In parallel with this feedback process, the Board of Selectmen established the Village Streets Study Committee (VSSC) on July 12, 2023. This committee was tasked with the critical role of reviewing any final recommendations, considering them with the public's input, and formulating a set of proposed design interventions for the Board of Selectmen to consider.

Village Streets Study Committee Phase

The Village Streets Study Committee (VSSC) was established by the Board of Selectmen on July 12, 2023, following the Visioning Phase of the Village Streets Study. Its charter outlines the

committee's purpose to evaluate and assess streetscape improvements for Amherst's village area as suggested by the design consultants.

The VSSC's responsibilities encompassed providing a thorough review of proposed measures to improve safety and enhance the streetscape and incorporating public feedback from the visioning phase. The seven-member committee, including representatives from key local organizations and two at-large community members, was tasked with developing specific treatment options and formulating a detailed implementation plan.

VSSC Charter Key Points:

- The Charter designated committee membership includes representatives from various Town boards and citizen representatives.
- The purpose of the Village Streets Study Committee is to evaluate suggested streetscape improvements for the village area of the Town of Amherst.
- The VSSC would continue the Village Streets Study process of reviewing the options presented and allow for continued public input.
- The committee shall conduct a thorough assessment of the proposed traffic calming and streetscape improvements recommended by Mobycon and CMA Engineers.
- This assessment shall include a comprehensive evaluation of the proposed measures, taking into account their potential impact on improving safety, enhancing the overall streetscape, and addressing public feedback received during and after the visioning phase of the Village Streets Study.
- Based on this assessment, the committee shall develop a vision for specific treatment options and provide recommendations for consideration by the Board of Selectmen.

A copy of the entire VSSC charter is included in the appendix.

Village Streets Study Committee Activities

The Village Streets Study Committee conducted a thorough assessment of the proposed traffic calming and streetscape improvements recommended by the design consultants. The assessment included a comprehensive evaluation of the proposed measures. Each proposal was evaluated for their potential impact on improving safety, enhancing the overall streetscape, and addressing public feedback received.

Public input-based goals

- Improve safety for all users
 - Reduce speeding and noise
 - Prevent unwanted cut-through traffic
 - Redesign confusing/dangerous intersections
- Make the Village even more pleasant to experience
 - Fill in the missing pedestrian network
 - Introduce aesthetically pleasing paving
- Reinforce the unique small-town character and celebrate the town's history

Vision & Process

The committee's vision for the streetscape in the Village is the result of evaluating the network of streets, streetscape design elements including the pedestrian network, and intersection design. The committee prioritized creating a comprehensive plan that could be utilized as a template for future design choices as streets become eligible for reconstruction or further grant opportunities become available.

The committee was very attentive to public input throughout the process and recommendations reflect the citizen's desire to make changes that would be appropriate for the rural, historic village setting. There was consensus that options that are very applicable in urban and suburban areas were not a good fit for the rural, historic village.

Consistent with the recommendations provided by the consultants, the process by which the VSSC conducted its review of improvements was the following:

1. Network Design
2. Streetscape Design
3. Intersection Design

Three guiding principles were adopted and referred to for guidance when considering or deciding a difficult matter.

- When in doubt, refer to the Charter for the Village Streets Study Committee for guidance.
- Respect the integrity of Amherst Village as a designated member of the National Register of Historic Places as well as historic landmarks (e.g., horse watering trough, etc.)
- Prioritize citizen concerns about safety for everyone who enjoys the Amherst Village as a resident or uses the large public common as a gathering place.

Public feedback throughout the visioning phase, including the results from in-person meetings as well as an online survey, and a summary of "citizen concerns" over the last year were included to reflect upon throughout the process and can be found in the Appendix.

Community Engagement

Public input opportunities were a prominent portion of each Village Streets Study Committee meeting. Amherst residents were encouraged to share their concerns and opinions. Public input was an important guiding force throughout the process and the results of a Site Walk helped solidify the direction of our recommendations.

Meetings were held 1st and 4th Tuesdays at 5:30PM in Town Hall:

- July 24, 2023, Organizational Meeting
- August 1, 2023, Overview of Purpose and Materials
- August 22, 2023, Step 1: Network Design Discussion
- September 5, 2023, Step 2: Streetscape Design Discussion
- September 26, 2023, Step 2: Streetscape Design Discussion
- October 3, 2023, Step 2: Streetscape Design Discussion
- October 15, 2023, Site Walk to 5 Streets
- October 24, 2023, Step 2: Streetscape Design Discussion

- November 7, 2023, Step 3: Intersection Design Discussion
- November 28, 2023, Other improvements and action plan adoption

In addition to public meetings, the VSSC made several efforts to continue community engagement into the process:

- Even while balancing a significant workload and a condensed timeline, the Village Streets Study Committee meetings prioritized time for public input at every meeting.
- The VSSC meeting schedule and site walk were published on the VSSC web page and the town calendar.
- The Committee's meeting schedule was posted at Town Hall, Moulton's Market, the Library, and on a sandwich board placed in front of the Town Hall prior to meetings.
- The committee hosted a site walk where citizens were invited to attend and provide input relative to streetscape design options. Flyers advertising the site walk were hand-delivered to residents in the village inviting citizens to attend. The site walk was well-attended with 41 total participants including 35 residents and 6 committee members.

Recommendations

Detailed recommendations are provided, including the requested guidance for prioritization and potential funding sources. It is the hope of the VSSC that the Board of Selectmen will consider the action plan presented and move forward with the grant application process. The plan presented includes a vision for the village roads and options for the ideal, basic, and minimum options for streetscape design and materials. The committee appreciates that final plan decisions may be impacted by many factors including availability of funding and shifting priorities.

Article 30 Streets

As part of the Village Streets Study, our initial efforts concentrated on the five streets identified in Article 30. These streets are Carriage Road, Church Street, Davis Lane, Jones Road and Main Street.

These streets were chosen because they have been scheduled for road work since the drafting of Article 30 in 2021. This initial phase is an essential step in developing a comprehensive approach to street improvements within Amherst Village. While these five streets serve as the committee's starting point, they lay the groundwork for subsequent phases that will extend our work to other streets in the area, ensuring a holistic enhancement of our village's streetscapes.

Assessment

The Village Streets Study Committee conducted a thorough assessment of the proposed traffic calming and streetscape improvements recommended by Mobycon and CMA Engineers. The assessment included a comprehensive evaluation of the proposed measures. Each proposal was evaluated for their potential impact on improving safety, enhancing the overall streetscape, and addressing public feedback received. The committee considered data on road widths, vehicular volume counts, and research on historically appropriate surface materials. Three guiding principles were adopted and referred to for guidance when considering or deciding a difficult matter. A summary of citizen concerns over the last year was included to reflect upon throughout the process and can be found in the Appendix.

General recommendations:

- The Village network of roads evolved organically over time, and it should be a priority to preserve it. The VSSC does not recommend closing streets or making streets into one-way streets.
- Utilize historic paving materials as a traffic calming technique to foster an atmosphere of safe, shared spaces for drivers, pedestrians, and other users by limiting vehicular speeds. While traffic control devices and enforcement are part of an overall approach to influencing driver behavior, it is of paramount importance that the Village streets themselves communicate to drivers the expectations of the area.
- Request the Board of Selectmen and the Highway Safety Committee consider designating the speed limit as 25 mph throughout the Village.
- Request the Board of Selectmen consider no through trucking on Boston Post Road in conjunction with the results of the related NRPC study. While outside of the VSSC's

scope, the Board of Selectmen may want to consider no through trucking for Lyndeborough Road as well to prevent the displacement of truck traffic onto another residential street.

- Prioritize creating new pedestrian facilities and upgrading existing, non-ADA compliant sidewalks to enhance the existing pedestrian network and improve the safety of users.
- Narrow the roads to minimum widths as a primary traffic calming measure.
- Paving materials and streetscape design choices should define the way we want drivers to behave.
- Connecting the pedestrian network using separate or shared streetscape designs is a priority.
- Leverage traffic calming as the primary mechanism of achieving slower vehicular speeds and a safer environment for nonmotorized users, including:
 - Physical narrowing of travel lanes
 - Optical narrowing of roadways and other psychological traffic calming techniques
 - Reduction of turning radii
 - Removal of painted markings, such as center lines.
 - Employ area-appropriate alternate paving materials to reinforce a sense that the village is a special, shared space and for their self-enforcing speed control properties through tactile and auditory feedback
 - Horizontal deflections, such as chicanes or similar designs
 - Add vertical elements on road edges such as trees and lamp posts for “edge friction” to better communicate to drivers their speed
- Stormwater management
 - Many residents wanted the Board of Selectmen to understand that stormwater management issues are a great concern and would like this to be addressed as road projects occur.
 - Reduction of impermeable surface, like asphalt, is a benefit to the environment. In New Hampshire, stormwater runoff contributes to over 90% of surface water quality impairments per the New Hampshire Department of Environmental Services. Please see the related link in the Appendix.
 - The Board of Selectmen adopted a new stormwater management plan in 2021 to help protect local natural resources from degradation and to prevent adverse impacts to adjacent and downstream land, property, facilities, and infrastructure by planning for and managing stormwater runoff. The Planning Board supported this plan and the reduction of impervious surfaces whenever possible. The recommendations to narrow road widths, reduce turning radii, and normalize to T-intersection design will contribute to an overall reduction in asphalt.
- Consider placing conduit for electrical lines as part of planned road work when possible. This opportunity would prepare for electrical line placement at a later date. Related vault placement and an opportunity for water mains to be updated may also be worth considering at the same time as road work projects.
- Over generations of resurfacing, several of the streets in the village have been raised significantly relative to their surrounding terrain. This has resulted in several streets

becoming an elevation obstacle for pedestrians while making the streets unnecessarily level and likely increasing speeds. Consider, during scheduled road work, reducing the elevation of streets to be flush with the surrounding terrain. This is particularly needed along Main Street.

- Throughout the public input process, citizens have stated that they desire a police presence as part of the solution to address speeding and safety concerns. Boston Post Road and Jones Road were the most desired areas for increased police patrols, placing unmanned patrol cars, etc.

The VSSC recommends that the implementation phase continue to be a public and transparent process. Committee members expressed their willingness to remain available as resources to the Town should any questions arise throughout this initiative.

Step 1: Network Design

A foundational step undertaken by the Village Streets Study Committee was to delve into the concept of “network design” by examining the functional classification of various streets within the village. This critical analysis was not just a matter of categorizing streets; it was a strategic approach to understanding the unique role and purpose of each street within the broader network of the village's infrastructure.

Establishing functional classification serves as a key determinant in the following step, the selection of appropriate streetscape designs. This is imperative because it ensures that the chosen streetscape enhancements align with the intended use and character of each street. A street's classification underpins its operational dynamics, influences the behavior of its users, and shapes its role in the overall fabric of the village.

By meticulously classifying the streets, the committee aimed to ensure that the streetscapes to be developed would not only enhance aesthetic appeal and functionality but would also resonate with the desired character and utility of each street. This process is crucial for creating a cohesive, efficient, and user-friendly street network that reflects the needs and aspirations of the Amherst Village community.

Categories

After completing the visioning phase, Mobycon recommended that the VSSC consider the following categories which were identified to exist within the village and then identify which streets should be placed into each of them.

- **Regional Flow Street - High Vehicle Speeds:** These streets are typically major thoroughfares that experience high levels of vehicular traffic moving at faster speeds. They are crucial for regional connectivity, linking the village with surrounding areas. The design for these streets needs to consider safety measures that can handle high-speed traffic while integrating features to potentially calm traffic and protect pedestrians and cyclists.
- **Regional Flow Street - Lower Vehicle Speeds:** These are also significant routes for regional traffic but are characterized by lower vehicle speeds compared to the high-speed regional flow streets. They may pass through more densely populated or commercially

active areas of the village. Streetscape design here might focus on balancing the flow of traffic with the safety and convenience of local residents and businesses.

- **Local Flow Streets:** Local flow streets primarily serve the village's internal traffic. They connect different parts of the village, handling moderate levels of traffic. The design of these streets could prioritize ease of local travel and access to residential areas, schools, and businesses, incorporating elements that encourage safe pedestrian and bicycle movement.
- **Neighborhood Access Streets:** These streets primarily provide direct access to residential areas. They typically experience low traffic volumes and speeds, making them ideal candidates for designs that prioritize pedestrian and cyclist safety and encourage neighborhood interaction.

Table 1. Functional classification of Village streets as determined by the VSSC. Streets identified with an asterisk are Article 30 streets. Nashua Regional Planning Commission (NRPC) average vehicular volumes were collected in December of 2022.

Functional classification	Street	Average vehicular volume (vehicles/day)
<i>Regional Flow Street-high vehicle speeds</i>	Amherst Street	8,043
<i>Regional Flow Street-lower vehicle speeds</i>	Boston Post Road	5,878
<i>Local Flow Streets</i>	Church Street*	No data
	Courthouse Road	No data
	Davis Lane*	295
	Foundry Street	1,013
	Jones Road*	1,008
	Mack Hill (between Jones Rd and Manchester Rd)	1,880
	Main Street*	1,347
	Manchester Road	1,443
	Middle Street	No data
	Narragansett Street	No data
	New Boston Road (from Boston Post Rd to Jones Road)	1,982
Thornton Ferry I	471	
<i>Neighborhood Access Streets</i>	Beaver Brook Circle	No data
	Carriage Lane*	No data
	Knight Street	No data
	Old Jailhouse Road	No data
	Pierce Lane	No data
	Sunset Avenue	No data

Step 2: Streetscape Design

In the next phase of the Village Streets Study, the committee embarked on the crucial task of Streetscape Design. This step involved a strategic selection of streetscape design options from the consultant's proposed list, focusing on those that presented the most significant opportunities for enhancement and improvement. After a thorough review of the five streetscapes suggested by the consultants, the committee narrowed down its focus to three streetscape design options, prioritizing them based on a variety of factors including traffic volume, safety considerations, community impact, and the potential to enhance the village's overall aesthetic and functional appeal.

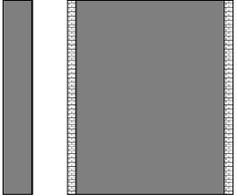
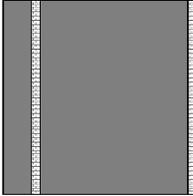
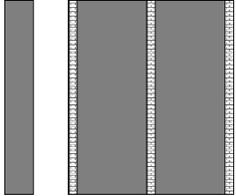
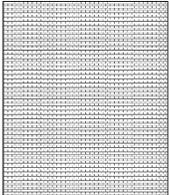
In the development of streetscape designs for each selected street, the primary focus was ensuring that the design aligns with the desired outcomes specific to that street. Public input during the site walk was a crucial part of this process and had a significant impact on final VSSC recommendations. This alignment was guided, among other factors, by the street's network classification established in the previous step.

This methodical approach ensures that each street's physical characteristics are in harmony with its functional role and safety requirements. It creates streetscapes that intuitively guide traffic behavior, promoting safer and more appropriate travel experiences for all users.

Selected Streetscape Designs

These treatments are designed to enhance safety, improve functionality, and preserve the aesthetic charm of Amherst Village. Each design approach reflects a thoughtful consideration of the street's network classification and intended use, ensuring that the improvements align seamlessly with the everyday experiences of those who navigate these streets. Drawings depicting these treatments will be provided below (not to scale).

Table 2. Selected streetscape designs by function

<p>For streets with more of a through-function, a need to separate pedestrians, etc.</p>	 <p>Local Flow Street with Separate Pedestrian Facility</p>	 <p>Local Flow Street with Separate Pedestrian Facility, constrained right-of-way</p>	 <p>Cross-section of a Regional Flow Street with Separate Pedestrian Facility, higher vehicle volumes</p>
<p>For streets with less of or no through-function, with no space for a separate pedestrian facility, or where the street already functions as a shared space</p>	 <p>Shared Space with Pedestrians, Pedestrian Priority</p>		

Local Flow Street with Separate Pedestrian Facility

This design is tailored for streets that function as local connectors within the village, balancing the flow needs of higher vehicular traffic with pedestrian safety and comfort.

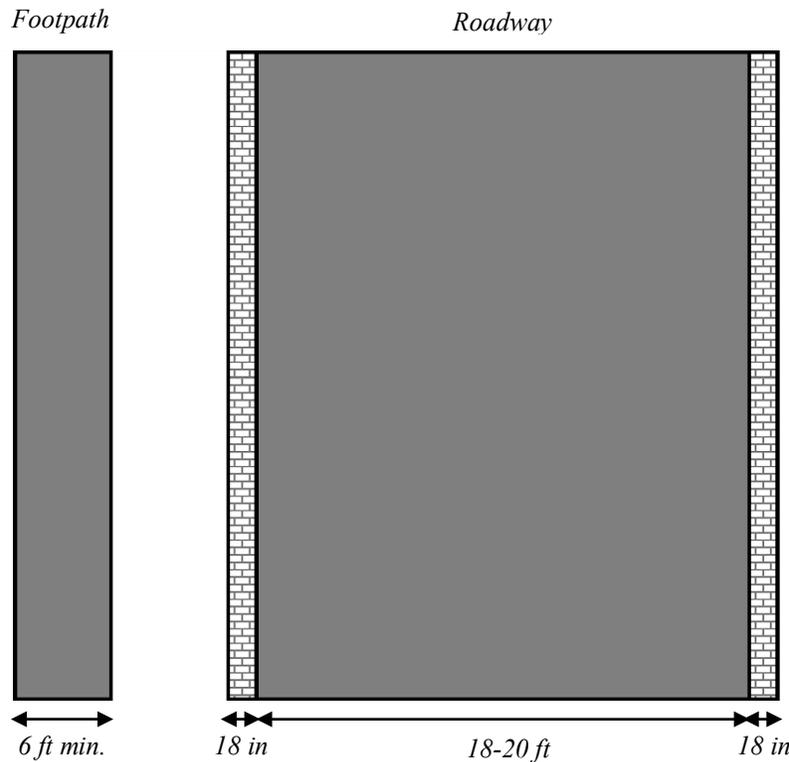


Figure 2. Cross-section of a Local Flow Street with Separate Pedestrian Facility

Key features of this design include:

- **Physically and Optically Narrowed Center Asphalt Area:** The central asphalt portion of the roadway is minimized to the narrowest width that can still accommodate two-way car traffic. This design naturally keeps vehicle speeds low, enhancing safety for all street users. The minimum width is set at 18 feet to ensure clear operation as two lanes, one for each direction, with no center line provided between to maintain a unified street appearance.
- **Alternate Surface Materials:** To accommodate wider vehicles like trucks or buses, alternate surface materials, selected from the approved palette, are used. These materials form a border of up to 18 inches, providing additional space alongside the asphalt.
- **Separate ADA-Compliant Sidewalk:** Pedestrian safety is prioritized with an Americans with Disabilities Act compliant sidewalk, ensuring accessibility for all. See additional details about ADA compliance in the appendix.

- **Historical Footpath Design:** Consistent with footpaths that existed in the village in the past, the sidewalk is level with the roadway and is separated from the roadway by a grass strip, creating a buffer zone that enhances pedestrian comfort and safety.

This design can also be adapted to localized contexts and needs:

- **Constrained Right-of-Way:** While not the preferred configuration, in cases where the right-of-way is limited, the sidewalk can be repositioned to be adjacent to the roadway, optimizing the available space while maintaining pedestrian accessibility.

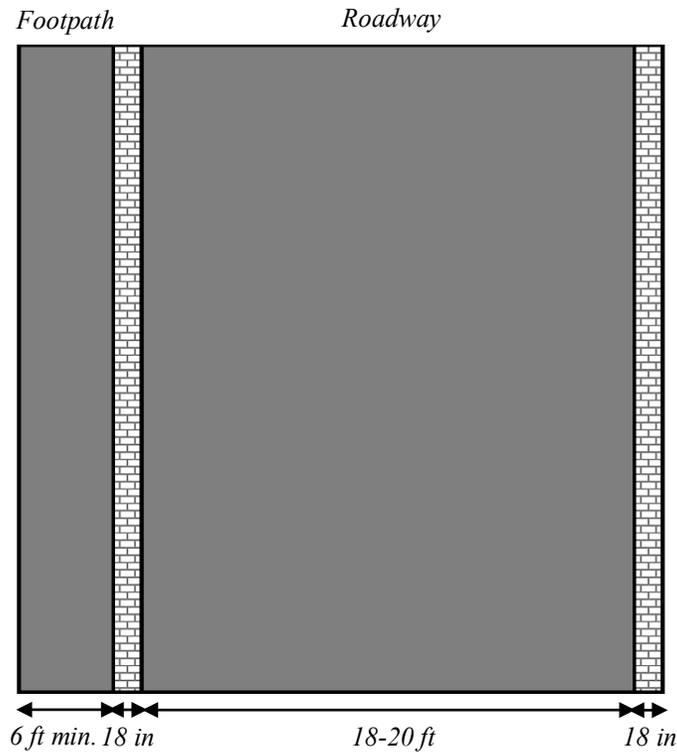


Figure 3. Cross-section of a Local Flow Street with Separate Pedestrian Facility, constrained right-of-way

- Higher vehicular volumes:** For streets classified as "Regional Flow Street - Lower Vehicle Speeds," especially those handling over 6,000 vehicles per day, the design may include a mountable center median. This median, constructed from alternate surface materials, provides a central delineation, aiding in traffic management and enhancing the street's visual appeal.

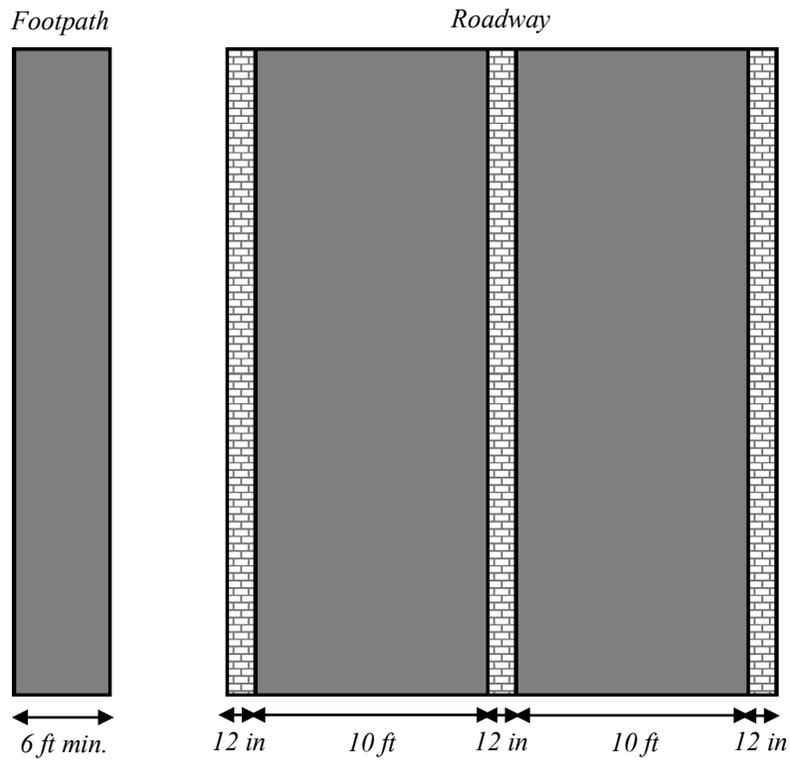


Figure 4. Cross-section of a Regional Flow Street with Separate Pedestrian Facility, higher vehicle volumes

Shared Space with Pedestrians, Pedestrian Priority

This streetscape design reimagines the conventional division of roadway space by creating an integrated environment where pedestrians and vehicles coexist harmoniously.

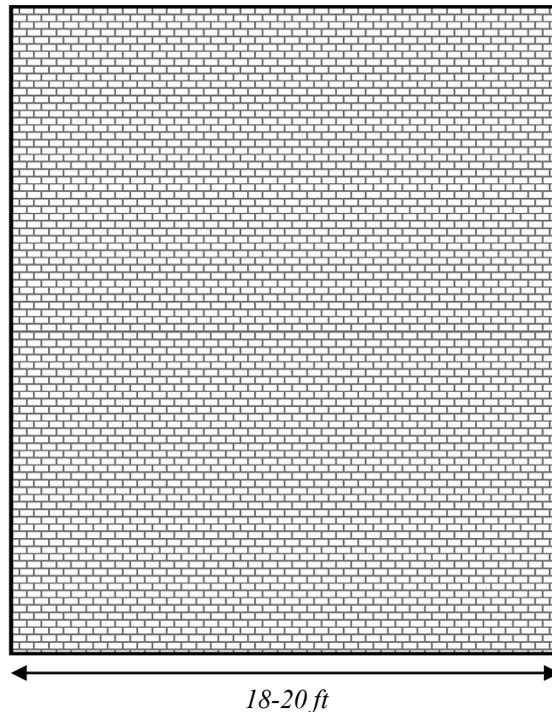


Figure 5. Cross-section of a Shared Space with Pedestrians, Pedestrian Priority

The design's key features include:

- **Alternate Surface Materials:** The entire road surface is paved with alternate surface materials selected from the approved palette. This choice of surface material not only enhances the aesthetic appeal of the neighborhood but also contributes to traffic calming by providing tactile and auditory feedback to drivers.
- **Consistent Design Application:** To ensure consistency and predictability for drivers, this paving design is primarily recommended for neighborhood access streets without separate pedestrian facilities. However, other street types can incorporate similar designs at intersections or pedestrian crossings to reinforce the pedestrian-priority concept.
- **Traffic Flow Considerations:** Neighborhood access streets designed with this approach should not serve as major through-routes for motor traffic, reinforcing their role as primarily pedestrian zones.
- **Self-Enforcing Speed Reduction:** The use of alternative surface materials inherently encourages lower vehicle speeds due to their tactile and auditory properties. This design philosophy ensures that drivers instinctively share the space with pedestrians at a safe, respectful speed, obviating the need for traditional pedestrian sidewalks.
- **Stormwater Management Benefits:** An added advantage of this design is its positive impact on stormwater management. The permeability of the pavers allows for natural

water dispersion, reducing the need for expensive underground stormwater systems and contributing to environmental sustainability.

This design concept redefines the relationship between pedestrians and vehicles, creating a shared space that prioritizes pedestrian safety and comfort, while also offering ecological benefits through sustainable stormwater management practice.

Palette of Surface Materials

The committee reviewed the materials currently present throughout the village area and used these as a basis for discussion about historically appropriate choices. Materials used in similar contexts in other nearby towns were also considered. The committee determined a palette of materials that it deemed were historically compatible with the village and met the practical needs of the village. Considerations discussed included plowability, ice removal, maintenance needs and costs, drainage, installation methodology and cost, and cost over the lifecycle of the materials. The committee appreciates that the plans being presented will require a systematic approach of implementation over many years as roadwork is initiated and funding becomes available.

Table 3. Approved palette of surface materials

	Vehicular spaces	Shared spaces, shoulders	Parking areas, accents, etc.
Ideal	Asphalt, chip seal, etc.	Granite paving blocks, setts, etc.	Granite paving blocks, setts, etc. (rougher texture).
Basic	Asphalt, chip seal, etc.	Pavers (e.g.: Unilock or similar company)	Pavers (e.g.: Unilock or similar company)
Minimum	Asphalt, chip seal, etc.	Asphalt, chip seal, etc. (temporary treatment to be replaced by superior option at next lifecycle)	Asphalt, chip seal, etc. (temporary treatment to be replaced by superior option at next lifecycle)

Note: setts are defined as small square stones that are used on driveways, garden patios, etc.

Key points:

- **Historical Compatibility and Practicality:** The committee carefully selected a palette of materials that are historically compatible with the village while meeting its practical needs. This involved reviewing existing materials in other communities.
- **Granite Paving Blocks - Ideal Option:**
 - Upfront Cost vs. Longevity: While granite paving blocks present a higher initial cost, they offer substantial long-term savings. This is due to their exceptional durability, often lasting for hundreds of years.
 - Reduced Stormwater Management Needs: The use of granite blocks can negate the need for elaborate stormwater management systems, thanks to their natural permeability.
 - Reasonable Lifetime Cost: Over their lifespan, granite blocks are cost-effective, minimizing the need for frequent replacements and maintenance.
- **Financial Feasibility and Implementation Strategies:**
 - Phased Implementation of Ideal Treatments: Where immediate implementation of ideal treatments is not financially viable, the town should consider a phased

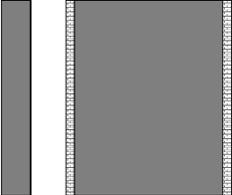
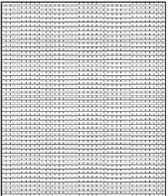
approach. This spreads the initial investment costs over time and allows for gradual enhancement.

- Preparatory Reworking of Existing Streetscapes: In cases where ideal treatments cannot be implemented immediately, existing streetscapes should be reworked to facilitate future installation of these treatments. This might include narrowing or repositioning roadways in preparation.
- Use of Less Expensive Materials as Interim Solutions: In the interim, more affordable materials can be used as placeholders, with the understanding that they will be replaced with optimal materials in the future.
- **Minimum (Asphalt, etc.) Option:** While these options start at a lower price point, they require more frequent replacement and, over multiple lifecycles, may prove more expensive than the ideal granite paving blocks. The minimum options does not enhance pedestrian safety in the village.

Recommended application of selected streetscapes

The following table meticulously outlines the selected streetscape design for each street, providing a high-level guide to how these designs would be applied in practice. These recommendations are the culmination of rigorous analysis and careful consideration of each street's unique character and functional needs, aligning with the overall vision for enhancing the village's streetscapes.

Table 4. Overview of recommended streetscapes by street (Article 30 streets)

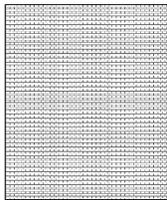
Streetscape	Street
 <p data-bbox="237 737 764 766">Local flow street with separate pedestrian facility</p>	<ul data-bbox="821 604 1373 699" style="list-style-type: none"> • Jones Road • Main Street (between Amherst Street and Library driveway)
 <p data-bbox="232 974 769 1003">Shared Space with Pedestrians, Pedestrian Priority</p>	<ul data-bbox="821 810 1378 968" style="list-style-type: none"> • Carriage Road • Church Street • Davis Lane • Main Street (between Library driveway to 8 Main Street businesses)

Article 30 streets will be explored first. For an overview of recommended streetscapes for all streets in the village, see Table 5. Overview of all recommended streetscapes by street on page 29 or Streetscape Recommendations Overview on page 51.

The following sections will delve into the specific application of the selected streetscape designs for each street as outlined in the study. These detailed discussions will encompass the implementation strategies tailored to the unique characteristics and requirements of each street. The focus will be on providing specific recommendations for regulatory and streetscape enhancements, based on the unique needs and limitations of each street. This comprehensive analysis ensures that the proposed changes align with the broader goals of the Village Streets Study, while respecting the distinct identity of each street within the village, and employing traffic calming techniques to foster a safer environment for all users by slowing vehicular traffic speeds, etc.

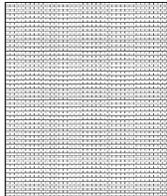
Carriage Road

The following table presents a range of streetscape design options for Carriage Road, categorized into ideal, basic, and minimum treatments. These options have been developed considering the street's current characteristics as an active shared space today and utilizes traffic calming techniques to limit vehicular speeds to preserve its use as a shared space.

Current characteristics				
Network classification		Neighborhood access street		
Vehicular volume		No data		
Roadway width		18 ft		
Recommendations				
<i>Ideal</i>				
Regulatory considerations	Posted speed limit		25 mph	
	Through trucking		No	
Streetscape	Type	 Shared Space with Pedestrians, Pedestrian Priority		
	Modal separation		None (shared)	
	Total streetscape width		18 ft	
	Motor vehicle space	Dimensions	None	
		Surface material	None	
	Mountable shoulders/median	Dimensions	None	
		Surface material	None	
	Shared space	Dimensions	18 ft	
		Surface material	Granite paving blocks, setts, etc.	
	Nonvehicular space	Dimensions	None	
Surface material		None		
Painted markings		None		
Traffic calming		Area-wide alternate surface material, tactile and auditory feedback for drivers.		
<i>Basic</i>				
<i>All ideal attributes listed above except for:</i>				
Streetscape	Shared space	Dimensions	18 ft	
		Surface material	Pavers (e.g.: Unilock or similar company)	
<i>Minimum</i>				
<i>All ideal attributes listed above except for:</i>				
Streetscape	Shared space	Dimensions	18 ft	
		Surface material	Asphalt, chip seal, etc. (temporary treatment to be replaced by superior option at next lifecycle). Minimize road crown to be as flat as possible within Town standards.	

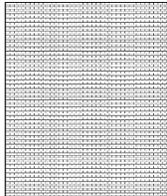
Church Street

The following table presents a range of streetscape design options for Church Street, categorized into ideal, basic, and minimum treatments. These options have been developed considering the street's current characteristics as an active shared space today, albeit with local flow characteristics. Recommendations utilize traffic calming techniques to limit vehicular speeds to preserve its use as a shared space.

Current characteristics			
Network classification		Local flow street	
Vehicular volume		No data	
Roadway width		23 ft	
Recommendations			
<i>Ideal</i>			
Regulatory considerations	Posted speed limit		25 mph
	Through trucking		No
Streetscape	Type		 Shared Space with Pedestrians, Pedestrian Priority
	Modal separation		None (shared)
	Total streetscape width		20 ft
	Motor vehicle space	Dimensions	None
		Surface material	None
	Mountable shoulders/median	Dimensions	None
		Surface material	None
	Shared space	Dimensions	20 ft
		Surface material	Granite paving blocks, setts, etc.
	Nonvehicular space	Dimensions	None
Surface material		None	
Painted markings		None	
Traffic calming		Physical narrowing of the roadway, area-wide alternate surface material, tactile and auditory feedback for drivers.	
<i>Basic</i>			
<i>All ideal attributes listed above except for:</i>			
Streetscape	Shared space	Dimensions	20 ft
		Surface material	Pavers (e.g.: Unilock or similar company)
<i>Minimum</i>			
<i>All ideal attributes listed above except for:</i>			
Streetscape	Shared space	Dimensions	20 ft
		Surface material	Asphalt, chip seal, etc. (temporary treatment to be replaced by superior option at next lifecycle). Minimize road crown to be as flat as possible within Town standards.

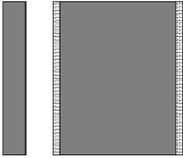
Davis Lane

The following table presents a range of streetscape design options for Davis Lane, categorized into ideal, basic, and minimum treatments. These options have been developed considering the street's current characteristics as an active shared space today, albeit with local flow characteristics especially during school pickup and drop off times. Recommendations utilize traffic calming techniques to limit vehicular speeds to preserve its use as a shared space.

Current characteristics			
Network classification		Local flow street	
Vehicular volume		295 vehicles/day	
Roadway width		20 ft	
Recommendations			
<i>Ideal</i>			
Regulatory considerations	Posted speed limit		25 mph
	Through trucking		No
Streetscape	Type	 Shared Space with Pedestrians, Pedestrian Priority	
	Modal separation		None (shared)
	Total streetscape width		20 ft
	Motor vehicle space	Dimensions	None
		Surface material	None
	Mountable shoulders/median	Dimensions	None
		Surface material	None
	Shared space	Dimensions	20 ft
		Surface material	Granite paving blocks, setts, etc.
	Nonvehicular space	Dimensions	None
Surface material		None	
Painted markings		None	
Traffic calming		Area-wide alternate surface material, tactile and auditory feedback for drivers.	
<i>Basic</i>			
<i>All ideal attributes listed above except for:</i>			
Streetscape	Shared space	Dimensions	20 ft
		Surface material	Pavers (e.g.: Unilock or similar company)
<i>Minimum</i>			
<i>All ideal attributes listed above except for:</i>			
Streetscape	Shared space	Dimensions	20 ft
		Surface material	Asphalt, chip seal, etc. (temporary treatment to be replaced by superior option at next lifecycle). Minimize road crown to be as flat as possible within Town standards.

Jones Road

The table below details the streetscape design recommendations for Jones Road, a local flow street. It outlines three levels of treatment - ideal, basic, and minimum - each tailored to the street's unique requirements. These treatments encompass considerations for regulatory aspects, streetscape type, modal separation, and surface materials, reflecting a balance between historical compatibility, functionality, and financial feasibility. Community concerns about speeding and pedestrian safety and vehicle speeds on Jones Road have been a focal point, especially considering its role as a key component of a popular walking loop in the village. Jones Road is also a key street for pedestrian traffic whose destination is the Wilkins School.

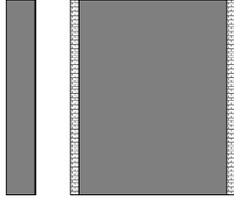
Current characteristics			
Network classification		Local flow street	
Vehicular volume		1,008 AADT	
Roadway width		25 ft	
Recommendations			
<i>Ideal</i>			
Regulatory considerations	Posted speed limit		25 mph
	Through trucking		No
Streetscape	Type		 <p>Local flow street with separate pedestrian facility</p>
	Modal separation		Separate
	Total streetscape width		21 ft + grass separation + 6 ft sidewalk
	Motor vehicle space	Dimensions	18 ft
		Surface material	Asphalt, chip seal, etc.
	Mountable shoulders/median	Dimensions	18 in shoulders (2), one on either side of motor vehicle space
		Surface material	Granite paving blocks, setts, etc.
	Shared space	Dimensions	None
		Surface material	None
	Nonvehicular space	Dimensions	6 ft minimum, separated, ADA-compliant sidewalk, south side of roadway
Surface material		Asphalt	
Painted markings		None	
Traffic calming		Physical narrowing of the roadway, optical narrowing of mountable shoulders.	
<i>Basic</i>			
<i>All ideal attributes listed above except for:</i>			
Streetscape	Mountable shoulders/median	Dimensions	18 in shoulders (2), one on either side of motor vehicle space
		Surface material	Pavers (e.g.: Unilock or similar company)
<i>Minimum</i>			
<i>All ideal attributes listed above except for:</i>			
Streetscape	Mountable shoulders/median	Dimensions	None
		Surface material	None
	Nonvehicular space	Dimensions	None
		Surface material	None (reposition roadway to accommodate future installation of footpath asphalt, etc.)

Main Street (from Amherst Street to Library driveway)

The character of Main Street changes significantly as it runs through the Village. As a result, the committee determined that it would be prudent to divide Main Street recommendations into three distinct sections, each of which is designed to reflect the uses and desired environments for each section.

This section of Main Street is more linear in its use, whether by motor vehicles or pedestrians. As a result, the committee determined to use a streetscape that communicates this through-function. In addition to the standard *Local flow street with separate pedestrian facility* streetscape, the addition of intermittent parallel parking on the north side of the street alternating with trees/vertical elements is encouraged both to address parking needs in the village as well as providing “edge friction” traffic calming to slow vehicular speeds.

The existing sidewalk is recommended to remain on the south side of the street, but to widen it to a 6 ft minimum and to ensure that there is a minimum 2 ft horizontal clearance from adjacent vertical surfaces such as fencing, etc. This would address safety concerns and improve pedestrian network connectivity. Furthermore, reducing the crown and embankment upon which the street is situated would make the area more level and welcoming.

Current characteristics			
Network classification		Local flow street	
Vehicular volume		1,347 AADT	
Roadway width		25 ft	
Recommendations			
Ideal			
Regulatory considerations	Posted speed limit	25 mph	
	Through trucking	No	
Streetscape	Type	 Local flow street with separate pedestrian facility	
	Modal separation		Separate
	Total streetscape width		21 ft + grass separation + 6 ft sidewalk
	Motor vehicle space	Dimensions	18 ft
		Surface material	Asphalt, chip seal, etc.
	Mountable shoulders/median	Dimensions	18 in shoulders (2), one on either side of motor vehicle space
		Surface material	Granite paving blocks, setts, etc.
	Shared space	Dimensions	None
		Surface material	None
	Nonvehicular space	Dimensions	6 ft minimum, separated, ADA-compliant sidewalk, south side of roadway
Surface material		Asphalt	
Painted markings		None	
Traffic calming		Physical narrowing of the roadway, optical narrowing of mountable shoulders. Parking defined with 2-3 parking spaces alternating with trees/vertical elements.	

Basic			
<i>All ideal attributes listed above except for:</i>			
Streetscape	Mountable shoulders/median	Dimensions	18 in shoulders (2), one on either side of motor vehicle space
		Surface material	Pavers (e.g.: Unilock or similar company)
Minimum			
<i>All ideal attributes listed above except for:</i>			
Streetscape	Mountable shoulders/median	Dimensions	None
		Surface material	None
	Nonvehicular space	Dimensions	None
		Surface material	None (reposition roadway to accommodate future installation of footpath asphalt, etc.)

Main Street (from Library driveway to 8 Main Street)

The character of Main Street changes significantly as it runs through the Village. As a result, the committee determined that it would be prudent to divide Main Street recommendations into three distinct sections, each of which is designed to reflect the uses and desired environments for each section.

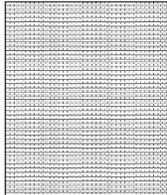
This section of Main Street is more spatial in its use, whether by motor vehicles or pedestrians. In many ways, this area is the cultural center of Amherst, and the streetscape should reflect this reality. Formal, linear, and “urban style” pedestrian treatments that delineate separate spaces for pedestrians are less meaningful in this area as it is the entire area that has multiple uses.

As a result, the committee determined to use a streetscape that communicates this spatial function by using the *Shared Space with Pedestrians, Pedestrian Priority* streetscape for this area. The use of these materials in this area was broadly seen as the highest priority area for such materials. Furthermore, the extent of these materials should span east to west from the Library Driveway to 8 Main Street and north to south from Mike’s Auto to the end of the Moulton’s parking area.

Use of a natural, locally sourced, native material like granite to designate the entire area as a pedestrian priority space is recommended as the ideal choice. This material will help calm traffic which addresses speeding and safety concerns. Parking areas should also be the same or a rougher similar material. Parking along the green space can be formalized with consideration given to a grass paver option.

It is recommended to ensure that the existing sidewalk which connects Carriage Road to Main Street in the area of the Library’s entrance also be updated with the same streetscape material as this area (and Carriage Road).

More information about this area is available in the *Carriage Road-Boston Post Road-Main Street-School Street Intersection* section on page 38.

Current characteristics			
Network classification	Local flow street		
Vehicular volume	1,157 vehicles/day		
Roadway width	25-27 ft		
Recommendations			
<i>Ideal</i>			
Regulatory considerations	Posted speed limit	25 mph	
	Through trucking	No	
Streetscape	Type	 Shared Space with Pedestrians, Pedestrian Priority	
	Modal separation	None (shared)	
	Total streetscape width	20 ft	
	Motor vehicle space	Dimensions	None
		Surface material	None
	Mountable shoulders/median	Dimensions	None
		Surface material	None
	Shared space	Dimensions	20 ft
		Surface material	Granite paving blocks, setts, etc.
	Nonvehicular space	Dimensions	None
		Surface material	None
Painted markings	None		
Traffic calming	Physical narrowing of the roadway, area-wide alternate surface material, tactile and auditory feedback for drivers.		
<i>Basic</i>			
<i>Not recommended due to this area being a top priority for streetscape improvement</i>			
<i>Minimum</i>			
<i>Not recommended due to this area being a top priority for streetscape improvement</i>			

Main Street (from 8 Main Street to Manchester Road)

The character of Main Street changes significantly as it runs through the Village. As a result, the committee determined that it would be prudent to divide Main Street recommendations into three distinct sections, each of which is designed to reflect the uses and desired environments for each section.

While this segment of Main Street plays a major role in the Village’s culture, a simple narrowing of the roadway was determined to be the most appropriate solution at this time. By narrowing the roadway from 27 ft to 20 ft and removing center lines, it will have a traffic calming effect on use, as well as reduce pavement costs. It was determined that the southern extent of the roadway should remain where it is while the narrowing should result in a reduction in asphalt from the northern side of the roadway, following existing natural curves and restoring the reclaimed 7 feet to the green space of the Common. Grass pavers may be considered for parking areas.

In the future, this area should be upgraded to granite when future funding becomes available.

Current characteristics			
Network classification		Local flow street	
Vehicular volume		No data (1,157 vehicles/day at adjacent segment, likely a reasonable approximation)	
Roadway width		27 ft	
Recommendations			
<i>Ideal</i>			
Regulatory considerations	Posted speed limit		25 mph
	Through trucking		No
Streetscape	Type		No modified streetscape recommended
	Modal separation		Undefined
	Total streetscape width		20 ft
	Motor vehicle space	Dimensions	20 ft
		Surface material	Asphalt, chip seal, etc.
	Mountable shoulders/median	Dimensions	None
		Surface material	None
	Shared space	Dimensions	None
		Surface material	None
	Nonvehicular space	Dimensions	None
Surface material		None	
Painted markings		None	
Traffic calming		Physical narrowing of the roadway	
<i>Basic</i>			
N/A			
<i>Minimum</i>			
N/A			

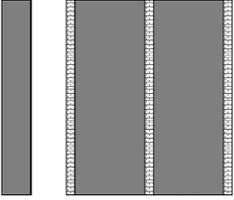
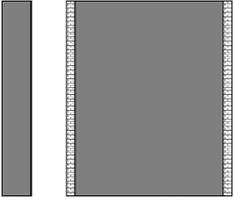
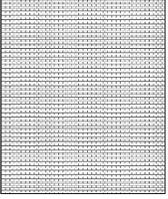
Other Village Streets

Throughout this report, intentional effort was concentrated on the five streets that were scheduled for road work coinciding with the drafting of Article 30. This offered distinct benefits for narrowing our focus to develop an understanding of how to accomplish the large volume of work in our charter. With this in mind, it's important to note that the Village Streets Study Committee (VSSC) was chartered with a broader scope, to "evaluate suggested streetscape improvements for the village area of the Town of Amherst." Worth noting is the fact that the Amherst Public Works Department has identified several additional streets scheduled for upcoming road work.

This section will detail recommendations for the remaining streets within the Village Streets Study scope. Consistent with our other recommendations, these are not intended for immediate, simultaneous implementation but are envisioned to be phased in over time. This approach allows for improvements to be rolled out over time, generally coinciding with scheduled road work, external funding opportunities, or a combination of them both.

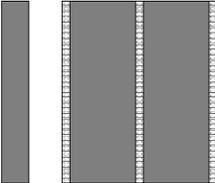
Our extensive work on the initial five streets has informed our understanding of how different network classifications influence the need for specific streetscape designs. Applying this insight, we extend similar streetscape recommendations to the other streets in the village, ensuring a cohesive and holistic improvement across the entire area. This section details additional recommendations for two streets - Boston Post Road and Mack Hill Road (from Manchester Road to Jones Road) - and provides a categorization of recommended streetscapes for the rest, with the aim of achieving a unified and improved village environment over time.

Table 5. Overview of all recommended streetscapes by street

Recommended Streetscape	Street	Network Classification
 <p data-bbox="215 464 581 548">Regional flow street with separate pedestrian facility, higher vehicle volumes</p>	Boston Post Road	Regional Flow Street-lower vehicle speeds
 <p data-bbox="232 804 565 863">Local flow street with separate pedestrian facility</p>	Foundry Street	Local Flow
	Jones Road	Local Flow
	Mack Hill Road (between Manchester Road and Jones Road)	Local Flow
	Main Street (between Amherst Street and Library driveway)	Local Flow
	Manchester Road (from Mack Hill Road to Narragansett Road)	Local Flow
	Narragansett Road	Local Flow
	New Boston Road (between Boston Post Road and Jones Road)	Local Flow
 <p data-bbox="232 1213 565 1272">Shared Space with Pedestrians, Pedestrian Priority</p>	Carriage Road	Neighborhood Access
	Church Street	Local Flow
	Courthouse Road (from Amherst Street to Main Street)	Local Flow
	Cross Street	Neighborhood Access
	Davis Lane	Local Flow
	Knight Street	Neighborhood Access
	Main Street (between Library driveway to 8 Main Street businesses)	Local Flow
	Manchester Road (from Main Street to Mack Hill Road)	Local Flow
	Middle Street	Local Flow
	Pierce Lane	Neighborhood Access
	School Street	Local Flow

Boston Post Road

The table below details the streetscape design recommendations for Boston Post Road, a regional flow street. It outlines three levels of treatment - ideal, basic, and minimum. Community concerns about pedestrian safety, vehicle speeds, and trucking-related noise on Boston Post Road have been a focal point, especially considering its role as a key component of a popular walking loop in the village. As Boston Post Road is on the cusp of 6,000 vehicles per day, a granite mountable median is recommended to function as center delineation.

Current characteristics				
Network classification		Regional Flow Street - Lower Vehicle Speeds		
Vehicular volume		5,878 AADT		
Roadway width		24, 27, and 28 ft (variable widths)		
Recommendations				
<i>Ideal</i>				
Regulatory considerations	Posted speed limit		25 mph	
	Through trucking		No	
Streetscape	Type	 <p>Regional flow street with separate pedestrian facility, higher vehicle volumes</p>		
	Modal separation		Separate	
	Total streetscape width		23 ft + grass separation + 6 ft min footpath	
	Motor vehicle space	Dimensions	20 ft	
		Surface material	Asphalt, chip seal, etc.	
	Mountable shoulders/median	Dimensions	12 in shoulders (3), one on either side of motor vehicle space and one in center	
		Surface material	Granite paving blocks, setts, etc.	
	Shared space	Dimensions	None	
		Surface material	None	
	Nonvehicular space	Dimensions	6 ft minimum, separated, ADA-compliant sidewalk, west side of roadway (two sidewalks, on both east and west sides of roadway, from Amherst St to Main St)	
Surface material		Asphalt		
Painted markings		None		
Traffic calming		Physical narrowing of the roadway, optical narrowing of mountable shoulders.		
<i>Basic</i>				
<i>All ideal attributes listed above except for:</i>				
Streetscape	Mountable shoulders/median	Dimensions	12 in shoulders (3), one on either side of motor vehicle space and one in center	
		Surface material	Pavers (e.g.: Unilock or similar company)	
<i>Minimum</i>				
<i>All ideal attributes listed above except for:</i>				
Streetscape	Mountable shoulders/median	Dimensions	None	
		Surface material	None	
	Nonvehicular space	Dimensions	None	
		Surface material	None (reposition roadway to accommodate future installation of footpath asphalt, etc.)	

Improvements along Boston Post Road have been frequently requested throughout the public input process as its role in the village, as well as higher vehicular volumes, have resulted in a higher concentration of the same problems experienced throughout the village (e.g.: speeding, trucking-related concerns, noise, pedestrian safety, etc.). Understanding that Boston Post Road may not be scheduled for road work as soon as other streets in the village, interim recommendations are offered for improvements that can be made prior to comprehensive road work.

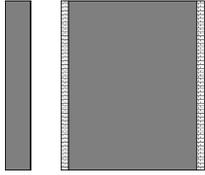
Interim Recommendations:

- Consider restriping to eliminate centerline markings and installing edge lanes along the shoulders in a manner that would simulate the preferred streetscape for Boston Post Road. Specifically, paint edge lines that would create two 10 ft lanes.
- Consider implementing a no through trucking policy
- Consider speed limit signage between Main Street and Sunset Avenue to reiterate 25 mph speed limit
- Consider a trial of traffic calming furniture along the roadway to simulate narrowing of the roadway, including crashworthy planters during non-snow removal months, as a proof-of-concept
- Consider exploring alternate routes for vehicles traveling from points north of the village to avoid going through the village. Further study of feasibility would be needed. Austin Road was mentioned as a possible road to explore.

To analyze the improvements of these interim recommendations, it is suggested that the Town enlist the assistance of the Nashua Regional Planning Commission to do before-and-after analyses of vehicular speeds and volume.

Mack Hill Road (from Jones Road to Manchester Road)

The table below details the streetscape design recommendations for lower Mack Hill Road, a local flow street. It outlines three levels of treatment - ideal, basic, and minimum - each tailored to the street's unique requirements. These treatments encompass considerations for regulatory aspects, streetscape type, modal separation, and surface materials, reflecting a balance between historical compatibility, functionality, and financial feasibility. Community concerns about pedestrian safety and vehicle speeds on Mack Hill Road have been a focal point, especially considering its role as a key component of a popular walking loop in the village.

Current characteristics				
Network classification		Local flow street		
Vehicular volume		1,880 AADT		
Roadway width		25 ft		
Recommendations				
<i>Ideal</i>				
Regulatory considerations	Posted speed limit		25 mph	
	Through trucking		No	
Streetscape	Type		 <p>Local flow street with separate pedestrian facility</p>	
	Modal separation		Separate	
	Total streetscape width		21 ft + grass separation + 6 ft min footpath; 27 ft if constrained space variant is required	
	Motor vehicle space	Dimensions		18 ft
		Surface material		Asphalt, chip seal, etc.
	Mountable shoulders/median	Dimensions		18 in shoulders (2), one on either side of motor vehicle space
		Surface material		Granite paving blocks, setts, etc.
	Shared space	Dimensions		None
		Surface material		None
	Nonvehicular space	Dimensions		6 ft minimum, separated, ADA-compliant sidewalk, west side of roadway
Surface material		Asphalt		
Painted markings		None		
Traffic calming		Physical narrowing of the roadway, optical narrowing of mountable shoulders.		
<i>Basic</i>				
<i>All ideal attributes listed above except for:</i>				
Streetscape	Mountable shoulders/median	Dimensions	18 in shoulders (2), one on either side of motor vehicle space	
		Surface material	Pavers (e.g.: Unilock or similar company)	
<i>Minimum</i>				
<i>All ideal attributes listed above except for:</i>				
Streetscape	Mountable shoulders/median	Dimensions	None	
		Surface material	None	
	Nonvehicular space	Dimensions	None	
		Surface material	None (reposition roadway to accommodate future installation of footpath asphalt, etc.)	

Interim Recommendation:

- Consider eliminating center lines and narrowing vehicular lanes with edge line markings to delineate pedestrian space on west side of Mack Hill Road

Step 3: Intersection Design

During public input opportunities, citizens commented that intersections in the village present safety concerns due to their design. Some intersections were described as confusing. The committee reviewed intersections related to the five Article 30 streets and offered suggestions to improve safety and geometry, decrease confusion, and reduce asphalt.

Intersection design concepts presented by CMA Engineers consultant Samuel Fortier introduced the following considerations:

- Narrowing the roadway
- Narrowing the intersection
- Reducing turning radii (reducing radii and providing truck apron for larger vehicles)
- Realigning intersections (e.g.: change geometry from a “skewed T” to standard “T intersection”)
- Using alternate surface material to designate shared space at intersections/crosswalk
- Horizontal deflections (e.g.: chicanes, splitter islands, etc.)
- Vertical deflections (e.g.: raised intersections)
- Adjusting flow (e.g. “push pin” or roundabout style intersections)

In general, the committee voiced support for most of the presented intersection design concepts, preferring simpler options wherever possible. The committee preferred to avoid vertical deflections or the use of “push pin” or roundabout-style intersections, showing a preference for simple T-style intersections that utilize the other intersection design concepts presented.

The committee’s preference for how to apply these intersection design concepts will be detailed below by intersection.

Amherst Street-Davis Lane-Carriage Road-Main Street Intersection

This redesign aims to normalize the geometry of the existing intersection while also enhancing pedestrian safety and reducing speeds of vehicles approaching Main Street. Below the image depicting proposed changes, find a detailed list of the specific alterations planned for this intersection.

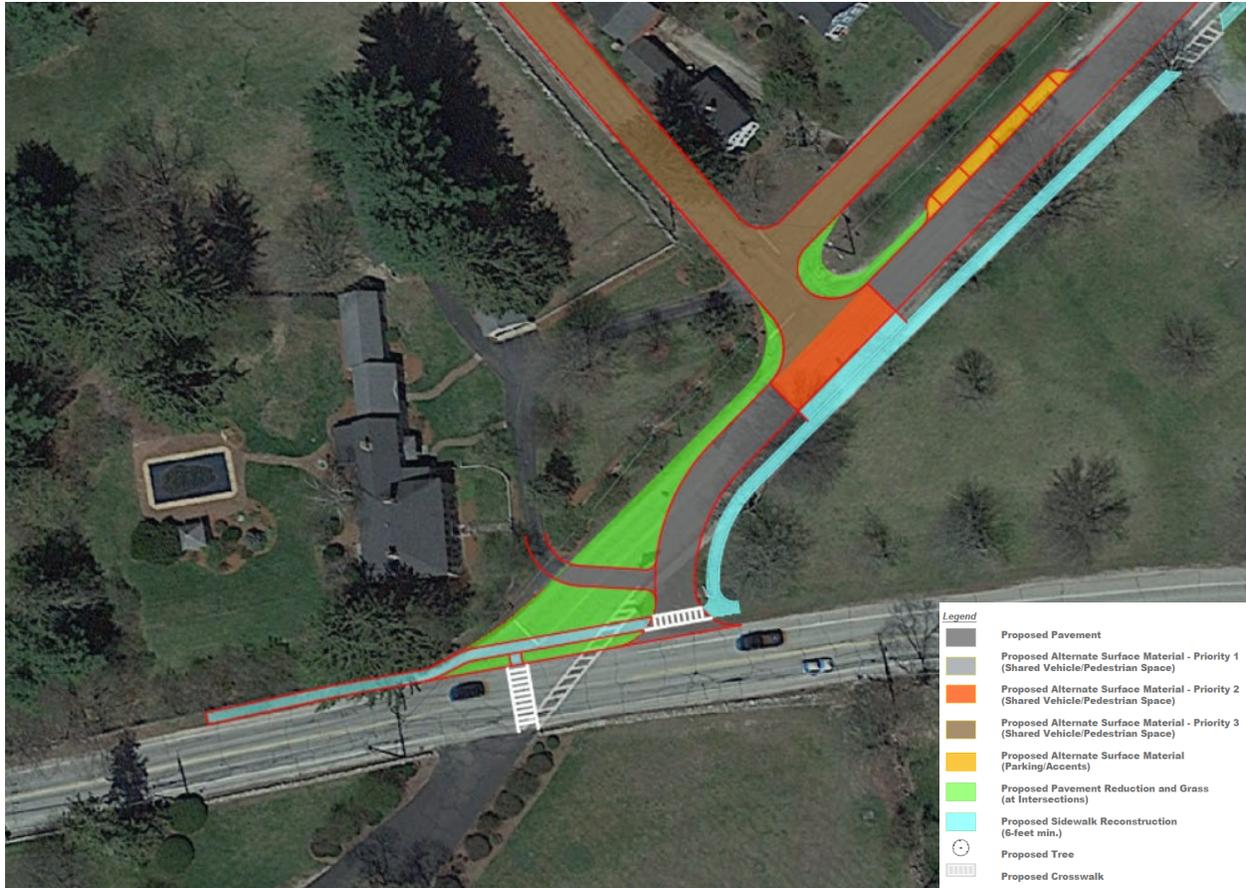


Figure 6. A depiction of recommended improvements for the Amherst Street-Davis Lane-Carriage Road-Main Street intersection

Recommended changes:

- Normalize intersection geometry by creating a T-intersection at Main Street and Amherst Street with the option to allow left-turn from Main Street onto Amherst Street.
- Reduce corner radii of both Davis Lane (on both sides of the street) and Carriage Road (south side)
- Reduce and remove asphalt no longer needed
- Extend alternate surface material from Davis Lane across Main Street so that the entire intersection becomes a pedestrian crossing and serves as a gateway treatment to alert drivers that they have entered a pedestrian priority space and need to slow speeds. This would allow pedestrians to walk from Davis Lane and Carriage Road across Main Street to the existing footpath
- Realign the current diagonal crosswalk from Country Mansion (135 Amherst Street) across Amherst Street to Main Street. Shortening sidepath crosswalk directly across Main Street to increase safety and decrease time in crosswalk. The current diagonal crosswalk design reduces sight lines to see traffic due to the angle

Note that the corner radii reductions can be accomplished with little to no additional costs incurred. Improving the intersection geometry to a T-intersection can be accomplished with minor additional costs.

Boston Post Road-New Boston Road-Wilkins School

The proposed redesign of this intersection seeks to address several identified concerns in this area, including: a skewed approach of New Boston Road, a high degree of linearity along Boston Post Road allowing for drivers to achieve high speeds when approaching the village from the north, an unnatural crossing for pedestrians from the existing footpath as they walk to Wilkins School (and beyond), high speeds in the area of Wilkins School, and where to place the pickup queue for Wilkins School parents.

The committee considered two different possible reconfigurations for this intersection and did not endorse one over the other, voicing general support for the principles found within either design. Both configurations will be included for reference and the selection of either intersection, or a combination of the attributes found within them both, would be acceptable.

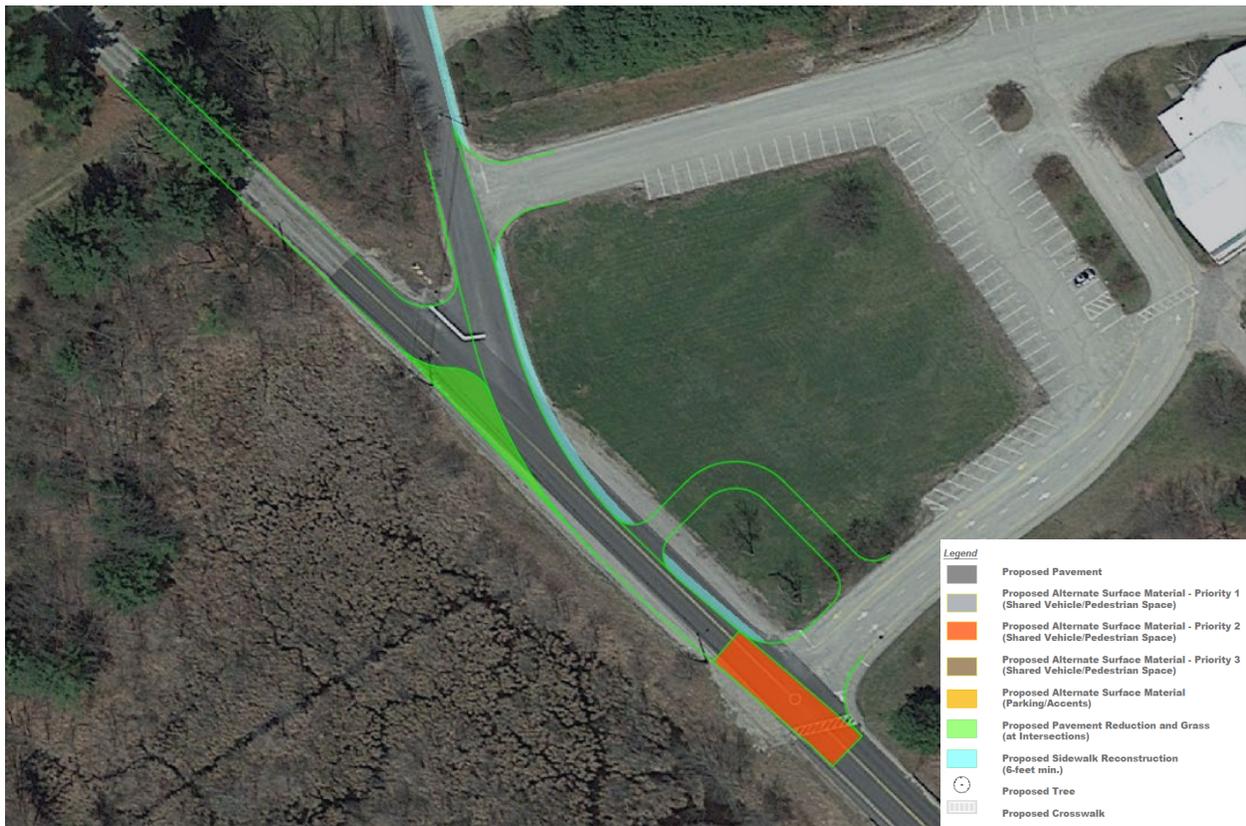


Figure 7. A depiction of an option for recommended improvements for the Boston Post Road-New Boston Road-Wilkins School intersection

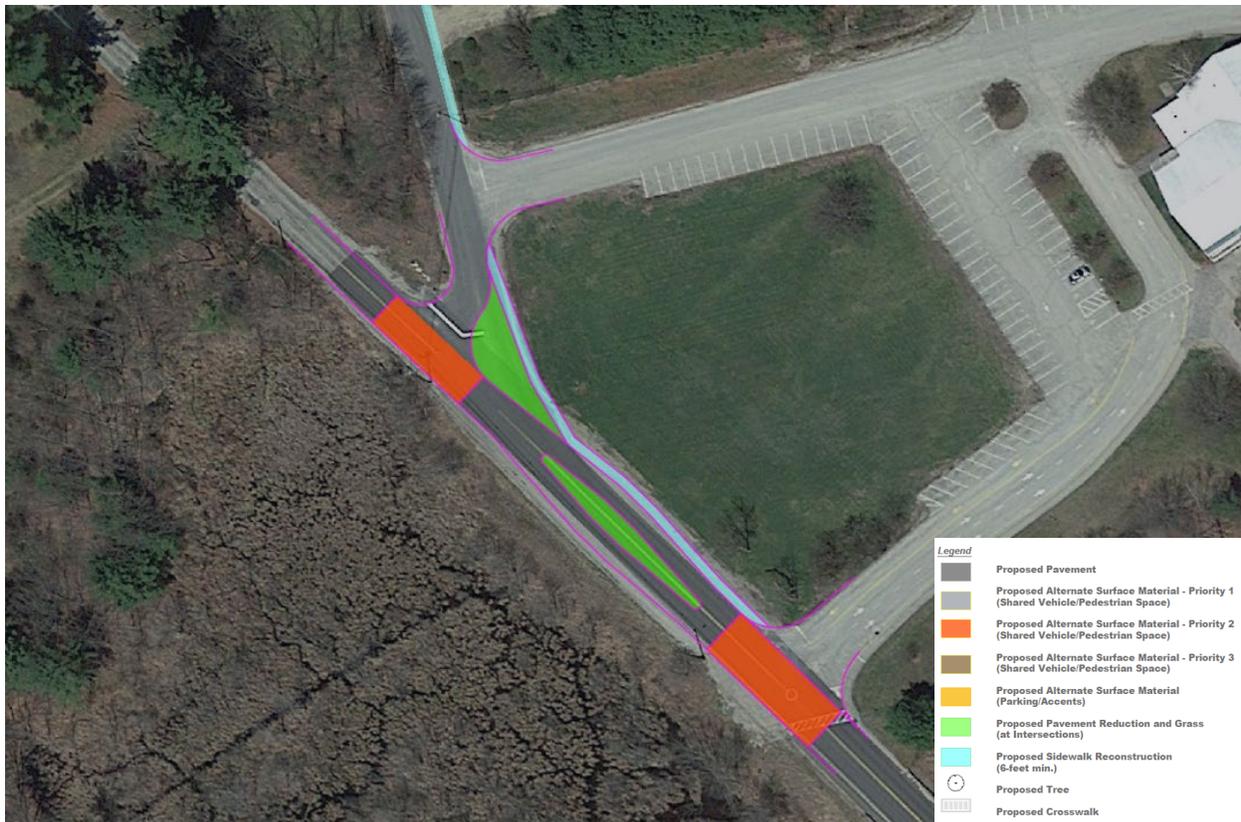


Figure 8. A depiction of an option for recommended improvements for the Boston Post Road-New Boston Road-Wilkins School intersection

Recommendations:

- Normalize intersection geometry by creating a T-intersection at Boston Post Road and New Boston Road
- Add horizontal deflection to Boston Post Road
- Place alternate surface material in the intersection of Boston Post Road-New Boston Road as a visual and tactile area to alert drivers to slow down, and break up the linearity of Boston Post Road, serve as a gateway treatment to the Village
- Place alternate surface material in the intersection of Boston Post Road-Wilkins entrance driveway to serve both as traffic calming but also to replace the existing crosswalk, allowing the entire intersection to become the crosswalk, allowing pedestrians from the existing Boston Post Road sidewalk to access both Wilkins School and continue north to New Boston Road

Boston Post Road-Church Street-Foundry Street

The proposed redesign of this intersection seeks to establish a pedestrian-priority area for crossing the higher volume Boston Post Road from the Clark School area to the rest of the village. This would serve as a traffic calming effect for drivers on Boston Post Road with a visual and tactile area to alert drivers to slow down and break up the linearity of Boston Post Road.



Figure 9. A depiction of recommended improvements for the Boston Post Road-Church Street-Foundry Street intersection

Recommendations:

- Extend alternate surface material from Church Street into the intersection.

Carriage Road-Boston Post Road-Main Street-School Street Intersection

The proposed redesign of the Carriage Road-Boston Post Road-Main Street-School Street intersection prioritizes pedestrian safety and traffic efficiency. The changes are geared towards creating a more cohesive and functional space, with an emphasis on pedestrian priority, improved parking solutions, and a nod to this intersection being the cultural center of the Village today. Recommendations for this intersection are the highest priority recommendation for improvements by the committee.



Figure 10. A depiction of recommended improvements for the Carriage Road-Boston Post Road-Main Street-School Street intersection

Recommendations:

- Extend alternate surface material from the Main Street library driveway to 8 Main Street, and along Boston Post Road from the southern edge of the Moulton’s Market parking on Boston Post Road to Mike’s Auto. This will establish a pedestrian-priority area and serve as a visual and tactile gateway to alert drivers to slow down.
- Narrow School Street to facilitate a T-intersection with Boston Post Road, creating an opportunity to formalize additional parking spaces along the southern side of School Street.
- Consider reconfiguring parking spaces on Main Street to provide appropriate minimum distances between parking and crosswalks. This would improve safety by eliminating cars backing into the crosswalks.

- Consider providing an underground heated snow melting system for the parking area in the middle of this intersection due to the physical challenges of plowing it. Similar solutions were implemented in Concord, NH with a federal TIGER grant in 2012, to ease snow removal.

Davis Lane-Foundry Street Intersection

The upcoming overview of the Davis Lane-Foundry Street Intersection focuses on key modifications aimed at enhancing pedestrian priority and safety. The proposed redesign is intended to alert drivers to the presence of pedestrians and encourage slower vehicle speeds through the intersection.

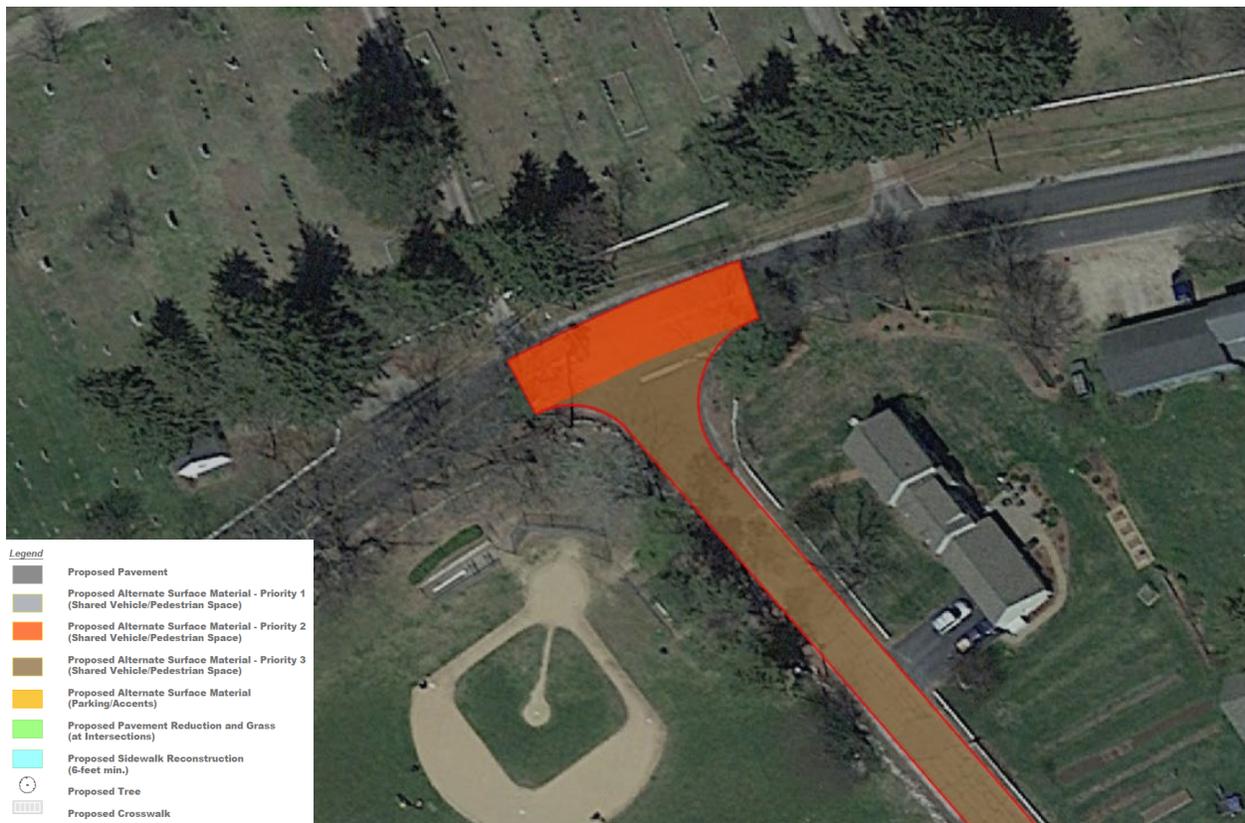


Figure 11. A depiction of recommended improvements for the Davis Lane-Foundry Street intersection

Recommendations:

- Extend alternate paving material from Davis Lane across intersection with Foundry Street. This serves as pedestrian crossing and serves as a gateway treatment to alert drivers that they have entered a pedestrian priority space and need to slow speeds.
- Reduce corner radii to extent practical

Note that corner radii reductions can be accomplished with little to no additional costs incurred.

Dodge Road-Jones Road-Mack Hill Road Intersection

The proposed redesign of the Dodge Road-Jones Road-Mack Hill Road Intersection is geared towards improving traffic flow and enhancing pedestrian safety. The focus is on implementing initial changes that can be built upon progressively, based on effectiveness and necessity.

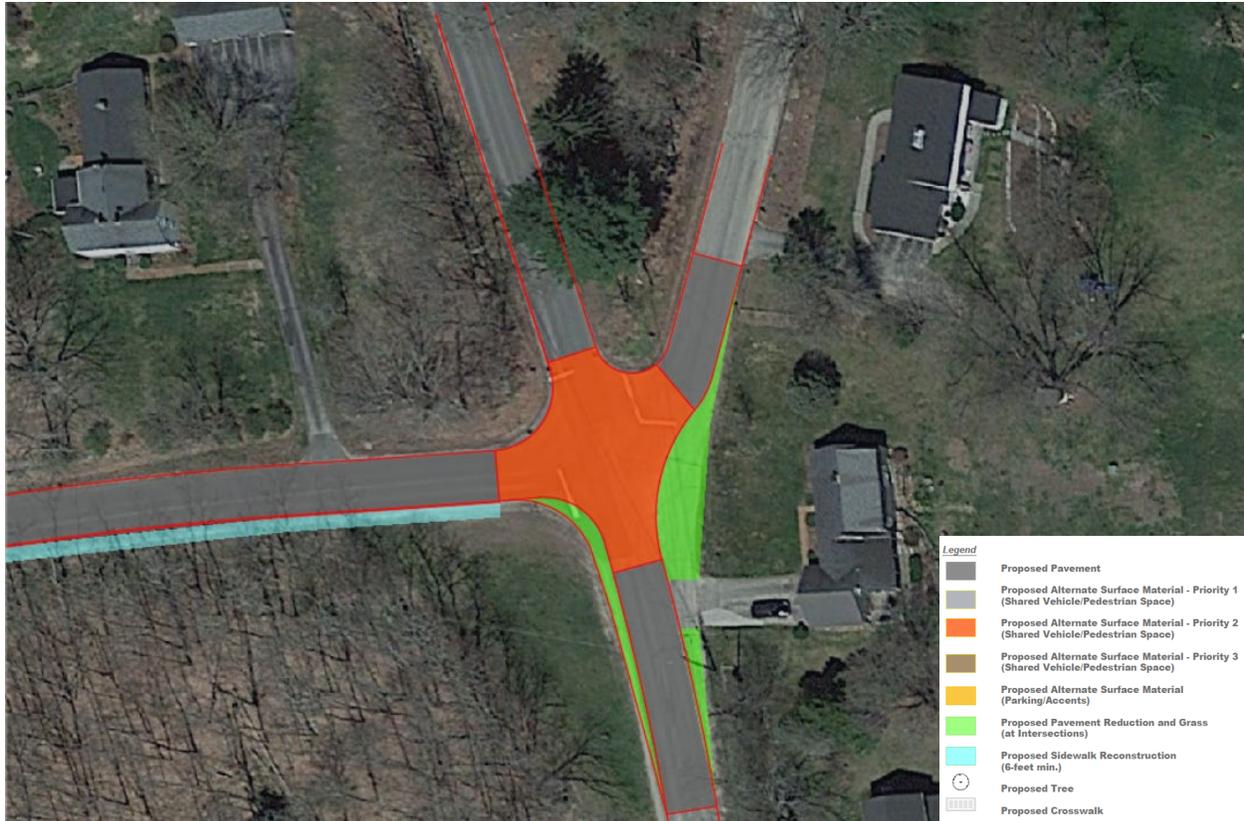


Figure 12. A depiction of recommended improvements for the Dodge Road-Jones Road-Mack Hill Road intersection

Recommendations:

- Narrow the intersection, remove excess asphalt, and replace with grass.
- Improve the geometry of the Dodge Road approach to make for less of a skewed angle
- Reduce corner radii to the maximum extent practical, including a significant reduction in corner radius on the Dodge Road side of Mack Hill Road to slow traffic speeds

Recommendations for this intersection included a progression of additional options should further improvements be required:

- Alternate paving material in the entire intersection. This would give a nod to the original center of town and serve as a gateway treatment to indicate to drivers that they have entered pedestrian priority space and need to slow speeds.
- Mountable alternate surface materials at each approach for several feet as approach intersection, indicating a change of space
- A truck apron was discussed as an option for the eastern side of the intersection, but if deemed insufficient, look at the option for raised curb to address cars driving through

grass where the significant pavement area was reduced. Driving onto the grassy area would create ruts and can damage the asphalt.

Mack Hill Road-Manchester Road

The proposed redesign of this intersection seeks to address several identified concerns at this intersection, including inadequate pedestrian facilities for the popular Jones Road-Mack Hill Road walking loop and ambiguous traffic controls.

Recommendations:

- Curve Manchester Road along the southern geometry of the existing intersection without interruption
- Normalize intersection geometry by creating a T-intersection at Mack Hill Road and Manchester Road with Manchester Road being the primary street and Mack Hill Road being the secondary street
- Connect proposed Mack Hill Road footpath to shared space treatment Manchester Road (between Main Street and Mack Hill Road)

Main Street-Pierce Lane Intersection

The proposed redesign of the Main Street-Pierce Lane Intersection focuses on increasing safety and efficiency. The changes aim to streamline the intersection layout while adhering to town standards and minimizing additional costs.

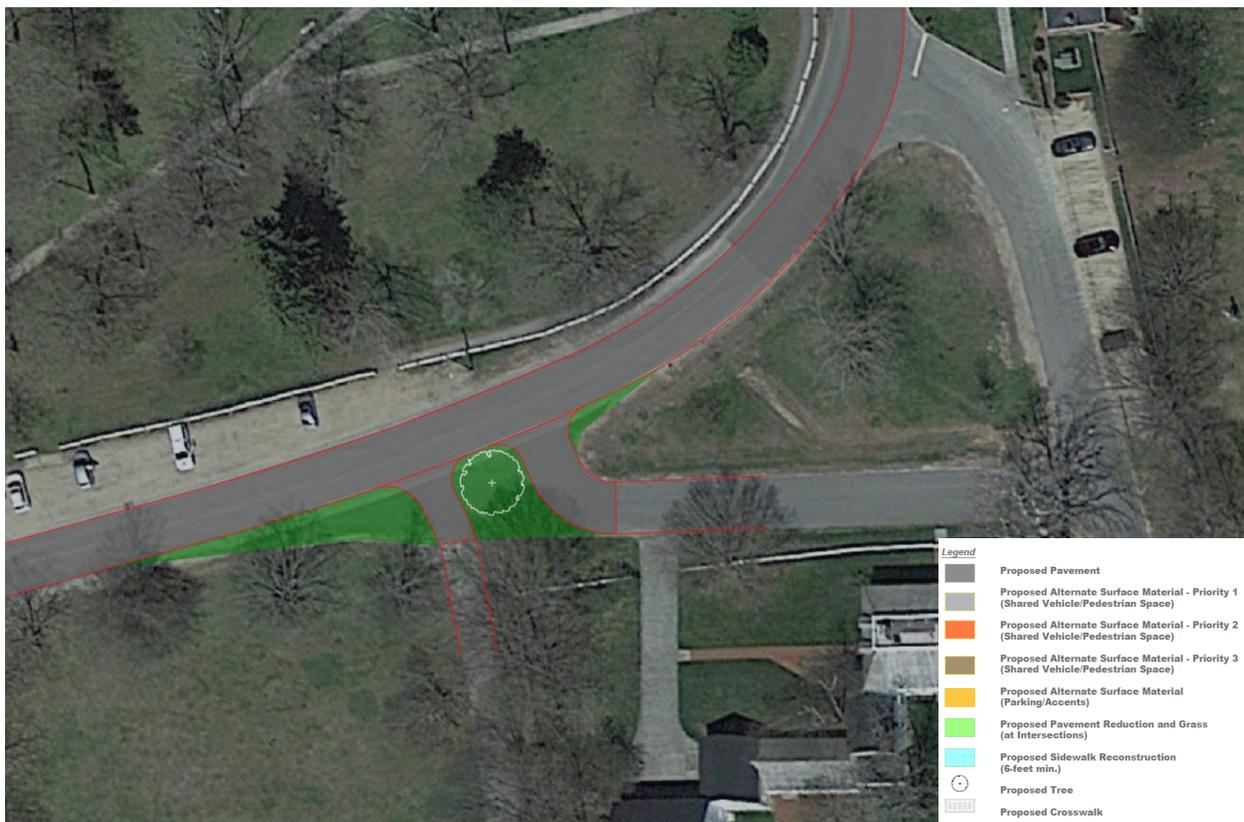


Figure 13. A depiction of recommended improvements for the Main Street-Pierce Lane intersection

Recommendations:

- Redesign the approaches of Pierce Lane and the Carriage House's driveway to form T-intersections with Main Street, enhancing the clarity of the intersection.
- Maximize the separation between approaches as much as is practically feasible.
- Removal of excess asphalt to reduce unnecessary space and improve the intersection's overall layout.
- Install a tree between the Pierce Lane approach and the Carriage House's driveway to reduce encroachment into green spaces.

Note that this option can be accomplished with little to no additional costs incurred.

Next Steps

The Village Streets Study Committee prioritized and respected the integrity of the Amherst Village as a designated member of the National Register of Historic Places as well as its historic landmarks. Reinforcing the unique small-town character and celebrating the town's history was integral to decisions made relative to network, streetscape, and intersection designs. The committee took to heart the feedback received from citizens of Amherst and strived to achieve the public input-based goals for improving safety by reducing speeding and noise, decreasing cut-through traffic, and redesigning confusing/dangerous intersections. Completing the pedestrian network and suggesting aesthetically pleasing paving materials were also key discussions.

Throughout the Village Streets Study Committee assessment process, our guiding principles and the consistent message from citizens that they desired a “less is more” approach, provided direction. The committee evaluated consultant options and moved toward maintaining the historic integrity and simplicity of the Village while providing options to address the concerns raised by citizens. The site walk provided residents an opportunity to provide feedback that was integral in creating the recommendations presented. The VSSC envisions the recommendations for streetscape designs and paving material choices will be utilized as a template for updating future village streets.

It is the hope of the Village Streets Study Committee that the Board of Selectmen will adopt the Action Plan presented and move forward with the final design review and creation of a robust grant application.

Aligning Infrastructure Improvements with Established Plans

When seeking external funding for infrastructure improvements, it is imperative that proposed projects are consistent with established community plans. This approach not only strengthens the case for funding but also ensures that the improvements are deeply rooted in the community's long-term objectives and needs.

This study's recommendations closely align with the aspirations and concerns expressed by the public over the years, as documented in several key plans. These include the *Envision Amherst 2035 Master Plan* (2023), the *Amherst Village Strategic Plan* (2015), and the *Safe Routes to School Travel Plan* (2013). Each of these plans has articulated specific goals and visions for the community's future, particularly in terms of infrastructure development and enhancement.

The *Envision Amherst 2035 Master Plan*, for instance, emphasizes the need for sustainable, community-centric development that balances growth with historical preservation and environmental stewardship. It advocates for infrastructure projects that enhance connectivity, promote safety, and contribute to the overall livability of the town. Similarly, the *Amherst Village Strategic Plan* and the *Safe Routes to School Travel Plan* highlight the importance of pedestrian-friendly and safe transportation networks.

Strategic Alignment: Concepts from the *Envision Amherst 2035 Master Plan*

The Master Plan provides the legal basis for zoning and other land use regulations. It also provides the community with a big-picture view of where things are today, and where the community wants to be in the future.

The Amherst Master Plan was recently revised and approved. It provides [A Vision for Amherst in 2025](#) which states “The historic architecture, pedestrian friendly streets, and the common in Amherst’s village continue to be the heart and civic center of the community, and a place where neighbors meet and build relationships.”

The traffic calming techniques, streetscape designs, and materials selected align perfectly with the 2025 vision of Amherst. Priorities expressed by citizens during the Visioning Phase and the feedback found in the Master Plan survey are consistent.

Listed below are related results from the Master Plan survey. Please see related link in Appendix to review the Master Plan.

- The survey found that 66% of respondents strongly agree/agree that Amherst should improve safe routes (connectivity) for pedestrians and bicycles.
- Amherst should improve roads and infrastructure was supported as strongly agree/agree by 79% of respondents.
- Amherst should protect historic resources was supported as strongly agree/agree by 80% of respondents.
- Ranking priorities section found 82% highest/high priority to maintain the rural character and feeling of Amherst.
- Ranking priorities section found 61% highest/high priority to provide safe and comfortable routes for bikers and walkers.

Potential Funding Sources

Below are four potential funding sources for infrastructure improvements. The grant that best correlates with the project in the Amherst Village is the Safe Streets and Roads for All Grant. In 2023 all grant application materials were due in early July. At this time the date for the 2024 applications has not been published.

The SS4A program requires a safety action plan (Action Plan) to apply for Implementation Grants. The document presented will serve as the required Action Plan.

- Safe Streets and Roads for All (SS4A) Grant
 - The [Bipartisan Infrastructure Law \(BIL\)](#) established the new Safe Streets and Roads for All (SS4A) discretionary program, with \$5 billion in appropriated funds over 5 years, 2022-2026. The SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries.
 - The [fiscal year \(FY\) 2023 Notice of Funding Opportunity \(NOFO\)](#) for Safe Streets and Roads for All grants closed on July 10, 2023. Planning and Demonstration Grant award decisions are expected to be announced in **October**

2023 and Implementation Grant award decisions are expected to be announced in **December 2023**.

- The FY24 Notice of Funding Opportunity (NOFO) for SS4A is expected to open in Spring 2024.
- Congestion Mitigation, Air Quality (CMAQ) Grant
- State of New Hampshire, Department of Transportation, 10-Year Plan
- Transportation Alternate Program (TAP)

Prioritization

The VSSC developed recommendations for streetscape and intersection improvements with explicit attention to a cost-effective and prioritized approach. Understanding that not all improvements can be pursued everywhere simultaneously, high level prioritization of our recommendations is provided below.

- **Leveraging scheduled road work and budget**

Scheduled road work for Article 30 streets is expected to use funds approved in the Town's road budget. While this budget is likely insufficient to fund ideal treatments throughout the village, these budgeted funds could be leveraged as the requisite 20% local match requirement for a federal infrastructure grant.

Such grant programs, especially the Safe Streets and Roads for All (SS4A) grant, would provide significantly more funds and allow the streetscape designs presented to be applied more immediately and completely. A grant award would amount to a substantial increase in funding potential at no additional cost to Amherst taxpayers.

- **The Highest Identified Priorities**

In this section, we highlight the top priorities identified by the committee for implementing ideal safety improvements, focusing on key intersections and areas of high pedestrian activity to enhance safety and promote a pedestrian-priority environment.

- **Priority 1: Carriage Road-Boston Post Road-Main Street-School Street Intersection**

The committee recognized the intersection of Boston Post Road and Main Street as the top priority for using the ideal alternate paving materials. This is truly a mixed-use area that provides access to commercial businesses and a high level of pedestrian activity. Extending the ideal surface paving material, granite paver blocks, throughout this area would be an ideal way to designate this area as a pedestrian priority space shared with vehicular traffic. Creating safer spaces for pedestrians and enhancing the pedestrian network were priorities noted during the Visioning Phase citizen input opportunities. Using this treatment would also serve as a gateway treatment to alert vehicular traffic that they have entered a unique space that requires slower speeds and more attention to pedestrians in the space.

- **Priority 2: Spot Improvements at other Intersections and areas of High Need**

The committee also recognizes a second priority is the use of the ideal alternate paving

material, granite paver blocks, at intersections and crosswalks with higher levels of pedestrian traffic. Examples of these pedestrian priority areas include Davis Lane and Foundry Street, Mack Hill Road and Jones Road, and the area of Manchester Road in front of Town Hall crossing to the common.

- **Priority 3: Leveraging Streetscape Design as Traffic Calming**

Modifying streets to implement the recommended streetscape designs will be a crucial component to streetscape improvements in the Village. These improvements will likely represent the highest financial commitment and thus will likely have to be phased over time.

- Priority 3A: the application of streetscapes with Local Flow Streets with Separate Pedestrian Facility. As these streetscapes see higher vehicular volumes and have a lower percentage of alternate surface materials, they will likely represent a lower linear foot cost to implement and thus may be able to be prioritized at any point, with or without external funding.
- Priority 3B: application of streetscapes with Shared Space with Pedestrians – Pedestrian Priority. As these streetscapes have lower volumes and have a 100% application of alternate surface materials, it is likely they will represent the highest linear foot cost to implement. Thus, these will likely need to coincide with scheduled road work, external funding opportunities, or both. Nonetheless, these streetscape improvements represent an essential piece in a village-wide improvement as they will make a profound impact on driver behavior.

- **Priority 4: Other Recommended Streetscape Improvements**

Options have been provided on a street-by-street basis whereby “ideal”, “basic”, and “minimum” options could be considered for implementation. While the ideal treatment is the optimal treatment with the highest recommendation from the VSSC, alternative options are provided in the event that improvements are limited by budget constraints.

- **Ideal Treatments**

When considering the streetscape treatments for Amherst's infrastructure improvements, it's crucial to weigh the initial costs against long-term financial implications. Ideal streetscape treatments, particularly those involving natural granite materials, present a higher upfront cost compared to alternatives like asphalt. However, their lifetime costs tell a different story.

Granite materials, known for their durability and longevity, can last for centuries with minimal maintenance. This makes them a financially savvy choice in the long run. While asphalt may appear more budget-friendly initially, it lacks the enduring quality of granite, leading to more frequent replacements and higher maintenance costs over time.

The strategic use of federal grants can play a pivotal role in this context. Leveraging such funding to invest in higher-quality materials can yield substantial savings for Amherst

taxpayers over generations. By opting for granite in streetscape projects, the town can ensure a legacy of sustainable, cost-effective infrastructure that stands the test of time.

This prioritization strategy aligns with a vision of fiscal responsibility and long-term planning. It not only addresses immediate infrastructure needs but also considers the financial impact on future generations, ensuring that today's investments continue to benefit the community for years to come.

- **Adapting to Financial Constraints: Implementing “Basic” and “Minimum” Treatments for Future-Ready Designs**

In scenarios where the ideal surface material is beyond current budgetary capabilities, the plan also includes a pragmatic approach with minimum treatments. These treatments involve restructuring the geometry of the streetscapes using more affordable, temporary materials. The key here is to design these temporary solutions with an eye toward the future, ensuring that they lay the groundwork for eventual upgrades to the ideal materials. This approach allows the town to make incremental improvements that align with financial realities while maintaining a clear path toward long-term goals. It ensures that even with budget constraints, the infrastructure work done today won't hinder or complicate future enhancements, but rather facilitate them. This strategy reflects a commitment to gradual but consistent progress in streetscape improvement, ensuring that each step, regardless of its scale, contributes positively to the overarching vision of Amherst's infrastructure development.

Options were provided to allow for various levels of change to the streetscape design and use of paving materials. The ideal option represents the choice that would be suggested outside of constraints related to budget, materials availability, etc. The upfront cost of the ideal material is greater, however over the lifetime of the material the costs are significantly lower. The basic option supports the streetscape design recommended with an option for paving materials that have a lower upfront cost. A third option, considered a minimum option, still supports the streetscape design selected while providing the most economical materials choices. It is important to note that basic geometry changes at intersections and narrowing the paved width of streets can largely be accomplished without grant funding and can be incorporated into the scheduled road work if grant funding is not obtained.

Appendix

Article 30

<https://www.amherstnh.gov/village-streets-study-committee/pages/article-30-village-area-multimodal-road-infrastructure-design>

Origin of the VSSC

https://www.amherstnh.gov/sites/g/files/vyhli4116/f/uploads/tc_vssc_creation_background.pdf

Charter for the VSSC

https://www.amherstnh.gov/sites/g/files/vyhli4116/f/uploads/village_streets_study_committee_charter_approved.pdf

Amherst Village Streets Study (August 1, 2023) reviewed by the VSSC

https://drive.google.com/file/d/12df8_h76cJPRnkyv8WO06eqfEdPAuCxK/view

Amherst Village Streets Study Public Input Results

- October 2022 Open House Comments
<https://www.amherstnh.gov/village-streets-study-committee/files/october-2022-mobycon-open-house-resident-comments>
- Online Survey Results
 - Question 1: What about the Village makes you proud?
<https://www.amherstnh.gov/village-streets-study-committee/files/online-survey-results-question-1-what-about-village-makes-you>
 - Question 2: What concerns you about transportation in the Village?
<https://www.amherstnh.gov/village-streets-study-committee/files/online-survey-question-2-what-concerns-you-regarding>
 - Question 3: What is your future vision regarding transportation in the Village?
<https://www.amherstnh.gov/village-streets-study-committee/files/online-survey-results-question-3-what-your-future-vision>
- April 2023 Open House Comments
<https://www.amherstnh.gov/village-streets-study-committee/files/april-2023-mobycon-open-house-resident-comments>
- October 15, 2023 Site Walk Minutes
<https://www.amherstnh.gov/village-streets-study-committee/minutes/vssc-site-walk-minutes-final>

Guiding Principles

https://www.amherstnh.gov/sites/g/files/vyhli4116/f/uploads/vssc_guiding_principles_final_08.22.2023.pdf

Amherst Master Plan: A Vision of Amherst in 2035

https://www.amherstnh.gov/sites/g/files/vyhlf4116/f/uploads/adopted_master_plan_013123_wit_h_appendix.pdf

Amherst Master Plan: Survey Results

https://www.amherstnh.gov/sites/g/files/vyhlf4116/f/uploads/adopted_master_plan_013123_wit_h_appendix.pdf

New Hampshire Department of Environmental Services related to stormwater run-off.

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/wmb-17.pdf>

Town of Amherst Stormwater Regulations

https://www.amherstnh.gov/sites/g/files/vyhlf4116/f/uploads/stormwater_regulations_adopted_12.16.20_1.4.21_0.pdf

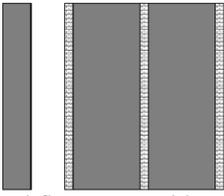
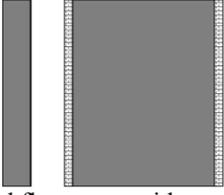
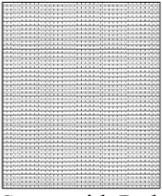
Federal Highway Administration Course on Bicycle and Pedestrian Transportation on Traffic Calming, Lesson 11

https://safety.fhwa.dot.gov/ped_bike/univcourse/pdf/swless11.pdf

The Americans with Disabilities Act (ADA) has a set of guidelines to ensure that sidewalks are constructed to a set of standards that ensures accessibility for the disabled.

<https://safety.fhwa.dot.gov>

Streetscape Recommendations Overview

Recommended Streetscape	Street	Vehicular Volume (vehicles/day)	Network Classification	Current streetscape width	Recommendations				
					Recommended streetscape width	Speed Limit	Through Trucking	Center Delineation	Pedestrian accommodation
 <p>Regional flow street with separate pedestrian facility, higher vehicle volumes</p>	Boston Post Road	5,878	Regional Flow Street-lower vehicle speeds	24, 27, and 28 ft (variable widths)	23 ft + grass separation + 6 ft min footpath	25 mph	No	12 in mountable median	6 ft min. footpath on west side, with grass separation wherever feasible
 <p>Local flow street with separate pedestrian facility</p>	Foundry Street	1,013	Local Flow	25 ft	21 ft + grass separation + 6 ft min footpath; 27 ft if constrained space variant is required	25 mph	No	None	6 ft min. footpath on south side, with grass separation wherever feasible
	Jones Road	1,008	Local Flow	25 ft	21 ft + grass separation + 6 ft min footpath; 27 ft if constrained space variant is required	25 mph	No	None	6 ft min. footpath on south side, with grass separation wherever feasible
	Mack Hill Road (between Manchester Road and Jones Road)	1,880	Local Flow	25 ft	21 ft + grass separation + 6 ft min footpath; 27 ft if constrained space variant is required	25 mph	No	None	6 ft min. footpath on west side, with grass separation wherever feasible
	Main Street (between Amherst Street and Library driveway)	1,347	Local Flow	25 ft	21 ft + grass separation + 6 ft min footpath; 27 ft if constrained space variant is required	25 mph	No	None	6 ft min. footpath on south side, with grass separation wherever feasible
	Manchester Road (from Mack Hill Road to Narragansett Road)	1,057	Local Flow	No data	21 ft + grass separation + 6 ft min footpath; 27 ft if constrained space variant is required	25 mph	No	None	6 ft min. footpath on south side, with grass separation wherever feasible
	Narragansett Road	No data	Local Flow	23 ft	21 ft + grass separation + 6 ft min footpath; 27 ft if constrained space variant is required	25 mph	No	None	6 ft min. footpath on west side, with grass separation wherever feasible
	New Boston Road (between Boston Post Road and Jones Road)	1,982	Local Flow	24 ft	21 ft + grass separation + 6 ft min footpath; 27 ft if constrained space variant is required	25 mph	No	None	6 ft min. footpath on east side, with grass separation wherever feasible
 <p>Shared Space with Pedestrians, Pedestrian Priority</p>	Carriage Road	No data	Neighborhood Access	18 ft	18 ft	25 mph	No	None	Shared space
	Church Street	No data	Local Flow	23 ft	20 ft	25 mph	No	None	Shared space
	Courthouse Road (from Amherst Street to Main Street)	No data	Local Flow	22 ft	20 ft	25 mph	No	None	Shared space
	Cross Street	No data	Neighborhood Access	No data	18-20 ft	25 mph	No	None	Shared space
	Davis Lane	295	Local Flow	20 ft	20 ft	25 mph	No	None	Shared space
	Knight Street	No data	Neighborhood Access	No data	20 ft	25 mph	No	None	Shared space
	Main Street (between Library driveway to 8 Main Street businesses)	No data	Local Flow	25 ft	20 ft	25 mph	No	None	Shared space
	Manchester Road (from Main Street to Mack Hill Road)	1,443	Local Flow	No data	20 ft	25 mph	No	None	Shared space
	Middle Street	No data	Local Flow	No data	20 ft	25 mph	No	None	Shared space
	Pierce Lane	No data	Neighborhood Access	No data	18-20 ft	25 mph	No	None	Shared space
School Street	No data	Local Flow	21 ft	20 ft	25 mph	No	None	Shared space	

Village Center Overview



Jones Road Overview



- Legend**
- Proposed Pavement**
 - Proposed Alternate Surface Material (Shared Vehicle/Pedestrian Space)**
 - Proposed Alternate Surface Material (Parking/Accents)**
 - Proposed Pavement Reduction and Grass (at Intersections)**
 - Proposed Sidewalk Reconstruction (6-foot min.)**
 - Proposed Tree**
 - Proposed Crosswalk**

