AMHERST COMPREHENSIVE PLANNING STUDY:

DEFINING VILLAGE BOUNDARIES &
OPEN SPACE PRESERVATION STRATEGIES

Report Prepared for:
Amherst Comprehensive Planning Committee

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and Regional Planning
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EXECUTIVE SUMMARY

BACKGROUND

The Amherst Comprehensive Planning Committee (CPC) was formed in 1997 to carry out a Visioning Process for the Town of Amherst. Working with a consultant, two public forums were held, which resulted in the publication of Amherst Visions in June 1998. The document recommended that the Town proceed with a Comprehensive Planning Process to ensure appropriate growth and development in keeping with the Town’s vision for the future. In preparation for requesting funds from Town Meeting for the Plan, the committee engaged in scenario planning exercises and developed a series of compelling questions to make the case that a planning process was vital to the Town’s development. Town Meeting denied the funding in the fall of 1999; however, in the spring of 2000, Town Meeting approved the first step towards a comprehensive planning process: A Build-out and Future Growth Analysis. This process resulted in the development of several Future Growth Scenarios, one of which included the concept of clustering growth in several village centers to preserve open space.

In order to assist the CPC in keeping the planning effort alive, the University of Massachusetts’ Dept. of Landscape Architecture and Regional Planning was contracted to work on three components of the plan including:

- Open Space and Viewshed Protection
- Defining the Village Boundaries outlined by the Build-out and Future Growth Study
- The Design of several Village Centers

Although major funding for a Comprehensive Plan is not imminent, several other planning efforts will also contribute to the planning effort including an Open Space Plan, a Historic Preservation Plan, the Atkins Corner Workbook and the Town Center Streetscape Design Guidelines.
ACKNOWLEDGEMENTS

The Amherst Comprehensive Planning Study was initiated and funded by the Comprehensive Planning Committee of the Town of Amherst. We would like to thank the members of the CPC for initiating the study and providing input during the development of this report.

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In addition we would like to acknowledge a number of individuals for their support, advice, and feedback. Niels LaCour, Assistant Planner in the town of Amherst, was an invaluable source of information and provided us with extensive data for this study. Pete Westover of the Town's Conservation Department, supplied us with many of the long-range open space goals for the town both existing on paper and in discussion. Judy Steinkamp from University of Massachusetts Campus Planning gave us not only the University of Massachusetts perspective, but valuable critique on the project as a whole. Peter Flinker from Dodson Associates set a high standard for our graphic products and timely advice and evaluation on our presentations. Many thanks to our professor, Robert Ryan, who guided our efforts and kept us focused on what this project was really about.

The study conducted by graduate students in the Landscape Architecture and Regional Planning programs in the University of Massachusetts under the direction of Assistant Professor Robert Ryan. The contributions of Maureen Borg, Pam Miller, Elizabeth Lokocz, Timothy Lockett, Mary Elizabeth Burgess, Jarita Sadler, Nate Richardson, Mary Lee York and Nidhi Madan are invaluable to this effort.
Chapter 1: INTRODUCTION

The Town of Amherst has in recent years commissioned several projects to direct the future growth and development of the town and assist in its Comprehensive planning process. Some of these include the Build-out Analysis and Future Growth Study (2002), Action Steps for a Better Amherst (2002), and Atkins Corner Workbook (2002). There are still many steps that need to be taken in these planning efforts, several of which will probably be undertaken by different committees in Town (i.e., the Amherst Conservation Commission and Historical Commission). Some others await funding by the town. The University of Massachusetts' Department of Landscape Architecture and Regional Planning was contracted to work on three focal issues as part of a Comprehensive Planning Study. These include:

- Preserving Open Space,
- Defining Village Boundaries, and,
- Designing Village Centers.

With the overall goal of planning and implementing open space protection at a town scale and accommodating new development in an environmentally sensitive manner, five specific objectives were formulated for the Town. These were: to preserve the open space corridor; define the Town and Village center boundaries; identify its development and growth potential; create a distinct district that builds on the area’s history and plans for potential multiple uses; and facilitate village connections to the open space network. Towards accomplishing these objectives, analysis and preliminary recommendations were followed by the development of potential strategies for implementation. Feedback from Town meetings and the Comprehensive Planning Committee were key inputs in this process.

1.0 METHODOLOGY AND STUDY AREAS

The study was divided into the three distinct geographic study areas of Amherst: North, Center and South (Figure 1.1). The goal was to assess the unique characteristics and focal developmental issues for each area as identified by this and other preceding studies. Similar issues were addressed across all three sections to assure consistent assessment criteria. Additional criteria relevant to the individual areas were also addressed. The existing conditions were assessed as were potential future growth scenarios, protection and planning strategies.

North Amherst
This section focused on defining open space preservation strategies for North Amherst. It builds upon previous greenway planning efforts to strengthen the existing open space network of the area. It includes all land to the north of the University of Massachusetts. It also looked at defining the Village growth boundaries and compared a concentrated village development scenario with one that is determined by current zoning. A focused Village Center design proposal focused on issues of identity, sustainability, mixed-usage, and connectivity to the rest of North Amherst.

Amherst Center and the East Amherst Common
This area of study includes the University of Massachusetts, Town center and Amherst College, roughly terminating along Mill Lane. In addition to assessing open space protection priorities, this section looked at defining the growth boundaries for Amherst Center, including the Town center and the
Figure 1.1: Geographic study areas of North, Central and South Amherst.
East Amherst common. It also addressed the issue of infill development, to concentrate growth within the village boundary as proposed by the Build-out Analysis. A sub-set of this section completed a design proposal for a vibrant mixed-use center at the East Amherst Common, at the intersection of Main Street, Route 9 and Northeast and Southeast Streets (also known as Amherst Crossing). Issues of traffic congestion, walkability, architectural character and development potential were addressed.

South Amherst (Pomeroy and West St.) and Echo Hill
This geographic area encompasses all land in Amherst south of Mill Lane including Hampshire College, the Lawrence Swamp and the Holyoke Range. Study in this area looked at defining the open space preservation needs for the area and reinforcing the greenway network for South Amherst in terms of the overall greenway plan for Amherst as developed by Fabos et al (1997). Defining village boundaries for South Amherst and designing a mixed-use center at Echo Hill were additional tasks. An Echo Hill Village Center design was in the scope of the project as defined by the Comprehensive Planning Committee as other village centers in South Amherst have been previously studied or are historic centers. It explored the potential of a viable mixed use center in an area that has seen previously unsuccessful centers.

Information for this study was assimilated in a number of ways. A number of individuals and/or experts were consulted for their particular expertise and areas of concern. Previous documentation regarding development in Amherst was reviewed including the Open Space Plan, Zoning Ordinance, Subdivision Regulations, and Build-out Analysis and Future Growth Study. Extensive Geographic Information System (GIS) analysis was carried out using data provided by the Town. A series of written and graphic recommendations for each geographic area, and research in key issues made up the first half of the process.

These issues were studied as a whole and by the geographic areas they fall under, as mentioned earlier. The criteria to determine priorities for protection of open space included habitat protection, scenic views and connectivity. Habitat, as defined by the Commonwealth of Massachusetts Natural Heritage and Endangered Species Program’s BioMap, represent areas with endangered species and natural communities as Core or priority Habitat, and other fragmented areas that safeguard these as supporting natural landscapes or Supporting Habitat. These areas of habitat were considered important factors in assessment. To assess different lands for their scenic value, a town-wide survey of scenic views was conducted which includes rated photographs of scenic areas. The rating was based on the Bureau of Land Management-Visual Resource Management guidelines and categorized areas into areas of high, medium and low scenic values. Special attention was given to views that exist in areas that have high potential to be developed. Additional criteria of connectivity for the existing open space corridors in the Town added weight to a matrix incorporating these factors. The result of combining the natural species habitat and scenic areas led to the development of priorities for open space protection. These are meant to supplement lands protected or proposed to be protected as per the Draft Open Space Plan (2003).

As per the 3-Village growth scenario, developed by the Build-out Analysis and Future Growth Study (2002), the potential growth that could be accommodated within three Village Center and its relevance to open space protection outside of these boundaries was studied. To achieve this Three-Village Scenario described in the Build-out Analysis, a study was conducted of buildable areas, existing development patterns and zoning, and potential density changes. Potential strategies to achieve this concentration were a result of research and exploring alternative development strategies, creative zoning and other planning strategies.
Alternative visions for the identified Village Centers following the Three Village/Town Center Scenarios as described in the Build-out Analysis were designed. The North Amherst Village Center, around the North Amherst common; the East Amherst Village Center, around the east Amherst Common; and an Echo Hill mixed use center were identified for Design proposals. Existing land use, transportation patterns, village identity or lack thereof and development potential were factors that resulted in the Proposed Design concepts. Each geographic area has its own unique character which was reflected in the illustrative drawings. These changes are illustrated using axonometric sketches, sections, and/or computer simulations. The visual impact of both the current trends scenario and proposed village center is shown to inform the public and planning organizations what could happen and how to get there.

The second half of the process as described in Chapter 5: Planning Strategies included researching and defining specific strategies that have been used by other towns and their potential adaptability to fit Amherst’s unique character. As a result, it provides the town with various potential development scenarios, and the knowledge and tools to implement them.

### 1.1 PRELIMINARY FINDINGS

At present, the traditional rural character of the town, a result of its formerly agrarian economy, makes it an attractive town to live in, with its vibrant downtown, picturesque views of farmlands, woodlands and the Holyoke Range. This however, is set to change. With a shift in its economic base towards service and communication sectors, pressures on the land to develop have increased. The campuses of the University of Massachusetts, Amherst College and Hampshire College and their ensuing population add to the development pressures on the town. Growth pressures on the land and housing in particular, are represented by the low vacancy rate of housing units in the Town (Appendix 1). These facts are borne out by the average household size of 2.19 for the town (Appendix 1), as does its attractiveness as a retirement community. It also represents pressures towards suburbanization. Over time these pressures are liable to increase. While open space protection has long been a priority, with the Conservation Department adding agricultural and woodlands to lands under protection, it is important to plan for the inevitable growth pressures and to accommodate its needs. Historic development patterns in Amherst have concentrated growth in the Town and Village centers. In the current scenario, this makes sense as the infrastructure to support this growth already exists within these centers. Public transportation connects these centers with a large concentration of bus stops found within their boundaries (Fig. 1.2). Mixed uses with residential, retail and business buildings, walkable centers and the sewer and water lines (Fig. 1.3) support this concentration.

**Preserving Open Space**

Open space planning and protection is a well known topic of discussion in Amherst and the Town has taken extensive steps to see that many of the critical open spaces of the Town are protected under conservation, farmland and woodland protection. However, although nearly one quarter of the Town’s land is permanently protected; gaps in the open space network still exist. Some of these are along the Mill River corridor in the North, the Fort River corridor in the East, and the Holyoke Range in the South, which have been found to have critical habitat and scenic views. Additional parcels within wildlife habitat, scenic views, and corridors were identified for potential protection.
Figure 1.2: A number of the bus stops are in the three village centers, connecting them and providing easy access to these areas.
Figure 1.3: Concentrating growth within the Village boundaries will reduce the extension of the sewer lines that will in turn reduce development in outlying areas.
Defining Village Boundaries

Growth in Amherst has traditionally been concentrated around existing village centers. Documented in the Select Committee on Goals (1974), a distinct, vibrant town center with clustered satellite village centers surrounded by open space was the development character that the town wished to preserve. Although no less than eight historic village centers have been identified in Amherst (Figure 1.4), detailed studies have not been done for all of them. The focus of this study was restricted to three village centers: the North Amherst Village Center, Amherst Town Center and South Amherst Village Center. The other village centers at Cushman and the South Amherst common were not included in the scope of study as they are historic centers with restrictive growth potential, and the Atkins Corner Village has been previously studied by Dodson Associates (2002).

For the most part, existing development and natural boundaries were found to determine the Village boundaries in keeping with historic growth patterns. In some areas recognition emerged that meeting the proposed village build-out goals is not likely to occur due to the availability of existing developable land and the existing community character. It is unlikely that significant changes could be avoided in community character given the amount of infill necessary to meet build-out numbers. As a result, each section determined the development that could fit into its Village boundaries and the strategies that could achieve them. Some of these strategies include infill, creative zoning and cluster zoning.

Designing Village Centers

The Village Center designs provide suggestions that the Town of Amherst can use to create a vibrant, walkable district that draws people to live, visit, shop and dine in the Villages. The development of an attractive Village Center district would support the town goal of concentrating development within the Villages, by creating an attraction for those living within walking distance. Towards this goal, this study proposes changes to infrastructure for circulation that allows for convenient and safe access for pedestrians, bicyclists and vehicles alike. Modifications or the addition of new facilities that can accommodate retail, office and residential uses simultaneously; and the creation of standards of design that help to create a unified, attractive and unique space for each of the village centers are additional...
objectives. These are represented in design proposals, plans and sketches to illustrate the visions they create.

1.2 PLANNING STRATEGIES

In response to the growing development pressures on the Town for development, managing growth around existing village centers will alleviate pressures on the existing and potential open space corridor of the Town as well as contain the extension of services and amenities (Town of Amherst, 2002). These are in keeping with the traditional development patterns that have characterized the growth of the Town as well as the its historic growth pattern which most resembles the 3-village growth scenario as represented in the Build-out Analysis carried out by Applied Geographics, Inc. in 2002.

A number of strategies are described as ways of achieving the goals set forth in the first half of the study. These strategies are only a few of the many that could be applied and are discussed in detail because 1) they complement a specific task given us, such as viewshed protection, and/or 2) complement something Amherst is already doing, but could improve upon. Some of the strategies already successfully employed by the town include Agricultural Preservation Restrictions (APRs) and coordination with local land trusts. Other recommendations include some of the following techniques.

**Viewshed Protection Overlay District**

Numerous options can be applied to protect significant views. Our recommendation to the town focuses on the creation of a Viewshed Protection Overlay District. This district would limit vegetation removal, prohibit building on slopes greater than 15 percent and on elevations over 350 feet, and require design review to further reduce the impact of structures within the view.

**Woodland Protection**

Current regulations in Amherst recommend conservation of trees on wooded lots, but does not prohibit the removal of trees in new subdivisions. Increasing the level of protection to mandate conservation would help to preserve the rural character of the town, protect views, and support environmental concerns such as clean air.

**Street Tree Protection & Replacement**

New England is known for its picturesque tree lined streets, and although the town requires shade trees to be planted in all new subdivisions, no guidelines or regulations exist for tree planting or replacement in existing neighborhoods. Street tree planting may be one step towards helping define village boundaries and set the character of the village centers.

**Cluster Development**

Cluster Development is currently allowed by-right in Amherst, but flexibility and additional explanatory language are needed to make it an attractive alternative to conventional development. Clusters are required in the Farmland Conservation Overlay District (FC) and are optional in most residential zones. Amherst’s extensive GIS inventory and its subsequent ease of analysis make it a viable option for new development. Nearby towns and literature provide examples of useful language to aid in reviewing lot size and conservation requirements.

**Infill Strategies**

If future development is to be concentrated in villages, current barriers to infill must be reduced. After careful review numerous potential sites for infill exist, but are often not considered buildable under current zoning restrictions. Reducing or eliminating additional lot size per unit, reducing flag lot
requirements, and reviewing setback requirements within the identified village boundaries will sustain them as development centers.

**Design Review Guidelines**
Performance based design guidelines can provide essential information to developers and the general public. The town has an existing design review process within the historic Town Center for business general development, but does not currently require it for other, particularly residential, development. Identifying the special character of the town perhaps on a village basis and providing language which enables the town to review any project can act as a unifying and supportive measure. Providing character information to developers from the start of a project can streamline the process.

### 1.3 CONCLUSION
This report incorporates findings and recommendations for a Comprehensive Planning Study that will add to the existing framework of the Amherst Comprehensive planning process. It is intended to both spark discussion about timely issues and assist people in looking to the future and planning for it. Each of the three focal issues of 1) preserving open space; 2) defining village boundaries; and 3) designing village centers are discussed in detail in a chapter of their own. Within each chapter the town is described by its successive geographic region and then addressed as a whole. The final chapter develops the implementation strategies listed above and provides useful resources and examples of what other towns are doing to achieve their development and conservation goals. Together this information represents a body of knowledge that can be applied towards the achievement of the town’s planning goals.
Chapter 2: PRESERVING OPEN SPACE

In response to the growing development pressures on the Town for development, managing growth around the existing Village Centers will alleviate pressures on the existing and potential open space corridor of the Town as well as contain the extension of services and amenities (Town of Amherst, 2002). These are in keeping with the traditional development patterns that have characterized the growth of the Town as well as its historic growth pattern which most resembles the three-village growth scenario as represented in the Build-out Analysis (2002).

Pressured for development, the Town of Amherst has preserved 3,922 acres of open space, with more than half of it protected under conservation easements and conservation land owned by the Town (Figure 2.1). While Amherst must accommodate a growing population, it is also necessary to protect land for its significant natural features, biodiversity, scenic views, and/or natural corridors (river, trail, and protected land connectivity). In conjunction with the Amherst Conservation Commission’s priorities for open space protection, this study assessed the undeveloped land in Amherst to determine additional priorities for protection. This has been done using the criteria of scenic quality, habitat preservation and connectivity of the open space network.

The primary goal is to allow for a compact, coherent growth pattern that provides for the rural character, quality of life, and natural factors of the region. This includes providing for a concentration of development around the existing Village Centers, maintenance of the connectivity of the open space corridor, and open space preservation through the protection of areas with priority habitat and high scenic quality while encouraging recreation along proposed trail networks. The main corridors of connectivity identified for contiguous protection are along the Mill River in the north, the Fort River spanning the Town from north to south along its eastern side, and the Holyoke Range in the south (Figure 2.2).

2.0 METHODOLOGY

Within the boundaries of the Town of Amherst, three areas of study were assessed: North Amherst, Amherst Center, and South Amherst. Geographically, North Amherst includes areas north of the University of Massachusetts and Amherst College, Amherst Center lies between the University of Massachusetts and Amherst College. South Amherst includes areas south of Mill Lane and Amherst College and includes Hampshire College, Lawrence Swamp and the Holyoke Range.

Towards consolidating and strengthening the existing open space corridors in the Town as a whole, areas of potential protection and corridors of connectivity were identified (Figure 2.2). Areas of biodiversity or priority habitat, high scenic value and development potential determined the criteria of assessment and are important factors in the formulation of recommendations and potential strategies for future protection. Each of the three geographic areas was assessed for these factors, culminating in a comprehensive set of recommendations which pertain to the Town as a whole.
Figure 2.1: Lands in existing and proposed protection
Figure 2.2: Natural corridors along the Mill River, Fort River and Holyoke Range
Assessment Criteria

Biodiversity
“Biodiversity is defined as the totality of genes, species and ecosystems in a place, as well as the ecosystem structures and processes that support and sustain life” (BioMap 2001, p. 6). Its preservation is important to protect an abundant heritage of plants, animals, forests, natural landscapes and natural communities. Areas of biodiversity in Massachusetts have been identified by the Natural Heritage and Endangered Species Program (NHESP) and represented as a BioMap. This BioMap represents areas of priority or Core Habitat and the supporting natural landscape or Supporting Habitat, factors that are integral to any open space assessment. The Core Habitat is home to rare plant and animal species and other natural communities. The Supporting Habitat includes buffer areas around the Core Habitat, undeveloped watersheds and large, undeveloped patches of vegetation. Together they represent areas of environmental sensitivity and are found to traverse a significant part of Amherst. Although some of these areas are currently under protection, additional areas need to be considered.

Scenic Quality
The scenic views of the farmlands, woodlands, undulating landscape and surrounding hills accentuate Amherst’s rural character. To protect these views and viewsheds (regions visible to the observer from the main access routes); scenic views around the Town were assessed. The scenic views in each of the three geographic study areas of Amherst were assessed according to the evaluation criteria of the Department of the Interior - Bureau of Land Management Visual Resource Management (BLM VRM 2003) (Appendix 2). The evaluation was based on seven criteria: Landform, Vegetation, Water, Color, Adjacent Scenery, Scarcity, and Cultural Modifications. These criteria were evaluated based on factors such as topographic change, plant textures, color variations and diversity, on a scale from “1” to “5” for all factors except cultural modifications. These were based on a scale from “–4” to “2”. Cultural modifications are changes made in the physical environment that either add to or detract from its natural scenic quality. A rating of “1” is considered to be weak in the category, while a rating of “5” is considered to be strong. Likewise, a rating of “–4” is considered to be weak in the category, while a rating of “2” is considered to be strong. Views with a cumulative score of 19 or more are considered high scenic value (A rating); views with a cumulative score of 12-18 are considered medium scenic value (B rating); and views with a cumulative score of 11 or below are considered low scenic value (C rating). Using the criteria from the Bureau of Land Management, a composite assessment of the scenic views in each geographic area in Amherst is illustrated in Figure 2.3. Along with an assessment of the scenic views in the Town, additional views were added after consulting with Pete Westover, Amherst Conservation Department Head.
Figure 2.3: Scenic viewsheds assessment
Connectivity
For the purpose of this study, connectivity is inclusive of all areas in close proximity to river or trail corridors, and/or adjacent parcels to protected land. With a considerable amount of land in the Town’s protection, it was found that there are gaps in the otherwise continuous network of the Town. Areas of Core and Supporting Habitat follow contiguous patterns along natural corridors. These areas for the most part fall within the scenic viewsheds. As a result, corridor connectivity is a factor in determining open space priorities.

Priorities for Protection
The methodology for assessing the priority land protection followed a series of steps. Using the evaluation criteria and their respective results for scenic views, the presence (or absence) of habitat (Priority or Supporting) was entered into a matrix to determine a value for each parcel not previously developed.

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<th>No Habitat</th>
<th>Supporting Habitat</th>
<th>Priority Habitat</th>
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<tbody>
<tr>
<td>Low Scenic View</td>
<td>=1</td>
<td>=2</td>
<td>=4</td>
</tr>
<tr>
<td>Medium Scenic View</td>
<td>=2</td>
<td>=3</td>
<td>=5</td>
</tr>
<tr>
<td>High Scenic View</td>
<td>=3</td>
<td>=4</td>
<td>=6</td>
</tr>
</tbody>
</table>

Secondly, connectivity was considered in determining a priority for protection for each parcel. Areas that meet this criterion, i.e., fall within an area of successive open space, protected or otherwise, were assigned a value of 1 or 2 depending on their potential for future development. It also should be noted that areas adjacent to Priority Habitat are significant if there is no major obstruction or barrier (i.e.; roads, highways, etc.) in the wildlife corridor.

Third, the scores from the matrix and the additional connectivity rating were added to obtain a cumulative score for each developable parcel. The following illustrates the scoring for three priority protection levels and their suggested development potential:

- **High Priority:** 5+ No development, Protection highly recommended
- **Medium Priority:** 3-4 Development constraints recommended
- **Low Priority:** 0-2 Developable, no constraints

### 2.1 NORTH AMHERST

In comparison to Amherst Center and South Amherst, North Amherst stands out in terms of its natural resources. First, North Amherst possesses some of the highest elevations in the Town. Secondly, vegetation and water sources are abundant in North Amherst, particularly around the Mill River corridor. The majority of protected land is located along the Mill River, a natural water corridor that runs east to west through North Amherst. There are, however, other parcels of protected land scattered throughout the area, particularly to the west of Route 116/Sunderland Road and west of Leverett Road (Figure 2.4). Other protected parcels lie along Northeast Street.
Unprotected open space is found in the undeveloped land to the north-east of this geographic area. Additional open space may be found along the Mill River corridor and other places throughout North Amherst. Connectivity in the protected land to the southwest of Pulpit Hill Road and the open space parcel to the northwest of Pulpit Hill Road is disconnected with only partially protected corridors.

**Existing Conditions and Site Assessment**

Existing and proposed trails traverse through the North Amherst area. The Robert Frost Trail is one of the more extensive and well-used trails in Amherst. While it runs throughout Amherst, one of its access points is located on Leverett Road. This trail, as well as other trails, runs through areas of protected land into areas that are not protected into others that are protected or are designated open space. Trails also run along the Mill River, traversing in and out of protected lands. Therefore, the Mill River and Leverett Road areas have been identified as possible significant corridors that should be considered for priority protection. Without protecting land between connecting parcels of protected land and open space, establishing a corridor to preserve trails and other natural features is virtually impossible.

As designated by the Massachusetts Natural Heritage & Endangered Species Program (NHESP), areas of overlap of protected land and biodiversity exist to the west of Route 116/Sunderland Road within the Core Habitat; along a majority of the Mill River; and some parcels to the east of Bridge Road and Henry Street in the Supporting Habitat (Figure 2.4). Also, an overlap of protected land and the Supporting Habitat exists to the northwest of Leverett Road. The Mill River serves as a major source of biodiversity with its Priority and Supporting Habitats.

![PROTECTED LAND WITH BIODIVERSITY](image)

*Fig 2.4: North Amherst: Areas of biodiversity and lands under existing protection*
Based on the Bureau of Land Management- Visual Resource Management criteria, two viewsheds in North Amherst were found to have high scenic value and four to have medium scenic value. The undulating topography, varied vegetative texture and color as well as the diversity of the supporting scenery lend itself to this exceptional rating. Although scenic views do abound in the remainder of North Amherst, they were found to have comparatively lower scenic values (Figure 2.7).

**Areas of High Scenic Value**

This includes views to the west of Leverett Road with a cumulative score of 22 and to the north/northwest of Market Hill Road with a score of 23.

![Figure 2.5: North Amherst: Areas of High Scenic Value.](image)

**Areas of Medium Scenic Value**

The lesser cumulative scores of these viewsheds are result of lesser diversity of landform, increased cultural modifications such as roads, buildings, and lesser textural and color variations of the topography. These include views to the west of Van Meter, and northeast of Route 116/Sunderland Road with cumulative scores of 16. Other examples include views east of (Lower) Flat Hills Road and west of (Upper) Flat Hills Road with scores of 12 and 13 respectively.

![Figure 2.6: North Amherst: Areas of medium scenic value.](image)
Based on these cumulative scores, areas of high scenic value have a narrow range of scores, and do not differ significantly in each factor. Areas of medium scenic value have a slightly wider range, yet do not differ significantly in each factor either. The table below illustrates the scores of each of the areas mentioned above, with high or medium scenic values for each individual as well as a total of all criteria considered.

<table>
<thead>
<tr>
<th>Geographic Area</th>
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<td>Landform</td>
<td>Vegetation</td>
</tr>
<tr>
<td>North of Route 116/Sunderland Road</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>West of Leverett Road</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>North/Northwest of Market Hill Road</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>West of (Upper) Flat Hills Road</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>East of (Lower) Flat Hills Road</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>West of Van Meter</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Three areas with high or medium scenic values are not currently protected, and these include (1) the area west of Leverett Road with a high scenic value, (2) the area north/northwest of Market Hill Road also with a high scenic value, and (3) the area to the east of (Lower) Flat Hills Road with a medium scenic value. The remaining three scenic view sheds are protected (Fig 2.7).

To put all these different factors into perspective, areas that are recommended for protection include areas along the Mill River. It spans two large areas of biodiversity, with the Core Habitat in the west and Supporting Habitat in the east (Fig 2.8). Additional areas included buttress this existing corridor and/or are of high value for their scenic quality.
Fig 2.7: North Amherst: Scenic views and lands under existing protection

Fig 2.8: North Amherst: Priorities for protection as determined by the assessment matrix
2.2 AMHERST CENTER

Within the geographic study area of Amherst Center, the majority of lands under protection through APRs, conservation restrictions and Town ownership is agricultural. This is a reflection of the primary criteria that has characterized protection so far. Another facet of existing protection is that most of the lands protected so far lie to the east of Northeast and Southeast Streets, along the eastern part of the Town. Although not a continuously protected corridor in protection status, they tend to follow the riparian corridor of the Fort River. This is evident in the map of protected lands and the visible extension of this corridor to lands west of Northeast Street along the River. Existing and proposed trails within this area emphasize the importance of this corridor towards developing the recreational potential of the Town’s open space network (Figure 2.9).

Overlapping continuous areas of protection and areas designated by the Massachusetts Natural Heritage & Endangered Species Program (NHESP) with the Core and Supporting Habitat, gaps in protection in the open space corridor become evident (Figure 2.9). Areas of Core habitat and supporting habitat to a large extent follow the Fort River Corridor, extending into lands owned by Amherst College. Approximately half of the lands within this corridor are under some sort of protection. Isolated patches of unprotected habitat lie within the Town center area.

![PROTECTED LAND WITH BIODIVERSITY](image)

Fig 2.9: Amherst Center: Areas of biodiversity and lands under existing protection
Existing Conditions and Site Assessment

The Center of Amherst comprising the Town center and the central buildings of Amherst College are situated atop a high elevation. From this height, the topography drops down to the southern extents of the College along Mill Lane, and the eastern agricultural lands along Northeast Street along the 100-year flood plain of the Fort River and Belchertown Road. Against the backdrop of the Amherst College Hills, Pelham Hills and the Holyoke Range, the low lying topography of this area, as well as the nature of its representation in the undulating land of the Town lends itself to spectacular views from various vantage points. The significance of this characteristic scenic quality of the Town is represented in the use of scenic views as a criterion for identifying areas for protection.

Based on the Bureau of Land Management Visual Resource Management (BLM VRM) evaluation criteria, areas identified with high scenic value within Amherst Center represent areas with farmlands, forests and undulating topography as well as the scenic backdrops of the Pelham Hills and Holyoke range (Figure 2.10). Variation in vegetation and fall color influence this assignation (Figure 2.11). Medium scenic value views represent less diversity in some or all of these factors as well as the presence of cultural modifications of the land, especially buildings. Low scenic values were given to areas with partially obstructed views, the obstruction being buildings, parking lots or in some cases dense vegetation (Figure 2.12).

Figure 2.10: Amherst Center: Scenic views and lands under existing protection
The lands belonging to Amherst College, between South Pleasant Street, Mill Lane and Southeast Street form a majority of the scenic viewsheds in the Town center with views to the elevated Amherst College buildings. The other high scenic viewsheds are towards the Pelham hills from the scenic routes along Northeast, Southeast and Strong Streets. These include farmland and forests against the backdrop of the Pelham Hills. Views to University of Massachusetts lands and other lesser views towards the interior of the Town from these roads make up the other scenic views. Areas of high scenic quality to a large extent follow the Fort River corridor and represent similar gaps in protection status that have been identified earlier. Significant additions include developed areas with potential for redevelopment.

Figure 2.11: Amherst Center: Areas of high scenic value.

Figure 2.12: Amherst Center: A low scenic view on Belchertown Road.
The criteria of scenic quality and habitat were studied using a weighted matrix to determine the priority of protection for parcels as mentioned before, with additional weight given to lands lying with the riparian open space corridor of the Fort River. These priorities have been assigned to identify levels and immediacy of protection from total to severe to some. Recommendations will be based on these priorities. Areas for potential development have not been specifically identified and remain within these areas.

Although a substantial acreage of land along Northeast and Southeast Streets, which also forms a part of the riparian watershed area, is under protection or proposed protection, key parcels that line the road have been identified as high priority. Parcels along this boundary of the Town which form the backdrop of the scenic views before the Pelham hills have been given priority for their high visual quality as well as the presence of habitat and connectivity (Figure 2.13). Additionally, areas of priority habitat have high protection priorities.

**Fig 2.13: Amherst Center: Priorities for protection as determined by the assessment matrix**
2.3 SOUTH AMHERST

South Amherst is the one area of the Town that probably has the maximum potential for protection. Against the scenic backdrop of the Holyoke Range, the undulating topography lends itself to breathtaking views. Brooks, rivers and wetlands traverse this part of the Town, along with ridges, valleys and familiar hills. With comparatively sporadic development in the area, home to Hampshire College, the Crocker Hill School, Atkins Corner and Hickory Ridge Country Club, than anywhere else, the pressures on the land will inevitably increase here, making this area critical for protection.

Existing Conditions and Site Assessment

Currently the lands protected under farmland protection, APRs and Town ownership follow the topographical and visual corridor of the Holyoke Range in the South and along the east following the Fort River corridor. Within the geographic boundaries of South Amherst, this well-defined corridor of biodiversity and open space has many parcels under protection. However, as the map (Fig. 2.14) indicates gaps in this corridor, especially along the Fort River are evident. Significantly, overlapping the BioMap areas of biodiversity indicates that this natural corridor follows that of the Core Habitat (Figure 2.14). The core habitat has a major presence in this region, all along the Holyoke range to the south of Bay Road. With a minor break it resumes up to the north of Bay Road, including the Lawrence Swamp and most of the area west of Southeast Street, narrowing as it extends north to the center of Town. It follows the River corridor east, supporting a narrow stretch of biodiversity well into the Town of Hadley. Small amounts of Supporting Habitat are found in spots adjacent to the area of Core Habitat

Existing trails within the Holyoke range, along the Core Habitat, and through most of the central spine of this part of Town will potentially be supplemented by many more proposed trails. The Norwottuck Trail is one of the significant trails in the area. It runs through areas of protection for the most part, and partially follows the Core Habitat.

The majority of scenic views in South Amherst are located along Bay Road to the Holyoke Range and east from Southeast Street. Additional notable scenic quality viewsheds are located to the east of Route 116 (Figure 2.15). Based on the Bureau of Land Management- Visual Resource Management evaluation criteria for scenic quality, viewsheds of high and medium scenic quality were assessed. High scenic value viewsheds in South Amherst include three notable viewsheds to the east of Southeast Street (Figure 2.16), one to the south of West Street, and two to the east of Route 116. Medium scenic viewsheds in South Amherst are located to the southwest of Southeast Street, to the south of Potwine Lane, to the west of Middle Street, to the east of Southeast Street, to the north of Station Road, and to the northwest of West Pomeroy Lane.

For the most part, these scenic viewsheds follow the natural corridor mentioned earlier and supplement the determination of priorities for protection. Areas zoned under flood protection along the River corridor restrict development negating the need for additional protection. Others are for the most part under some kind of protection. A few lands have been recommended for protection as a result of this study. These include parcels to the south of Bay Street and some unconnected parcels to the east of Southeast Street (Figure 2.17).
Figure 2.14: South Amherst: Protected Land and areas of biodiversity.

Figure 2.15: South Amherst: Protected Land and areas of biodiversity.
Figure 2.16: South Amherst: Area of high scenic value.

Fig 2.17: South Amherst: Priorities for protection as determined by the assessment matrix.
2.4 SUMMARY

In September, 2003, the Town of Amherst released an Open Space Plan Draft assessing the Town’s open space options and consequent priorities for protection. As illustrated in Figure 2.21, recommendations for Amherst concur with the Open Space Draft for the majority of areas.

However, additional lands that were not recognized for protection in the Open Space and Recreation Plan Draft (2003) were found to be of high or medium priority for protection. The disparity is probably due to the additional criteria of scenic viewsheds and continuously protected corridors of open space in the assessment. Towards maintaining the traditional character of views to open spaces, farmlands and hills along the main Town roads, additional lands were proposed for protection. These include lands west of Route 116 in North Amherst, to the west of Leverett Road, to the east of Flat Hills Road, to the west of Southeast Street and to the east of Northeast Street and Southeast Street.

Studies of residents’ perceptions in Amherst towards preserving the rural character of the Town have found generally positive attitudes. The study to assess local residents’ perceptions towards alternative residential developments attests that people associate rural character with views of natural areas of farms more so than country roads and cultural elements, especially development. As a result, expanses of open space, farmlands and natural vegetation and views represent areas of importance to most people for preservation and restrictions (Ryan, 2000). In Amherst Center, this is an important implication for the potential development that could occur along the scenic routes of Northeast and Southeast Street. Figure 2.18 and 2.19 show how potential development will obstruct scenic views in the future. Figure 2.20 shows the highly rated views restricted by the isolated development and obstructive vegetation along Northeast Street. Additional development and/or building redevelopment will further restrict these views.

Similarly, along Mill Lane, prime scenic views of the agricultural lands with the backdrop of the Amherst College hills are obstructed by overgrown shrubs. Management and preservation of this scenic view is essential.

Definition of the village boundaries as discussed in the next chapter serves to restrict development within these outlying areas. The connectivity of the riparian watershed corridor along the Fort River in the east and the Mill River in the north, suggests more stringent protection. A substantial part of this area falls under the flood protection zone under the zoning laws. This restricts development in these areas. Therefore, these parcels have been assigned low or in some case no priority. Additional low priority areas are those with lesser scenic views or solely supporting habitat.

Within the Amherst center area, the largest part of the priority and supporting habitat area as determined by the state, fall within the corridor that connects South Amherst to the Pelham Hills. The proposed trail networks in this corridor enhance its connectivity to existing trails as well as to the other parts of Town. Here, lands belonging to Amherst College have been assigned medium priority as they are already protected by the college to preserve the scenic views from the College. However, towards the long-term preservation of these areas as scenic vistas from Town roads as well as habitat, these have been prioritized in this study and by the Town (Fig 2.21).
Figure 2.18: Critical views in Amherst Center along Southeast Street

Figure 2.19: Potential development will lower the scenic quality of the views as shown in this photo-simulation.

Figure 2.20: Existing views along the scenic Northeast Street blocked by dense vegetation and roadside development
South Amherst has the bulk of its scenic views in the areas east of Southeast Street and the Holyoke Range along Bay Road. These areas within the Priority Habitat exhibit high scenic quality and character, and constitute a portion of the north-south open space corridor traversing the Town. Along this corridor are both protected and unprotected lands, some within the scenic views. Therefore, these areas are categorized as a high priority for protection.

By and large, the proposed protections from the Draft Open Space and Recreation Plan (2003) form the Town overlap with those identified here (Fig 2.21). Additional parcels represent gaps in the open space corridor, habitat and scenic views (Town of Amherst, 2002).
OPEN SPACE PROTECTION PRIORITIES

- Town Open Space Proposal
- Open Space Priorities of Study
- High
- Medium
- Low
- Town Boundary
- Major Roads
- Railroads
- All Trails
- Hydrology
- Wetlands/ Open Water
- Parcel Boundaries
- Misc. Open Space
- Protected Open Space

GIS Data Sources:
- Town of Amherst Planning Department
- Dodson Associates, Ltd.
- Applied Geographics/ Phillip B. Herr and Associates
- Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts
- Executive Office of Environmental Affairs
- NHEBP BirdMap Core Habitat
- NHEBP BirdMap Supporting Natural Landscape

Figure 2.21: Town Proposed and Study Recommendations for Priority Protection
Chapter 3: DEFINING VILLAGE BOUNDARIES

The Build-out Analysis and Future Growth Study (2002) proposed four possible scenarios to accommodate future growth in the Town of Amherst. One of these concentrated the majority of projected growth within identified Village Centers as opposed to dispersed development throughout the Town. This is in keeping with the traditional growth patterns of Amherst’s development. Although the Build-out Analysis identified the general area of these Village Centers, it did not delineate specific boundaries. This chapter delineates these Village boundaries and explores the potential of concentrating growth within them. Using the geographically defined study areas delineated earlier as guides, three Villages have been identified. These are the North Amherst Village, Amherst Town Center and the South Amherst Village.

The North Amherst Village encompasses the intersections of Meadow, Pine, North Pleasant streets and the Sunderland and Montague Roads to the north. The Amherst Town Center was identified as the area from the intersection of Main Street and Northeast Street to the intersection of Route 9 and Southeast Street. It spans the existing Town Center, the East Amherst common and parts of Amherst College. The South Amherst Village was identified around the intersection of West Street (Route 116) and Pomeroy Street.

For each Village, a series of assessments were made. These include determining a logical Village boundary; analyzing the potential for growth within the boundary; making recommendations to accommodate tentative Build-out Analysis population projections; and identifying significant habitat and pedestrian corridors within the area (Figure 3.1). While attempts were made to match the development goals of the Build-out Analysis, variations in the projected development potential do occur. This is a result of different techniques and considerations used for assessing future growth projections.

The goal in defining the Village boundaries is to depict a coherent, compact growth pattern which retains the rural character, quality of life and natural features of the Town; at the same time providing for diverse housing opportunities. More specifically, it deals with evaluating and defining the potential growth within each Village and guiding its growth patterns. It also works towards promoting natural and pedestrian corridors within and beyond the Village boundaries.

Each Village has its own unique character and developmental pressures to contend with. Therefore, each center also has unique planning and design considerations and planning strategies.
Figure 3.1: North, Central, and South Amherst Village boundaries proposed by the study
3.1 NORTH AMHERST VILLAGE

The North Amherst Village has great potential to become a walkable and livable community. Its boundaries are for the most part already defined by its existing natural characteristics. Within the identified village, the infrastructure already exists to house additional development. The maximum number of housing units that can be accommodated within the village is 237 under existing zoning. This could increase to 500 units with revised zoning, allowing for little or no additional development in the relatively undeveloped areas of the northeast. Additional dispersed development, if any, could be accommodated in the vegetated areas outside of the core and supporting habitat in the Northeast area. Development there could hold over 300 units. While this development does dilute the concentrated village center concept, in the absence of any protection potential it is important to consider alternate development options. And to plan for creative development strategies to avoid sprawl in North Amherst.

Existing Conditions and Site Assessment

The Boundary delineation for the North Amherst Village was a relatively easy process when compared to the other two Village areas. Several key factors were used to assess and analyze the final boundary. These include—identifiable destinations within the Village Center, existing residential, commercial, and retail patterns, and the desire to create a walkable village (Figure 3.2). Walkability, or walking distance and time, was considered particularly important in these considerations and limited to approximately 15 minutes in walking time.

The northern boundary of the Village is determined by changing residential density, parcels zoned for research park development, and walking distance. The eastern boundary, the only boundary definition that had any flexibility, is delineated by a change in residential development patterns and some undeveloped lots. The determining factor was walking distance from the Village Center. The southern boundary is the along the northern edge of the University of Massachusetts Campus. The western boundary is along State Route 116, a four lane divided highway. It is also a significant barrier to pedestrian accessibility and wildlife corridors. In addition, land to the west of Rt. 116 is predominantly in permanent preservation in the form of APRs.

Protected lands within the North Amherst Village are limited to one 30 acre parcel under APR, another large parcel adjacent to it, and a corridor following the Mill River comprised of APR, conservation/watershed protection, and recreational areas. No Core or Supporting Habitat, acknowledging the presence of endangered species or natural communities exists within this area, and was therefore, not a significant influence in determining the village boundary (Figure 3.3).

There are numerous existing and town proposed trails in northern Amherst including the Robert Frost Trail. Pedestrian trails link the North Amherst Village residents to the Mill River Recreation Area and beyond. A proposed bike trail paralleling Route 116 from the University of Massachusetts campus will connect to the village center via Meadow Street and continue on marked on-road bike lanes north on Montague Road and to Route 116 along Sunderland Road. This study proposes several short connector pedestrian trails to help connect the surrounding neighborhoods to the Village Center.
Figure 3.2: North Amherst Village Boundaries and Walkability.

Figure 3.3: North Amherst Village Developable Lands with Constraints.
The remaining lands are developed or were indicated as developable by the Build-out Analysis (2002) for the Town of Amherst. The Mill River corridor cannot easily accommodate new development due to existing development. However, it is very important to the surrounding residents for its pedestrian access to existing recreation fields and its significance as a wildlife corridor between the identified Core Habitat to the west and Supporting Habitat to the east. In summary, the significant open space within the Village boundary exists in the Core/Supporting Habitat connections; recreation fields and pedestrian trails; and, APR and conservation/watershed protection.

Additions: There is one proposed additional area to be added to existing open space in the northwest area of the village. The Mill River runs through several lots in this area. These lots are:

- 5A_1 (15.7 acres/no structures)
- 5A_138 (6.7 acres/one structure)
- 2C_13 (3.5 acres/three structures)

The largest lot with no development is also the most ecologically sensitive and suggested for permanent protection. Some additional restrictions are recommended for the other two lots to further protect the Mill River.

One piece of information not included in the data supplied to us by the Town is the status of two major parcels in the village (Map parcels 5C_22 and 5D_305 in the GIS data layers). These are parcels that are proposed for conservation but not yet identified as permanently protected. These two parcels, if development is restricted, could significantly change build-out numbers in the village.

With the protection of land within the Village at variance with the goal of concentrating growth within the Village boundaries, this protection needs to be seen a wider context. Protecting farmlands in the Village does reduce the development potential; however, factors such as resident impetus, historic preservation, and open space corridor connectivity need to be accommodated. An important consideration, it requires a further definition of the development goals of the Village.

**Development Scenarios**

Contrary to popular belief, undeveloped land does exist in the North Amherst Village area. The number of possible additional houses, however, is dependent on the density at which the remaining land is developed at and the attitude and trends of infill development. The Village scenario identified by the 2002 Build-out Analysis proposes an additional 500 units in the village. This number is not attainable given the current zoning, but can be approached with zoning changes as outlined below in Table 3.1.

<table>
<thead>
<tr>
<th>Current Zoning:</th>
<th>237 units (Excluding additional conservation and parcels under 10,000 sq. ft.)</th>
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</thead>
<tbody>
<tr>
<td>Revised Zoning:</td>
<td>443 units (Excluding additional conservation and parcels under 10,000 sq. ft.)</td>
</tr>
<tr>
<td>20,000 → 10,000 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>80,000 → 15-20,000 sq. ft. (cluster?)</td>
<td></td>
</tr>
<tr>
<td>Excluding 200’ buffer &amp; wetlands.</td>
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</tr>
</tbody>
</table>

Table 3.1: North Amherst Village Build-out
Calculations are based on current zoning and are only calculated for single family homes or single dwelling units. The proposed North Amherst Village area has approximately 35 developable parcels making it possible to complete a parcel by parcel assessment of development potential. Build-out numbers do not take into account any new mixed use development in the village center, discussed later in this report, but do take into account infill that could occur on existing developed lots. Nor do calculations take into account changes which have occurred since the initial GIS information from the town was received. In additional, it is more than likely that not all of the land identified as developable will actually be developed. These numbers do not take into account such constraints such as lot frontage or the reduced acreage caused by access roads.

Given the constraints to development listed, it is not likely that the goal of 500 units will be reached within village boundaries. The next step in planning for North Amherst’s growth was to identify areas that are appropriate for dispersed development outside of the village boundary (Figure 3.4).

Taking into account the existing protected space, Core Habitat, Supporting Habitat, the Mill River Corridor, and current development patterns, a large area with undeveloped parcels became apparent in the northeast corner of town. These parcels, shown in lavender, yield the possible additional build-out numbers that follow. This area is vegetated and has some steep slopes, but much of the land is suitable for development. Another concern for almost all areas of currently undeveloped land in North Amherst is public sewer and water availability. The extension of these utilities will greatly influence the density of development possible in this area. Due to these conditions, it may be advisable to increase lot sizes, but strongly encourage conservation subdivisions and cluster development, thus, reducing the overall density. In this way, the best land for development could be better utilized while protecting the environmentally sensitive areas with poor soil or steep slopes. The dispersed development potential with revised zoning yields an additional 175 units as outlined in Table 3.2.

<table>
<thead>
<tr>
<th>Current Zoning:</th>
<th>349 units</th>
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<td>(Excluding additional conservation and questionable parcels.)</td>
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</table>

<table>
<thead>
<tr>
<th>Revised Zoning:</th>
<th>175 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>30,000 →60,000 sq. ft. due to steep slopes &amp; sewer</td>
<td></td>
</tr>
<tr>
<td>Encourage cluster development where possible</td>
<td></td>
</tr>
<tr>
<td>(Excluding additional conservation, questionable parcels, and parcels under 10,000 sq. ft.)</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.2: Potential Dispersed Development in North Amherst outside the Village Center.

Another area proposed for development by the Build-out Analysis is the area designated as Supporting Habitat in the eastern region. This area is currently heavily wooded and has steep slopes making building costly as compared to other areas of farmland in Amherst. In addition, this patch of Supporting Habitat acts as a receiving area for the Mill River corridor and a connection for Core Habitat areas in central and southern Amherst. For these reasons, this area is not being proposed as an area to receive dispersed development. An additional proposed overlay was also made evident during this process. A River Protection Overlay would help to piece together the fragmented protection of the Mill River in this area. This overlay would not prohibit all development but would add another layer of protection perhaps through additional setbacks and land use review.
Planning Strategies

The next major step towards implementation of proposed zoning changes is to evaluate people’s perceptions of lot sizes. To help communicate what the different lot sizes look like, a series of comparisons were created to graphically illustrate these changes (Appendix 3). Additional planning strategies to achieve the Village Center goals may be found in Chapter 5: Planning Strategies.

Summary- North Amherst

In conclusion, the Village of North Amherst is already identified as a unique area within the town of Amherst. Although much of it is developed, guiding future development of open parcels and infill/redevelopment is essential to solidify its identity and protect natural resources in North Amherst. Dispersed development will negatively impact the current level of wildlife habitat and the scenic beauty of the area. However, without a defined area for development it is more than likely that dispersed development is exactly what will occur.

The next steps for implementing this plan include development strategies and conservation strategies. Development strategies include clarification of rezoning for denser development in the village, possible refinement of the build-out numbers, and additional guidelines for dispersed development perhaps including guidelines to character sensitive building in the rural areas of North Amherst. The River Overlay needs to be researched to provide the Town with sample guidelines or text and conservation strategies need to be developed for the Mill River Corridor parcels that were identified for direct conservation. These strategies also need to be coordinated with the larger open space strategies.

Figure 3.4: Recommendations for Dispersed Development and River Overlay protection.
3.2 AMHERST TOWN CENTER

The focus of this section was to determine a boundary line that defines the Town Center of Amherst, within which development and infill proposals would be concentrated. The purpose is to reinforce the Village Center feel of Amherst and take development pressure off the scenic and habitat lands identified in the Open Space portion of this study. For the most part, the Town center area contains fairly dense residential housing on small lots zoned as Residential General or Residential Neighborhood. It also includes a vibrant multi-use Town Center zoned as Business Village Center, historic districts including the underutilized East Amherst common, parts of Amherst College and Schools. The concentration of these and other services make this area the most highly developed in the Town. As a result, accommodating concentrated growth within this area requires creativity in zoning and subdivision regulations. The breadth of area covered in the Town Center precludes the possibility of a comprehensive assessment. Scenarios and strategies therefore, have been developed for a smaller section, with the potential for wider adaptability.

Existing Conditions and Site Assessment

Defining the Town Center boundary area relied upon a set of criteria that included walkability, density, historic districts, trail connections, and open space borders. More specifically, the boundary was often drawn along major roads that had residential housing on one side and farms and farmland on the other (protected and lands identified by the town for priority for protection). All land within a ½ mile of the intersection of Main Street and Rte. 116 in the center of Amherst were included. This encompasses much of Amherst College (except for the playing fields which are at a lower elevation than the main campus and are visually more part of the open space owned by the college to the south). All lands within the 1 mile zone of the intersection that are historic districts (the entire district is included even if it falls outside the 1 mile boundary), and commercial areas within the 1 mile boundary of the center of town were included. The northern boundary was defined by all developed or developable lands along Strong Street and to the south and east of the Strong St. / Southeast St. intersection. Commercial and residential areas near the intersection of College St. and Southeast Street defined the southern boundary. In addition all lands within ¾ mile of the central intersection were included except for Amherst College lands, land to the south of the Norwottuck Rail Trail and University of Massachusetts land.

The core of the Town Center Area is defined by fifteen minute walking radii around the intersections at Triangle, North Pleasant and South Pleasant Streets; and at Main and South Pleasant Streets. Although the entire Town Center Area is not easily covered in a fifteen minute walk, its borders contain lands that are within a fifteen-minute walk from several key destinations and intersections in the center of town. For example, land to the northeast of the shopping areas at the intersection of Rte 9 and University Drive is one such area. Colonial Village is another, a fifteen-minute walk from the commercial cluster at the intersection of Southeast and College Streets. Similarly, extending the boundary north encompasses the affordable housing complex on Northeast Street, which is an integral part of the Town center with its easy pedestrian and bus access to the commercial downtown area (Figure3.5).
Defining Village Boundaries

Figure 3.5: Town Center Boundary Map

Figure 3.6: Open Spaces, Recreation and Access Map
The only two trails that are found entirely within the Town Center boundary are Skillings path, linking Chestnut Street to North Whitney/Red Gate, and a proposed trail that would link Maplewood Circle with the end of Canton Road (Figure 3.6). However the Town Center Area is connected through the University of Massachusetts Bikeway and the Norwottuck Trail to regions beyond, and it comes very close to a proposed trail off Pelham Road.

The Village Center scenario for Amherst from the Build-out Analysis envisions 500 additional housing units within the Town Center area. It estimates that concentrating development within the village center boundary would keep 100 dwelling units off the outlying lands (Figure 3.7). However, very few large parcels of developable land are available within the village center. Also, upon closer inspection, many of the parcels that do overlap with the developable (purple) lands are actually not developable due to wetness or inaccessibility. Therefore, most of the future development within the Town Center boundary must be accommodated by infill development on already built parcels.

**Development Scenarios**

Due to the daunting task of assessing each parcel for development suitability within the densely developed town center, a multiplier was applied to the parcels and then divided by area, according to the best estimates of how many units they might be able to accommodate. Using this method, calculations showed that 261 additional units could be accommodated in the RG district, while 231 could fit into the RN district. This resulted in a total of 555 units that could fit into the Town Center area (Appendix 4). Most of the residential land within the Town Center boundary is zoned as RG: residential general, with some zoned as residential neighborhood: RN (Figure 3.8).

These numbers are close to the estimates of Build-out Analysis, but are still very rough due to lack of data, such as information regarding how many dwelling units are actually held within each building on a given lot, and how many separate buildings exist on each lot. To provide the town with some useful strategies on how and where to accommodate infill within the town center boundary, a smaller section of the town center was studied to assess various infill options in detail.

An examination of areas to put in infill development within the town center led to one “demonstration” neighborhood in the northeast section of the Town Center Boundary (Figures 3.8 & 3.9). The Rail line to its west, and the Amherst Regional High School and Amherst Middle School to its east define this neighborhood. In this region the parcels are all zoned as RG and RN. A map showing a breakdown of parcels by zoning type and lot size shows several lots that significantly exceed the amount of space required for one dwelling. This helps to identify possible lots for infill with no zoning changes, and lots that could accommodate infill with modest zoning changes.
Figure 3.7: Developable Lands according to the Build-out Analysis

Figure 3.8: Residential zoning districts in the Town Center
South of the transition from North Whitney Street to Red Gate, this neighborhood exhibits a linear, grid-like pattern, with houses set close to the road. The streets are enveloped beneath a mature tree canopy, and the many children and adults walking on the streets and sidewalks give the impression that it is a functional, pleasant place to live, where people know their neighbors. Above, along Red Gate, the larger lot sizes and wooded environment provide more seclusion for individual dwellings. Many of these lots are deep and have ample frontage. The neighborhood is fairly flat, with steeper grades (up to 18%) to the west, on the parcels outlined as developable by the Build-out Analysis. The focus area also contains a small parcel of priority habitat in the northeast on the lands identified as developable.

After examining zoning regulations, the following options for infill development have been found to have merit. These are:

- Flag lots
- Converted dwellings
- Empty or underdeveloped lots
- Cluster zoning
- And, zoning changes to allow for infill on large lots that fall short of current dimension requirements.

The focus study area for infill can accommodate all of options as shown in Figure 3.10.
Of note were several flag lots on Red Gate, vacant lots along Canton Ave, double lots in the RG Zone and other lots that could take another dwelling with slight reductions in zoning requirements and modest adjustments of property boundaries (Figures 3.9 & 3.10).

**Planning Strategies for the Town Center**

To direct growth into the Town Center area and keep it off open space and viewsheds, the Town needs to consider alternative zoning to accommodate infill in the RN zones and/or RG zones. A few of the potential strategies to achieve this that have been demonstrated are illustrated here.

Revising the “m” clause in the zoning that puts a difficult density minimum on new town houses, apartments, and sub dividable dwellings, by stating that housing in these structures shall not exceed one dwelling unit per 6,000 sq. ft. of the remaining lot area, or the entire area in the case where there are no existing dwelling units.
Current zoning requires at least double the minimum lot area for a flag lot, and this excludes the access strip. Reducing this area required for flag lots in the RN district within the town center boundary to just an additional 20,000 square feet increases infill potential (Figures 3.11 & 3.12).

Fig 3.11: Flag lot proposal in the “demonstration” neighborhood

Fig 3.12: An example of a Flag lot
Allowing accessory structures other than pre-1967 structures to be converted into housing (converted dwellings) increases the diversity of housing offered in the Town (Figure 3.13).

Other infill strategies include reducing the minimum area for lots in the RG zone from the current level of 12,000 square feet to 10,000 square feet and reducing the frontage requirements from 100 feet down to 70 feet. Many of the currently built lots in this area are actually closer to this new suggested dimension rather than the zoned dimensions, and infill along these lines would not detract from the existing character and pattern of the street. Allowing apartments in the RN zoning district is another strategy.

Summary- Town Center

This vision for potential development in Amherst Center takes advantage of several different methods of accommodating infill, while still respecting the overall layout of the street patterns and existing and proposed trails (Figure 3.14). In just this small section of the Town Center boundary, 40 more dwelling units may be added with minor zoning changes. As envisioned here, these additions would support the architectural and physical character of the existing residential neighborhood. Maintaining frontage requirements, height restrictions and building regulations helps to regulate the neighborhood character. Granted, that a large number of these units would fit into the large undeveloped parcel in the northwest of the focus area that was suggested to be developed as a cluster. However in the interests of protecting scenic viewshears and prime habitat, housing on prime parcels must be accepted within the town center boundary.
3.3 SOUTH AMHERST VILLAGE

The South Amherst Village in this study is centered on the intersection of West Street (Route 116) and Pomeroy Street (Figure 3.15). Similar assessment criteria to the other Village study areas consisted of determining the boundary line for the village, exploring the impact of potential development; identifying areas for development within and outside the village, determining the natural and pedestrian corridors within the village, and, proposing strategies for growth.

Existing Conditions and Site Assessment

This area of South Amherst was considered for multiple reasons. There are approximately 213 acres within the proposed Village boundary identified as developable by the Build-out Analysis. It is zoned Business Village Commercial (BVC) and only some of the new development has taken advantage of this zoning. The commercial strip development that does exist lacks a center. It is at a crossroads with no traffic signal at the intersection, making it difficult to cross or turn onto West Street from Pomeroy. In addition, it lacks any pedestrian infrastructure and cultural focus. The South Amherst Common is not included within the study area because it is part of a historical district and is considered by the Town to be inappropriate for receiving any new multi-use development. It lies just outside of the delineated eastern boundary of the Village.

The boundary for the South Amherst Village was determined through the analysis of several GIS maps (Figure 3.16). The key elements in this definition were: landmarks unique to the area, pedestrian walkability, rivers and streams, topography, agricultural land, protected lands, population centers, developed and undeveloped lands. A ridgeline that runs north to south from Mt. Castor to Mt. Pollux defines the eastern boundary of the Village Center (Figure 3.17). Large tracts of farmland currently in or proposed
for Agricultural Protection Restrictions (APR) also define the boundary. These cleared farmlands offer unobstructed views of the Holyoke Range to the south and the Pelham Hills to the east from the Village. The protected land running along Plum Brook beginning at Potwine and heading north to the Crocker Farm School creates a natural and pedestrian corridor. This corridor is a natural divider between the village at the intersection of West Street and Pomeroy Street and the historic South Amherst village center at Pomeroy and South-east Street.

Landmarks within a half mile of the South Amherst Village intersection include the Crocker Farm School to the north and the Hickory Ridge Country Club to the west. Atkins Corner which was the site of a previous study (Dodson Associates 2002), the Yiddish Book Center, the Eric Carle Museum for Picture Book Art, and the Hampshire College campus all lie approximately one and a half miles to the south of the village (Fig 3.16). Also south of the village is the Holyoke Range which is an ever present landmark. The Fort River, Hop Brook, Plum Brook, Muddy Brook, and their accompanying wetlands all run through South Amherst. These waterways are too dynamic to be useful as a static boundary line; however, they do restrict the development potential of the area (Figure 3.17).

The majority of open space in South Amherst exists outside of the village boundary (3.18). The open space inside the village boundary is of four types; existing recreation, conservation & watershed, conservation restriction, and private golf course. The existing recreation is found at the Crocker Farm School. Conservation & watershed properties are found along the Fort River and Plum Brook. There is one parcel with a conservation restriction along the Fort River. The Hickory Ridge Country Club is a large parcel starting close to the village intersection that runs west to the Town line. The Country Club property lies almost entirely within the Flood Plain Conservancy (FPC) zoning overlay district and the Fort River runs through the property. The Country Club would normally not be considered protected land but due to the FPC it is restricted for development. There are some smaller unconnected parcels of protected farmlands and others with proposed protection within the village boundary. One parcel close to the central intersection is currently being considered for the APR program.

A strong pedestrian connection from the large multi-family development (the Boulder’s) in the north-west corner of the village across the Fort River to the village center is absent and should be considered. Another along Plum Brook which delineates the boundary creates a natural and pedestrian corridor. On the east, the K.C. trail runs through the village crossing Potwine Street near Plum Brook and follows the brook until the back of the fields of the Crocker Farm School where it finally meets up with Shays Road.
Figure 3.15: Looking South at the intersection of West Street (Rte. 116) and Pomeroy Street

Figure 3.16: South Amherst Landmarks, Village boundaries, and walk-ability
Figure 3.17: Ridgeline and waterways influence the village boundary in South Amherst.

Figure 3.18: Protected open space and developable lands also define the South Amherst village boundary.
Development Scenarios

There are four potential development impacts to be considered in South Amherst. Development can block and destroy scenic views across open agricultural and developable land. It can eliminate the connectivity of green spaces and corridors. Development on agricultural land can permanently remove primary agricultural soils resulting in the loss of potential productivity. And, inefficiently used land is often the result of traditional subdivision developments. These development impacts can be restricted by concentrating development within the village boundary to a smaller area.

The number of single dwelling units that could potentially be built on current developable land was determined by taking the square feet of each parcel, multiplied by a development factor of 80% and then divided by the square feet required by zoning. The result was rounded to the nearest whole number. Parcels that resulted in zero units were not considered for development. It was determined, using this process, that 155 single dwelling units could be built on developable land found within the village boundary.

The number of potential single dwelling units outside the boundary (according to current zoning) was determined by the same process as those parcels within the village boundary as stated above. It was determined that approximately 757 single dwelling units could be built outside the village boundary in South Amherst.

With considerable land in South Amherst under current or proposed open space protection, it has been found that 235 of these potential units lie within proposed protected areas. Assuming that this land is all put under protection, there are still 522 units to accommodate. It was assumed that a part of the 522 single dwelling units would be accommodated within the Atkins Village boundary. The Atkins Corner Plan (Dodson Associates 2002, p. 24) proposed increasing the potential units to 75 dwelling units. This would leave 447 units for the village boundary which can currently hold 155 units. Accounting for a margin of error, only a third of these units removed from development could be provided for within the village without making any changes to current zoning.

As a result, the key question that emerges is that once all the currently developable land is developed or the Town is “built out” then where will additional growth occur?

Within the village boundary of South Amherst there is room for infill development. Along the western side of the village boundary there is a large traditional style subdivision. This area is a prime location to receive and benefit from the infill recommendations made for North and Central Amherst. There is a smaller neighborhood around the Crocker Farm School that could also receive some infill. Outside of the village, conservation subdivisions would allow for a higher density of single dwelling units as well as some multi-family units. This would allow for more growth within the currently developable lands due to a more efficient use of the land (Figure 3.19).
Planning Strategies-South Amherst

The South Amherst Village located at the intersection of West Street and Pomeroy Street can accommodate development that would be lost to the increased protection of open space within South Amherst. Through the use of infill strategies and the more efficient use of developable land outside of the village, Amherst can concentrate its development within its village centers and still meet its overall growth needs.

Some of the planning strategies are: purchasing or restricting the development of parcels identified for protection; concentrating growth within the Village boundary using infill inside the Village boundary, and conservation subdivision outside of the boundary; and, encouraging affordable housing using infill and density bonuses both within and outside the village.
Summary - South Amherst

While these development strategies do account for the accommodation of units within the Village boundary, the viability of developing a village center so close to the one at Atkins corner has not been considered. In addition, changes in the protection status of key parcels identified as buildable, and the substantial wetland component inherent in the land here, can very likely reduce the development potential suggested. The Flood Protection Overlay further restricts development. Therefore, alternative areas to receive additional development need to be looked at.

At the same time, the South Amherst Village is an important area both commercially and environmentally. With Hampshire College, Atkins Corner and the South Amherst Common a 15-minute walk away, and a number of existing trails and waterways spanning the Village, there is tremendous potential to create a walkable Village Center. Consequently, it becomes important to acknowledge the natural Village boundaries, its commercial center, nearby facilities and infrastructure to create a cohesive Village center with defined growth boundaries that South Amherst currently lacks. Residential and mixed use development will increase pedestrianization to a number of destinations and give this area a distinct identity. In addition design guidelines will add to its character. Towards accomplishing this in light of the restricted development potential, increased housing density and infill development are important strategies to pursue.

3.4 SUMMARY

In this chapter, logical boundaries were identified for the three Villages identified in the Build-out Analysis (2002). In addition, the scope of the work included analyzing the potential for growth within them, developing strategies to achieve tentative Build-out Analysis population goals, and identifying significant habitat and pedestrian corridors within each study area (Figure 3.1). With the identification of the boundaries, the total development that could be concentrated within them was assessed. This was done using existing zoning as well as proposed revisions in regulations. Infill strategies that would accommodate these strategies included lot size studies, zoning revisions, cluster developments, flag lots and converted dwellings. Other development strategies to achieve this were also discussed. These strategies build upon existing development in the Village Centers, using examples from other towns and cities. Additional planning strategies for achieving compact Village Centers may be found in Chapter 5.

In an attempt to bolster these strategies, and portray the Village character that would emerge as a result of defining these Village boundaries, three Village Centers were identified. These three areas at key intersections in the Town were chosen to explore their potential to become vibrant, walkable centers that would attract the concentration suggested here, with design proposals, and recommendations. Chapter 4: Designing Village Centers illustrates these design proposals and the strategies to achieve them.
Chapter 4: DESIGNING VILLAGE CENTERS

In an attempt to further the Comprehensive Planning process, this section of the report studies and evaluates the design potential of three specific areas in the Town of Amherst. This is in keeping with the low growth Village Center development scheme set forth in previous studies, including, the Build-out Analysis and Future Growth Study (2002) and the Action Steps for a Better Amherst (2002). The issue is that if potentially developable land outside of the defined village boundaries is to be preserved for ecological, agricultural, or viewed protection, then new development must be accommodated inside the village boundaries. The potential to make these areas more attractive for concentrated development increases by using the existing resources and thus increasing their efficiency. Support for this development comes in the form of residential units and infrastructure supporting the existing development, including bus transit routes, water and sewer lines and other services and amenities (Figures 1.2 & 1.3).

The study areas are based on two unexplored but potentially viable Village Centers and an additional mixed use center. These are the North Amherst Village Center, East Amherst Village Center and the Echo Hill Village Center (Figure 4.1). The North Amherst Village Center is centered on the intersection of Pine Street, North Pleasant Street, Montague and Sunderland Roads. The East Amherst Village Center encompasses the East Amherst Common, the intersection of Main, Northeast and Southeast Streets, and the intersection of College Street, South Pleasant Street and Belchertown Road. The third, the Echo Hill Village Center, is located at the intersection of Gatehouse, Old Farm and Belchertown Roads. While the Village centers of North and East Amherst are part of the Villages defined earlier, the Echo Hill center is not within South Amherst. Echo Hill was chosen over other areas in South Amherst, because the Village Center at Atkins Farm has already been studied and the South Amherst Common, being a historic center has little room for development. In addition the existing development potential of the neighboring areas surrounding Echo Hill creates the need for a viable mixed use center which was originally proposed and only partially realized at the Gatehouse area. Currently this area is bypassed on the way to Belchertown. It has no discernable character or identity. Assessing the viability and sustainability of such a center where others have failed is an important consideration.

The Village Center designs provide suggestions for the Town of Amherst to create more vibrant, walkable districts that draw people to live, visit, shop and dine in them. The development of an attractive Village Center district would support the initiative of concentrating development within the Villages, by creating an attractive place for those living within walking distance. Towards this goal, this study proposes: changes in infrastructure for circulation that allows for convenient and safe access for pedestrians, bicyclists and vehicles alike; modifications or additional facilities that can accommodate retail, office and residential uses simultaneously; and, standards of design that help to create a unified, attractive and unique space for each of the village centers.
Figure 4.1: Amherst Village Center Study Areas and Village Boundaries
The designs illustrate examples of sensitive growth based on traditional New England village development patterns including dense village centers surrounded by open space. Conceptual plans and sketches are used to represent the character and growth patterns that have been envisioned in addition to descriptive summaries. These designs represent visions of how these areas might look in the future. They do not envision a one time endeavor, but the establishment of guidelines towards achieving their goals over a period of time. They are conceptual designs and over time, the potential to explore additional or variant strategies, and diversify according to the requirements and changing development scenarios of the Town need to be constantly assessed. These designs and the strategies to accomplish them are described in detail according to their successive geographic locations.

**4.1 NORTH AMHERST VILLAGE CENTER**

The North Amherst Village Center design study focuses on a small triangular area of land bounded by Montague and Sunderland Roads to the east and west, respectively (Figure 4.2). The Mill River defines a natural boundary on the north. The study area also includes the playing fields to the east of the triangle, and the Riverside Park Mall property to the west. Development to the south is limited by Historic District designation.

![Figure 4.2: Current land use in the North Amherst Village Center.](image)
**Historic Precedents**

North Amherst was first settled in 1740 when Nathaniel Kellogg built the first mill in Amherst on the Mill River. None of the mill structures have survived, but many historic structures remain in the historic district that extends from the Sunderland/Montague intersection, down along North Pleasant Street. Three structures of special note are found adjacent to the area of this study. The North Congregational Church was established in 1826. The North Amherst School, (Figure 4.3), which now houses the Survival Center and the Head Start program is a brick structure built in 1870. The North Amherst library was built in 1893 and was renovated in 1997.

**Existing Conditions and Site Assessment**

The North Amherst Village Center is a compact area, constrained on four sides. To the east and west, preserved open space limits new development. To the south, the designation of a Historic District limits architectural changes to structures and their surroundings. To the north, the Mill River serves as a natural boundary. Zoning in the area reflects these limits, with the land in between designated as Business Village Center (Figure 4.4).

The central triangle consists of 1.7 acres split between two parcels, of which about 0.7 acres is in Flood Plain Conservancy. Current land uses include a mechanics shop that occupies a former gas station and a carpentry shop. The 1.4 acre Riverside Park Mall, to the east of the triangle, contains a strip mall that could be subject to redevelopment. The playing fields to the west of the triangle could additionally provide approximately 1.4 acres for new development. All of these parcels are zoned Business Village Center (BVC) which is appropriate for the intended application as a mixed-use business based town center.

![Figure 4.3: The North Amherst School](Source: Jones Library Special Collection)
Current Use
A number of businesses and amenities that serve both the Village and the larger Town can be found in proximity to the North Amherst Village Center. These include the recreational opportunities that Puffers Pond and the Mill River Recreation Area provide, and the civic functions of the North Amherst Library and the Post Office. Restaurants including Daisy’s Restaurant, House of Teriyaki, The Harp, The Red Rooster, and a Pizza/Indian takeout, in addition to groceries like Watroba’s and Cumberland Farms cater to the residents of the neighborhood. The business and commercial enterprises are represented by Cowl’s Lumber, Village Motors, North Amherst Towing, Educational Collaborative, ProSensing Engineering and the Barbershop. These venues attract people into the area, but are currently not well linked except at a vehicular scale, so there is little incentive for people to walk and recreate within the Village Center.

The Village Center triangle lacks a coherent focal point, and is not attractive to pedestrians. Sidewalks end abruptly and where they do exist there is no buffer between the pedestrian and the traffic lanes. The North Amherst Common, which runs along North Pleasant Street, south of Pine Street, is a narrow strip that contains no civic facilities and no programming whatsoever. The industrial and commercial low rise buildings in the North Village triangle undermine the beauty of the historic district that lies to its south. Street trees are almost non-existent here. Even for a motorist, the dangerous and confusing intersection at Sunderland and Montague Roads can be a deterrent. Bicyclists are at risk on the narrow shoulder of Sunderland Road.

Figure 4.4: Current Zoning
Proposed Village Center Design

Business and Residential Development

The proposal for development of these parcels is shown in figures 4.5 and 4.6. This plan is provided, not as a design for the area, but as one vision of how the area might appear at some time in the future. This vision would require the town to establish guidelines for multi-use development districts so that private development results in a compact, pedestrian-friendly Village Center.

This vision clusters mixed-use buildings towards the street at minimum setbacks, and moves parking to the back of the lots. This places store windows a few feet from the widened sidewalks, creating a pedestrian centered district. The buildings will have complete facades that are consistent with the historic district. Most buildings are 2 stories high, with an occasional 3rd floor. As depicted, the district is approaching maximum capacity. Fourteen new buildings provide 32,000 square feet of ground floor retail/office space and 40,000 square feet of 2nd and 3rd floor residential space. Civic functions, including the post office, would be located in the mixed-use developments.

This is a considerable increase from available space today; therefore, pacing of development would be guided by market needs. The suitability of the existing playing fields for development needs to be examined. While this design does include building on the existing playing fields next to the Survival Center, they could possibly be replaced at the Mill River Recreation Area or at other suggested fields on Pulpit Hill Road.

Figure 4.5: Vision for the North Amherst Village Center: Plan View
Circulation

In this plan, the intersection of Sunderland and Montague roads has been simplified, removing any ambiguity. Montague Road has been changed to a one way between the intersection with Sunderland Road and the new connector road. Access to parking is simple, and aligns, for the most part, with roadway intersections. The number of parking spaces provided ranges from 75-95% of the code requirements for Amherst. This is adequate because of the mixed-use nature of the developments; residents will use more parking in the evening hours, and businesses and offices during the day. This assumption was verified by the Town Planning Office. The traffic pattern change allows for more green space to the front of the library, and keeps traffic lanes narrow, slowing drivers.

The proposal would encourage pedestrian and bicycle access to the district by extending widened tree lined sidewalks and bicycle lanes to link the Village Center with surrounding neighborhoods and recreational opportunities (Mill River Recreation Area). Completing the fragmented sidewalk network within the Village Center and area and out into the surrounding neighborhoods is important for a pleasant and walkable district. Clear intersections, crossroads and pedestrian crossings across the main connector roads are necessary too.

A green space for social and civic activities has been reserved behind the library. Programming for this area will be critical to draw people to the district. Additional green space is also provided between the new connector road and the river, restoring a section of the river buffer.

Figure 4.6: Vision for the North Amherst Village Center: Isometric View looking northeast
Development Strategies

This plan requires a considerable investment in infrastructure. Even if the roadway change is deemed prohibitive and cannot be implemented, investment in sidewalks, crosswalks and other traffic calming solutions will be required. And, the support and active participation of the local business associations will be necessary in this endeavor to revamp the area.

Other strategies have lower costs but require an equally concerted effort by the Planning Department. A key element in guiding redevelopment of North Amherst will be the establishment of design guidelines that regulate the dimensional (height, mass, and setback) and material qualities of the buildings. To encourage pedestrian interest, the town should consider establishing tight minimum front setbacks for the Business Village Center zone, and require parking to be moved to the back of the lot. Material requirements should be in keeping with the neighboring historical district. Although the Town has recently established streetscape standards that include sidewalk and traffic-calming strategies, it should consider further measures towards creating a walkable district, by requiring that any development or redevelopment project be required to install street trees in the sidewalk buffer.

The preliminary public meeting responses highlighted two areas for investigation. First, the activities currently available at the playing fields may not be easily moved to the Mill River Recreation Area, in which case it may be more appropriate to leave it for recreation. Another alternative is to leave it for the last phase of development, and reassess it at that time.

The second concern is that Montague Road is a state highway and it may not be feasible to make it a one-way road. Leaving Montague Road as a 2-way road changes the physical layout of the village center only slightly, since this plan would still recommend providing the connector road, and limiting left turns at the Sunderland/Montague intersection. An alternate scenario that may address this problem involves re-routing Montague Road (State Highway 63) along the new 2-way connector road, and having the state turn over its ownership of the one-way section of the road to the town.

4.2 EAST AMHERST VILLAGE

The East Amherst Village Center focus area is located around the historic East Amherst Common which runs from north to south along Southeast Street between two of Amherst’s main vehicular arteries. The following is one scenario to accommodate growth in the context of the existing historical East Village and strategies by which to implement it. This proposal considers the historic use and character of the East Amherst Village Center area as well as current use patterns to inform design decisions.

Historic Precedents

Historically, the area around the East Amherst Common was Amherst’s first known Town Center. It was created at the cross roads of Southeast Street and Main Street which were part of the original highway system (figure 4.7). This crossroads became a manufacturing center and took on a “blue collar” identity during the 1800s. The present Jewish Community Center was once a Congregational Church. It was built by members of the original church in Amherst that believed the minister was too closely affiliated with the English Tory party and wished to break away. The Baggs Tavern built in
1772, still stands on the southeast corner Main and South East Streets and is a standing relic of local history, and neighbor to the now demolished Clap Tavern which was the site of planning meetings for the famous Shay’s Rebellion (Martin, J., 1982). These events indicate that the East Village area had a distinct historical identity, which is represented today in the fragmented form of historic properties and buildings.

**Site Assessment and Existing Conditions**

The area that is the East Amherst Village Center at present has no distinct identity. Comprising two important intersections that directs traffic from the neighboring towns of Pelham and Belchertown Road into the Town Center, heavy traffic characterizes the streetscape (Figure 4.8). Traffic flows from Belchertown to Amherst Center on College Street (Rt. 9) along the southern border of the common, and from Pelham to Amherst Center along the northern edge of the common on Main Street. The Fort River Elementary School is also located on this section of South East Street. No transition exists from this primarily residential area into the commercial districts along College Street and Belchertown Road. The East Amherst Village area is zoned primarily residential and is proximal to this commercial district to the south and another zoned as Business Village Center to the north (Figure 4.9).

Figure 4.7: The intersection of two historical roads, Southeast Street and Main Street was Amherst’s first town center.

*Source: Jonathan Tucker*
Figure 4.8: The East Amherst Village Center lies within a historic district and a 15 minute walk from the Town Center, Amherst crossing and proposed trails.

Figure 4.9: The Village Center is primarily zoned Residential with some Commercial areas.
Currently, the East Amherst Village Center acts as a predominantly vehicular bypass for commuters to and from Amherst Center, through two confusing intersections (Figure 4.10). Narrow, overgrown sidewalks, wide intersections and road widths tend to alienate the pedestrian. To mold this area into a walkable, densely populated village center it is necessary to provide clear, symbiotic circulation patterns for both pedestrians and vehicles.

Current Use
The East Amherst Village Historic District is a primarily residential district comprising a mix of new and historic buildings. The intersection of Main and South East Street is within a quarter mile, or a 15 minute walk, from many amenities including a proposed trail, the commercial district, and is within a half mile, or a half hour walk, from the Town Center (Figure 4.8). There are two under-utilized parcels zoned Business Village Center that could accommodate new businesses and residential growth. Currently they house low occupancy commercial enterprises.

The East Amherst Village area is currently utilized by the town primarily as a vehicular “Pass Through” area for people on their way too and from work at the University of Massachusetts, Amherst College and other businesses in town (Figure 4.10). The vehicular circulation of the area adds to the traffic congestion. The area bears the vast majority of its traffic along the east side of the Common on Southeast Street between the intersections of Main Street and College Street (Rt. 9). This area gets very congested during the morning and evening commuting periods and by traffic from the two entrances to the Fort River School.

In addition, neither the sidewalks nor the Common invites the pedestrian. The Common has been relegated to a neglected swath of green along the transit route. It does not even relate to the residences along its side. This side of the road, with no consistent frontage, setbacks or design characteristics, houses a number of historic buildings. Vegetation along the road is overgrown, vagrant and in no way relates to the Common. Further south, at the College Street, Belchertown Road and Southeast Street intersections, confusing vehicular circulation and strip development characterize the area familiarly known as Amherst Crossing.

With its resources, access to amenities and natural corridors, there is a great deal of potential for the area to become a distinct, eastern gateway to the Town. However, this requires a phased process, including the alteration of traffic patterns, access routes, densities, zoning and the setting up design guidelines. Although these may not be possible altogether, due to the scope of this vision and the commitment and investment required, over a period of time there are important steps to take towards enhancing the area and its identity.
Figure 4.10: The existing East Amherst Village Common plan shows the traffic patterns that are a result of the confusing intersections and uneven traffic distribution.
**Proposed Village Center Design**

This design proposal attempts to create a compact, distinct and walkable district in the East Amherst Village Center. Extending the physical and visual connection between the disjointed intersections of Main Street -Southeast Street, and College Street (Rt. 9)-Southeast Street helps creates a distinct unified district. Extending the Common to include currently underutilized town owned land (part of the historic highway system) furthers this goal. The corridor is further reinforced by adding strategic new buildings to fill gaps in the visual corridor and continue sight lines along the Common.

**Business and Residential Development**

Seven new buildings have been added along the East Amherst Common. These would be constructed to match the traditional building set-backs and would be guided by an architectural review, to insure compatibility with the surrounding historic buildings and complete the linear visual corridor. Four new buildings on the east side of the Common are added to the existing structures and will require no demolition of existing buildings (New buildings in black are shown in Figure 4.11). Of these four the three buildings to the north are residential and built on land freed by re-orienting Fort River School traffic to Pelham Rd. The new residential buildings provide much needed housing and fill in gaps in the residential pattern along the common. The building to the south is multi-use and built on land acquired by closing of the bypass from Rt. 9 to South East Street (figure 3.10). The new multi-use building provides both business/office space and housing units while transitioning from the commercial district along Rt. 9 to the primarily residential area along the Common.

Three new buildings on the west side of the common replace three small non-contributing residential buildings and one non-descript commercial building. Replacing these buildings for multi-use, architecturally compatible buildings helps transition from the commercial district along College St. (Rt. 9) to the residential one along the Common. While the intent of this Multi-use development is not to increase the commercial area it does seek to integrate the currently disparate district identities of the residential and commercial areas. Transition areas, with possible low traffic retail/office space development along with the current residential buildings will accomplish this task. It will also integrate all the new and existing development along Northeast and Southeast Streets, extending out into the protected farmlands beyond.

In addition, four new buildings are proposed at the north-east corner of the Main Street and Southeast Street intersection, to reinforce the focal intersection. This has the potential to accommodate growth and inject vitality into the area. This location positions small businesses and residences within walking distance of the commercial district along Rt. 9, Amherst Center, the school and the proposed trails (Figure 4.12). Positioning the entrance to this development directly across from the new Fort River School driveway creates an intersection that slows traffic. Special permits for building setbacks aside, this property reflects the possibilities that the Business Village Center zoning regulations offer. The new structures would be two story multi-use buildings providing 20,000 square feet of office/retail space on the ground floor and 25 residential units on the second floor. Multi-use buildings require less parking as there is an overlap of parking space usage between businesses during the day and residents at night. For this reason a 25% reduction of required parking was considered adequate. This design provides for eighty-eight new parking spaces and a comprehensive sidewalk network throughout the development. Spanning the two developments, the proposed Mixed-use to the north and the existing commercial to the south, the Common acts as a connector, integrating the currently disparate intersections.
Figure 4.11: The design proposal redistributes traffic patterns on either side of the Common, extends the common between the intersections and proposes new buildings and street tree plantings which unify the East Amherst Village area to create a distinct pedestrian friendly district.
Circulation

This design addresses circulation problems by clarifying intersections, slowing the existing traffic and creating a more pedestrian friendly atmosphere. Redistributing traffic from a two-way street to two narrower one-way streets, create equal traffic flows on either side of the common. Parallel parking along this road slows traffic and promotes use of the green by providing parking (figure 4.11). To clarify the Main Street and Southeast Street intersection, the Common was shifted to the east and narrowed in order to directly receive south-bound traffic from Northeast Street. Clear left turns are provided onto Southeast Street from Pelham Rd. and from Main Street to Northeast Street. An additional intersection 250 feet from the Southeast Street- Main Street intersection links the Fort River School exit to the multi-use BVC development (Figures 4.12 and 4.14). This intersection is marked by raised sidewalks, that slow traffic and distinguishes the transition into the district. Potential traffic cutting through the proposed Fort River School drive will be mitigated by a series of speed bumps. In addition, the Fort River School traffic is taken off South East Street by eliminating one driveway and realigning it to Pelham Rd. Eliminating the Fort River School drive reduces traffic congestion. It also completes the fragmented pattern of residential homes and promotes pedestrian movement. The Southeast Street-College Street (Rt. 9) intersection was simplified by eliminating the bypass behind the bank. Eliminating this bypass creates a safer more complete pedestrian network (compare Figures 4.10 and 4.11).

Figure 4.12: This concept illustrates an example of what could be built on an existing parcel zoned Business Village Center including mixed-use buildings, streetscape development, parking behind the buildings and a pedestrian network.
The plan envisions buildings with distinct architectural features that open out the street, parallel parking along the common, street tree plantings throughout the area, raised crosswalks at all intersections and widened sidewalks to promote a pedestrian friendly district (Figure 4.13). Sidewalks in front of the new multi-use buildings are extended to encourage outdoor dining, vendors and accommodate other public gathering opportunities.

Preliminary feedback received from the public presentation and the Amherst Comprehensive Planning Subcommittee has raised doubts as to the viability of the Mixed-use development at the corner of the Main Street-Pelham Road and Northeast Street Intersection. Traffic, design decisions, parking and setbacks at this focal junction are some of the related concerns. The intent of this design aspect was to have a focal development for low occupancy retail, office and residential use, easily accessible from the school for relevant after school activities; a place to eat, shop, wait and visit, for both visitors and residents of the area. Parking was relegated to the back of the lot to create a distinctive visual corridor along the road, with axial buildings visible from the crossing. Ease of access to this development from the School drive encourages parents and visitors to the school to use the resources of this development, but it does make parallel parking unfeasible. At the same time, maintaining the green space fronting the intersection extends the visual green corridor and development patterns along the Common beyond its central extent.

In addition, attempts have been made to restrict changes in traffic patterns and the realignment of roads to Town owned lands. However, some additional private land area primarily around the intersections has been taken to ensure continuity and integrity of the area. A more comprehensive assessment of the existing soil conditions (i.e. wet soils), traffic engineering and land ownership requires additional investigation that might not validate these proposed road changes.

Therefore, although these and other concerns have been addressed in the familiar context of design assessment and analysis, this is only one of the many possible development scenarios for this area. Additional concerns and criteria might determine a different course of action. This requires additional information, analysis and public participation.

**Development Strategies**

Currently the East Amherst Village Center lies within the East Village Historic District which is a national historic district. While this designation is beneficial in terms of recognition and status, only those projects within the district involving state or federal money can be regulated, leaving the vast majority completely unregulated. One way to bolster regulation of this area is creating a local historic district overlay by ordinance. This would help regulate and guide development ensuring architectural compatibility of new buildings and the proper maintenance of existing buildings. “Unlike the national and state historic districts, local historic districts create a set of standards and a process for local review to encourage developers not to destroy the integrity of historic buildings. Local governments can tailor these districts, and the standards they create, to meet local needs. Local governments create local historic districts. Local governments can modify, amend or repeal the same districts” (Northampton Historic District Study Committee, 1999, p. 2). A committee may oversee the design guidelines, rules and regulations. An example of which is Northampton’s Central Business District Ordinance.
Figure 4.13: Streetscapes include a buffer between the street and sidewalk, street tree plantings and architectural features that engage the street and support the surrounding character.

Figure 4.14: New buildings along South East Street complete the currently fragmented residential corridors, while multi-use buildings along Northeast Street and Pelham Rd. visually support the extended Common.
To achieve land use compatibility a more fluid transition from the area zoned commercial at the intersection of College Street (Rt. 9) and South East Street into the area zoned residential along the common the area directly north of the intersection and south of the entrance to the Fort River School to Business Village Center may be rezoned. This zoning change will encourage multiple uses in this area including residential, business and office. This mixture of use should be supported by appropriate design guidelines, including a pedestrian network, parallel parking, and street tree plantings.

Another implementation strategy to promote development compatibility would be to revise Amherst’s current design review process to include town character as part of the review criteria and reserve the option to review all projects. Details of this concept are found in the Design Review portion of Chapter 5: Planning Strategies.

### 4.3 ECHO HILL VILLAGE CENTER

This section investigates the feasibility of a mixed-use center in the Echo Hill neighborhood of Amherst. The resulting proposal suggests a location and a plan for the center as well as a surrounding greenway and a trail enhancement plan. The site for the Echo Hill Village Center has been defined adjacent to the intersection of Gatehouse Road and Old Farm Road with Belchertown Road.

#### Historic Precedents

Most of the area, comprising the Echo Hill and nearby Amherst Woods neighborhoods consist of a variety of residential developments, most of which were built between the 1960s and the present day. Echo Hill, the first planned unit subdivision in New England (Lacy, 1990), lies to the northeast along Gatehouse Road. The Amherst Woods development begins at Old Farm Road to the southwest (figure 4.15).

When Echo Hill was built, it included a mixed-use center just north of the Gatehouse Road and Belchertown Road intersection (Arendt, 1994). While it is still zoned for a Business Village Center district, it has gradually been converted to residential uses. Due to a number of reasons including land use and value, zoning discrepancies and accessibility, the district lost its commercial viability. The challenge then was to locate a viable mixed-use center, with concentrated but diversified uses, on land that allows it to maintain a successful operation, in the absence of any other commercial center supporting the nearby neighborhoods. The development of destinations, such as trails and other amenities is important in an otherwise vehicular area. Access to these destinations from a compact, pedestrian friendly Center, is important to keep the areas resources accessible and viable. This would also require additional strategies and regulations to see that it does not get converted into a residential area. In supporting the possibility of a mixed-use center, Amherst will be able to provide a greater variety of housing options and encourage small businesses that can serve residents on both sides of the Echo Hill intersection as well as the people driving by on Route 9.

#### Existing Conditions and Site Assessment

To begin to identify an appropriate location for a mixed-use center, an assessment was made of the available lands for building in these neighborhoods, and the natural and cultural factors that potentially affect them. Most of the build-able lands are between Route 9 and the heart of the Amherst Woods
The majority of habitat-sensitive and priority protection lands are to the north and west of these neighborhoods (Figure 4.16), and therefore do not conflict with any potential development that may occur within this specific area. South east of the main intersection, the buildable lands, totaling approximately 30 acres, wrap around several existing professional buildings and a few residential homes, some of which are in current use, others abandoned (Figure 4.16).

Further determination of an appropriate site for the mixed-use center was made by considering current zoning, potential land uses, accessibility and visibility from the main road, and the potential for creating a sense of arrival and identity at the southeastern corner of the Route 9 and Old Farm Road intersection. The zoning for these lands is almost entirely Professional and Research Park, with a partial overlay of Planned Unit Residential Development (Town of Amherst Zoning Bylaws, 2002). On the Town of Amherst Priority Open Space Protection map (Town of Amherst Zoning Bylaw, 2002), a portion of this area is also indicated for potential open space protection (Figure 2.1).

A parcel of land just southeast of the Route 9 and Old Farm Road intersection was targeted as a possible location for a mixed-use center with high visibility and accessibility (see figure 4.16).

**Current Use**

The identified parcel is currently zoned for general residential (R-G), with a planned unit residential development (PURD) overlay district (Town, 2002). According to the Town Zoning Bylaws, normally the Residential General designation permits building on a lot with a minimum square footage of 12,000, plus 2500 square feet per additional family. It has a setback of 15 feet, and the building area can cover a maximum of 25% of the lot. The PURD overlay district allows some latitude with regard to these dimensional requirements, in order to accommodate a greater mixture of housing types and residential units in the areas covered by the district.

![Echo Hill Land Use Diagram](image)

**Figure 4.15:** The land uses in the Echo Hill area include developable lands, subdivisions, protected and proposed open space.
Figure 4.16: Existing Conditions and Proposed Location for Mixed-Use Center

Figure 4.17: Existing Conditions at Proposed Mixed-Use Center Location
Figure 4.18: Proposed Site: Old Farm Road looking northeast towards the intersection

Figure 4.19: Existing Farmhouse: Looking west across Route 9 from Existing Subdivision
The existing conditions of the site for the proposed mixed-use center are shown in Figures 4.16 and 4.17. This undeveloped parcel covers roughly five acres of land, and is vegetated with a successional growth of trees and shrubs (Figure 4.18, looking north east). The land is flat, with a small, possibly intermittent stream crossing the parcel near its border to the south. The parcel surrounds a one-acre parcel on three sides, and an existing farmhouse sits on this second lot of land. This farmhouse from Route 9 is shown in Figure 4.19).

**Proposed Village Center Design**

The design for a Mixed-use Center (Figure 4.20) has the potential to create an integrated identity for the surrounding neighborhoods. This neighborhood identity would provide a sense of community and walkability amidst a cluster of residential and retail amenities. Street tree plantings along the roads and sidewalks surrounding the site are integral elements of the proposed design. Trees encourage pedestrian and bicycle activities, provide shade and protection from wind, and enhance the livable quality of the space. The design (Figure 4.20), includes trees within and around the site.

In the Echo Hill study area, existing trails (Figure 4.21) shown as solid green lines, widely surround the region, including the KC Trail to the west and the Robert Frost Trail to the northeast, which extends southward on the east end of the neighborhoods. This plan recommends potential places for trail extensions that would connect to these existing greenway trails.

**Business and Residential Development**

Such a center can be accomplished with a change in the underlying zoning from RG to BVC, or Business-Village Center. In contrast to the RG zoning, BVC requires a minimum of 15,000 square feet for residential uses, with 4,000 square feet for each additional family, and will allow for up to 35% building coverage on the site. Since this is still covered by the PURD district, the square footage requirements could be relaxed for the additional residential uses. By keeping the other areas open for office park uses and proposed recreational uses, each of these three land use types has the potential to favorably impact one another as well as bring to life a place of disconnect that lies at the heart of two large neighborhood communities.

In the plan for a mixed-use center (Figure 4.20), three proposed two-story buildings that could support retail and office space at the ground level and residential on the second level have been added. The buildings have a footprint of approximately 5,000 square feet each, adding up to a gross 15,000 square feet of ground coverage, well within the 35% maximum building coverage on the site. The setback for a BVC zone is reduced to 10 feet, so that the buildings can be placed closer to the road for easy pedestrian access. The farmhouse has been retained in this plan, which could possibly be incorporated into the center by maintaining it as a private residence or potentially converting it to mixed-use depending on future ownership, in which case its addition could add another acre to the total site acreage.
Figure 4.20: Proposal for Mixed-Use Center

Figure 4.21: Existing and Studio Proposed Greenways and Trails
Circulation

The circulation for vehicular access begins at the corner of Route 9 and Old Farm Road. People accessing the Center from Route 9 or from Gatehouse Road would enter Old Farm Road and turn left into the parking lot. The lot, situated internally between the buildings rather than along the road, would accommodate approximately 64 parking spaces, close to the 74 required by the BVC zone (Town, 2002), with the assumption that business and residential parking will have peak demands at different times. Vehicles leaving the lot would exit to the south of the site onto the existing rear drive used by the farmhouse, which in turn leads back to Old Farm Road. If the farmhouse were to be converted to mixed-use as well, their front drive could also serve as an exit point for people leaving the parking lot (Figure 4.20).

The value of greenways is becoming increasingly apparent to the public. As described by Smith (1993), the demand is great for outdoor facilities that provide opportunities for exercising, such as walking, jogging, or cross-country skiing. Greenways and green spaces can serve the dual purpose of providing recreation as well as building a green infrastructure across ecologically fragmented areas. The difficulty is that “ecological greenway planning becomes progressively more constrained by landscape fragmentation and increasing development pressure (Smith, 1993).”

In the Echo Hill Center design, the emphasis of greenway connectivity is on increasing pedestrian access and activity within these neighborhoods. As described earlier, this site is close to two existing trails. Pedestrian access to the Echo Hill Center can be facilitated by designating trails to run alongside the site and connect with these existing trails on the periphery of the two neighborhoods. The dotted green lines (Figure 4.21) represent a proposed connector trail, connecting the existing network of trails and greenways (the suggested green space addition is shown by the semi-transparent green polygon), across build-able lands to the proposed mixed-use center.

Figure 4.22 provides a view of the design looking east across Old Farm Road and Belchertown Road, with the three proposed buildings at the center and left and the farmhouse shown on the right. Figure 4.23 shows a view looking south at the intersection of Old Farm Road and Belchertown Road, with the three proposed buildings in the foreground and the farmhouse in the background. The scale and general style of development proposed are shown to be congruent and exciting for a corner of a busy residential area, and are intended to be encouraging for walkers, bicyclists and motorists alike.

Development Strategies

General recommendations include using the proposed greenway trails to shape where and how development, both mixed-use and offices, as well as recreation, could best be located within the study areas. Also recommended is the further investigation and refinement of this assessment for the feasibility of a business village center at the southeast corner of Belchertown Road and Old Farm Road.
Fig 4.22: Proposal for Mixed-Use Center looking east towards Old Farm Road and Rte 9

Fig 4.23: Proposal for Mixed-Use Center looking south at the intersection of Old Farm Road and Rte 9
Specifically, some implementation strategies that are detailed later in this report have a direct bearing on this Village Center Design. The use of zoning changes or other measures have been explored that may encourage the development of a Village Center within the Echo Hill and Amherst Woods communities. The zoning change required for the proposed design would not be complex. Simply changing the parcel’s zoning from R-G to B-VC would allow for commercial development on the site, with reduced setbacks permitting the buildings to be placed closer to the edge of the street, making room for a parking lot in the back. An additional strategy relates to street trees. Street tree plantings along the edges of the sidewalks as well as throughout the site would be vital to the success of the center, as well as other mixed-use centers throughout town. The implementation of a street tree ordinance that affects village centers would further this aim, and will be looked at in detail in the following Planning Strategies chapter.

These steps can help propel these ideas forward to a level of detail and scrutiny that can pinpoint areas of weakness or irrelevance, discern concepts in need of refinement, and validate suggestions that may truly be workable and worthwhile.

4.4 SUMMARY

In Designing Village Centers, this study has taken a detailed look at design studies for three Village Centers identified by the Town. The North Amherst Village Center, East Amherst Village Center and Echo Hill Village Center plans presented here are provided as potential scenarios, and primarily for the purpose of generating further discussion and exploration. While these scenarios offer glimpses into what the future of Amherst’s village centers could look like and feel like, the greater challenge has been to concretize the possibilities of village center planning and open space preservation, so that Town officials and residents alike can use this information to assist them as they determine a next course of action for Amherst.
Chapter 5: PLANNING STRATEGIES

With the increasing pressure for more diverse housing needs, additional development in the Town of Amherst is inevitable. It is important therefore, that the Town be able to regulate development, but not prohibit it. Essentially, Amherst must establish a balance among scenic view protection and allowing for inevitable housing growth. To achieve such a balance, it is important to assess the kind of development that is desirable and the strategies to achieve them.

The potential planning strategies addressed in this chapter are meant to supplement the existing strategies to plan for the future character the Town wishes to preserve and the development it wishes to create. These strategies are a result of the assessments in the preceding chapters. They are to a large extent regulatory in nature, and serve to direct growth into the Village Centers, create distinct and vibrant identities for them and protect the view sheds so integral to the Town’s distinctiveness.

These strategies are:

- Viewshed Protection
- Woodland and Street Tree Protection
- Cluster Development Strategies
- Village Center Development
- Design Review Guidelines

5.1 VIEWSHED PROTECTION

Over a period of time, development pressures in the Town are going to increase due to decreasing household sizes, increasing housing demands and additional development pressures. Without changes in current development regulations, this new growth will occur within existing open space corridors, farmlands, and scenic areas. This will lead to the loss of the scenic views and vistas so integral to the Town character. Since developable lands fall within scenic viewsheds, it is critical that these views be protected from development that could harm their character and amenity.

Currently, Amherst has no viewshed protection regulation in existence to protect and preserve its scenic views. In an effort to protect scenic views, biodiversity, farmland, and corridors of open space, a Viewshed Protection Overlay District is advocated. This allows for development, but restricts construction within areas of high scenic value view sheds.

Generally, Viewshed Protection Overlay Districts are permitted in residential, agricultural, recreational, and conservation areas. They allow for such special considerations as buildings within scenic views and commercial and industrial uses. It is an effective way of protecting view sheds because it regulates the location and character of new development within scenic viewsheds.
Existing Scenario

Amherst has almost a quarter of its land under some kind of open space protection, including farmland, aquifer and watershed overlay districts, agricultural preservation restrictions, town ownership and conservation restrictions. This encompasses to a large extent the extensive scenic views from many of the main routes in the Town. While the overlap of scenic view sheds with aspects of biodiversity, natural features, agricultural lands and river corridors has resulted in protection, scenic views alone have not been a consideration. The undulating topography of the Town lends itself to spectacular views of within and beyond the Town's boundaries. These include views to and from Amherst College, to the Holyoke range, from Mt. Pollex, to the Pelham Hills among many, many others (Figure 5.1). The unobstructed visibility of these views is in essence a result of the natural lay of the land; however, it does require to be preserved for this very factor. These are vital resources for the Town, even though they have not been quantified. Development on lands within these viewsheds put at risk the scenic integrity of the area.

Recommendations

In protecting the natural corridors of Amherst, land must also be set aside for development to allow for the growing population in the Town. It is the goal of this work to harmoniously integrate village design, future development, and open space preservation. It is not being recommended, however, that the Town of Amherst purchase the entirety of land prioritized for protection. Conservation strategies are an effective means of protecting priority lands, while inviting new development to provide for an increasing number of residents. Looking ahead to future development needs, a Viewshed Protection Overlay District that regulates performance standards can allow construction to occur while protecting and preserving areas of scenic value within farmlands, biodiversity, and open space corridors.

To achieve such a balance, the attachment of performance standards that allows for development to occur may be provided if specific guidelines are followed. These performance standards would include a limit to vegetation removal or removal that is complementary to the scenic quality of the land, no development allowed in areas with a slope greater than 15% and/or large areas with an elevation greater than 350 feet (Figure 5.1), and a requirement for any new construction to be submitted to Design Review and to seek the approval of the Design Review Board. Amherst must accommodate new development, yet protect scenic views important to the Town’s character.

In the high elevation areas along Leverett Road in North Amherst and the Holyoke Range in South Amherst there is considerable area where potential development might occur. These are areas of pristine and high quality scenic views that would be compromised by building into the higher elevation slopes. While development need not be curtailed entirely this scenario reflects the crucial decisions involved in protection viewsheds. Building at a lower elevation, which might be inconspicuous from the road will not affect the view, however, the same development at a higher elevation reduces the perception of natural scenic attractiveness. A Viewshed Protection Overlay district would effectively regulate development, particularly residential development, in these areas of high scenic quality.
Figure 5.1: Scenic views and elevations greater than 350 feet.
Scenic views and steep slopes greater than 15% overlap in the same areas with the exception of areas to the east of Southeast Street (Figure 5.1). To provide for elevation protection, a buffer of 350 feet was created to delineate areas of high elevation except in isolated areas along Strong Street and East Pleasant Street that are primarily already developed. Scenic views and elevations greater than 350 feet are present in areas east and west of Leverett Road, east of Flat Hills Road, and Road, and the Holyoke Range (Figure 5.1). Restricting development on land steeper that 15% serves the dual purpose of protecting the view sheds, and, avoiding instability that result from development and erosion.

Vegetation, as observed along Northeast Street (Chapter 2, Figure 2.20) restricts views as much or possibly more than buildings. Equally the converse applies, removal of vegetation in a woodland or densely vegetative area, reduces its scenic quality in its bareness and shorn appearance. Although, it is an inconvenience to regulate, it is an important facet to address. As shown previously in Chapter 2, Figure 2.3, scenic views and vegetation overlap in a number of locations throughout Amherst. These areas include land west of Leverett Road, east of Flat Hills Road, north of Market Hill, east of Northeast Street, east of Route 116, east of Southeast Street, and the Holyoke Range along Bay Road.

To protect its view shed from its perched prospect, Amherst College had purchased agricultural land to its south. Hampshire College too has a strategy to protect its view shed. A number of other towns have successfully incorporated Overlay Districts into their zoning to protect the views to steep slopes, guide development and prevent erosion, including Hampden and Wilbraham, Massachusetts.

**Summary**

The recommendation of the Viewshed Protection Overlay District (Figure 5.2) here includes

- The regulation of vegetation removal
- Restricting buildings on steep slopes greater than 15%
- Restricting development in areas of high elevation

These are features that are not only present, but overlap with the scenic views in Amherst. And supplement the initiatives of the open space protection in the Town. Subject to design review, flexibility of the appropriateness of each of these factors may be assessed in individual cases.
Figure 5.2: Proposed Viewshed Protection Overlay District.
5.2 WOODLAND AND STREET TREE PROTECTION

Woodlands and street trees are valuable resources for a community to manage. Research (Duerksen, 1999) shows that trees can help to mitigate air pollution, water run-off, and soil erosion. They also buffer noise and extreme elements such as summer heat and winter winds. Trees aesthetically enhance the outdoor experience, which can in turn increase property values and community livability, contribute to greater outdoor participation, and promote walkable communities. They have also been shown to positively impact human health, both physically and psychologically, and potentially reduce criminal activity.

Woodland and street tree ordinances are intended to provide measures that protect the valuable tree resources of a community (USDA, 2003). Because of ongoing pressures for development, wind and storm damage and the expected life cycle of trees, existing trees in the community are not guaranteed to remain standing over time. While it is not reasonable to assume that all trees in the town are necessary to protect, it is important to look at ways to protect the core woodland assets of the town, as well as to ensure that steps are taken to plant new street trees in desirable and appropriate places in the community.

Figure 5.3 shows what can happen without a town-wide street tree ordinance in place. The sidewalks do not invite pedestrian activity as they do not have the aesthetically pleasing appearance that trees provide. This is also a narrow sidewalk. Also, no buffer exists between the pedestrian and traffic, fostering an unsafe and unfriendly atmosphere for the potential walker. In contrast, figure 5.4 shows a level of complexity of light and shadow, contributing to physical comfort and aesthetic experience that can be provided by street trees.

Figure 5.5 shows clear-cutting of trees to the edge of property lines that creates negative visual impacts as well as hazardous conditions because the trees at the property’s edge having grown within the protection of other trees, are now exposed to the elements and ill-equipped to survive. These trees are likely to blow over or die, causing potential hazard to the homeowner as well as further loss of mature vegetation at the site.

Existing Scenario

Woodland Protection

Amherst regulates the protection of its woodlands within its subdivision regulations. A tree inventory is required for new development, and sub-dividers are recommended to protect existing trees. This is only a recommendation, however, and according to the language within the regulations, developers cannot be required to follow the town’s expectations. As quoted from the Town of Amherst Subdivision Regulations (2003), Section VI (L.1.), “trees on the site, especially those over twelve (12) inches in diameter should be preserved.”

Recommendations are provided for effective measures for protecting existing trees both during and after construction. These are very specific, but are only useful if the developer chooses to follow the recommendations to begin with.
Figure 5.3: Sidewalk with no street trees

Figure 5.4: Street trees in residential area

Figure 5.5: Recent construction with clear cutting to parcel boundary
The strengths inherent in the methods Amherst is already employing include the requirement for a tree inventory within proposed subdivisions, and their listing of specific guidelines for avoiding the unnecessary removal or destruction of trees.

Potential improvements could include mandating the protection of trees for new subdivisions as well as requiring some level of protection outside of subdivision development. This latter recommendation could involve a woodland protection overlay district that could stand alone or, to potentially increase its effectiveness, it could be joined with a viewshed protection overlay district, such as the one described earlier in this chapter.

**Street Tree Protection**

Amherst currently has a Shade Tree Committee that works on street tree plantings in the community. Amherst regulates the planting of street trees within its subdivision regulations (Town of Amherst Subdivision Regulations, 2003) as it does with the protection of existing trees, although here the regulations are mandatory. As explained in the Regulations, Section VI (L.2.), “the sub-divider is required to plant suitable broadleaved deciduous shade trees along roads, or ways unless specifically exempted by the board.”

A subsequent description of acceptable trees and planting methods specifically outlines expectations. This description supports the regulation and clearly lays out methods for fulfilling this requirement.

Current strengths of the town in protecting its street trees are evident, including having a Shade Tree Committee that is already working to promote street trees, and subdivision regulations that mandate street tree plantings with very specific requirements.

Potential improvements include providing requirements for street tree plantings outside of new subdivisions, particularly within proposed village center boundaries, and providing a long-term maintenance and replacement plan for street trees throughout Amherst.
Figure 5.6 shows a street tree that has been limbed and is slated for removal. With a maintenance and replacement plan in place, Amherst could have measures to ensure that trees such as this will be replanted to provide for future shade trees in the community.

**Recommendations**

**Woodland and Street Tree Ordinance**

The foremost recommendation for Amherst in protecting its tree resources is to consider creating a woodland and street tree ordinance that addresses the protection, planting and long-term maintenance and replacement of trees throughout Amherst. With careful attention to using specific and clear language, such an ordinance would be defensible and provide consistent application across development projects. However, the ordinance would need to maintain a degree of flexibility that allows for exemptions, variances and other external considerations, so as not to impose excessive hardship on certain parties, or invite potential litigation.

Part of a woodland ordinance may include a Woodlands protection overlay district for critical areas across the community. This district would focus woodland protection in important scenic and habitat-sensitive areas that contribute to the rich resources of Amherst, without conflicting with development initiatives in the areas of town that are appropriate for economic viability.

A woodlands protection overlay district may have greater strength and effectiveness if combined with the aforementioned viewshed protection overlay district. A combined district would be less complex to establish and implement, and would still accomplish the goals of protecting the scenic and biological resources that are in large part dependent on existing woodlands within Amherst.

### 5.3 CLUSTER DEVELOPMENT STRATEGIES

Cluster or conservation design subdivisions have many benefits over traditional subdivision design. These benefits exist at all scales from the town and region to the individual homeowner. One of the key aspects of cluster development is its maximization of open space. Land that would otherwise be held in individual private ownership is held in common by a homeowners’ association or other similar organization, can be given to a nonprofit land trust, or can be deeded to the town and protected in perpetuity. An important aspect of this flexibility is that conservation land may be retained under private ownership and control, an issue that can be important to some homeowners.

Through an analysis process environmentally sensitive land (due to habitat, steep slopes, riparian corridors, or for cultural use as a trail network) is identified and protected while development is concentrated on land more suited to development. Although Amherst has not seen an increase in population, the pressures of growth persist. The existing population is living in more nuclear, smaller households and many live alone. This indicates that demand for smaller, perhaps more affordable housing will increase in the near future.

Cluster development works with existing zoning and build-out projections. The change occurs in where development is sited. It is important to note that cluster development does not result in higher overall densities or build-out numbers. Although density bonuses can be given for affordable units,
generally any given parcel will contain the same number of units with a traditional or cluster development.

A major plus to clustering is the interconnected network of open space that can result over time. Amherst has an extensive trail network and open space plan that recognizes the important river corridors connecting habitat as identified by the state. It is not without its gaps however, and smaller networks of open space that serve Village Centers still need identification.

Another sometimes overlooked benefit of cluster development is the potential for a streamlined permitting processes. Traditional subdivisions are not designed to avoid any sensitive areas of a parcel that do not explicitly require restrictions. Required changes to the application are often the result of increasing the time and expense for all involved. Clustering can avoid these changes and actually provide more flexibility to the developer regarding the location of units to avoid habitat areas, create corridors, or take advantage of existing infrastructure. Therefore, it reduces development costs.

**Current Zoning**

Cluster development is allowed by right in all residential zones other than the Fraternity Residential zone. Basic requirements include a minimum five acre parcel (see Table 3 of the Amherst Zoning Bylaws for all dimensional requirements). The number of possible units is calculated by subtracting any un-buildable areas and ten percent of the remaining parcel for roads. The underlying zone determines the density. At least 2,000 sq. ft. of upland per unit must be set aside for active and passive recreation use.

More complicated aspects of the current by-law include the formula for calculating minimum conservation areas (a minimum of 50% of the lots must be reduced a minimum of 25%) and the mix of single and multi-family housing.

<table>
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<th>Housing Type</th>
<th>Minimum or Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>Minimum 40%</td>
</tr>
<tr>
<td>Non-zero lot line</td>
<td>Minimum 20%</td>
</tr>
<tr>
<td>Two Family</td>
<td>Maximum 60%</td>
</tr>
<tr>
<td>Attached Multi-family (8 units max)</td>
<td>Maximum 30%</td>
</tr>
</tbody>
</table>

*Table 5.1: Open space requirements for cluster development by housing types.*

At present, the only areas that require cluster development are those areas under the Farmland Conservation Overlay District (FC). This overlay (figure 5.7) intends to help preserve the agricultural character of Amherst. Development can be restricted to the peripheral areas of the parcel leaving agricultural land in use. Of the district, some areas are already under permanent protection, some have already been developed, and some remain open for either.
Fig 5.7: Required cluster development in Farmland Conservation District
Generally, current zoning does not allow for or encourage significantly smaller lots. It requires only 12.5% of the buildable land to be conserved. It does not provide for the flexibility that cluster development ideally generates.

**Existing Scenario**

It is important to note that Amherst is doing a number of things right in regards to cluster development. Required clustering on farmland is a sensitive application of the bylaw that could easily be overlooked for more complicated forms of agricultural protection. In addition, any cluster in the Farmland Conservation district must have a buffer between the development and open space. The bylaw also provides for some flexibility in zero lot line and setback requirements.

Perhaps Amherst’s biggest asset, however, is not the bylaw itself but the other wealth of inventory information the town possesses. Many areas of the town already have detailed inventories regarding slopes, vegetation, wetlands, habitat, etc. This information is essential to effectively using the options of a cluster development. In addition, the town has a relatively comprehensive Open Space Plan which could be made available developers to better guide them in their efforts.

Standard dimensional requirements should be reviewed and reworked to give the developer the greatest flexibility on the site. This may mean reducing frontage to 65 ft. or allowing for no setbacks in some situations. The specifics can be left as performance based and incorporated into a design review process as discussed later in this chapter. Whatever the dimensional requirements, they should not require excessive description to be clear. One way of simplification would be to have a separate table for requirements in clusters in which requirements are consistent across zones.

Although public access to conservation space cannot legally be required, it can be encouraged through language within the bylaw (Arendt, 1999). This is vital if pedestrian networks are to be developed.

In response to the previous improvement, language regarding the location of the proposed conservation areas should also be added. The Planning Board should retain the right to direct where open space may be located to further facilitate networks.

In the event that not all resources are mapped or mapped to the desired detail, the by-law should contain language such that “the community’s special resources shall be protected through the conservation subdivision design process in which applicants shall prepare detailed site inventory maps (Existing Resources and Site analysis Maps) that pinpoint the exact locations of environmental, cultural, historic, and scenic features on their properties.” (Arendt, 1999, p 21)

Cluster developments may also compliment other proposed implementation strategies such as the viewshed protection overlay by directing growth in less visually obtrusive ways. An example of this is shown in the photo-simulations in Figure 5.8.

Several local examples exist that can provide helpful language and ideas on cluster developments. The City of Northampton has not successfully implemented a cluster ordinance, but requires developers to submit a cluster design proposal regardless of the intended project (Rules & Regulations, 2001). This enables the Planning Board to make an accurate comparison of the potential impacts of both plans and gives them the option of approving the better of the two alternatives. Through this process Northampton has made a shift in which cluster development is no longer a By-Right option but the preferred development pattern. In addition to this overarching decision, dimensional requirements are
significantly smaller than Amherst’s current requirements and the town sets forth a clear goal of 50% open space protection.

A second local example of a cluster bylaw can be found in the city of Greenfield, Massachusetts, Zoning Bylaws (1999). Not only does Greenfield allow for smaller minimum lot sizes and as little as 65 ft. of lot frontage, but requires a pre-application review between the applicant/developer and the planning office. This is an extremely useful tool and can clarify many points of possible confusion or requirements prior to the official application.

Figure 5.8: Viewshed protection through cluster development.
Summary

Specific recommendations include:
- Review of lot sizes/setbacks with possible reduction in mind (see Arendt, 1997 for a discussion on density and lot sizes)
- Allowing clusters on parcels under 5 acres to facilitate network connections
- Requiring minimum open space as percent not formula
- Requiring connectivity based on the Open Space Plan
- Requiring detailed inventory of any site judged to have inadequate existing information
- Considering neighborhood character
- Considering location of open space
- Including Open Space Plan as part of Bylaw package to facilitate site plan application

The majority of recommendations have been previously discussed in detail within this report. However, two have not been discussed in detail but are essential to the overall acceptance and perceptions of cluster developments. Taking into account the surrounding neighborhood character through design review or other techniques could significantly increase the acceptance of clusters as a standard form of development. This is discussed in detail in recent paper on rural character in New England (Ryan 2002). In addition, this survey suggests that the location of open space within the development may significantly impact the acceptance of commonly owned land. Visibility of open space helps people feel connected to it and therefore accept it. These more detailed design questions can be directed to improve the overall experience.

Cluster development benefits Amherst from not only an open space or development standpoint, but both. It supports and incorporates each of the other implementation strategies to produce a comprehensive plan that is beneficial for all involved. With some directed changes, regulations can achieve many of the goals already identified.

5.4 VILLAGE CENTER DEVELOPMENT

From the intersection of Bay Road and Route 116 heading north through downtown Amherst to the Town line with Leverett, one passes through and experiences lands containing varied open spaces and developments of increasing and decreasing density. This change in scenery and experience is lacking in many communities throughout Massachusetts and the country due to sprawl and a reactive planning approach. An alternative to this approach is Amherst’s traditional pro-active approach of managing and directing new growth into village centers while preserving outlying open spaces. This approach builds on what already exists and strengthens it further resulting in a community with a rich tapestry of land use and spatial experience.

A village has many benefits both for the Town and the residents living within its boundary. They are an alternative to sprawl and can take in new development. Families are becoming smaller and there are more single persons within the community. Villages have the ability to accommodate for higher residential densities making them ideal places for the many alternative affordable housing options that Amherst has to offer. The proximity to existing infrastructure such as water and sewer as well as parks, schools, and commercial all within a quarter to half mile area allow for more efficient use of these valuable resources keeping costs down. A study done in Seattle, Washington and referred to in a report
on Infill development strategies for shaping livable neighborhoods (Municipal Research & Services Center of Washington 1997; Seattle Planning Department, 1993) suggests that many families and individuals who normally prefer the suburbs over urban living options would consider living in an urban village if it provided certain conditions. The conditions listed were town homes, greenery, affordable housing, school quality, convenient neighborhood businesses, neighborhood parks, good transit, quality urban design, low commute time, and low crime.

Amherst’s villages have many of these qualities now making them ideal places to live. Target development goals have been used in this study to assess the development potential within these Villages. The extreme scenario of development may not occur, however it is important to define strategies to manage the growth that will take place. Following the current patterns of zoning and subdivisional restrictions, land for development within these centers will not be available for development. To avert the unavoidable scenario of increased developmental pressures in the outlying areas, it is important to consider alternative strategies and scenarios. The report from Washington State (Municipal Research & Services Center of Washington 1997) further states that urban villages and mixed use districts need to be recognized as opportunities for infill development. For infill to work it is important to make it attractive to developers, potential residents, and the existing residents. With this in mind the following recommendations and strategies along with those mentioned in Chapter Three will attempt to make infill more attractive leading to more viable Village Centers.

**Existing Scenario**

Amherst has taken a proactive approach to managing its growth by using a number of land use controls. These controls have focused mainly on protecting and conserving natural resources such as Aquifer Recharge Protection and Farmland Conservation. The Town also has a phased growth plan that limits the amount of development that can occur in one year; however, they have not exceeded the set limit. Besides the Conservation Overlay Districts they have also used zoning to create areas of mixed use that offer developers more flexibility and options. The Village Centers are such areas and have been zoned Business Village Center (B-VC) and Residential Village Center (R-VC). These zones allow for the compatible mix of higher density residential and commercial that is required for a successful village center. Specifically, the B-VC allows for a mix of commercial, retail, office, and high density residential uses while the R-VC allows for a mix of medium density residential and office use. The R-VC also acts as a transitional zone between the B-VC and the neighborhood residential zone which most of the residential areas in the villages are zoned.

**Recommendations**

**Creating a Village Boundary Overlay District**

This overlay district will cover the defined village boundaries determined by this study and focus on the residential zones within them. It would;

- Decrease the underlying residential zones basic minimum lot size and reduce required setbacks
- Relax or suspend area requirements for additional dwelling units
- Allow for expansion of footprints for existing structures, attached or detached

For example, imagine a ½ acre lot within the village boundary with an owner occupied house on it. The lot is zoned residential neighborhood which is roughly a ½ acre zone and had a detached garage built in 1963. Options for infill would include creating a flag lot behind the house to sell, converting...
the garage into a town house, or converting the house into a town house. Under current conditions this all would not be allowable due to the extra land requirements needed to meet these conditions (Appendix 5). To create a flag lot the owner would need another ½ acre besides the current ½ acre not too mention the extra land needed to meet the setback requirements. The garage could be converted but not beyond its current footprint making a town house unlikely. Also, for each additional unit added, additional land is required. This is the same reason the house itself could not be converted into a town house however, the land required for attached units is greater than for detached. All of this becomes an option for the homeowner with the Village Boundary Overlay district.

**Adopting Infrastructure Strategies**

This encourages development closer to existing infrastructure and thus keeps costs down. It ties infrastructure policy to service areas or in this case the village centers. The further a development is from the Village Center, the greater the costs that the developer will be expected pay with the Town paying less. The closer to the center, the Town would pay for more of the cost with the developer paying less. Level of service standards and impact fees could also be adapted to follow this strategy. Lower fees and standards would exist closer to village centers than away from them. As a result, the infrastructure would encourage and direct development within the Village Boundaries.

**Neighborhood Associations**

“A neighborhood association is a voluntary membership organization that deals with social, political, zoning, [and] crime [issues] and does not maintain commonly owned property” (© copyright by Regnesis.net).

These Associations can be useful in many ways. Specifically, they can help to determine the character and establish performance standards for each village. All they require is enabling language by the Town that set outs the rules and by-laws that are used to govern the association. Public participation and decision making in the neighborhood would help promote the character its residents aspire to achieve. It would also reduce the regulatory burden of the Town in the creation and maintenance of design standards, neighborhood character and compatible development. Connecticut has had success with these associations.

**Summary**

Specific recommendations include:

- Creating Village Boundary Overlay district
- Adopting infrastructure strategies
- Promoting affordable and low maintenance housing choices to match today’s needs
- Adopting design standards and guidelines for improved compatibility
- Encouraging neighborhood associations

The key to the villages is to concentrate development into the villages. This can be done by creating a village boundary overlay district that encourages infill and affordable housing options. Infrastructure strategies that tie policy and costs to the distance from the village center will encourage developers to consider developing within the village boundaries. Neighborhood associations are a powerful tool in maintaining the quality of place within the villages. The additional recommendation to promote affordable housing is already a major issue of concern in Town meetings. Some of the infill strategies in this study will possibly aid in this endeavor. Adoption of design guidelines is an important to support
the character of historic districts and create a cohesive identity for each Village center with a
flexibility of choice. Strategies and guidelines have been illustrated in the next section.

5.5 DESIGN REVIEW GUIDELINES

Amherst has many kinds of developments with a variety of design features, characteristics, and
elements. Some are desirable and others are not. In an effort to further the distinct village identity that
this study aims to create, design strategies to achieve compatible and desirable development have been
suggested. There are three major steps to achieving sensitive and compatible development: identify and
document the character of place, develop strategies to expand and protect this character, and create
guidelines to encourage them.

In order to understand how to illustrate sensitive development, it is necessary to recognize the diversity
of the town and identify the varied character evident in Amherst by understanding the elements from
which character is created. This includes topography, plants, wildlife, walkability, architecture, etc. Once
these places are understood and documented, the next step is to develop strategies to expand and
protect them.

Amherst is utilizing many strategies to achieve this goal, including zoning and open space planning.
Amherst’s Open Space Plan identifies significant lands for preservation and protection in terms of
agriculture, recreation, and biodiversity and is supported by zoning that promotes more dense
development around traditional village centers and less dense development away from the centers. The
final step toward achieving development with a desired aesthetic is to create guidelines and criteria for
sensitive and compatible development. These guidelines tie understanding character places in town
with strategies to expand and protect them by explicitly stating what kind of development is appropriate
for any given area. Amherst is currently achieving this through written prescriptive by-laws, site-plan
review and informal meetings with developers to discuss what would be appropriate development.

Existing Scenario

Amherst has shown an interest in adding performance based directed growth to site plan review in an
attempt to close the gap between development the town desires and what is actually built, as evidenced
Performance based guidelines differ from prescriptive guidelines in that performance guidelines are not
as interested in how a result is achieved but that it is in fact achieved. Illustrating rough guidelines for
desired development with drawings and photographs is one way to close the interpretation gap
sometimes left by prescriptive development criteria. Resulting from the Cudnohufsky project were
workbooks illustrating general design guidelines for commercial corridors and cluster developments
(figure 5.9). Currently these are used by Amherst’s planning department as an informal tool to show
developers what kind of development the town is looking for. These workbooks are general and do
not take into consideration the diverse character of Amherst and have yet to be integrated as part of the
criteria for the site plan review process. Current criteria for development is written in zoning by-laws
and leaves development open for interpretation sometimes to the detriment of surrounding character
(figure 5.10).
“It is all too easy for communities to become over-dependent on regulations that let minimum standards result in lowest-common denominator development.”

Figure 5.9: Illustrations give developers an idea of what kind of growth is desired by the town inside more performance based criteria.

Figure 5.10: Current site plan review criteria leaves development open for interpretation as shown here along College Street.
Amherst’s site plan review also promotes desired development. All projects submitted to the Planning Board are reviewed to assure compliance with general and environmental standards set forth in the by-laws. Projects within the Business General District (Downtown) and “any residential zoning district where the project in question occurs within the boundaries of a National Historic Register District, the Permit Granting Authority shall, if it deems the proposal likely to have a significant impact on its surroundings” (Amherst, 2002) are subject to design review (figure 5.11). This process reviews a project on such factors as height, proportion, relation of structures and spaces, shape, landscape, scale, directional expression, architectural and site details, and signs. The current site plan review process leaves all residential projects outside historic districts beyond design review.

In addition Amherst lacks documentation of its town-wide character. It has not integrated the illustrations found in existing workbooks and performance based design guidelines into the formal site plan review process. This would further the town’s ability to understand itself and thus, accurately illustrate issues related to development sensitivity and compatibility.

**Recommendations**

Providing illustrations and performance based guidelines to supplement existing bylaws could close the gap between development the town desires and what is actually built. To this end, important strategies are to define character of place throughout the town, integrate town character into design review, compile town character documentation as a tool to be used by developers and reserve optional design review for all projects.

After a comprehensive documentation of town character is complete, this valuable information can be incorporated into a design review guideline workbook to be used as a tool by the town and developers to promote town-wide character sensitive development. The workbook would illustrate criteria in terms of general standards that apply to all projects as well as describes character places in town. This way, general development standards can be tailored to the character and character related issues throughout the town. Developers would be required to use the book as a reference to understand what the town wishes for in terms of general standards such as site and landscape organization, architecture, and signage. It would also be used to understand the character of the area they are working in and be able to explain how their plan is sensitive to it (figure 5.12).

The Town of Simsbury, Connecticut’ Design Review Board (2001) has successfully implemented this kind of workbook and has been used as a model. The following examples illustrate the pages of the workbook a developer might look at who wished to develop a commercial building in the North Amherst area. The first step is to select the character place within which the project falls. In this instance it is Town Centers and Villages (figure 5.13). The next page illustrates elements of all projects in Town Centers and Villages as well as issues relating specifically to North Amherst that the plan should be sensitive to (figure 5.14). Once these are understood the developer is required to study use general standards appropriate to their development. General standards including but not limited to architecture (figure 5.15) site and landscape organization (figure 5.16) are broken into more specific criteria for design elements such as facades and off street parking.

Providing a visual resource for design review guidelines is more easily understandable than written regulations which are confusing and open to the individual's interpretation. It is also important for people to be able to visualize the character they wish to preserve. This model would go a long way towards creating an identity that may be defined with public participation and comprehension.
Design Guidelines Workbook
Identify and Illustrate Performance Based Criteria for Review by:

Illustrating General Standards
• Site and Landscape Organization
• Architecture
• Signage

Describing and Illustrating Character Places in Town
Town and Village Centers Wetlands/Lowlands
Traffic Corridors Woodlands
Open Space and Farmland Mountains/Hills

Figure 5.11: Residential projects not within a historic district do not receive site plan review.

Figure 5.12: Illustrating general standards for development and cross referencing them with character places promotes sensitive development.
Character Places
Town Center and Villages

Village Centers

- North Amherst
- Cushman Village
- Town Center
- East Village

Each Village is Unique but shares many similar landscape patterns and notable physical conventions including:

- Historic Structures and Sites
- Village Settlement Patterns

Vulnerability to Change

- Loss of Unique Community Settlement Patterns
- Scale and siting continuity
- Loss of public landscapes
- Decline of neighborhood identity
- Decline of Commercial Services
- Loss of Historic character

Figure 5.13: North Amherst elements that are typical to all village as well as some specific issues that require tailored sensitivity.

General Standards
Architecture

Facade

Guidelines:

- Establish horizontal continuity by referencing adjacent prominent façade detail elevations and rhythms.
- Include architectural detailing and apply it throughout the design.
- Build elements (stairs, columns, etc.) to human scale at sidewalk level to encourage pedestrian use.
- Observe historic precedents wherever possible.

Figure 5.14: Architectural Standards present a visual example of desired development outcomes.
General Standards
Site and Landscape Organization

Off Street Parking

Guidelines:
• Create a strong architectural edge at the rear of the building and the remainder at the side
• Screen parking area from street view
• Illuminate parking area for security and safety
• Pave and grade parking so that storm water will not cross public sidewalks.
• Maintain a spatial separation or landscape barrier between the parking area and the building.
• Provide linear islands with shade trees between parking rows.

Figure 5.15: Additional guidelines reflect the way roads and other visible elements would be defined.

General Standards
Site and Landscape Organization

Relationship to Community

Guidelines:
• Continue pre-existing visual patterns (density, lot size, location of sidewalk) in those neighborhoods historically based on functional activities.
• Separate incompatible uses with large open space or natural buffers.
• Allow a mix of uses (where permitted) of small scale commercial within primarily residential areas.

Figure 5.16: Reflecting how new development would fit into a larger context helps maintain the integrity of the neighborhood.
Summary

Amherst is currently doing many things to guide its growth. Conducting a comprehensive character study of the town’s landscape character and incorporating it into the design review process further ensure growth with a desired aesthetic. It also provides to the designer, developer, land owner and Town in general, a visual resource to reflect the patterns of development and character of the Town.
Chapter 6: CONCLUSION

The Amherst Comprehensive Planning Study is intended to aid in the Comprehensive Planning Process of the Town of Amherst. Building on previous works, this study focuses on key conservation and development concerns of the Town. It serves to identify and illustrate the varied dimensions of 1) preserving open space; 2) defining village boundaries; and 3) designing village centers in the Town. The existing state of protection and development was assessed with the help of GIS maps and information provided by the Town and preceding studies, along with alternative development scenarios. This assessment, followed by feedback from public meetings, analysis and design led to a series of planning strategies in keeping with the Town’s traditional development patterns and guiding principles.

This study intends to extend the planning efforts of the Comprehensive Planning Committee, by incorporating the concerns stated in the guiding principles of the Town. These concerns focus on providing a diversity of housing types, emphasizing existing service networks, creating economically and structurally viable and attractive Village centers, and creating a sense of neighborhood identity within each of these Centers. The process of assessment and analysis of development scenarios and alternatives, creative regulatory strategies and designs have resulted in potential planning strategies that reflect the development goals of the Town. These strategies provide useful resources and examples of what other towns are doing to achieve their development and conservation goals. Together this information represents a body of knowledge that can be applied towards the achievement of the town’s planning goals.

This study focuses on a few facets of this planning initiative. The assessments and recommendations do not purport to be conclusive or comprehensive. They are intended to spark discussion about timely issues and assist people in looking to the future and planning for it. The issues addressed require different ranges of planning initiatives, from short to long term, with flexibility for changing needs. Implementation may be phased, selectively incorporated or addressed at a later time. At the same time, public discussion and feedback along with local business involvement is vital to these efforts. As proscribed by the Design Review Guidelines section of Chapter 5: Planning Strategies, their involvement should be an integral part of the definition of issues addressing neighborhood character and development patterns. Similarly, discussion and public support are important to assess the needs of the Town in successive periods of time, as these are wont to change, making different strategies viable at different times.

While this study suggests a number of planning strategies to be implemented, there might be alternative strategies better suited for the Town’s long term planning goals. However, as evident by the work of this study, it is important to assess these goals keeping in mind the inevitable development pressures and the way the Town wants to handle these pressures.
REFERENCES


Downtown Historic District Study Committee and Office of Planning and Development-Project Staff. 1999. Central Business Architecture Ordinance: The Downtown Historic District Study Committee’s Final Study Report, City of Northampton.


MAPS AND DATALAYER SOURCES


Dodson Associates, Ltd. 2003. Datalayers provided on CD.


Town of Amherst Planning Department. 2003. Data from CD provided by Planning Department. Website:
RESOURCE INTERVIEWS

La Cour, Neils. 2003. Senior Planner, Town of Amherst Planning Department. Project contact between September and December 2003.

Westover, Peter. 2003. Director, Town of Amherst Conservation Department. Project contact between September and December 2003.

PHOTO CREDITS

Unless otherwise noted photographs and plans are the work of graduate students of the Department of Landscape Architecture and Regional Planning, University of Massachusetts, Amherst- Maureen Borg, Pam Miller, Elizabeth Lokocz, Timothy Lockett, Mary Elizabeth Burgess, Jarita Sadler, Nate Richardson, Mary Lee York and Nidhi Madan.
## APPENDICES

### APPENDIX 1

#### Census Data: Household Characteristics

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<thead>
<tr>
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<th>Percent of all Occupied Housing Units</th>
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<tr>
<td></td>
<td>Family Households</td>
<td>Non-family Households</td>
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<tr>
<td></td>
<td>Total</td>
<td>Married Couple Family</td>
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<td>Amherst</td>
<td>44.6</td>
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<tr>
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<tr>
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<td>64.5</td>
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#### Census Data: Housing Characteristics

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<th>Vacancy Rate</th>
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<td></td>
<td>Total Housing Units</td>
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<td>Rental</td>
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<tr>
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## APPENDIX 2

### Bureau of Land Management - Visual Resource Management: Scenic Quality Rating

<table>
<thead>
<tr>
<th><strong>(a) 1 - Scenic Quality - Explanation of Rating Criteria</strong></th>
</tr>
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</table>

### Landform

Topography becomes more interesting as it gets steeper or more massive, or more severely or universally sculptured. Outstanding landforms may be monumental, as the Grand Canyon, the Sawtooth Mountain Range in Idaho, the Wrangell Mountain Range in Alaska, or they may be exceedingly artistic and subtle as certain badlands, pinnacles, arches, and other extraordinary formations.

### Vegetation

Give primary consideration to the variety of patterns, forms, and textures created by plant life. Consider short-lived displays when they are known to be recurring or spectacular. Consider also smaller scale vegetational features which add striking and intriguing detail elements to the landscape (e.g., gnarled or windbeaten trees, and joshua trees).

### Water

That ingredient which adds movement or serenity to a scene. The degree to which water dominates the scene is the primary consideration in selecting the rating score.

### Color

Consider the overall color(s) of the basic components of the landscape (e.g., soil, rock, vegetation, etc.) as they appear during seasons or periods of high use. Key factors to use when rating "color" are variety, contrast, and harmony.

### Adjacent Scenery

Degree to which scenery outside the scenery unit being rated enhances the overall impression of the scenery within the rating unit. The distance which adjacent scenery will influence scenery within the rating unit will normally range from 0-5 miles, depending upon the characteristics of the topography, the vegetative cover, and other such factors. This factor is generally applied to units which would normally rate very low in score, but he influence of the adjacent unit would enhance the visual quality and raise the score.

### Scarcity

This factor provides an opportunity to give added importance to one or all of the scenic features that appear to be relatively unique or rare within one physiographic region. There may also be cases where a separate evaluation of each of the key factors does not give a true picture of the overall scenic quality of an area. Often it is a number of not so spectacular elements in the proper combination that produces the most pleasing and memorable scenery - the scarcity factor can be used to recognize this type of area and give it the added emphasis it needs.

### Cultural Modifications

Cultural modifications in the landform/water, vegetation, and addition of structures should be considered and may detract from the scenery in the form of a negative intrusion or complement or improve the scenic quality of a unit. Rate accordingly.
<table>
<thead>
<tr>
<th>Key factors</th>
<th>Rating Criteria and Score</th>
<th>Scenic Quality Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landform</td>
<td>High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops, or severe surface variation or highly eroded formations including major badlands or dune systems; or detail features dominant and exceptionally striking and intriguing such as glaciers.</td>
<td>Steep canyons, mesas, buttes, cinder cones, and drumlins; or interesting erosional patterns or variety in size and shape of landforms; or detail features which are interesting though not dominant or exceptional.</td>
</tr>
<tr>
<td>Vegetation</td>
<td>A variety of vegetative types as expressed in interesting forms, textures, and patterns.</td>
<td>Some variety of vegetation, but only one or two major types.</td>
</tr>
<tr>
<td>Water</td>
<td>Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape.</td>
<td>Flowing, or still, but not dominant in the landscape.</td>
</tr>
<tr>
<td>Color</td>
<td>Rich color combinations, variety or vivid color; or pleasing contrasts in the soil, rock, vegetation, water or snow fields.</td>
<td>Some intensity or variety in colors and contrast of the soil, rock and vegetation, but not a dominant scenic element.</td>
</tr>
<tr>
<td>Influence of adjacent scenery</td>
<td>Adjacent scenery greatly enhances visual quality.</td>
<td>Adjacent scenery moderately enhances overall visual quality.</td>
</tr>
<tr>
<td>Scarcity</td>
<td>One of a kind; or unusually memorable, or very rare</td>
<td>Distinctive, though somewhat similar to</td>
</tr>
<tr>
<td>Cultural modifications</td>
<td>within region. Consistent chance for exceptional wildlife or wildflower viewing, etc.</td>
<td>others within the region.</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td></td>
<td>* 5+</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>Modifications add favorably to visual variety while promoting visual harmony.</th>
<th>Modifications add little or no visual variety to the area, and introduce no discordant elements.</th>
<th>Modifications add variety but are very discordant and promote strong disharmony.</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>-4</td>
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</table>

* A rating of greater than 5 can be given but must be supported by written justification.

**INSTRUCTIONS**

**Purpose:** To rate the visual quality of the scenic resource on all BLM managed lands.

**How to Identify Scenic Value:** All Bureau lands have scenic value.

**How to Determine Minimum Suitability:** All BLM lands are rated for scenic values. Also rate adjacent or intermingling non-BLM lands within the planning unit.

**When to Evaluate Scenic Quality:** Rate for scenery under the most critical conditions (i.e., highest user period or season of use, sidelight, proper atmospheric conditions, etc.).

**How to Delineate Rating Areas:** Consider the following factors when delineating rating areas.

- 1 Like physiographic characteristics (i.e., land form, vegetation, etc.).
- 2 Similar visual patterns, texture, color, variety, etc.
- 3 Areas which have a similar impact from cultural modifications (i.e., roads, historical and other structures, mining operations, or other surface disturbances).

**Explanation of Criteria:** (See Illustration 1)

**NOTE:** Values for each rating criteria are maximum and minimum scores only. It is also possible to assign scores within these ranges.

**SCENIC QUALITY**

A = 19 or more
B = 12-18
C = 11 or less

*Source: http://www.blm.gov/nstc/VRM/8410a.html*
APPENDIX 3

Graphic Representation of Lot Size

Lot Size:
¼ acre
10,890 sq. ft.

McClellan Street: 6 – 7,000 sq. ft. lots
Lot Size:
¾ acre
10,890 sq. ft.

Blue Hills Road: 11 – 12,000 sq. ft. lots

Lot Size:
½ acre
21,780 sq. ft.

Beston Street: 16 – 17,000 sq. ft. lots
Lot Size:

½ acre
21,780 sq. ft.

Lincoln Street: 20 – 25,000 sq. ft. lots
APPENDIX 4

RG and RN infill calculations for Town Center

Possible units in RG (no build)

<table>
<thead>
<tr>
<th>Parcel Size</th>
<th>total area (sq feet)</th>
<th># parcels</th>
<th>Multiplier</th>
<th>resultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>12K to 24K</td>
<td>419245</td>
<td>27</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td>24K to 36K</td>
<td>194449</td>
<td>7</td>
<td>1.2</td>
<td>10.5</td>
</tr>
<tr>
<td>36K to 48K</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>48K +</td>
<td>844583</td>
<td>10</td>
<td>2.5</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>1458277</td>
<td>44</td>
<td></td>
<td>62.5</td>
</tr>
<tr>
<td>Total units (area divided by 12000)</td>
<td>121.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Possible Units in RG (build)

<table>
<thead>
<tr>
<th>Parcel Size</th>
<th>total area (sq feet)</th>
<th># of parcels</th>
<th>Multi</th>
<th>Resultant (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12K to 24K</td>
<td>6,152,354</td>
<td>367</td>
<td>0</td>
<td>0</td>
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<tr>
<td>24K to 36K</td>
<td>2,886,581</td>
<td>98</td>
<td>1</td>
<td>98</td>
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<tr>
<td>36K to 48K</td>
<td>1,958,035</td>
<td>49</td>
<td>1.5</td>
<td>73.5</td>
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<tr>
<td>48K +</td>
<td>3,931,401</td>
<td>45</td>
<td>2</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td>14,928,374</td>
<td>559</td>
<td></td>
<td>261.5</td>
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</tbody>
</table>

Total area left after one building’s worth of area is subtracted 9,420,374 (divided by 12000 = 785 units)
### Possible Units All Zones

<table>
<thead>
<tr>
<th>Zoning Type</th>
<th>Calc. Method</th>
<th>Total possible future units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RG</td>
<td>Area</td>
<td>906.6</td>
</tr>
<tr>
<td>RG</td>
<td>Multiplier</td>
<td>324</td>
</tr>
<tr>
<td>RN</td>
<td>Area</td>
<td>1149</td>
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<tr>
<td>RN</td>
<td>Multiplier</td>
<td>231</td>
</tr>
</tbody>
</table>
APPENDIX 5

Zoning regulations to consider

Duplex creation
A single family can be converted into a duplex (within the same dwelling unit). The first unit must have 20,000 sq ft in RN or 12,000 sq ft in RG, but in RN additional unit must have 6000 sq ft but the addition of new units must not exceed more than one per 6000 sq ft (1 per 2500 in RG). All duplexes require a special permit in RG and RN. Also note language from zoning codes of Amherst for sub-dividable dwelling:

A sub-dividable dwelling shall contain provisions for a specified number of dwelling units not to exceed three in accordance with a Special Permit. At least one of the dwelling units shall be and shall remain owner-occupied, which requirement shall be made a condition of any Special Permit issued under this section.

Flag lots
For a flag lot, you must have area equal to full zoning (12,000 sq. ft for RG or 20,000 sq ft for RN) for first the dwelling, then twice the area again for the flagged lot.

Each lot must have an access strip with a minimum street frontage of forty feet, a minimum width of forty feet at any point between the street and the principal building, and a maximum length of four hundred feet. Also, no more than three flagged lots can be created from any land identified, according to the records of the Assessor's office, as a single parcel of land (more are considered part of a subdivision).

Converted dwelling or supplemental apartment
When an outbuilding exists, such as a garage or old barn that was constructed prior to 1964, an owner can turn it into an accessory dwelling. From the zoning codes of Amherst: “A dwelling unit in or attached to an existing residence of ten or more years of age, or a detached structure constructed prior to 1964, located on a lot where at least one dwelling exists.” also, “An existing residence, a structure attached to an existing residence, or a detached structure, may be converted into a dwelling unit or units…”

A detached structure must have a minimum exterior footprint of 500 square feet, and a supplemental apartment cannot have more than 600 sq. feet of gross floor area.

“M” clause
In addition, the density for new town houses, apartments, and sub-dividable dwellings shall not exceed one dwelling unit per 6,000 sq. ft. of the remaining lot area, or the entire area in the case where there are no existing dwelling units

RN does not allow apartments; RG does allow apartments by special permit

Dimension Requirements under current zoning

<table>
<thead>
<tr>
<th></th>
<th>RN</th>
<th>RG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot size</td>
<td>20,000- minimum lot size, 6,000 sq ft additional family lot, 120 ft- min frontage 20% is max building coverage maximum floors- 3</td>
<td>12,000- minimum lot size, 2500 additional family lot, 100 min frontage max building coverage maximum 3 floors.</td>
</tr>
</tbody>
</table>
