

# GLEASONDALE VILLAGE REVITALIZATION PLAN

Stow, Massachusetts

#### Prepared for the Town of Stow Planning Board by

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### I. INTRODUCTION

#### **Project Background and Process**

In 2005, the Town of Stow received a Priority Development Fund Grant made available by MassHousing. The funds were used to develop zoning bylaws with the Metropolitan Area Planning Commission for a draft Mixed-Use Overlay District in town (Stow Lower Village 2011, 4). At that time, two of Stow's villages, Gleasondale and the Lower Village, seemed like ideal candidates for the project. After focusing its initial efforts on the Lower Village, the Town is preparing to turn next to Gleasondale, in the southern edge of town. A classic mill village on the Assabet River, Gleasontdale is home to Stow's contribution to the American Industrial Revolution.

The purpose of this project is to create a revitalization plan for Gleasondale that will capitalize on the village's remarkable characteristics. Today, Gleasondale is home to a variety of uses, including agriculture, outdoor recreation, housing, and light industry. At the center of the village are two mill buildings, which have housed Gleasondale's industrial operations for generations. Throughout the spring of 2013, a team of graduate students from the University of Massachusetts Amherst has assessed the social and economic potential of the village and the town. As part of the Economic Development Practicum, the team was tasked with identifying key issues and developing recommendations for revitalization and preservation in accordance with Stow's values.

The project team has gathered information from a number of sources: Documents and Reports, Town Officials, Industry Professionals, and Local Stakeholders. Documents from municipal, regional, and state agencies were reviewed alongside reports from civic groups and non-profit organizations. Town officials were consulted for insights pertaining to the town and village, and the feasibility of potential recommendations. The team contacted industry professionals for in-depth guidance on larger-scale issues, in order to place particulars in their appropriate context. Local stakeholders were

interviewed, as well, to gather the perspective of tenants and property owners at the Gleasondale Mill site.

Following initial meetings with planning officials in Stow, the team drafted a project scope. The project was completed in three phases: inventory, assessment, and implementation. This report presents the output of each of these phases. The inventory examines the physical, social, cultural, legal, and commercial elements in the project area. The assessment identifies the major issues pertaining to the redevelopment potential of the site, gathered from the inventory. Guided by the assessment, the implementation presents the team's recommendations, and strategies for realizing them. The report concludes with a vision for Gleasondale.

### II. INVENTORY

#### **Overview of Stow**

#### » CONTEXT

Stow's residents place high value on the community's strong sense of place, which is created by its varied natural features and land use patterns that made use of the fertile land.

-Mass DCR 2006, 14

Once called Pompositticut by Native Americans (Crowell 1933, 2), Stow is a quintessential New England Town: a long agricultural tradition; main roads following geographic terrain; and an open town center marked by civic buildings, churches, and schools. For its 6,590 residents, living in Stow combines the tranquility of rural living with access to the professional and cultural amenities offered by both Worcester and Boston, which lie 23 miles west and 29 miles east of Stow, respectively. Three miles from its intersection with Interstate 495, Route 117 brings one to the border of the town and the doorstep of Bose Corporation, the town's largest employer. Two miles east from Bose, the town center lies at the intersection of Massachusetts State Routes 62 (Gleasondale Road) and 117 (Great Road). A mix of rural, residential, and municipal, residents of Stow Center are within walking distance to Town Hall and other municipal offices, the police station, Randall Library, Center Elementary School, three major churches, groceries, gas stations, and farms.

Stow is included within the Minuteman Advisory Group on Interlocal Coordination (MAGIC), a collection of 13 communities within the Massachusetts Metropolitan Area Planning Council (MAPC). One of eight subregional committees within MAPC, MAGIC was established in the mid-1980s to respond to growth management issues, and it has since expanded its role to facilitate local responses to a number of planning and legislative concerns (MAPC 2013). In addition to Stow, the remaining twelve MAGIC towns are: Acton, Bedford, Bolton, Boxborough, Carlisle, Concord, Hudson,

Lexington, Lincoln, Littleton, Maynard, and Sudbury. MAGIC communities provide their residents with a high quality of life. One recent nationwide statistical analysis identified 30 "five-star" small towns and cities in Massachusetts, out of a field of 279. Nine of the MAGIC communities, Stow among them, received this rating (Grey House 2010, 891).

Stow is known throughout the region and the state for its outstanding outdoor recreation. Five orchards open to the public during apple-picking season, and are filled with families on weekends in the fall. There are 81 holes of golf in Stow, as well, and the town's five courses provide 500 acres of open recreational space (Mass DCR 2006, 11). Stow's abundance of forest and wetlands offers easy access to hiking, rail

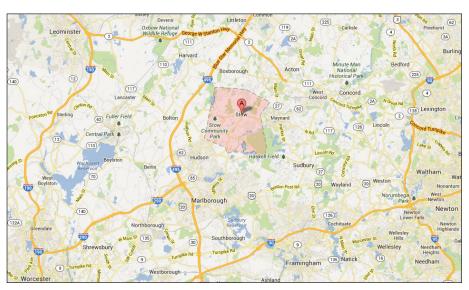


Figure 2: Stow and environs. Credit: Google Maps, 2013.

trails, paddling, and bird watching. In particular, the 2,230-acre Assabet River National Wildlife Refuge includes 113 acres along the river in Stow (US Fish & Wildlife 2010, 3). One of three inland refuges in the Eastern Massachusetts National Wildlife Refuge Complex, the Assabet refuge provides 15 miles of trails for public use, and essential habitat for wildlife, particularly amphibians and migratory birds. The town is also home to the Pine Bluff Recreation Area on Lake Boon, Gardner Hill Town Forest, and Minute Man Air Field, a private, general aviation airport for public use.

#### » DEMOGRAPHICS

The majority of Stow's 6,590 residents are White (93.6%). Stow is less racially diverse than the state of Massachusetts as a whole, where approximately 4 out of 5 residents identify as White (80.4%). Stow has a 3.3% Asian, 1.9% Hispanic or Latino, and 0.7% Black populations. Stow also has a slightly higher median age of 43.5 than the state's 39.1 years, but is nearly identical to the median age of the MAGIC group's median of 43.6. (Please see Appendix B for data sources in this section.)

Stow features a highly educated population of adults 25 and over who hold a graduate or professional degree, and almost one-third of adults over 25 hold a bachelor's degree. Both Stow and MAGIC have comparatively higher educational attainment rates than the state of Massachusetts.

Stow contains 2,429 households, of which 78.3% are categorized as family households. According to the 2010 Master Plan, "about 90% of Stow's housing stock" is detached single-family housing (Stow Planning 2010a, 53), and much of it is situated on parcels ranging from 1.5 to 2-plus acres of land. The average household size is 2.71 persons, and the average family size is 3.1 persons. These statistics are very close to those of the state.

The median house value in Stow is \$449,600. This is well above the median value for

the state, at \$343,500, and in the upper half of the MAGIC group, where the median is \$554,492. Similarly, Stow's mean household income of \$133,682 surpasses the state's (\$88,577), but is below the \$147,208 average of the MAGIC communities.

Stow has a higher percentage of residents who participate in the labor force than the state statistic; 76.1% of Stow residents are in the labor force, compared to 67.8% of Massachusetts residents. Stow's percentage of residents in the labor force is also higher than the average of MAGIC residents, a value estimated at 68.6%. The most common means of commuting to work is driving alone: 84.6% of Stow residents drive alone to work, spending an average time of 28.3 minutes commuting.

#### » RECENT ECONOMIC EVENTS

Stow adopted the Community Preservation Act in 2001, with a 3 percent surcharge on each real estate tax bill. Stow is participating in a manner that maximizes the state matching funds with the least possible financial impact to the community. Stow's long-term bond ratings in 2011 indicate the overall financial health of the town. The *Aa2* from Moody's indicates "high quality and very low credit risk," and the A+ from Standard & Poor's indicates "strong capacity to meet commitments" (Mass DOR 2011, 1).

In 2012 the town's annual debt payment increased by 27% to \$1,657,196 with the first full principal and interest payment on a 20-year, \$9 million bond for the now-completed Center School project, and a second project bond issuance of \$8.4 million to be paid over 25 years (Landry, 2013).

Stow's Capital Planning Committee must vote on any expenditure over \$10,000 or having a "useful life of over three years." While not affecting the study area, some items in the 2011 Annual Report have tangential relevance to the Gleasondale project on account of their relationship to water treatment, land purchase, and traffic engineering (Town of Stow 2012, 62):

- By the Building Department: \$29,000 for installation of a water treatment system for the Town Building
- By the Cemetery Department: \$200,000 for purchase of a parcel of land adjacent to the Brookside Cemetery
- By the Planning Board: \$43,334 for preliminary engineering plans for traffic and safety improvements to the Lower Village.

#### » CAPITAL PLANNING AND MUNICIPAL ASSISTANCE FOR WATER / SEWER SERVICE IN STOW

While there are no municipal water and sewer services, in recent years the town has provided technical assistance and financing for clustered water and sewer facilities on two occasions. In 2011, the town administrator, with the support of other town officials, state agencies, and elected officials, put forth a proposal to help 57 residents of the Harvard Acres subdivision disconnect from the Assabet Water Company system that was headed towards bankruptcy. Stow voters accepted a \$1 million loan from the state Water Pollution Abatement Trust at no interest, which the town then used to provide 2% interest loans to what became 175 Harvard Acres residents, for drilling individual wells (Town of Stow 2012, 18).

In January 2013, a group of business people announced their intention to explore alternatives to access the water they need to be able to expand their establishments. Using town land for private water continues to be discussed (Arsenault 2013, 1). While the town has enjoyed the growth-limiting effects of being served by private water and sewer systems, these recent developments have highlighted the fact that any attempt to fulfill plans to direct growth into the town villages will hinge upon solutions to the challenges raised by the lack of service. This issue is important given the constraints and environmental challenges in and around the Gleasondale Mill site.

#### **Overview of Gleasondale**

#### » HISTORY

Gleasondale is a portmanteau commemorating the village's most successful industrial partnership, between mill owners Benjamin Gleason and Samuel Dale. The village is one quarter of a mile from the Stow-Hudson border, and 2.7 miles south of the intersection of Stow's main thoroughfares, Gleasondale Road and Great Road. It is the

town's only thickly-settled area along the Assabet River, which is bordered elsewhere in the town by farms, orchards, wetlands, and protected open space. The river and the geology beneath it account for the presence of a mill village at this location: just upstream from the mills, the farthest reaches of the Andover Granite pluton (listed as "SOagr" in Figure 3, below) intrude upon the softer metamorphic rock of the Nashoba Formation (USGS 1983). It is here that an ice dam holding Glacial Lake Assabet gave way, releasing a torrent of water between the Orchard and Lambert Hills drumlins. Only bedrock was left behind, exposing the natural falls ideal for early industry (McAdow 1990, 104).

On account of these conditions, Gleasondale is able to trace its manufacturing roots to the colonial era. An early miller named Jonathan Randall built his homestead at what is now the intersection of Sudbury Road and Gleasondale Road, circa 1710 (MassDCR 2006, 6). Apart from the presence of some low-intensity sawmills and gristmills, the area was much like the rest of Stow: quiet and agricultural (Mass Historical 1980, 3). When Samuel Slater brought his mastery of the Arkwright system to Rhode Island in 1790, falls like those found at Gleasondale had the potential to become production centers in the emerging textile trade. Cotton spinning came to the village, and with it came an industry that reorganized life in Stow and dozens of other New England towns.

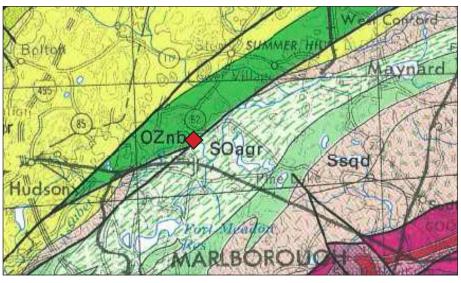


Figure 3: Gleasondale (red diamond) along the Assabet River Fault, Credit: USGS, 1983.

Gleasondale's development is a classic example of the Rhode Island system which, along with the larger-scale Waltham system, was one of two patterns common to mill operations undertaken between 1820 and 1860 (Dunwell 1978, p.52). In the Rhode Island system, owners attempted to replicate the patterns of traditional New England life for their employees. Company-owned houses were built near the mills, to accommodate workers and their families. Schools, stores, and churches soon followed, to meet the new village's civic needs. Mill owners lived in the village as well, in order to manage the affairs of their enterprises directly. In Gleasondale, the mill owners built homes for themselves on the upland, eastern side of what is now Gleasondale Road, mill worker housing was built across the street, closer to the river, and the mill stood at the lowest point, across Rockbottom Road. On Orchard Hill, a farm once owned by the Gleason family to provide food for workers is still in production, and the original structures are still in use.

Completed in 1849, the Marlborough Branch of the Fitchburg Railroad brought the first trains to Gleasondale (still known as "Rock Bottom"), traveling between Hudson and the main line in South Acton (Crowell, 40). A second cluster of businesses and residences formed around the station, by Marlboro Road and High Street. Businesses here included the Humphrey Brigham Shoe factory, Reed Brothers cabinetry and furniture, and a brick yard (Crowell, 57). Unlike the mills, these enterprises were not dependent on hydropower, and their presence by the depot was indicative of industry's shift away from rivers for both transportation and power (see Figure 4, below). In confirmation of this emerging mode of transportation, a competing railroad brought service to the village in the 1880s, a short walk over the Hudson town line. The Central Massachusetts Railroad established its own train station in "Rocky Bottom." The station provided east-west passage from Boston to Northampton, running roughly parallel to the established Boston & Albany Railroad (Central Mass 1888).

By the end of the 19th century, the Gleason family had acquired much of the real estate by the depot, building houses for workers and supervisors. The result was a unified village, fully inhabited from Sudbury Road to the rail station in Hudson. In response to this continued investment and ongoing prosperity (and the gift of a new Methodist Church from the Gleason family), the village's post office and train stations were renamed "Gleasondale" in 1898 (PAST 2011a, 2).

According to the Bruce Clouette, consultant for the Public Archaeology Survey Team, a number of key features from this era of industrial planning and production still exist in the village: the Gleason Homestead, the Dale Cottage, the Randall-Hale Homestead, family housing for workers, a boardinghouse for workers, the general store

and post office, the Orchard Hill farm houses, and the Methodist Episcopal Church and parsonage (PAST 2011a, 4). As a result, "Gleasondale contains some of the most richly embellished architecture in Stow," boasting examples of French Second Empire, Queen Anne, Georgian, Italianate, Greek Revival, and Victorian Eclectic styles (PAST 2011a, 16). In her History of Stow, written on the occasion of the town's tercentenary, Ethel Childs observed that "[t]here was an elegance, Victorian in all its glory, quite different from the quiet conservatism in the center of town" (Childs 1983, 74).

#### » LAND USES

Along Route 62, Gleasondale is primarily a rural residential corridor, consistent with the uses found in an older mill village. Multi-family, medium density, and low density housing types are all found in the village, and the mill buildings are still home to light industrial uses. While Orchard Hill Farm is still active, substantial portions of the larger residential parcels have become forested. Significant amounts of forested and non-forested wetlands are present, primarily downstream from the dam. Commercial activity is non-existent off the mill property, which is the only non-residential destination. Outdoor recreation along the river is common, but access points are elsewhere in town.

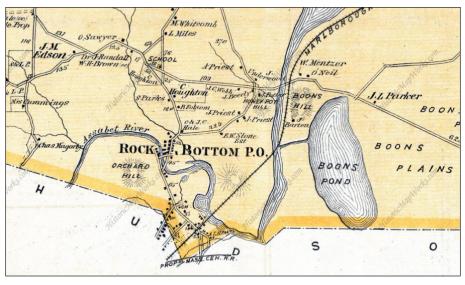


Figure 4: detail from F.W. Beers' Atlas of Middlesex County. 1875. Credit: Historic Map Works.com.

In January 2013, preliminary changes to the federal Flood Insurance Rate Maps (FIRMs) of June 2010 were made available. Comparing the 2013 and 2010 FIRMs, the most significant change is to the Assabet River's floodway, which is noticeably larger in the 2013 FIRM. It is important to note, however, that the floodway boundary at the mill site no longer includes a large portion of the Fahey Building (Figure 5, below). Instead, the building is within the Special Flood Hazard Area, which is subject to flooding by the 1% annual chance flood (FEMA 2013).

In addition to the expansion of the floodway, many moderate-risk or low-risk areas were upgraded to high-risk areas. Much of what had been Zone X (0.2 percent annual chance of flooding) was reclassified as Zone AE, within reach of a 1 percent annual chance flood, and termed "high-risk." For some property owners in the reclassified areas, particularly those just south of the Assabet on the east side of Gleasondale Road, and those along Railroad Avenue or Marlborough Street, purchasing flood insurance policies may become mandatory.

#### » ZONING

Stow's zoning is straightforward, with only seven districts. The majority of the town is zoned for Recreation/Conservation or Residential use, with pockets of Industrial zoning in the north, south, and western edges of the town. A few small sites are zoned for Business, Commerce, or Compact Business, and another section, Refuse Disposal, is lightly used (Stow Planning, 2010b).

The Gleasondale project area includes three zoning districts: Industrial, Recreation/ Conservation, and Residential. The area of Gleasondale that is zoned Industrial includes the mill site, but also the entirety of the Orchard Hill Farm, which is currently classified as agricultural under Chapter 61A, a state program which provides preferential tax treatment to landowners who maintain property in agricultural production (Stow Planning, 2010c). Remarkably, this is one of three tracts zoned Industrial in Stow: while it made sense that the mills had this designation, it was less clear why the farm did as well. One unofficial recollection held that when the town was required by state officials to provide land zoned for industrial use (or risk losing vital state funding), the town selected parcels that could be effectively landlocked to ensure development control was not lost.

The Industrial zoned area of Gleasondale is also a "Wireless Service Facility Overlay", one of several in the town (Stow Planning, 2010b). There is a cell tower on the mill site, projecting from the old boiler stack attached to the southernmost mill structure. The

wireless facility operates under a special permit that must be renewed every 3 years.

All of the residences along Gleasondale Road are zoned fully or partially Residential. Many have a portion of their land, or even their structure, within the Recreation/ Conservation zoning which in this area encompasses the course of the Assabet River and some of its floodplain. The Recreation/Conservation zone does permit structures, but not dwellings. A 14-acre parcel at the intersection of Marlboro and Gleasondale roads is primarily within this zoning district, and the town received inquiries from a number of groups prior to its sale this year. The home on the site is a pre-existing, non-conforming use.

Residential districts are intended for "typical rural, single-family residential and non-commercial uses." However, permitted uses include small boarding homes, home occupations, bed and breakfasts, and nursing homes, with additional limitations on structure placement. By special permit, accessory apartments and duplexes are allowed (Town of Stow 2011). Industrial districts are for "research laboratories, office buildings, and selected light industries." By right uses are limited: conservation and agricultural business activities, childcare, or light industry and business (if the facility is under

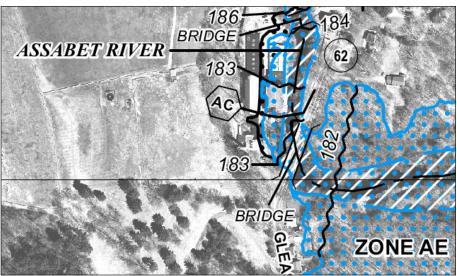


Figure 5: detail from FEMA map distinguishing floodway (white stripe), 1% flood area (blue dots), and 0.2% flood area (black dots), Most of Fahey building is outside floodway, but within 1% area. Credit: FEMA, 2013.

1,500 square feet, with parking in rear, and 50 percent open space). Any change to Gleasondale Mill most likely will require a special permit (Town of Stow 2011).

#### » HIGHWAY CONDITIONS

Massachusetts Route 62 is an 82-mile east-west route, which extends from the town of Barre in the west to the city of Beverly in the east. It proceeds through Hudson Center to Stow, where it travels northerly through Gleasondale, as Gleasondale Road. Route 62 continues to Maynard Center via a concurrency at Great Road with Stow's other state route, Route 117. At the intersection of Gleasondale Road and Great Road, connections with I-495 lie 7.4 miles south (in Berlin), and 5.0 miles west (in Bolton).

According to the Massachusetts Department of Transportation (MassDOT), Route 62 in Stow is a "city or town accepted road," and is not under MassDOT jurisdiction. Significant exceptions are the bridges crossing the Assabet River and Elizabeth Brook, which remain under state control. MassDOT classifies the Gleasondale Road stretch of Route 62 as a "principal arterial." This designation describes roads that "provide the highest level of mobility at the greatest vehicular speed for the longest uninterrupted distances." However, this roadway is classified by the United States Department of Transportation as a "minor arterial," and is therefore not part of the National Highway System. As such, it is only eligible to receive federal funding through the Surface Transportation Program (MassDOT 2012).

In Gleasondale, the section of Route 62 is a 24-foot wide, two-lane road of bituminous concrete in what MassDOT terms "good" condition. The right of way is 45 feet. Annual averages for daily traffic along Route 62 in Hudson at the Stow town line were obtained for three of the ten years between 2000 and 2009. The average daily traffic (ADT) was highest in 2005, with a count of 5,800. The most recent measurements, taken in 2008 were also the lowest, with an ADT of 5,000. Truck traffic accounted for two percent of that total, or 100 per day (MassDOT 2009).

#### **Overview of the Mill**

#### » LOCATION

Gleasondale Industrial Park sits at the foot of Orchard Hill in Stow, along the western bank of the Assabet River. The lot is 4.54 acres, extending from a point just upstream from the dam south to Gleasondale Road. The buildings are clustered on the southern

end of the parcel, and the northern portion is largely set aside for parking. The Assabet River bounds the parcel's eastern edge, and the hydropower canal that fed the mills runs along much of the western edge. Some of Stow's largest tourist attractions lie just one mile from the mills: to the north is Stow Acres Country Club, and to the east is Honey Pot Hill Orchards.

#### » HISTORY

Gleasondale has hosted water-powered businesses since its pre-Revolutionary War days, and the varying eras of mill production have overlapped one another at this site ever since. A natural falls in the Assabet River's course at this location first attracted sawmills and gristmills in the 18th century, one of which remained active until the 1850s. These saw and gristmills coexisted with the site's first cotton-spinning mill, a 3.5-story structure built in 1813, just north of the current site (Hurd 1890, 658). This mill, last used as a storage facility in 1932, housed the Rock Bottom Cotton and Woolen Company: this is thought to represent the first reference to the area by its former name, Rock Bottom (Crowell, 56). Operations were shifted to the current site in the 1830s, after a new ownership group, operating as the Rock Bottom Company, built a new dam and mill facilities for the woolen cloth trade. This entity was acquired by Benjamin Gleason and Samuel Dale in 1849, and continued operating until destroyed by fire in 1852 (Hurd 658). Still in use today is the mill built in the aftermath of that fire. Additional improvements were made to the site, including the 1883 construction of the site's granite dam to replace the one built in the 1830s (PAST 2011b).

The oldest structure on site is the former Gleasondale Company woolen mill (the "Lazott building"), a 4.5-story brick structure built in 1854 and expanded over the years. The structure's granite lintels, slate shingles, and gabled roof, capped by a distinct belfry at its northern end, are reminiscent of the Greek Revival style popular in the early era of mill architecture (PAST 2011a, 15). A wooden-frame building was built into the hillside directly to the west in 1864, and stands unused today. In 1919, another structure (the "Fahey building") was built just east of the original mill, which is also still in use. A four-story, square-framed brick building with a flat roof, its design and scale are characteristic of industrial structures built in the early twentieth century. One structure, across the canal and in the northwestern corner of the property, is a modular structure of more recent construction. It is not a part of the mill's operations, and does not appear on the Town's Assessors Database.

Each of the main structures has been expanded in a north-south direction, adding additional square footage. A large smokestack now sits at the southern end of the

Lazott building, and is one of the site's most recognizable features. The Fahey building was extended northwards, with metal and concrete materials.

#### » SQUARE FOOTAGE / ASSESSED VALUE

The two buildings in active use today are sizeable structures. The Lazott building has a footprint of approximately 19,546 square feet. The Fahey building has a footprint of approximately 14,784 square feet. The combined total of 33,330 square feet covers 17.36 percent of the property. The Lazott building provides approximately 52,900 square feet, and the Fahey building houses nearly 35,900 square feet of floor space. The FY2013 assessment of the parcel is a total of \$1,741,100: \$483,200 for the land, and \$1,257,900 for the buildings (Stow Assessors, 2013).

#### » SERVICES / CODE

The mill's electricity is provided by the Hudson Light and Power Department, a municipally owned, not-for-profit corporation in the neighboring town. Natural gas is provided by NStar, and fiber-optic cable is provided by Verizon. A 15,000-gallon holding tank was installed by to handle sanitary sewage in 1983. It was designed to accommodate the daily needs of 200 employees, at 15 gallons per person per day, with a tank capacity five times the anticipated daily flow (Veo 1983). The tank is accessed by a gravity sewer from the Lazott building, and a force main from the Fahey building (Veo).

Water is drawn from a bedrock well adjacent to the Lazott building, and pumped to a cistern atop Orchard Hill; this provides the water pressure necessary for the plumbing and sprinkler system to function. The sprinkler system has been maintained and inspected as necessary, and all structures have been fitted with appropriate exit signage and provide tenants with two means of egress (site visit 2013).

#### » BROWNFIELDS

In July of 1988, the Massachusetts Department of Environmental Protection (MassDEP) received two reports of a contaminated on-site water supply well at the Fahey building (Thuraisingham 1989). The contaminants, determined to include volatile organic compunds (VOCs), chlorinated solvents, and oils, required immediate

remediation efforts. As the site had the potential to affect a public water supply, it was classified as Tier 1A, or a "Priority Disposal Site" (Benoit 1994). In January of 1999, in a letter to the MassDEP, the Licensed Site Professional assigned to oversee the site's cleanup wrote that "it is important to note that VOC concentrations at both well locations have decreased significantly since the contamination was first discovered" (D'Amore 1999, 1).

Later that year, as a result of long-term cleanup efforts, the site was granted Class C Response Action Outcome (RAO) status. The status indicates that a site is no longer a substantial hazard, but that it is not yet at the desired level of "no significant risk." Sites with no significant risk require no additional activity, and Class C RAO sites are reevaluated at five-year intervals to determine whether this has been achieved (MassDEP 2013). At the Fahey site, the cleanup efforts transitioned to semi-annual samplings of monitoring wells and soil borings on the northern side of the building, and the sampling of the nearby private wells (D'Amore 2005, 2). Sites with a Class C RAO are re-evaluated at five-year intervals to determine if any additional efforts are necessary (MassDEP 2013). At this time, the DEP has imposed no limitations on the site's use, and the cleanup is considered complete. However, no documents have been added to the site's online dossier since 2005, and it is unclear if this is the result of a backlog, an oversight, or a resolution.

#### » CURRENT TENANTS

The mills are currently home to a number of enterprises, nearly all of which are independently operated. Tenants in the Lazott building are engaged in printing, artisanal woodworking, product warehousing/distribution, and antique storage. The Fahey building is entirely occupied by various woodworking operations: furniture refinishing, cabinetry, engraving, millwork, and trade show/exhibit display construction.



### III. ASSESSMENT

After reviewing relevant documents and resources, conducting site visits, meeting with clients, and contacting professionals and stakeholders, six major issues emerged as impediments to Gleasondale's revitalization. The recommendations that follow in the Implementation section are intended to address the issues identified here.

#### Many Parts, Unknown Sum

Along with the "established" farming, industrial, and residential presences in Gleasondale, less-obvious interests are pursued here. River enthusiasts put in or portage here on their way to Maynard, dog walkers use the open space at the mill to get outdoors with their pets, and photographers find dozens of vantage points to capture images of the mills, the dam and canal, the river, and the village. The Historical Commission recently submitted a number of documents inventorying Gleasondale's heritage to the Massachusetts Historical Commission, and within the past few years OARS has undertaken a number of initiatives to study and improve the conditions of the Assabet in and around Gleasondale. However, there is no committee or advocacy group representing Gleasondale as a whole. As a result, groups and individuals have no platform for finding common causes, recognizing shared challenges, avoiding potential conflicts, generating additional interest among like-minded parties, or demonstrating community investment to skeptics.

#### Illegible Identity and Wayfinding

Gleasondale is distinct, but it is also nearly anonymous. A motorist passing through the village would certainly notice the unusual juxtaposition of mills, wetlands, and farms directly surrounding the village center. However, the village seems to appear without

warning: there are no signs indicating the upcoming presence of a historic district or town village, no symbols or images to convey consistency and identity among the hardscape features, no traffic measures to slow automobiles down, no obvious places to pull over and explore, and no clearly public space to spend time with others. Gleasondale's mix of industry and agriculture is unique. Without taking steps to make its identity legible, it will be difficult for the town to attract interest to the village's potential.

#### **Limited Vehicular Access**

If the mills are central to the revitalization of Gleasondale, one of the most important issues to resolve pertains to site access and rights of way. With only one point for vehicular ingress and egress, efforts to substantially increase commercial, residential, and social activity at the mills are unlikely to move beyond conceptual stages. Without meeting established standards from the American Association of State Highway and Transportation Officials (AASHTO), access routes will be unable to handle the transportation needs that redevelopment creates.

#### **Inadequate Infrastructure**

Gleasondale's development potential is hampered by the lack of water and sewer service to the village. A number of potential uses for mill's structures are not feasible without the "industry standard" water and wastewater systems required for modern methods of production and mixed-use development. The existing installation is adequate for the current conditions and modestly increased use, but is not capable of accommodating the best use of the site.

#### **Weak Connections Beyond the Village**

Although Gleasondale is within one mile of the golf courses and orchards for which Stow is most well known, along the rail trail that links the communities of the Assabet River upstream and downstream, it does not benefit from their presence. However, it can also be said that Gleasondale does not contribute to their successes. Without forming tangible connections to the established attractions nearby, the village will be unable to enjoy and provide the co-benefits that would result. These connections will raise interest in Gleasondale and its revitalization efforts, and could pave the way for valuable partnerships in Stow and neighboring communities.

#### Lack of Dialogue among Neighbors

Gleasondale's remarkable character is due in part to the limited development the mill site has seen in recent decades. Complicated issues pertaining to property ownership, tenant rights, rights of way, lease agreements, and vehicular access have contributed to the long-term policy of maintaining the status quo at the mills. In such a situation, the lack of established channels for communication can prevent parties from finding ways to overcome the inertia that has set in. Getting the village's residents, employers, workers, and property owners interested in the possibility of working towards mutually beneficial goals begins with facilitating open-ended dialogue.

### IV. IMPLEMENTATION

The six issues identified in the Assessment section can be addressed in a number of ways. The Implementation section of this report includes recommendations for the town and village in general, along with mill-specific initiatives. They are meant to be consistent with the characteristics of Stow and Gleasondale, and present a cohesive vision for residents to consider.

#### **Town and Village Actions**

#### 1. FORM NEIGHBORHOOD COMMITTEE

Stow should consider developing a Neighborhood Committee for Gleasondale. The Village could greatly benefit from active community engagement and investment within the village area. A Neighborhood Committee would provide Gleasondale's residents with an avenue for participation in the preservation and design initiatives proposed below. As a result, the Village's residents would be able to work with the Town to shape the specifics of any revitalization efforts in Gleasondale.

As the southernmost village and Stow's most thickly-settled area, Gleasondale holds unique attributes and characteristics – many of which can be celebrated and enhanced through defining community borders and developing a Gleasondale Neighborhood Committee. Gleasondale holds strong historical content with manufacturing ties dating back to the colonial era, apple orchards, and a diverse housing stock.

The purpose of a Neighborhood Committee for Gleasondale is to generate community interest, participation, and engagement. The Neighborhood Committee would be a collaborative group of active citizens and perhaps include existing committee board members. The Neighborhood Committee would work actively with existing boards to develop methods of further community development for the Gleasondale village.

The village committee could also partner with the historical committee and provide walking tours of the Gleasondale Village.

The Gleasondale Neighborhood Committee could essentially be a combination of the three committees identified on the next page, or operate as separate smaller groups within the Neighborhood Committee. There is room for growth and opportunity in history, promotion and design. The Neighborhood Committee would have the ability to educate the public regarding Stow's history, which may include walking tours, preserving and displaying archival items and artifacts and sharing historic photos. The promotion component of the committee would develop and implement events that would draw both locals and visitors to the Gleasondale Village. The design component of the committee would address signage, aesthetics, and advocate for increasingly navigable streets for the Gleasondale Village. Goals:

#### 2. INITIATE FORMAL TOWN / VILLAGE COLLABORATION

Stow should consider hosting an annual or semi-annual "All-Boards Meetings" in order to foster effective communication amongst board members, community members and citizens. Each meeting would connect the members of several board groups, and create an open line of communication to address questions, comments and concerns, new information, and solidify the direction in which the town is headed in terms of planning for the future. Stow could benefit from holding all-boards meetings(s) either annually or semi-annually with Gleasondale. All-boards serve as a gateway for communication, information sharing and foster progress within the town.

The town would especially benefit from holding such meetings with all of the boards, including the Neighborhood Committee discussed above. The Neighborhood Committee would be able to work with the existing boards to discuss its framework in regards to fundraising, generating participation and community engagement, and discussing community needs and direction. An all-boards meeting is an effective way

Village History Committee	Village Promotion Committee	Village Design Committee
MISSION STATEMENT	MISSION STATEMENT	MISSION STATEMENT
To educate the public and preserve the history of Gleasondale.	To promote and enhance Gleasondale for the benefit of the businesses and residents of the town and surrounding communities. The committee creates, plans and produces events that bring visitors to Gleasondale, as well as events that are for to the Stow community.	To be a catalyst and change agent, shaping the physical image of Route 62 in Gleasondale. The committee makes the village an inviting, comfortable, safe and environmentally friendly place to attract residents, investors, businesses and visitors.
GOALS	GOALS	GOALS
Conduct downtown historic walking tours, school field trips, and other events.  Facilitate the preservation and restoration of the historic buildings in Gleasondale, along with other structures and materials, through education and public outreach.  Make historic photographs and other memorabilia available to the public.  Create keepsake holiday ornaments depicting historic points of interest.	Bring stability to the merchant and shopping community within Gleasondale.  Plan and produce events that will bring people into the community from a larger demographic area.  Enhance current events and recruit more active members to the Promotions/Events Committee.	Assist in planning the development of downtown-guiding future growth, shaping regulations and supporting art in public and private spaces.  Educate the community about good design and its role in enhancing the image of each business as well as the whole district.  Provide good design advice and encourage downtown improvements through incentive programs as well as partnering with other civic organizations.

to bring the town members together to gather discuss and plan ahead. These meetings would take place as often as desired, but once or twice a year may be sufficient.

The City of Marlborough currently holds all-boards meetings. Attendees are provided with an organized agenda and order of events, color-coded index cards distributed for committee-specific questions and comments, and a list of topics which will be addressed, including "Status Updates from Boards and Commissions."

#### 3. PURSUE NATIONAL REGISTER LISTING

Stow's historic commission has expressed an interest in designating the village of Gleasondale as a state and national historic district. The advantages of doing a historical survey to incorporate Gleasondale into the historical registers are numerous, including the possibility of reduced taxes, protection from future development, and the ability of the town to preserve the homes and other buildings as they were originally built. It is important that the historical protection district that would lie over the village is not so strict as to prevent new development or create a hassle for residents of the district in maintaining their homes, but is one that preserves the history and character of the village.

Some towns in Massachusetts, Concord and Deerfield, for example, have extremely strict historic protection districts. These towns require owners to come before the historic commission for every change made to their property or building, such as re-siding a home or changing the landscaping in the front yard. The chair of Stow's Historic Commission pointed out that many of the Gleasondale residents were nervous about making the village a historic district, on account of the experiences people have had in the nearby town of Concord (Spaulding 2013). While Concord's bylaws are particularly exacting, some municipalities have taken care to establish rules and regulations for historic districts that provide flexibility for residents. For example, the Historic District Commission in the neighboring Town of Acton identifies several exterior changes that properties in the district can undergo without Commission approval. Included in this list are the addition or removal of flags and flagpoles; exterior painting; landscaping projects; and the placement of outdoor furniture and temporary play structures (Acton 2009, 1). The Neighborhood Committee proposed above would be able to provide the Town with residential input into the specifics of any historic designation and preservation bylaws Stow might consider.

As this document suggests, Gleasondale has the potential to develop in a number of ways, and some are more preferable than others. Any commission created in concert

with the establishment of a Historic District could be an educational resource for residents. The commission could be a forum for considering additional preservation elements, such as the passage of a demolition delay bylaw. While such a bylaw is not being proposed here, Village residents may find it helpful in adding some stability to the potentially rapid changes that could arise as revitalization efforts grow.

#### 4. ESTABLISH DESIGN PRINCIPLES

Stow should ensure that design principles for the millyard contribute to a consistent high-quality streetscape and built environment throughout the village (Figure 7 illustrates the lack of same). Any design guidelines or principles would need to be consistent with existing guidelines in Stow, although they do not need to be the same. In 2011, Stow's Lower Village Sub-Committee produced recommendations and guidelines to "create an identity and improve pedestrian and traffic circulation" (Stow Lower Village, 1). This process would be an excellent template for Gleasondale. These guidelines should be coordinated with design principles for the millyard, conceived as a privately-owned space served by a public road and enlivened by public uses. The streetscape designed for the Lower Village is consistent with the town's agricultural roots. Gleasondale's design standards, then, might convey a blend of the agricultural



Figure 7: in the millyard, facing south. Credit: Jennifer Stromsten, 2013.

and mechanical, celebrating the river's beauty today and its role in the village's industrial era.

There are a number of notable architectural inspirations to draw from in Gleasondale, including the church at the southern end of the village, the mills themselves, the mill housing, and some remarkable farmhouses (PAST 2011a). With the completion of the state historical survey there is ample material to draw upon, and skilled designers will be able to assist residents in identifying visual components that highlight important features. Design principles are not meant to subtly "enforce" town bylaws or historic districts. In fact, the Neighborhood Committee described above would have a significant role to play in identifying preferences within the Village, which would have an impact on both the content of any design principles, and the nature of preservation initiatives.

Some tools to enact design principles include zoning, and possible design guidelines. Chapter Four of the 2010 Master Plan refers to a possible mixed use overlay district for Gleasondale (Stow Planning 2010a, 74). Such a district establishes guidelines that the town, as well as any developer, would follow. There are other methods, such as agreement between town and developer. For instance, the town may require the mill site to include certain design features in exchange for assistance in securing funding for improvements. Since we propose a site with ample public use, a number of resources are available, including funds from the Community Preservation Act, and grants from the Department of Conservation and Recreation. Or, the town could strike a deal in which a commitment to carry design upgrades throughout the village is offered in exchange for the developer taking care of on-site improvements.

Stow should pay particular attention to streetscape design principles, to calm traffic making its way through Gleasondale. Design guidelines will contribute to a sense of place in Gleasondale, adding to the 'wayfinding' that creative signage at the village gateways will establish. Stow should consider having the wayfinding and design guidelines developed in unison. Some key elements may include:

- Street lights to add pedestrian safety, with a design consistent with era of the older mill building perhaps
- The use of other architectural elements in roadway upgrades such as brick crosswalks to add visibility and safety and echo the mill buildings throughout the village
- Signage that is consistent throughout the village and builds on its function as a crossroads - for trails, rural roads, and the river

Finally, if access to the mill is restored via a loop through the mill and across the river, Rockbottom Road may need to be restored to a public way. In that case, the streetscape improvements for Route 62 through the village should be extended to Rockbottom Road, as well.

#### 5. CALL FOR ARCHITECTURAL SUBMISSIONS

One idea for drawing attention to the future of the mill would be to host a design competition. An open design competition would invite a broad range of interpretive skills to help the community envision how the mill might look with retail, housing, or hotel space. The resulting images will help to provoke conversations about the future of the Mill and the goals for shaping the future of Gleasondale Village. The design challenge could be structured to address issues of sustainability through creative reuse, water conservation, permeable pavements and the integration of renewable energy sources such as hydropower and day lighting. Landscaping elements should address river access, a pedestrian bridge and canoe launch. Design submissions will further engage the interests of the town and the village in what is being planned for the mill. The culminating event for the design competition would be a public charrette, held at the mill, for the public to view the facilities and offer input.

#### 6. CONDUCT DESIGN CHARRETTE

Working with mill owners, town officials, and village residents, organize a public charrette within the mill complex where the public can come to view design entries and participate in conversations about the mill. This open house may be the first opportunity that most members of the community have ever had to enter the mill. A great deal of thought should be put into the selection of the public event space and what additional spaces might be open to the public; such as the elevator, or wood shops. Not unlike a gallery opening, this should be a well-publicized event hosted by Stow and the mill owners. There should be food and beverages as well as opportunities to participate in the future planning of Gleasondale. This may be a good venue to propose the formation of a Neighborhood Committee for Gleasondale. Create interactive displays, maps and visuals that invite public input for what they may have envisioned for the mill. This event should be held at a time when families can attend and engagement should be directed at all levels of participation.

#### 7. OPEN DIALOGUE BETWEEN MILL AND NEIGHBORS

Conversations with the Mill owners and the abutting land owners have revealed the need for further discussion. Until recently the interests of abutters and the future plans of Mill owners have been purely speculative; limited by assumptions about ownership, lease agreements, or perceived obstacles to development. Every effort should be made to involve interested parties in an ongoing dialogue about the current configuration of Mill ownership, and the shared desire to resolve obstacles to mill redevelopment. Questions to be answered include:

- What are the lease agreements in regard to the chimney that supports the cell towers; how were those arrangements made; are taxes being paid and by whom?
- Who owns the modular unit in the parking lot; what is the lease agreement; are taxes being paid and by whom?
- Are there financial obligations, debts, or liens that could interfere with the sale of the mill?
- What is the hydraulic potential of the mill?
- How could the farm play a role in resolving water and septic system concerns at the mill?

#### 8. Develop utility connections

The village of Gleasondale and the mill site in particular need to improve their water delivery system and create a sewer system for the area. Most of Gleasondale's properties have septic systems, but the mill site's system is not sufficient because of the high water table and the proximity to the river. As the mill currently stands, both the water and sewer systems need to be improved. Once the mill buildings are being used for other purposes, the need will be even greater. The possibility to connect either the mill site or the entire village to the neighboring town of Hudson was brought up during discussions, but Stow's planners explained that Hudson's systems are both almost at capacity. One possible solution to both towns' problems is to share the underground aquifer that is owned by Stow in Gleasondale. Stow's planners have expressed that is may be a possibility to share this water supply with Hudson if they share some of their sewer capacity. This would be an almost even trade-off for both towns, helping each where they need it. The creation of a Regional Water Authority may be helpful for communities attempting to provide "municipal" services at a village-scale, enabling neighboring towns to share services. Please see Appendix C for relevant case studies.

#### $9.\,$ connect gleasondale to orchards and rail trail

Stow should continue discussions with the property owners who control the unfinished portions of the Assabet Rail Trail. The trail is an important regional asset. Gleasondale includes and is adjacent to many of the area's treasured resources (see Figure 8 below). Regional support for conservation, rather than an emphasis on development as one finds in Hudson and Marlborough, is going to depend upon these assets being available to the region's residents. The Rail Trail is an important connection through the Gleasondale Village area. A mechanism to complete the Assabet Rail Trail connection through the orchard can be devised in such a way that it also furthers the goal of supporting one of Stow's last remaining historic apple orchards, but the town will need to lead the way to ensure agricultural preservation is a part of a trail solution. However, taking this approach would bring into the equation farm preservation funding possibilities, such as the state's APR program as well as private land trust support, in order to compensate the farmer for any possible loss or inconvenience.

The rail trail would be one of several multi-modal routes that come together to make Gleasondale a crossroads. The others are the rural roads on which the historic orchards are located, and the Assabet River. The two parties engaged in trail development are



Figure 8: the gateway to Gleasondale, adjacent to apples. Credit: Anita Lockesmith, 2013.

the Assabet Rail Trail Organization, and Stow's own Multi-Use Track Committee, which has recently been successful in opening a new stretch of trail. Stow should reopen discussions with the Assabet Rail Trail group, with focus on creating a solution as soon as possible to form a connection, even if the mechanism for doing so is not the preferred ownership model for the Rail Trail organizations. The town and Multi-Use Track Committee could be instrumental in creating a framework that would alleviate the orchard owners' concerns, including seeking funding for protective fencing to prevent trail-users from entering the orchards or the use of APR to compensate the orchard owner for the loss of a buffer strip of productive land. The Rail Trail is not incomplete due to funding issues, and the Assabet Rail Trail group is generally responsible for trail funding and implementation.

A second option to consider is a "street-portage" along Gleasondale and Sudbury roads that bypasses the orchard. This approach would require the designation of bicycle lanes, which may necessitate road widening along portions of Route 62. As a town-controlled route, however, this is not outside the realm of possibility. One valuable outcome of this option is traffic calming through Gleasondale. Not only would the speed limit be lowered for transportation safety, a painted strip on the side of the road for cyclists would advertise Gleasondale's role as a multi-modal transportation center, as well. Even without bikes on the road, the lane would become part of the village's identity, and encourage motorists to slow down as they approach.

#### $10.\,$ create and promote a tool kit for mill redevelopment

In order to generate interest in the redevelopment of the Gleasondale Industrial Park, Stow should develop a Tool Kit for Redevelopment. The Tool Kit's purpose is twofold. First, it itemizes the issues of primary importance to developers, investors, tenants, and residents. Second, it serves as a platform for the Town to articulate its vision for the Mill, and its role as both a partner and stakeholder in the Village. The following is a list of 14 points the Town could make with the Tool Kit to define the site and Stow's vision for it (some of these are discussed in the next section of the report):

- The mill's brownfield status has been stabilized, and is not expected to require any additional cleanup.
- The mill's zoning will be changed to allow for mixed use.
- There will be a second vehicular access point to the mill.
- There will be fully functioning water and sewer systems at the mill, and the Town of Stow is developing grant proposals to secure the necessary funding.

- The Town is willing to grant Tax Increment Financing to qualifying businesses.
- The Town is pursuing Village inclusion in the National Register, for developers to leverage Investment Tax Credit incentives.
- The Town will make a liquor license available for new development.
- The mill's parking lots will accommodate tourists on weekends in the fall.
- Portions of the mill's parking lots and first floor areas will be opened to pop-up markets during peak tourism seasons.
- The town will continue to partner with OARS to improve the quality of the Assabet River through Gleasondale, for recreation and for wildlife.
- The Town will agree to lease space at the mill for civic uses in the first few years of development.
- The Town will create an advisory committee specifically for the mill.
- The Planning Board will review potential development proposals prior to the filing of any official applications, to advise developers on potential issues.
- The Town will direct a portion of the tax revenue generated on the mill site to a fund dedicated to infrastructural improvements in Gleasondale.

#### 11. Apply for grants and form partnerships

Stow should apply for grants to help the Gleasondale village with improvement projects we have suggested. Although the town of Stow may not qualify for as many state or federal grants due to its size, it still can apply for funding from MassDOT, the US EPA, the US Department of the Interior, and other state and federal conservation and redevelopment agencies. As an example, the revitalization of Ludlow Mills utilized a significant amount of state and federal resources. Some of the grants that the Ludlow Mill project received that could be used in Stow are the state's Jobs Grant (now part of the MassWorks umbrella), Infrastructure Improvements grant, New Market Tax Credits from Mass Development, and funding from the US Economic Development Administration's Public Works and Economic Adjustment Assistance programs. Many of the suggestions that this project makes deal with improvements to the roads, buildings, and other infrastructure already in place. For example, MassDOT can help with roadway improvements and could possibly finance the construction of a bridge at Rockbottom Road. If this access drive is under private ownership, the MassDOT funds could provide a way for Stow to return the road to public use, and use the bridge as the second entrance/exit to the mill site.

The many potential state and federal grants that Stow could receive to help the Gleasondale Village and mill site redevelop will be helpful in the future sale of the mill site. If developers know that the town is willing to help write grant applications on behalf of both the mill site and the village as a whole, they may be more willing to buy the property or start a new business in the mill buildings. The writing of grant applications could be done by staff in the town or could be done by an outside party. Each of the infrastructure improvement proposals could cost a significant amount of money that the town and owners of the mill do not have. The opportunity to apply for grants to help with the redevelopment and growth of the study area is important asset for Stow. Please see Appendix C for some examples of successful partnerships and funding sources.

#### Mill Actions

#### 1. EXPLAIN STATUS OF BROWNFIELD

Stow should make clear the status of the mill site brownfields assessment. Any ambiguity can scare away investors, but in the case of the mills, that fear is unnecessary: the only site contamination was in drinking water from the on-site well. According to the DEP, the site is expected to eventually reach the level of "no significant risk," but requires monitoring at five-year intervals to determine when such classification is possible. For many mill redevelopment projects, contamination and cleanup is a part of the process. Gleasondale's status, as a completed project expected to reach a permanent cleanup outcome, should be promoted as an asset.

The contamination was originally understood to derive from underground storage tanks. Establishing an off-site source of drinking water for the mill site would further ensure that even if future testing reveals the presence of contaminants it will not be an issue. Another possibility is remediation, involving the removal of these tanks and extensive soil remediation. The possibility of encouraging new infiltration that might contaminate the drinking water for surrounding properties may have informed the decision not to pursue aggressive remediation in the past. The 2008 Master Plan states that the site is a potential "Brownfields Reclamation" project eligible for state funding.

It is likely that any potential buyer will find the assurance of the 21E process and current brownfields liability structure sufficient, as long as the history and current situation are clearly documented and understood. However, if there is reason to think that 'solving' the drinking water problem is preventing action on mill redevelopment, or is likely to pose problems in the future, then the town should become involved in

resolving this issue. Grants and technical assistance for brownfields remediation can be accessed through the regional planning agencies. One advantage of pursuing this route is that brownfields restoration funds can be used to accomplish significant site design and restoration work. It may be worthwhile to consider brownfields funding as the means to create the public access and portage amenities, as part of a larger Village Redevelopment Plan.

While not a contamination issue, the site does have other low-level environmental issues that should be addressed. From barrels of latex paint in the Lazott building, to air quality issues in the Fahey workshop, the mills convey a sense of environmental degradation, which may be worse than the invisible sources of past well contamination. Any redevelopment effort for this site will need to include a thoughtful approach to code enforcement, and perhaps some willingness on the part of the town to help with the problem solving needed to address some of the low-level environmental challenges that have accumulated over the years. Finally, it may not be worth pursuing brownfields funding simply because it might convey the sense that this property is more contaminated than it is. If target businesses are a boutique hotel or '19th hole' high-end restaurants, marketing this property may require sensitivity to perception.

#### $2.\,$ embrace potential for green and smart growth

As Stow embarks on additional plans to further develop its community, it is important for it to consider sustainability as a key component in its growth. Generating increased sustainability practices and planning for healthy and "green" communities is currently a key concern should be considered an area of interest for Stow. Sustainability will be beneficial for the town in many ways, improving the town's finances, and increasing the health and wellbeing of individuals and the community. There are a few steps that Stow can take now to establish itself as both a town and community that is truly invested in sustainability and Smart Growth.

Appendix E of Stow's 2010 Master Plan Update recommends the adoption of the Smart Growth principles promoted by the state, and Gleasondale is the town's best opportunity to demonstrate a commitment to these principles. The Commonwealth of Massachusetts defines Smart Growth as:

A principle of land development that emphasizes the mixing of land uses, increases the availability of a range of housing types in neighborhoods, takes advantage of compact design, fosters distinctive and attractive communities, preserves open space, farmland, natural beauty and critical environmental areas, strengthens existing

communities, provides a variety of transportation choices, makes development decisions predictable, fair and cost effective, and encourages community and stakeholder collaboration in development decisions.

Smart growth protects natural resources, enriches quality of life, develops housing choices, decreases energy consumption, and expands municipal finances by considering the location, design, and long-term costs of development. Stow may also consider investment in smart energy, which includes alternative energy sources such as photovoltaic panels, wind turbines, geothermal, biomass, and hydropower.

While rules governing the state's Green Communities incentives program prevent Stow from participating, the revitalization of Gleasondale can demonstrate that the town is an active change-agent working to curtail environmental hazards and prolong sustained environmental and human health and well being. One avenue is through the incorporation of green building benefits to new and existing development projects in Gleasondale. Green building provides opportunities to retrofit existing infrastructure, or build new systems, by reducing costs, energy use, and output. Green building is responsible for saving resources such as water and energy, and has also been shown to increase employee and resident satisfaction and productivity.

The Commonwealth of Massachusetts has developed ten Sustainable Development Principles to encourage responsible development decisions. The principles pertain to the promotion of "sustainable development through integrated energy and environment, housing and economic development, transportation, and other policies, programs, investments and regulations." Developing Gleasondale in accordance with the principles, listed below, would build strong connections between the commercial, industrial, residential, agricultural, and recreational interests in the village. Encouraging the development of each of these interests in ways compatible with the others generates cooperative buy-in from all the village's stakeholders, and makes Gleasondale's revitalization a priority for state funding.

- Concentrate Development and Mix Uses
- Advance Equity
- Make Efficient Decisions
- Protect Land and Ecosystems
- Use Natural Resources Wisely
- **Expand Housing Opportunities**
- Provide Transportation Choice

- Increase Job and Business Opportunities
- Promote Clean Energy
- Plan Regionally

There are also varied options for funding these sustainability initiatives, including funds provided from the Environmental Protection Agency. The EPA Building Blocks for Sustainable Communities provides swift technical assistance to select local governments using tools that have been used to generate successful outcomes in prior cases. Assistance and guidance is wide ranging - local governments may apply for tools through letters of interest for preferred growth areas to walking audits. Please see Appendix D for examples of mill revitalization efforts underway in Massachusetts.

#### DETERMINE CONDITIONS OF BRIDGE AND RIGHT OF WAY

One of the major obstacles to mill redevelopment is the need for a second access point through the mill site. Efforts to address this issue in the past have fallen short of an actual solution. Most conversations about reopening or use of the bridge lead back to the opposition of property owners situated at the north end of the bridge. Attempts to



Figure 9: an intact belt drive in the Lazott Building, Credit: Jennifer Stromsten, 2013.

use the bridge in the past (to run power lines up to Orchard Hill Farm) resulted in a more expensive process of permitting a secondary 'utility access' road behind the mill. The utility road that was built for that project belongs to Orchard Hill Farm and is currently gated and unused.

Two potential solutions for a second egress reside with the owner of Orchard Hill Farm, and the property owners at the base of Rockbottom Road. A third option would be an alternate crossing by the former general store on Gleasondale Road, which would meet AASHTO standards. Each option requires the Town to negotiate with private landowners, but to varying degrees. In the case of the third option, any proposal to create a new crossing could be part of a larger effort to return the former general store property, currently zoned for industry, to some form of commercial activity.

Stow needs to conduct a full assessment of the 'pedestrian' bridge to determine the current condition as well as the cost to fix, remove or relocate the structure. Every effort to address the feasibility of reopening or relocating access to the mill via a bridge from Gleasondale Road must be explored in preparation of future development. The resolution of this obstacle will bring Stow one step closer to realizing the economic development potential of the Gleasondale Mill, as well as opening up connections to the neighborhood, encouraging public access and the use of the Gleasondale site for recreational purposes.

#### 4. DAM STATUS AND RESTORATION

Stow should commit to keeping the dam, and work with the regulatory agency (the Massachusetts Department of Conservation and Recreation Office of Dam Safety) to determine the best use of it. From the resident responses to the US Army Corps of Engineers' Sediment and Dam Removal Feasibility Study for the Assabet River, it is clear that there is little local support for removing the dam. The study itself did not place high priority on removing the Gleasondale dam. In fact, it raises the issue of its historic value and recommends placing it on the national historic register. Given these factors, and the fact that this dam does not fall within the regulatory sphere of the Federal Energy Regulatory Commission (FERC), it is up to the town to take the lead. Otherwise, the next owners of the mill will be the ones to determine the fate of the dam, as it is currently part of the Lazott trust holdings.

Stow should first consider whether the town would like to allow this asset to be completely under private control. The mills offer a sober example of how ownership, capacity, and control issues affecting all of the utility services (and a key revenue stream

in the cell tower) can create roadblocks to redevelopment. Options may include a right of first refusal for dam ownership in the case of Lazott's sale of the mill property, or an outright bid to purchase in the near future. Whatever the decision, the town needs to gain some sense of what to do with the dam. There are two areas to be explored. First, what is the town's role, if any, in permitting activities regarding the dam? Second, what is the feasibility of this dam for hydropower generation? The two questions are related, and the second may have major bearing on the economic viability of the mill property.

To encourage mixed-use, high-end but low-impact uses on the mill site, an additional revenue stream or subsidy would be extremely valuable. Therefore, Stow should commission a feasibility study of the dam to determine the viability of hydropower. Renewable energy can help make it profitable for developers to pursue the rehabilitation and maintenance of historic buildings.

To pursue this feasibility study, the town of Stow may need technical assistance to determine the regulatory issues. Returning the dam to active hydropower production would require obtaining a license from FERC, and would place the dam under FERC jurisdiction. MassWorks provides technical assistance funding, but the MAPC may also have the ability to do this work. Funding sources may include historic preservation funds if the dam is registered as historic, although it's important to be sure such status



Figure 10: shop space in the Fahey Building.. Credit: Jennifer Stromsten, 2013.

won't complicate potential hydropower redevelopment. There are micro-hydropower projects being funded by the US Department of Energy as well as the US Department of Agriculture, which provides grants as well as loans, and the Massachusetts Renewable Energy Trust has funded small hydro projects, as well (HydroWorld 2009). Ownership and control of the dam would need to be established before any funding was pursued, and so at this time the feasibility study is the first step.

#### 5. PROVIDE SPACE FOR ARTISANAL WOODWORKERS' COLLECTIVE

Among the established businesses utilizing the Gleasondale Mill, Scotia Woodworking has been in business the longest, at nearly twenty years. They have also been the most stable and viable source of revenue for the mills, which are home to a number of woodworking enterprises (see Figure 10, previous page). Any redevelopment scenarios at the mill should take into consideration the value of the woodworking 'cluster.' It would be useful for Stow officials to approach Scotia Woodworkers to get a sense of the future potential of this industry, and whether they expect to expand, contract, or remain the same in the next 5 to 15 years. That information is necessary for determining whether or not to support industry specific infrastructure upgrades or the devolution of the woodworking industry in Gleasondale.

- Open conversations with the owner of Scotia Woodworkers and other wood industries currently in the mill.
- Establish their interest in expanding production or forming a woodworkers 'cluster' or 'co-op', that could become a central focus of the mill
- Is there market interest or value in bringing in additional custom woodworkers or artisan furniture makers?
- Establish what kinds of infrastructure would help them expand productivity or support future viability of the industry.
- Would the woodworkers consider moving into one of the mill buildings to streamline a state-of-the-art woodworkers collaborative?
- Are there economic or technologic advantages of shared resources not available to individual business owners?

#### PERFORMANCE STANDARDS FOR INDUSTRY IN ZONING BYLAW

If the mill site keeps the woodworking cluster in the mill buildings, the Town needs to add performance standards to their zoning bylaw to ensure that the industry does not affect the residential areas that are in place now and could be built in the future. Some common elements to performance standards are protection from lighting, odors, noise, vibrations, visual interruptions, wastes, and pollutants being released into the air. The town could also add landscaping specifically aimed at the industrial development that would further block any other type of disturbance from affecting the homes. Although the wood working cluster is currently not affecting the residential areas around it, if another type of industry came into the mill site, the effects could be much different. The mill area is zoned industrial, so a multitude of uses could be allowed to move into the site. Protecting the Gleasondale homes and natural environment is important, and adding performance standards to Stow's zoning bylaw will help protect these in the future.

One example of simple performance standards can be found in the zoning bylaws of Harpswell, Maine. Here the town lists the specific industrial areas that are relevant and mention neighborhoods surrounding the area. Another example of performance standards that are slightly more involved can be seen in West Springfield, Massachusetts's zoning ordinance.

#### 7. OBTAIN DATA FOR MARKET ANALYSIS

Market data for the commercial activity within a 10-mile radius of Stow can be purchased from a number of research corporations, such as Caliper and ESRI. This would show the town, the village, and potential developers what types of commercial activities are already saturating the market, and what is missing. For example, residents were unable to think of a four-star hotel in the immediate vicinity of Stow. Therefore, the area may need a high-end hotel to serve corporate clients, golf enthusiasts, and guests attending weddings and receptions at the town's golf courses. Members of the Planning Board also expressed that there might be some support for a restaurant or bar in town, as residents need to travel outside of Stow when they want to go out for the night. When the data for all commercial activities is used, the town will be able to more accurately identify what is needed with hard numbers, not just opinions of observers and residents. Market data can show what types of hotels are in the area and can help to identify if the mill should be turned into a high-end location, or one which would be more affordable and attractive to tourists visiting for apple or golf season. With current and accurate data, feasibility studies will better help determine options appropriate for the mills and desirable for Stow.

#### UNDERTAKE FEASIBILITY STUDY FOR BOUTIQUE HOTEL

Stow should commission a feasibility study of the area to assess the market viability of a boutique hotel/ Inn and restaurant at the Gleasondale Mill. The unique New England

village qualities of Stow, its golf courses, its proximity to Boston, and the presence of the Bose facility could make a case for a boutique hotel in Gleasondale. Where does Bose send potential clients or consultants who need to visit Stow on business? Where do local professionals go to entertain new clients? What are the local options for hosting overnight guests in a uniquely spectacular mill setting?

One successful example is the Common Man Inn, in Claremont, NH. In 2008, the partners broke ground on a mill restoration project that promised to bring economic development and jobs into Claremont. In collaboration with local officials, state agencies, the Red River Computer Co. of Lebanon NH, and ReArch Co. of South Burlington VT, they proposed a vision for preserving the "defunct" mills located on the banks of the Sugar River. The Common Man Inn and Restaurant was constructed using LEED (Leadership in Energy and Environmental Design) industry standards, including the reuse of salvaged wood and materials from surrounding industrial sites. The architectural integrity highlighting the mills historic beauty in combination with applied 'green' principles has amplified the market interest and potential of these mills. The Common Man Inn offers uniquely fashioned rooms with views of the river, a popular full service restaurant and an event space, open seven days of the week.

#### 9. ENCOURAGE POP-UP MARKETS AND SEASONAL MARKETS

Pop-up markets are small businesses or vendors that are temporarily placed within a certain area or within a certain property for a limited amount of time to showcase and sell a product. Pop-up markets can add variety and excitement, complementing existing businesses rather than acting as existing business' competitors. Some pop-up markets are retail oriented, while others may sell products like food or specialty gifts. The markets can add a unique touch to Gleasondale, and can provide residents and visitors access to products they may not ordinarily have access to.

Seasonal pop-up markets could be set-up by the Gleasondale Mill on a flexible basis. Farmers' market stands, homemade apple pies, and specialty carved woodworking and furniture would all be possible vendors. The Town of Stow should consider utilizing pop-up markets as a tool to connect its assets, including the golf courses, apple orchards, and woodworking cluster. Pop-up markets are a flexible way to offer new and ever-changing shops and products to the community, and could introduce a new culture and character to the town.

#### 10. Enhance river portage

Stow has an opportunity to create connectivity between residents and visitors through its proximity to the Assabet River. While outdoor recreation along the river is common, access points are limited to certain areas within the town. Stow should consider developing a more widely accessible Assabet River access point in the form of a boat launch within Gleasondale in close proximity to the Gleasondale Mill Site.

Stow should ensure that the mill site offers safe access for boaters, and a comfortable portage around the Gleasondale dam. Stow residents have been valuable as advocates for the Assabet River, so it is fitting that they should lead the way in enhancing the recreational use of the Assabet here. The mills should offer amenities for those who have long enjoyed kayaking, canoeing, and fishing. Improving access here will enable the next generation to form connections with this region's natural resources. In the fight to improve the river's water quality, active recreational use is a valuable tool to raise awareness and expand the constituency willing to support investment in the regional infrastructure needed to protect the Assabet.

Several towns have created plans to develop portages along their neighboring rivers, all across Massachusetts. A new boat launch site or portage in Stow would greatly benefit community development and create increased opportunities to water access to residents and visitors alike.

#### 11. WELCOME CIVIC USES

Stow should ensure that the Gleasondale Mills provide opportunities for multiple civic uses – in the buildings, on the site land, and through access to the river. Civic uses in the buildings can be part of a strategy to enliven the site. For instance, a center for seniors or nursery school would create activity throughout the day and make the mills the heart of the village in a new way. A library, event space, or town offices (i.e., parks and recreation, conservation, or the historical society) would provide owners with a secure tenant, and draw town residents to the property. This will stabilize the property, and ensure exposure for the other mixed-use occupants, such as restaurant or retail.

Stow should take care to ensure that the civic uses of the mill property are well developed. The mill should offer access to the Assabet River in a manner that can serve a number of users. It would be valuable to examine the parks and recreation priorities and goals to assess which under-served populations might find their needs met by a well-designed riverside park at the mill. Currently, many people come to the mill site

to take a quick walk with their dog and enjoy the dam and river for a moment. This use should be enhanced to make the mill a destination for people of all ages, seeking a quick nature respite during a busy day. To that end, Stow should ensure that the design and maintenance of the river's edge preserves the character that Gleasondale residents currently enjoy.

Gleasondale is at the convergence of river, road, and rail. The mill site can be a transportation node, one where hikers and bikers find a place to rest, boaters and birders put into the Assabet River, and where village residents can wait for a bus or van to take them to the other Stow villages or points beyond.

A fine example of nature recreation, hospitality, and light retail can be found in the Town of Montague. Across from the Montague Mill, a revitalized grist mill built in 1842, a small parking lot serves a variety of users. Visitors come to the mill to drink coffee, have lunch, shop for books and music, or browse locally-made arts. Many spend the day there, bicycling or swimming before returning for lunch. In addition to the café, a high-end restaurant uses the same lot at night, after the kayakers and bikers have gone home. Many of the restaurant's customers discover the restaurant after coming to the café to work, or parking to hike in the adjacent conservation land. This modest site is a vibrant community hub. Gleasondale's mills have more land and building space, more recreational potential, and a larger regional market from which to draw.

Gleasondale is Stow's best opportunity to put into practice the Low Impact Development, and Resource Conservation and Restoration principles championed in the town's Smart Growth index. In the next twenty years, the village will represent the best characteristics of Stow and the MAGIC region: activity in residential and commercial centers; direct access to active and passive recreation; and a social context shaped by rich landscape heritage. In Gleasondale, each of these elements is anchored by the village's most valuable asset: the mill.

#### **Next Steps**

A few of the recommendations presented in this document should be undertaken in the next 90 days, in order to jump-start the planning process in Gleasondale. The following list of "Next Steps" identifies ways to capitalize on the existing interest in Gleasondale, and generate additional momentum.

- · Form an inclusive Neighborhood Committee to provide long-term oversight of initiatives in Gleasondale. Formalize meeting times and bring many stakeholders to the table.
- Gauge local business interest in bringing pop-up markets to the mills.
- Investigate process of FERC relicensure for hydropower.
- Form a sub-committee to review municipal-level mill redevelopment initiatives throughout the state.
- Develop a walking tour of Gleasondale and the mills. Coordinate with mill owners, tenants, neighbors, residents, and town officials to develop a program that sparks town interest and pride. Include Hudson residents and officials.
- Investigate options for a design charrette at the mills. Collaborate with local media, elected officials, regional and state authorities, and design/planning professionals.
- Establish lines of communication between mill owners, neighbors, town officials, and the Neighborhood Committee to clarify site questions.
- Evaluate wayfinding and identification options. Consider the size, shape, and scale of signs, landmarks, objects, and other materials. Identify natural "gateways" to Gleasondale.



Figure 11: on Gleasondale Road in Stow, at the Hudson Town Line. Credit: Anita Lockesmith.

# V. CONCLUSION: THE VISION FOR GLEASONDALE

#### The Village

Establishing the Gleasondale Historic District, with distinct signs along Route 62 from Sudbury Road to the Town Line, will promote Gleasondale's sense of place for visitors and passers-by, and street signs specific to the area will provide wayfinding elements for visitors. A partnership with the Town of Hudson may extend the borders to include elements in the neighboring town, and lay the intergovernmental framework for an extension of sewer and water services to the Mill.

Building on the recent submissions to the Massachusetts Historical Commission, Stow should consider preparing a multi-property submission for inclusion in the National Register. One of the most important benefits of inclusion is the Investment Tax Credit, which significantly expand the redevelopment options for a property owner.

In addition to historic and wayfinding activities, the Town should consider establishing a zoning overlay district for Gleasondale. This will enable uses consistent with town values and site characteristics, similar to the Active Adult Neighborhood districts elsewhere in Stow.

#### The Mill and Millyard

The mills provide an opportunity for Gleasondale to welcome a variety of interests. A mix of commercial, light industrial, and civic interests occupy the ground floors, while upper floors are given over to residential units and short-term lodging. The millyard accommodates a number of public uses, including river access, bird watching, and popup markets for farmers and artisans. Programmatic elements tie the site to established features of Stow that are less than one mile away: a "19th Hole" operation provides refreshments to Stow's golfers, weekend overflow parking serves the seasonal tourism of

the apple orchards, and a high-end hotel provides corporate clients and wedding guests with some of the area's finest accommodations.

Structural elements salvaged from the mill and grounds – camshafts, flywheels, and sluice gates, for example – can be repurposed as sculptural landmarks, indicative of the mill's Early Industrial heritage, and reinforce the site identity established elsewhere in the Village.

#### The Connections

Exploring options for the development of a secondary access point for vehicles will enable the mill to accommodate increases in use consistent with commercial or residential activity. Traffic calming initiatives and speed limit reductions will enhance safety and reduce noise in the village, enabling additional connections to the rural routes that reach to the east and west.

The Assabet River Rail Trail has long aimed to establish a connection from Hudson to Maynard, through the former Rock Bottom depot. In the meantime, Stow can encourage cyclists to use Gleasondale Road and Sudbury Road to access the Town's existing recreation-ready bike trails. Re-establishing pedestrian access to the mill via a footbridge from Rockbottom Road will serve the number of daily visitors to the mill, including canoe enthusiasts, bird watchers, fishers, and dog walkers.

#### The Future

Gleasondale has become a New England landmark. A far cry from the miles of mills along the Merrimack, the Chicopee, and the Concord rivers, smaller even than the

neighboring enterprises along the Assabet, Gleasondale retains the scale imagined by its namesake industrialists, Benjamin Gleason and Samuel Dale. Its growth has not consumed its origins; rather, the mills have remained the social and geographic centers of the village. Gleasondale is still home to the mills, but the mills are now home to much more than textiles.

Gleasondale's revitalization has validated the town's affirmation of the principles of smart growth, and serves as an example of the value of generating public investment and interest in the reuse and reimagining of structures and places. It has become something to see, somewhere to go, and someplace to live. There is always something to do.

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# APPENDIX B: KEY DEMOGRAPHIC POINTS IN STOW AND SURROUNDING REGION

Key Data Points	MASSACHUSETTS	STOW	Acton	Bedford	Bolton	Boxborough	Carlisle	Concord
Total Population	6,547,629	6,590	21,924	13,320	4,897	4,996	4,852	17,668
Median Age	39.1	43.5	41.9	45.1	42.8	43.3	46.9	46.9
Non-White population (%)	19.60%	6.40%	22.70%	14.10%	5.10%	19.50%	10.80%	10.30%
Total Households	2,547,075	2,429	8,187	5,130	1,670	1,949	1,695	6,484
Family Households (%)	63%	78.30%	72.80%	70.50%	83.30%	69.90%	85.10%	69.20%
Avg. Household Size	2.48	2.71	2.66	2.5	2.93	2.56	2.86	2.46
Avg. Family Size	3.08	3.1	3.19	3.02	3.22	3.14	3.11	3.02
Median House Value	\$343,500	\$449,600	\$482,700	\$537,400	\$512,700	494,300	\$780,700	\$707,900
Education Attainment for	22.1% Bachelor's	31.7% Bach	31.5% Bach	31.5% Bach	35.9% Bach	33.9% Bach	33.7% Bach	32.0% Bach
Population 25 years and over	16.6% Graduate	33.4% Grad	40.5% Grad	32.3% Grad	28.0% Grad	37.3% Grad	48.1% Grad	33.3% Grad
Population in Labor Force	67.80%	76.10%	71.50%	66.40%	75.30%	72.40%	63.00%	55.00%
Driving Alone to Work (%)	72.30%	84.60%	78.90%	81.70%	79.40%	78.60%	72.30%	72.20%
Mean Travel Time (minutes)	27.5	28.3	33	25.9	32.4	30.6	29.4	29.5
Mean Household Income	\$88,577	\$133,682	\$134,787	127,617	158,187	\$127,181	\$202,230	\$188,505
Mean Family Income	\$106,335	\$141,534	\$158,874	146,384	174,153	163,768	\$218,838	\$235,963
Key Data Points	MAGIC Averages	stow	Hudson	Lexington	Lincoln	Littleton	Maynard	Sudbury
Total Population	13,665	6,590	19,063	31,394	6,362	8,924	10,106	17,659
Median Age	43.63	43.5	41	45.6	43.4	43	41.3	42.5
Non-White population (%)	12.22%	6.40%	8.30%	24.50%	13.90%	6.70%	7.30%	9.20%
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Key Data Points	<b>MAGIC Averages</b>	STOW	Hudson	Lexington	Lincoln	Littleton	Maynard	Sudbury
Total Population	13,665	6,590	19,063	31,394	6,362	8,924	10,106	17,659
Median Age	43.63	43.5	41	45.6	43.4	43	41.3	42.5
Non-White population (%)	12.22%	6.40%	8.30%	24.50%	13.90%	6.70%	7.30%	9.20%
Total Households	4,793	2,429	7,528	11,530	2,404	3,297	4,239	5,771
Family Households (%)	74.62%	78.30%	68.20%	76.40%	75.10%	73.10%	62.50%	85.70%
Avg. Household Size	2.66	2.71	2.53	2.68	2.65	2.66	2.38	3.02
Avg. Family Size	3.12	3.1	3.07	3.12	3.1	3.15	3.03	3.3
Median House Value	554,492.31	\$449,600	\$323,500	\$687,100	\$865,000	\$395,200	\$335,500	\$636,800
Education Attainment:	31.16% Bach	31.7% Bach	24.2% Bach	27.0% Bach	32.1% Bach	27.5% Bach	28.3% Bach	35.8% Bach
Population 25 years and over	34.7% Grad	33.4% Grad	13.3% Grad	50.7% Grad	44.6% Grad	24.7% Grad	24.6% Grad	40.3% Grad
Population in Labor Force	68.61%	76.10%	72.30%	64.20%	69.30%	65.60%	73.60%	67.30%
Driving Alone to Work (%)	78.95%	84.60%	84.10%	74.50%	68.60%	85.70%	85.00%	80.80%
Mean Travel Time (minutes)	28.9	28.3	25.2	28.9	24.2	29.7	27.1	31.4
Mean Household Income	\$147,208.85	\$133,682	\$87,962	\$183,017	\$172,514	\$113,764	\$87,112	\$197,157
Mean Family Income	\$168, <del>4</del> 79.15	\$141,534	\$103,848	\$208,917	\$186,640	\$136,479	\$102,121	\$212,710

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# **APPENDIX C:** INFRASTRUCTURE IMPROVEMENT CASE STUDIES

# Fanaras Industrial Park Salisbury

**Major Grants Major Businesses** MORE: \$1 million Andover Healthcare PV Engineering & Manufacturing Old Time Sports

The Town of Salisbury's 2008 Master Plan described the Fanaras Industrial Park along Rabbit Road as an underdeveloped area with significant economic growth potential. Along Interstate 95, with easy access to both I-95 and I-495, Rabbit Road is considered the prime location for industrial development in Salisbury. However, the plan cited one particular reason for the difficulties the park had experienced in attracting and retaining tenants: "the lack of public sewer service" (Salisbury 2008).

At the time of the plan's approval, the process of providing the existing commercial and industrial interests with sewer extensions had begun. In 2007, Salisbury received a \$1 million grant from the Commonwealth's Massachusetts Opportunity Relocation and Expansion Jobs Capital program (MORE) to upgrade the water and sewer systems along Rabbit Road. The project, which called for the installation of 20,000 feet of sewer lines and 3,000 feet of water lines, was considered a prerequisite for additional industrial investment in the park (Chiaramida 2007).

In January 2008, the Town was able to secure a state-backed loan at 2 percent interest to pay for the water system's upgrades, to be repaid within 20 years. Property values in Fanaras Industrial Park increased, and businesses in the region began to consider

relocating to the park, now that its infrastructural capacity was able to accommodate a greater number of uses. Salisbury accepted a \$3.9 million construction bid for the project in February 2008, and construction was completed in 2010 (Chiaramida 2008).

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### CenTech Park

# Grafton/Shrewsbury

CenTech Park is a 121-acre technology park in the towns of Shrewsbury and Grafton. The park is a short drive from Exit 11 of the Massachusetts Turnpike, and within a half-mile of the Grafton stop on the Worcester Line of the MBTA's Commuter Rail. The Worcester Business Development Corporation acquired the land from the Commonwealth in 1994, and determined that the unimproved parcel held the potential for approximately 675,000 square feet of development (WBDC no date).

The Town of Grafton and the WBDC received a \$900,000 grant from the EDA to develop the necessary infrastructure: water, sewer, gas, and electricity. This grant leveraged additional funds from the Commonwealth, which provided an additional \$2 million grant for the park's infrastructure. In addition to infrastructure funding, the WBDC and the Town of Shrewsbury were able to secure \$3.5 million in state funding (\$1.2M grant from PWED, and \$2.3M from MassHighway) to construct a \$3.7 million dollar connector road from Route 20 to the park. Since CenTech Park's construction phase was completed in 2004, it has become home to a number of interests, including State Street Bank, TriTech Software, the University of Massachusetts, and IDEXX veterinary research (WBDC no date).

Based on the success of CenTech Park, the WBDC purchased an adjacent 84-acre parcel in Shrewsbury, intent on the development of 650,000 square feet for light industrial and manufacturing. This project, CenTech Park East, benefitted from the

Major Grants	Major Businesses
EDA: \$900,000	University of Massachusetts
PWED: \$1.2 million	State Street Bank
MassHighway: \$2.3 million	TriTech Software

infrastructure built during the development of CenTech Park: sewer and water lines were extended to the new parcel, and a 1,800-foot access road was built off of the original connector road with another \$3 million of funding. The EDA provided \$2M, and \$1M came from PWED (NEREJ 2010). In 2011, a local developer expressed interest in CenTech Park East, and purchased the land from the WBDC for \$3 million (Thompson 2011).

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# Medway Business Park at Interstate 495

### Medway

The Medway Business Park is one mile from the Interstate 495 – Route 109 intersection, and within ten miles of I-495's connections to both I-90 and I-95. Despite this exceptional location, Medway's 1999 Master Plan described the Park as "underdeveloped due to a lack of sewer infrastructure and wetlands restrictions." Given the sharp increase in residential development the town had experienced in the preceding decades, the 1999 plan emphasized the need to zone and plan for commercial/industrial land uses (Medway 1999).

Ten years later, the 2009 Master Plan noted the impending completion of the Medway's Industrial Park Sewer Extension project. The project resulted in the construction of 22,000 linear feet of 18- and 12-inch sewer mains, a submersible pump station, and force mains to serve the park (Mass EEA 2008). Completed in 2009, the \$5.2 million project was funded by a \$1.68M contribution from the Town in 2003, a \$500,000 Community Development Action Grant (CDAG), and a \$3.1M grant in 2007 from the state's MORE program (Medway 2009, Crocetti 2007).

A market study completed in 2001 estimated that fully developed infrastructure in the park would enable the development of an additional 800,000 to 1,000,000 square feet, providing Medway with \$950,000 of annual tax revenue (PGC 2001). This increase in sewer capacity would enable Cybex, a major exercise equipment manufacturer with its corporate headquarters in the park, to expand their facility by approximately

Major Grants	Major Businesses
CDAG: \$500,000	Cybex
MORE: \$3.1 million	CGIT Systems
	EPCO Manufacturing

100,000 square feet, and increase their workforce of 250 to 370 (Crocetti 2007). Since the project's completion, another manufacturer has located to the park: AZZ's CGIT Systems employs 100 people in the field of electrical transmission manufacturing (Medway 2009).

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# Framingham Technology Park

### Framingham

Framingham Technology Park (FTP) is approximately 20 miles from New England's largest cities: Worcester and Boston. The park has direct access to Interstate 90 and Route 9, just north of the intersection of the two highways. For years, it has been home to the corporate headquarters and R&D facilities of two of the town's larger employers: Genzyme and Bose. These companies alone employ over 3,900 people, and other prominent companies – FedEx, Nestle, and Sheraton among them – employ hundreds of employees, as well (ULI 2012).

In order to accommodate the ongoing growth in FTP, the town's zoning bylaws were adjusted to allow increased development densities for manufacturing, R&D, and associated office space (TetraTech 2010). Even under conservative projections, TetraTech envisioned that the zoning alterations could add another 1.8 million square feet to the 2.77 million square feet already built or in construction. However, this build out scenario would be impossible without major infrastructural upgrades to the municipal water and sewer systems at FTP.

To secure funding for the infrastructure project, the Town of Framingham worked with Genzyme to demonstrate that infrastructural development was a prerequisite to industrial expansion. In November of 2008, the newly formed Massachusetts Life Sciences Center (MLSC) agreed to fund a phased water/sewer upgrade program through the state's Life Sciences Act, to go hand-in-hand with Genzyme's large-scale expansion. A \$5.2 million grant enabled Framingham to replace the park's aging wastewater pump station. Completed the next year, the project was timed to align with Genzyme's schedule for new manufacturing processes. Satisfactory progress triggered the release of a \$7.7M grant for the project's second phase, upgrading FTP's water and wastewater systems (MLSC 2009). Phase two brought the park's water transmission mains to 20-inch diameters, and increased the capacity of a water pumping station

Major Grants	Major Businesses
Life Sciences Act: \$14.3 million	Genzyme
	Bose
	FedEx

from 4 million gallons per day (MGD) to 6 MGD (TetraTech 2010). Two years later, Genzyme's celebrated the opening of a new 57,000 square foot pharmaceutical plant. The facility, which represents a corporate investment of over \$300M, will employ approximately 500 people.

As a consequence of the infrastructure projects at FTP, additional interests have acquired property in the park, as well. The Congress Group's plans to invest \$150 million in three parcels adjacent to the Bose complex were dependent upon the final \$1.5M phase of the sewer's improvements. With the sewer project completed in 2010, the developer intends to proceed with the construction of the Crossroads Corporate Center, which calls for approximately 400,000 square feet of office and R&D space (McDonald 2010).

#### Sources:

Urban Land Institute. Revitalizing Framingham Technical Park & 9/90 Corporate Center. Sep 2012.

TetraTech. Framingham Technology Park Infrastructure Improvement Plan. Apr 2010.

Massachusetts Life Sciences Center. "Center approves \$7.7 million grant for Phase II." Press release. 28 Oct 2009.

McDonald, Dan. "Sewer, lawsuit top special TM warrant in Framingham." MetroWest Daily News. 6 Jan 2010.

# Summit Industrial Park Gardner

In March of 1996, the U.S. Economic Development Administration provided the City of Gardner and the Gardner Redevelopment Authority (GRA) with a \$675,000 grant to establish Summit Industrial Park (Olver 1997). At the time, Summit Industrial Park was 125 acres of undeveloped land, one mile from the intersection of Routes 101 and 140, and three miles from Route 2. Today, thirty acres remain undeveloped (Gardner no date). By 2002, six structures had been built, totaling over 180,000 square feet of manufacturing and light industrial space (Assessor 2012).

As is the case for many muncipalities in northern Worcester County, a lack of direct interstate access has discouraged economic growth in Gardner. To remain competitive and bring businesses back to the area, Gardner extended the city's municipal services out to the park. With the funding received from the EDA, Summit's services were developed to a level anticipating full build-out. This has enabled the park to offer potential tenants pre-approval for storm water and drainage systems, and establish permitting to accommodate a number of uses, including manufacturing, warehousing, and R&D (Gardner no date). Today, the businesses at Summit Industrial Park provide stable employment to approximately 150 people.

Major Grants	Major Businesses
EDA: \$675,000	ACT Fastening Solutions
	New England Peptide
	F.E. Incorporated

#### Sources:

Olver, John. "The Olver Report." https://forms.house.gov/olver/news/nl\_olverreport.pdf

City of Gardner Redevelopment Authority. "Summit Industrial Park." http:// gardneredc.virtualtownhall.net/Pages/GardnerEDC\_WebDocs/summit

City Assessor. "Assessor's Online Database for Gardner, MA." http://data. visionappraisal.com/GardnerMA/search.asp

# **APPENDIX D:** MILL REVITALIZATION DISTRICTS

"MRD Summary Matrix." Smart Growth / Smart Energy Toolkit Mill Revitalization Districts. http://www.mass.gov/envir/smart\_growth\_toolkit/pages/mod-mill-redev.html

		Special		Density/					
	Municipality,	Permit		Maximum		New	Minimum		
Type	Name of District	Reqd.	Permitted Uses (in addition to underlying zoning)	Units	Expansions	Buildings	Affordable Units	Parking	Miscellaneous
Exiting Bylaw	North Adams Amendment to Industrial Districts	Yes	Uses allowed through special permit: Accessory residential use in conjunction with artists' studios in mill space/industrial properties in excess of 50,000 sq. ft. provided that: (a) There shall be no more than one residential use per 1,000 square feet of gross studio space; (b) A dedicated bathroom with water closet, sink and shower and a kitchen containing sink, refrigerator and stove shall be provided for each proposed residential use. Any new construction of studio spaces shall conform to commercial code. Adequate heat and ventilation shall be provided for each studio; (c) Trash and garbage removal must be provided for; (d) New construction for studio spaces shall conform to commercial building codes, including fire alarm, fire protection, egress, etc. (h) Building owners and/or building committees shall determine the qualifications of the artists using the studio spaces for residential use and the limitations contained herein shall be included in any lease or sales contract with the resident artist.	Maximum number of 50 studio units per building.	No mention	No mention	No mention	Parking shall be as determined by the Planning Board with a minimum of one parking space per studio.	Not an overlay district, just an amendment to existing Industrial Districts.
Amendment to	Fall River Amendment to Industrial District	special	Uses allowed by right: Existing mill buildings in existence prior to 1950 may be altered, reconstructed and used for: a. Office of any kind including medical office; b. Retail store or outlet; c. Bank or other financial institution; d. Restaurant or other eating place; and e. Uses customarily accessory to such uses.	Minimum lot area: 10,000 square feet.	No mention	Amendment pertians to only exosting structures	No mention	Adequate provision shall be made for the off-street accommodation of all vehicles.	Very breif piece of industrial district chapter.
,	Providence,RI Amendment to Industrial District	No	Uses allowed by right as added to Light Industrial District: Multif-family housing.						
re Reuse Overlay	Northbridge Historic Mill Adaptive Reuse Overlay District	Yes	Uses allowed through special permit: All redevelopment projects must provide an area within the mill for education of the history of the property. Multi-family dwelling units shall only be permitted in conjunction with one or more of the nonresidential uses permitted under this section; (1) Office for administrative, executive, professional, sales and other similar uses; (2) Retail, service, and restaurant; (3) Institutional (museum, educational use, charitable or philanthropic institution, municipal use, club or lodge); (4) Recreational (indoor commercial recreation); and (5) Appropriate accessory uses.	For multifamily housing; 10 units per acre is maximum, bonuses available for providing additional affordable units.		architectural style o new buildings	10% in perpetuity, to be restricted to persons qualifying as moderate income. Affordable units must be integrated into overall development.	Board may decrease parking requirements by up to 25% if two or more uses can share parking spaces.	
toric Mil	<b>Uxbridge</b> Historic Mill Adaptive Reuse Overlay District	Yes	Uses allowed through special permit: (1) Office for administrative, executive, professional, sales and other similar uses; (2) Retail, service, and restaurant; (3) Institutional (museum, educational use, charitable or philanthropic institution, municipal us club, lodge, or similar uses); (4) Recreational; (5) Residential; and (6) Appropriate accessory uses.		Yes, contingent upon character of building.	Number, type, scale architectural style o new buildings subject to Planning Board Approval.		Board may decrease parking requirements by up to 25% if two or more uses can share parking spaces.	Town's Growth

		Special		Density/					
	Municipality,	Permit		Maximum		New	Minimum		
Type	• • • • • • • • • • • • • • • • • • • •	Regd.	Permitted Uses (in addition to underlying zoning)	Units	Expansions	Buildings	Affordable Units	Parking	Miscellaneous
	Easthampton Mixed Use/Mill Industrial District	Yes	NO UNDERLYING ZONING. Uses allowed through special permit: Uses within an existing mill building must be compatible with existing uses. Uses that create excessive noise or dust may not be compatible with residences, offices, restaurants or retail stores. Uses that create a high volume of vehicular or pedestrian traffic may not be compatible with residences. Residential uses are permitted on all floors or levels in buildings except on the street level or first floor of new structures or commercial buildings which existed at the time of the adoption of this ordinance. The following types of residential uses may be permitted: multifamily dwellings, multifamily housing for elderly and/or handicapped persons, accessory apartments, and bed-and-breakfast establishments.	Donating to city's public amenities may allow up to 10% reduction in the minimum lot area requirements.	No mention	No mention	No mention	No mention	Extensive list of objectives in purpose section.
Bylaws	<b>Montague</b> Historic Industrial District	grant additional	NO UNDERLYING ZONING. Uses allowed by right:1) Business office or professional office, 2) Retail sales and services, 3) Manufacturing, processing, or research, 4) Bulk storage, warehousing, distribution, 5) Craft workshop or light assembly shop, 6) Uses customarily accessory to the aboveUses allowed through special permit by Board of Appeals: 1) Hotel Residential uses, with management plan Public utility Uses that involve the construction, alteration or change of use of more than 10,000 square feet of floor area. 2) Other uses similar to the above in externally observable attributesUses allowed through special permit by Planning Board: Self-service storage facility	No mention	No mention	No mention	No mention	No mention	Only uses discussed in bylaw.
Non Overlay	Lowell Conversion of Existing Buildings (Lowell also has an Artist Overlay Disrict- summarized below)	Yes	Bylaw applies to specific structures, not to a specific area or district. Uses allowed through special permit: Structures having been constructed more than sixty years ago may be altered so as to contain two (2) or more dwelling units.	The minimum floor areas is 750 sq.ft. for studio or one-bedroom units, and 900 sq.ft. for units with two or more bedrooms. Planning Board may these requirements.	Building gross floor area can	Not applicable to the structure of this bylaw.	No mention	At least two (2) parking spaces per dwelling unit are provided on the lot. Where the lot does not provide sufficient area to accommodate parking, parking may be provided or another lot located within 400 feet of the primary entrance to the structure by special permit.	Existing buildings being converted are not subject to minimum setbacks, maximum building height, or maximum number of stories requirements.
	Clinton Mill Conversion/ Planned Development	Yes	Bylaw applies to specific structure, not an area or district. Uses allowed through special permit Existing mill structures of more than twenty thousand (20,000) square feet of floor area may include the following uses dwelling units, retail offices, artist's lofts and hand crafts. Accessory uses and recreation facilities for the use of the residents and/or employees of the area only to include golf course, tennis courts, jogging trails, swimming pools and similar outdoor facilities, a community building not to exceed 5% of the total floor area of the residential units, parking area and garages, storage sheds, cabanas, detached fireplaces and similar facilities for use by the residents of the Planned Development, but n including home occupations, taking of boarders or lodgers, renting of rooms or professional offices, incidental retail sales and services.	If there is more than one type of major land use (e g , residential, institutional, office building, or research establishment), no one type shall constitute less than 10% or more than 70% of the total dwelling units or gross floor area.	No mention	Buildings shall be compatible with nearby architecture and located and designed in a manner which conforms to the existing natural terrain of the site and encourages maximum use of solar energy.	If the conversion is to dwelling units, at least 10% of the units shall beset aside for low and moderate income housing.	provided in accordance with underlying zoning. All parking spaces shall be	be responsible for maintaining all common areas including, but not limited to lighting, plowing, roadway,

	Municipality,	Special Permit		Density/ Maximum		New	Minimum		
Type	Name of District	Reqd.	Permitted Uses (in addition to underlying zoning)	Units	Expansions	Buildings	Affordable Units	Parking	Miscellaneous
Right	<b>Holyoke</b> Arts and Industry Overlay District	No. Special permit can grant additional uses.	Uses allowed as of right: 1. Multifamily dwelling by renovation of an existing building; 2. Dwelling unit(s) on second or higher floor above permissible nonresidential use; 3. Wholesale or warehouse operation incidental to manufacturing on the premises; 4. Live/work space, including, but not limited to: customary home occupations; music or photographic studio; studio for arts, crafts, writing, acting, dancing, or other performing arts; advertising, industrial design, media facility, architecture, interior design, recording studio; theater, film or video production; gallery, auction house, set shop; lighting, engineering, or musical instrument manufacturing; sheet music printing, framing, arts supply, arts restoration. Uses allowed through special permit:1. Any residential uses more than 25 dwelling units; or 2. Any residential uses with a floor area greater than 50,000 gross square feet.	No mention	No mention	No mention	No mention	Each dwelling unit, including a dwelling unit associated with live/work space, shall be provided with one parking space. No parking spaces shall be required for any other use.	Still active industrial uses in district.
Uses Allowed by		No. Special permit can grant additional uses.	Uses allowed as of right a) Multi-family dwelling, high rise; b) Multi-family dwelling, low rise; c) Dormitories; and d) Single family semi-detached dwelling Uses allowed through special permit a). Business Use #7 food service excluding consumption/sale of alcohol beverage; b.) Business Use #10 indoor recreation, health club - profit; c). Business Use #24 retail sales, including retail with incidental fabrication assembly.	No mention		Yes, dependent upon the dimensional requirements of the underlying zoning district.	No mention	Normal requirements except: (i) All residential parking shall require 1.5 parking spaces for each dwelling unit; and (ii) Office, professional/genera shall require one (1) parking space for every 50 square feet of gross floor area. Special Permit can grant changes.	Planning board may waive or modify dimensional controls of normal zoning.
Residential	Bellingham Mill Reuse Overlay District	No. Special permit can grant additional uses.	Uses allowed as of right: (a) Multi-family dwelling, (b) Assisted elderly housing (May not exceed 100 units of multi-family or assisted elderly housing, including any combination thereof.) (c) Accessory uses of: (1) Adult day care, (2) Other uses customarily incidental to a permitted use. Uses allowed through special permit: (a) Multi-family or assisted elderly housing in excess of the number of units allowed as a permitted use, (b) New construction for uses permitted as of right, (c) Continuing care retirement community, (d) Nursing home, (e) Medical offices or medical clinic, (f) Accessory uses of: (1) Adult day care accessory to a special permitted use, (2) Retail or service establishment, or restaurant serving food and beverages only in the building or on a patio adjacent to and directly accessible from the building, primarily for residents, outpatients or employees of a permitted or special permittuse, (3) Indoor or outdoor recreation, primarily for residents, outpatients or employees of a permitted or special permitted use, (4) Other accessory uses customarily incidental to a special permitted use.	By right 9 units per acre allowed. By Special Permit 12 units per acre allowed if Public Benefits provisions are met. No more then 100 units of multi-family or assisted elderly housing, including any combination thereof.	Yes, but expansion may not result in a floor area ratio that is more thar 1.25 times the existing floor area ratio.	wastewater treatment facility,	5% in perpetuity, to be restricted for low or moderate income household. Must meet Local Initiative Program affordable housing requirements.	All new off-street parking areas shall be located to the rear or side of all buildings and shall not be located in front setbacks or common open space. Assisted elderly units: 1 space per unit, plus one space per two employees with further details. Multifamily units: 1 space per studio or one-bedroom unit, 2 spaces per unit with two or more bedroom with further details. More details regarding other uses.	30% of the parcel shall be protected as

	Maria de Alder	Special		Density/		N	M:!		
Туре	Municipality, Name of District	Permit Regd.	Permitted Uses (in addition to underlying zoning)	Maximum Units	Expansions	New Buildings	Minimum Affordable Units	Parking	Miscellaneous
7,50	Chicopee Mill Conversion and Commercial Center Overlay District	·	Uses allowed through special permit 1) Within an overlay district, there shall be no restriction on combining different categories of use within the same building except any imposed by the State Building Code or other federal or state regulations. 2) Multifamily residential uses in conjunction with one or more of the uses by right in the underlying district. 3) Residential uses combined with studios with an emphasis on arts and crafts.	To be determined by Board of Aldermen with consideration of impacts to City schools and services traffic, adequacy of the site, and technical reports.	·	No, except by special permit. Must be compatible with nearby	No mention	Normal requirements although a reduction of 50% is available by special permit if two or more uses within a single developmen can share parking spaces.	
Miscellaneous	-	No, although creation of new district must be first approved by	Uses allowed by right: 1. Library, museums, art gallery or civic center. 2. Country or tennis club, lodge building or other non-profit social, civic, conservation or recreational use, but not including any use, the principal activity of which is one customarily conducted as a business. 3. Retail Store. 4. Indoor amusement or recreation place of assembly provided that the building is so insulated and maintained as to confine noise to the premises. 5. Commercial clubs and/or recreational establishments such as swimming pools, tennis courts, ski clubs, camping areas, skating rinks or other commercial facilities offering outdoor recreation. 6. Drive-in, drive-thru, drive-up facilities or open-air business or appurtenant buildings or structures for any use permitted in Commercial IUses allowed through special permit: 1. Five or more family dwellings (apartment or condominium buildings). 2. Restaurant or other place serving food or beverages with live or mechanical entertainment.	No mention	than 50 percent of that structure's gross floor area. Site plan review if	review for any new structure/s under the same ownership on the same or contiguous lots that consists of more then 2500 sq.ft. gross floor	No mention	Normal requirements except: 1. Retail Store, General and Personal Services; Financial Studio, Building Trade or Restaurant with no seating One space per 300 square feet of floor area. 2. Business or Professional Office One space per 400 square feet of floor area. 3. Restaurants; Lodge or Clubs; or other place of Assembly. One space per every three seats.	request creation of new district on his/her property,
	<b>Millbury</b> Adaptive Reuse Overlay District		Uses allowed through special permit: 1. Multi-family Dwellings; 2. Business or Professional Offices; 3. Retail Sales and Services, including Florist Shop; 4. Personal Services; 5. Restaurants, except the use of drive-up windows; 6. School or College; 7. Non-profit Club or Lodge; 8. Philanthropic Institutions; 9. Municipal Use; 10. Recreation and Open Space; 11. Accessory Uses; and 12. Uses similar in nature and impact to those listed above, subject to such determination by the Planning Board; or 13. Any combination of the uses shown above.	No mention	No mention	No mention	No mention	No mention of Parking.  Extended Miscellaneous: District consists of 11 properties in different areas and were selecte with following criteria: lot contains at least 2 acre of land, contains a building of at least 5,000 sq.ff (GFA), building originally constructed before 194 and originally used for manufacturing or an associated use.	
	Williamstown Station Mill Redevelopment District	Yes	Uses allowed through special permit (A) Residential; 1. New two family dwellings, 2. new multifamily dwellings, 3. multifamily dwellings by conversion of an existing historic building. (B) Business uses; 1. Theater, bowling alley, skating rink, club or other place for amusement, exercise or assembly. (c) Accessory uses; parking of larger vehicles.	No mention	No mention	No mention	No mention	No mention	District consists of one Mill. Very brief application section.

		Municipality,	Special Permit		Density/ Maximum		Nam	Minimum		
ту	/ре		Reqd.	Permitted Uses (in addition to underlying zoning)	Units	Expansions	New Buildings	Affordable Units	Parking	Miscellaneous
i's structure)		<b>Dracut</b> Mill Conversion Overlay District	Yes	Uses allowed through special permit: Multifamily dwelling(s), assisted living facility, single-family dwelling(s), nonresidential uses (nonresidential uses refers to those allowed within underlying zoning such as: day care facility, storage, professional office, lounge/pub, financial services, retail space {greater or less than 5,000 sq.ft.}, and accessory uses)	Contingent upon many factors including: character of building, potential reuses, and number of affordable units.	Yes, contingent upon character of building.		15% of total units for no less then 30 years in following break down: 5% affordable to low income, 5% to moderate income, 5% to median income. Affordable units must be integrated into overall development.	every 6 spaces. Parking lots shall be located to the rear or side of all buildings and shall not be located in the front set backs or in	Additional standards on: buffers, vegetation, loading and others.
	Ä (Š	<b>Dudley</b> Mill Conversion Overlay District	Yes	Uses allowed through special permit: Residential use shall be permitted in conjunction with one or more of the following specified non-residential uses: A. Commercial (restaurant, retail, or office establishment); B. Institutional (museum, educational use, charitable or philanthropic institution, municipal use, club or lodge); C. Recreational (indoor commercial recreation); and D. Appropriate accessory uses.	No mention	Yes, subject to approval.	Yes, subject to approval.	10% for no less then 30 years for low or moderate income. Affordable units must be integrated into overall development.	Must provide 6 foot wide screening and 1 tree for every 10 spaces. Parking lots shall be located to the rear or side of all buildings and shall not be located in the front set backs or in buffer areas.	Additional standards on: commercial vehicles, loading, lighting and others.
	eri	<b>Westford</b> Mill Conversion Overlay District	Yes	Uses allowed through special permit: No uses specified in overlay district, all subject to underlying zoning.	Contingent upon many factors including: character of building, potential reuses, and number of affordable units.	Yes, contingent upon character of building.	Yes, number, type, scale architectural style of new buildings subject to Planning Board Approval.	15% for no less then 30 years in following break down: 5% affordable to low income, 5% to moderate income, 5% to median income. Affordable units must be integrated into overall development.	rear or side of all buildings and shall not be located in the front set backs or in	Additional standards on: buffers, vegetation, commercial vehicles and others.
	ersion	<b>Fitchburg</b> Mill Conversion Overlay District	Yes	Uses allowed through special permit: Multifamily dwellings, assisted living facility, single-family dwelling(s) and/or nonresidential ancillary uses in some combination.	Contingent upon many factors including: character of building, potential reuses.	Yes, contingent upon character of building.	Yes, number, type, scale architectural style of new buildings subject to Planning Board Approval.	No mention	Must provide adequate parking for uses as indicated in underlying zoning.	Additional standards on: number of bedrooms and others
	IIIII	<b>Winchendon</b> Mill Conversion Overlay District	Yes	Uses allowed through special permit: Residential uses: single family dwelling, duplex dwelling, multi-family dwelling; condominium, apartment, live and work unit; age-restricted housing; independent living unit. In conjunction with these residential uses, an Mill Conversion Project may include one or more of the following non-residential uses: a. (Commercial uses) Restaurant, retail store, or offices. b. (Institutional uses) Museum, educational use, charitable or philanthropic institution, municipal use, club or lodge. c. Appropriate accessory uses.	reuses, and number	Yes, contingent upon character of building.	Yes, number, type, scale architectural style of new buildings subject to approval.	planning board's discretion. Affordable units must be integrated	Must provide adequate parking for uses. Parking	Minimum residential use. At least 25% of the gross floor area shall be used for residential purposes.

	Municipality,	Special Permit		Density/ Maximum		New	Minimum		
Туре		Regd.	Permitted Uses (in addition to underlying zoning)	Units	Expansions	Buildings	Affordable Units	Parking	Miscellaneous
Miscellaneous	Lowell Artist Overlay Disrict (Lowell also has an Conversion of Existing Buildings Bylaw - summarized above)		Uses allowed by Special Permit: Within the AOD, any existing building more than sixty (60) years old maybe converted to artist live/work or residential use, containing two (2) or more dwelling units.	The minimum floor areas shall be 750 sq. ft. for studio or one-bedroom units and 900 sq. ft. for units with two or more bedrooms. Planning Board may allow as many as fifty percent (50%) of the units in any one project may be smaller than these minimums by SP.	No mention	No mention	No mention	As rquired in underlying zoning.	All dimensional requirements of the underlying zone must be met.
cus Not Mill Reuse	Waltham Riverfront Overlay District		Uses allowed through special permit: 1) Residential uses; may construct up to the maximum FAR allowed, single, two family and multifamily developments without any requirements for nonresidential use. 2) Mixed uses: retail stores, restaurants, business offices, personal service establishments and all residential uses permitted by this chapter, except that drive-up customer services, fast-food establishments, used car lots, new car dealerships, retail gasoline stations, and autobody shops are prohibited. Further, the total square feet devoted to nonresidential uses shall not exceed 20% of the total gross floor at of the project, excluding basement parking areas However, in order to promote commercial redevelopment in the downtown area, projects shall be permitted to include the nonresidential uses allowed in the underlying business district, except that retail gasoline stations and used car lots shall be prohibited. Further, projects whose underlying zoning district is Business B or Business C shall not be subject to the twenty-percent nonresidential development limitation noted above.	Projects with a lot area between 25,000 and 40,000 sq.ft. shall have a maximum floor area ratio of 1.0, projects between 40,000 and 80,000 sq.ft. shall have a maximum floor area ratio of one and five tenths (1.5); projects over 80,000 sq.ft. shall have a maximum floor area ratio of 2.0.	No mention	Yes	Normal Requirements	Must provide 4 foot wide screen with 4-6 feet tall plantings.	Height restriction of 65 feet. Maximum lot coverage of 40%. Complex minimum open space requirements.
Primary Focus	Chelsea Waterfront Industrial Overlay District	No. Special permit can grant additional	Uses allowed as of right: 1. Harbor and marine supplies and services, chandleries, ship supply, not including bunkering of vessels; 2. Boat storage facilities, including rack storage facilities; 3. Marine-related scientific research and development; 4. Maritime-industrial related museum; 5. Marine office, including without limitation, offices of owners of wharves or their agent, naval architects, and seafood brokers; 6. Institutional uses, including marine research, education and laboratory facilities, riot including overnight accommodations; 7. Landscaped Areas; and 8. Accessory uses. Uses allowed through special permit: 1. Uses allowed as of right which occupy a gross-floor area and outside intensive use area totaling 30,000 square feet or more; 2. Tugboat, fireboat, pilot boat and similar services related to public safety on the Waterfront; 3. Public pedestrian paths, along the water's edge providing marine industrial viewing opportunities and/or points of access to, from, and within the Chelsea Creek DPA; 4. Boatbuilding, including facilities for construction, fabrication, maintenance, and repair of boats not exceeding a length of sixty (60) feet;(m	Projects shall have no more then 30,000 sq.ft. gross floor area and outside use area	No mention	No mention	No mention	No mention	No mention

Туре	Municipality, Name of District	Special Permit Reqd.	Permitted Uses (in addition to underlying zoning)	Density/ Maximum Units	Expansions	New Buildings	Minimum Affordable Units	Parking	l
Smart Growth Overlay	Arlington Mills	No. Special permit can grant additional uses.	Uses allowed as of Right: a. Mixed use development shall be permitted by right and shall allow the use of buildings and land in one ownership for residential, retail, restaurant, office, personal service, government non-profit, educational, philanthropic, day care or similar us subject to the following: 1. Mixed use buildings shall require residential components to have separate and distinct points of access from any commercial use. In instances where a mixed use development is comprised of more than one building on a lot, a building or buildings may be used exclusively for residential purposes. 2. There shall be no minimum or maximum percentage of residential or commercial/ office uses in any type mixed-use development. Further, buildings with a mix of commercial, residential and artist live / work space shall be permitted consistent with all applicable building code requirements. b. Rehabilitation of all existing commercial and residential uses, including existing mixed use development shall be permitted by right. (continued next cell)	New Construction: maximum of 1 dwelling unit per 1,500 square feet of lot area but not less than 20 units per acre. Adaptive Reuse: A maximum of 1 dwelling unit per 750 square feet of lot area but not less than 20 units per acre.	mention of	Yes, no specific mention of requirements.	Must meet affordable housing requirements of the Massachusetts Department of Housing and Community Development, and that procedures are in place tensure the administration of said units over time; and that the total number of affordable units is at least 20% consistent with said regulations.	more details such as	N n ir s c E s
			Uses Continued: c. Multifamily Residential as an adaptive reuse of existing buildings, or as new construction shall be permitted by right. d. Town or Row houses shall be permitted by right. e. Artist Live / Work Units shall be permitted by right. The configuration of artist/ live work space can be as separate floors in a building; or a building where each individual living space can be used for the creation of art or arts and craft products consistent with state and local fire safety codes. In either configuration showrooms and other areas for public display and sale shall also be permitted. f. Professional and general office uses and buildings shall be permitted as of right. g. Restaurants shall be permitted as of right, but all forms of drive up service windows shall be prohibited. Bars and lounges for dispensing alcoholic drinks shall also be permitted as of right if they are located in restaurants with seating for at least 50 people. Seasonal outdoor café's shall also be permitted by right as a primary or accessory use. (continued)						
			h. Retail uses shall be permitted by right if no individual retail use exceeds 20,000 gross square feet; except that supermarkets and furniture stores may be permitted up to 65,000 gross square feet. i. Medical office buildings or any service providing outpatient medical services shall be permitted by right. j. Research and development facilities for scientific or						

medical research shall be permitted by right consistent with all licensing requirements. k. Recreational uses as defined by 29-19D. I. Parking; including surface, garage under, and parking garages. 2. Storage facilities as a residential accessory use. Uses Permitted by Special Permit: a. Publishing and or printing establishment. b. Cinema or theater. c. Catering establishment. Exempted Uses: All uses allowed by Chapter 40A Section 3

Massachusetts General Laws. Prohibited Uses: All uses not listed.

Lawrence continued

Miscellaneous

Many dimensional

including height, setback, lot coverage open space, etc.

Brief listing of design standards.

requirements