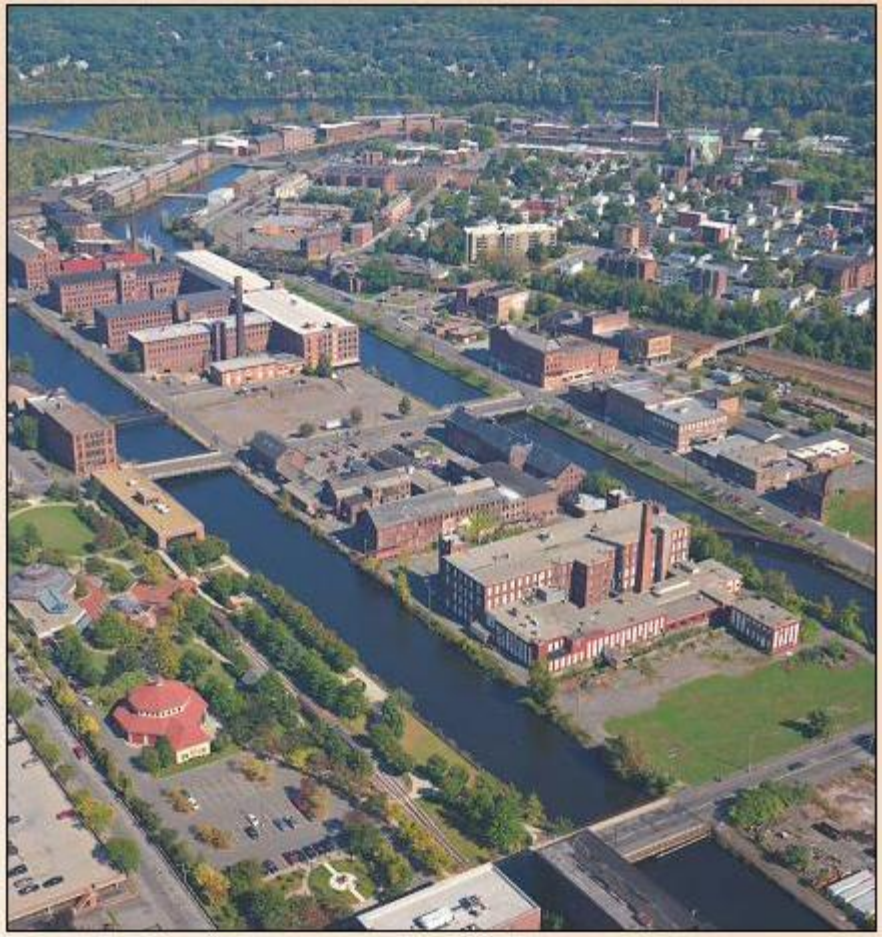
Mill Revitalization Districts (MRD)

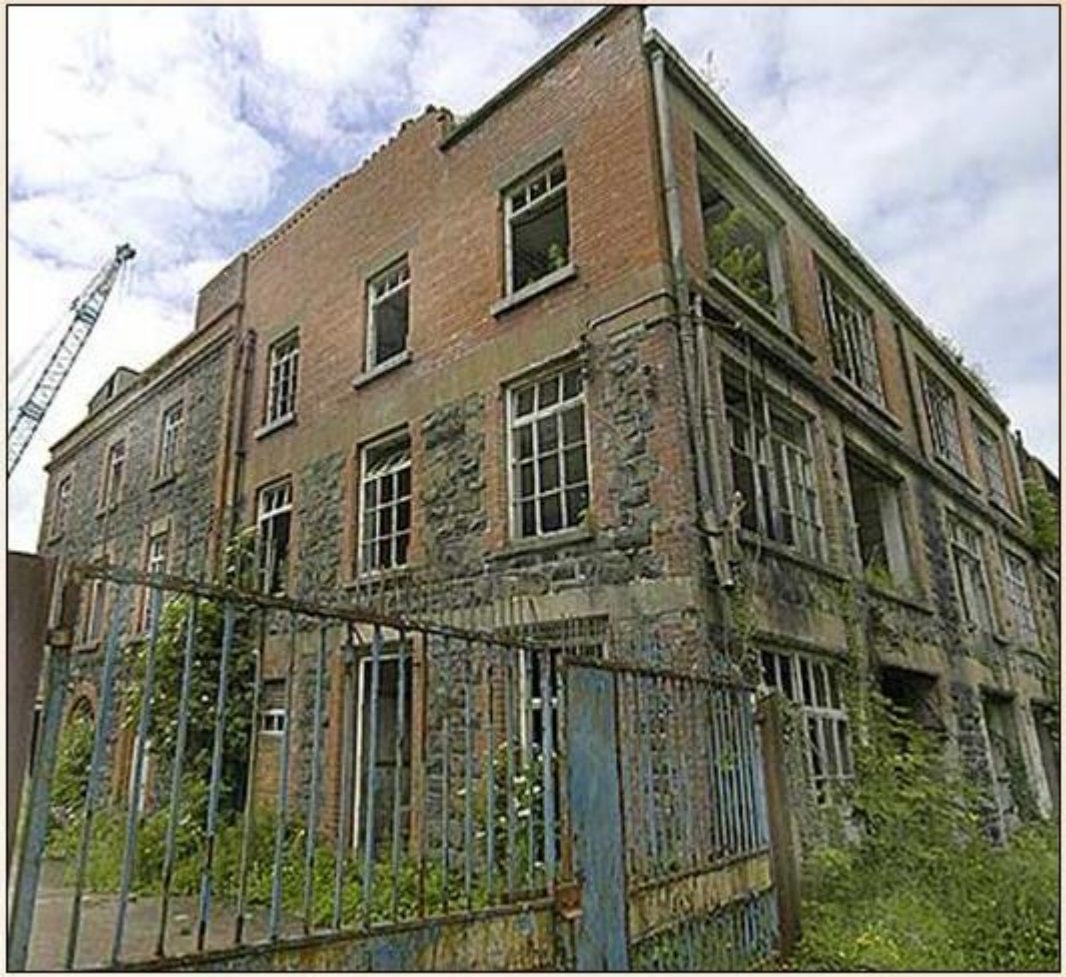
Smart Growth / Smart Energy Toolkit

Mill Revitalization Districts (MRD):

Areas that are composed of one or more historic mill buildings and surrounding structures such as worker housing, utilitarian service buildings, and canal infrastructure.



Typical Challenges



- Building scale and location make redevelopment difficult.
- Aging infrastructure.
- Environmental contamination.

Opportunities

- Historic mill districts present a valuable cultural asset.
- Revitalizing mill districts can provide an economic boost to the entire community.
- Redeveloping mill buildings accomplishes multiple smart growth goals at once:
  - Reuse of existing structures
  - Compact, infill development
  - Environmental restoration
  - Increase in housing and job opportunities

History of Mills

- Mills first appear in Massachusetts in the early 1800's.
- Massachusetts is a national industrial leader throughout the 1800's.
- Mill villages appear in every area of the Commonwealth and are largely supported by an immigrant workforce.
- Industry declines between 1920-1940 and once thriving mill districts fall into decay.

Redevelopment Considerations

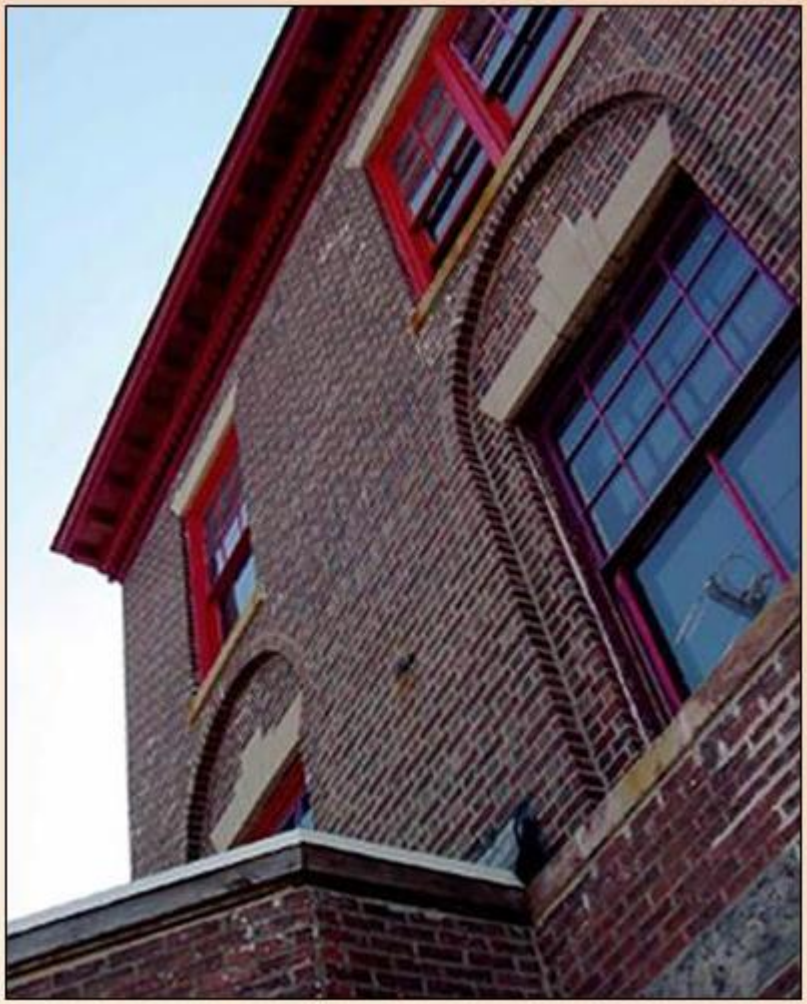
Successful mill revitalization depends upon four basic focus areas:

1) Site and Mill Building
2) Host Community
3) Market Conditions
4) Development Entity

1) Site and Mill Building

Considerations:

- Location
- Physical conditions:
  - Building size
  - Structural integrity
  - Roads and parking
  - Environmental condition
- Previous uses
- Utility systems
- Codes and Regulations



Classic Characteristics of Mill Buildings

- 4-5 stories.
- Brick exterior, wood interior.
- Spacious rooms with high ceilings.
- Many large windows.
- Built with hazardous materials such as asbestos and lead paint.
- Small setbacks from surrounding structures.
- Narrow streets and alleys.

2) Host Community

Considerations:

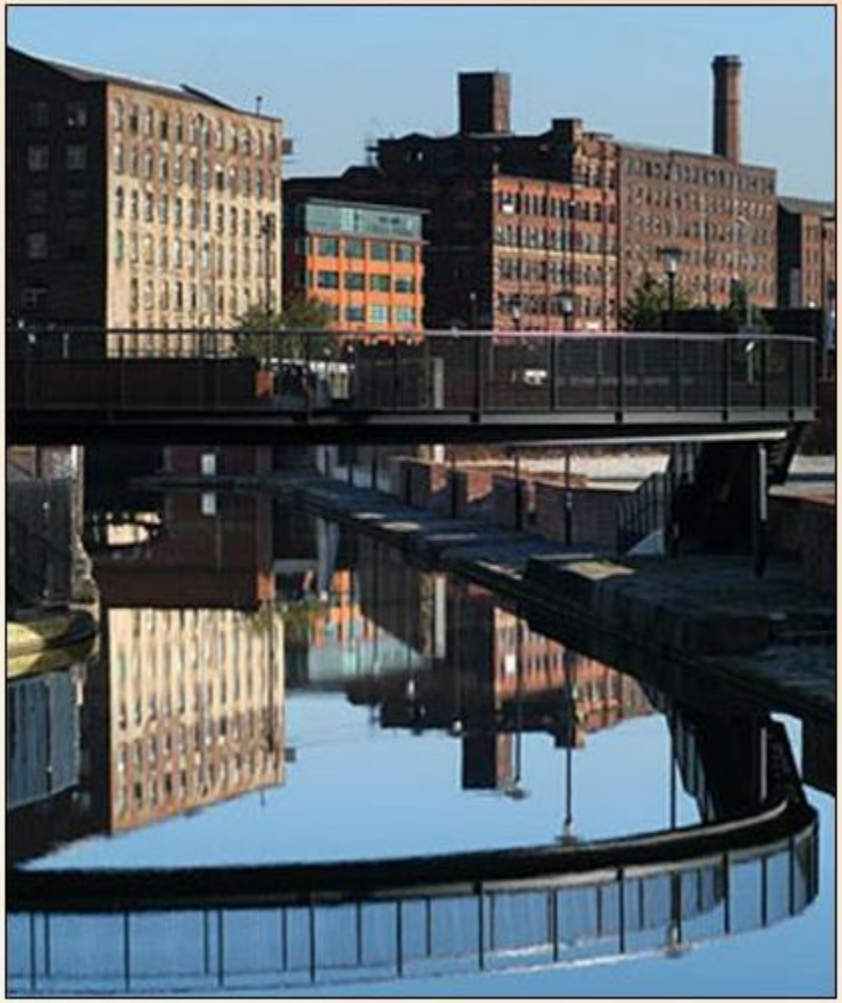
- Values and commitment to revitalization.
- Local leadership.
- Mill redevelopment objectives reflected in Master Plan and Zoning Ordinances.
- Willingness to engage in public-private partnerships.

3) Market Conditions

Considerations:

- Identify demand for different uses.
- Conduct market feasibility study to assess costs/benefits.
- Determine whether the local and regional planning agencies support brownfield redevelopment and smart growth principles.

4) Development Entity



Considerations:

- Available capital, experience, and innovative capabilities.
- Commitment to building effective public-private partnerships.
- Respect the history of the mill and the values of the community.

Actions that support Mill Revitalization

- Elicit community input and support.
- Build public-private partnerships.
- Accurately map district borders.
- Conduct environmental assessments.
- Prevent further potential structural and environmental degradation.
- Maintain a comprehensive inventory of pertinent information within the MRD.

Actions that support Mill Revitalization (cont.)

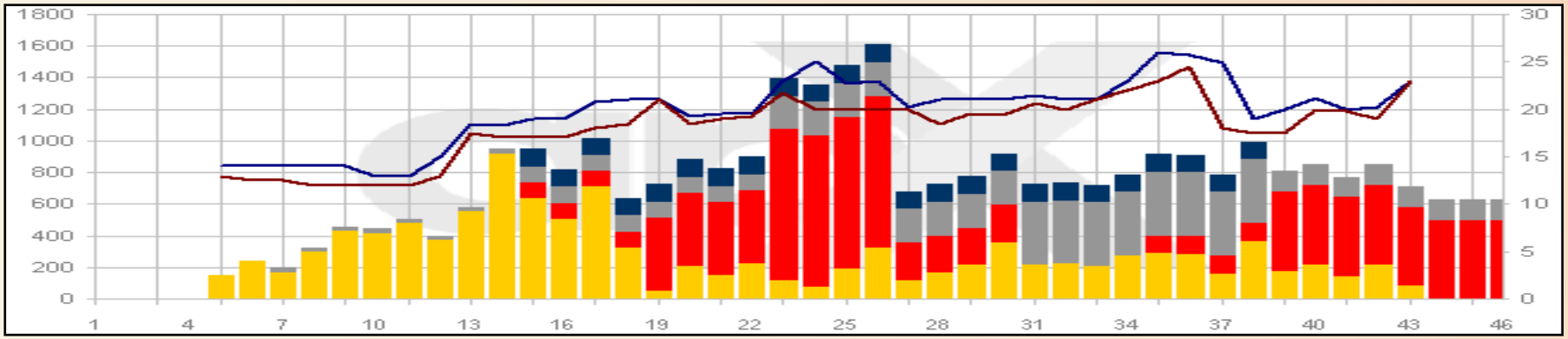
- Explore innovative permitting processes, zoning regulations and building codes to encourage redevelopment.
- Include revitalization goals in the master plan and zoning ordinance.
- Encourage flexible site plan approvals.
- Create streamlined special permit process.
- Establish as receiving zone under TDR provisions.

Potential for New Uses

- Each potential new use responds to unique market conditions.
  - Manufacturing: Easiest to convert, but least profitable return.
  - Commercial/Office: Location sensitive uses that work best in centralized areas.
  - Residential: Strong market, but can be difficult to convert depending on building layout.
  - Assisted Living: Fastest growing reuse of mill buildings in Massachusetts.

Understanding the Market Place

1. Data Collection
2. Realtor Participation
3. Lining Up Banks
4. State of Manufacturing
5. The Mixed Use Model



Recommended Site Development Process

1. Site Assessment/Environmental Resource Review
2. Analysis of Zoning and other applicable land use regulations (Is a Zoning Change Needed?)
3. Look for opportunities to integrate LID features into redevelopment
4. Consider mixed uses/TOD

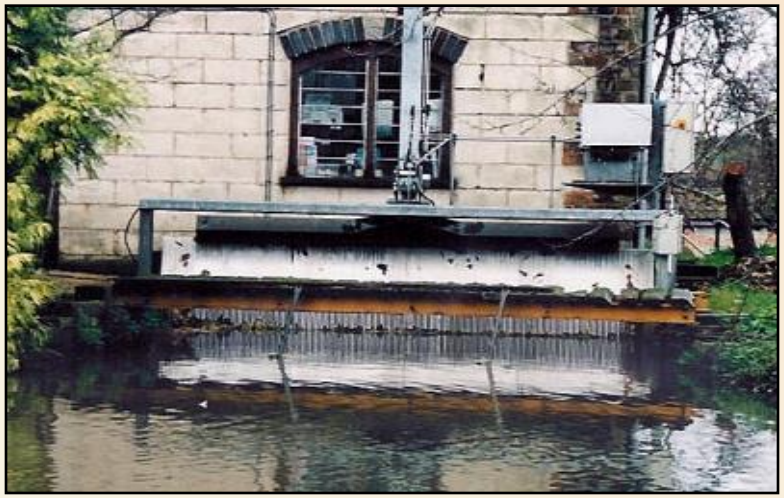
Integration of LID

Opportunities for Mixed Uses

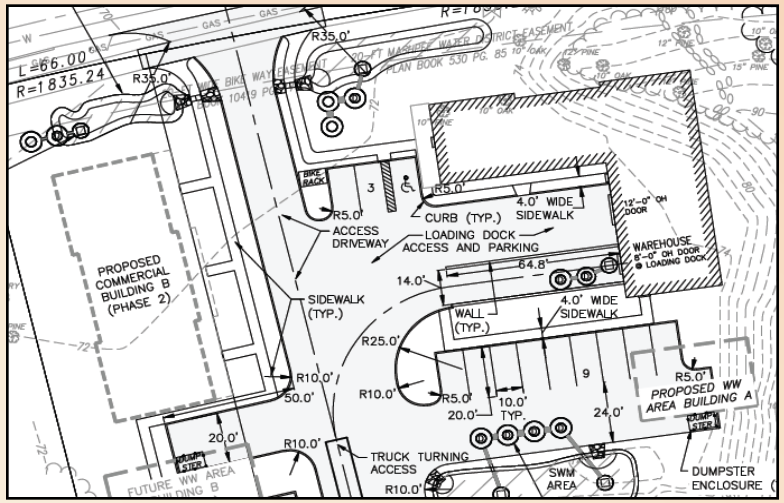
Recommended Site Development Process (cont.)

5. Evaluate options for alternative energy including hydropower.
6. Develop conceptual site plan.
7. Develop engineering plans.
8. Permit Applications (Special Permit, Notice of Intent, etc)

Hydropower Infrastructure

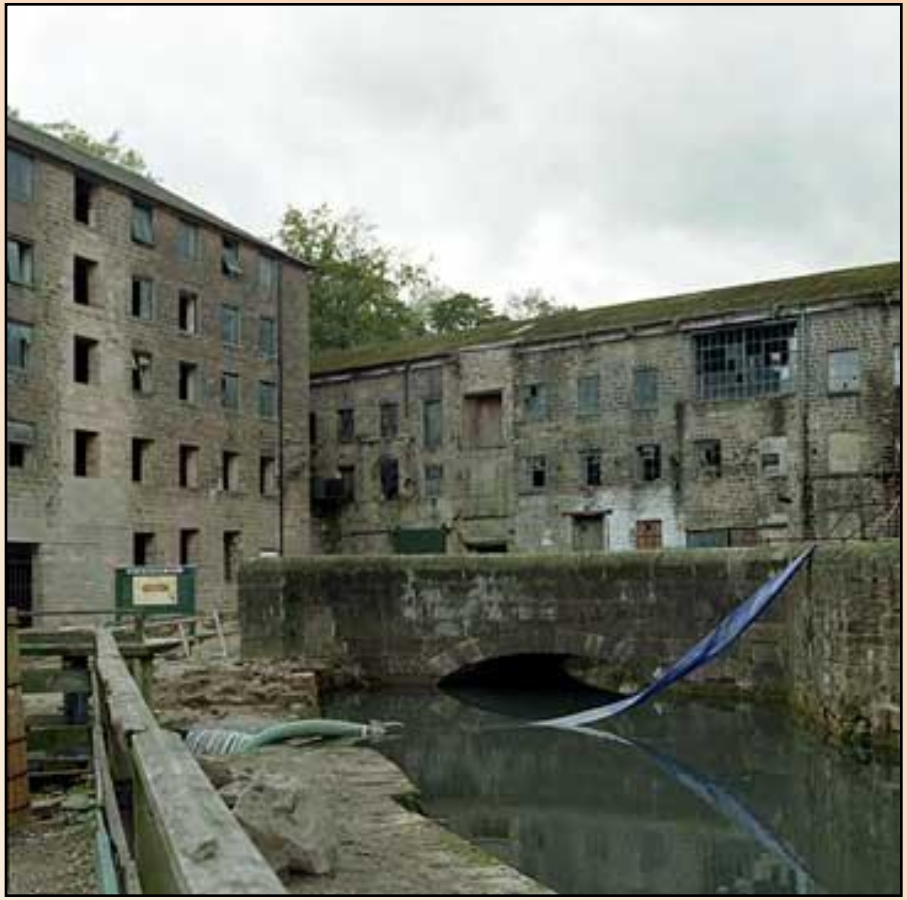


Engineering Plans



Concerns about Mill Redevelopment

1. Rehabilitation is expensive.
2. Environmental contamination can be a "deal breaker."
3. Physical constraints of site and buildings.
4. Perceived safety of surrounding area.



Concerns about Mill Buildings

1. **Rehabilitation is expensive.**
   - **Developers need to ensure that capital generated from reusing the mill will exceed capital invested into renovating it.**

Concerns about Mill Buildings

2. Environmental contamination can be a "deal breaker."
   - The cost of mitigating contamination at mill sites can be prohibitive.
   - Banks see contamination as a liability and may be unwilling to provide loans.

Concerns about Mill Buildings

3. **Problematic physical constraints.**
   - **Concerns include a lack of parking space, transportation access, and loading docks, as well as weakened floor loads (the amount of weight a floor can hold without caving in).**

Concerns about Mill Buildings

4. Perceived safety of surrounding area.
   - Mill buildings are typically situated in older, often rundown neighborhoods.

Overcoming Obstacles

- Several state and federal incentive programs are available to fund site assessment, remediation, and redevelopment.
- Eliciting community involvement early in the process can overcome potential pitfalls.
- A strong marketing campaign can transform apprehensive attitudes and perceptions.
- Zoning can be rewritten. Many current mill reuse bylaws in Massachusetts were initiated by a developer.

Public-Private Partnerships

- The Master Plan
- Zoning Assistance
- Invest in the Upgrades
- Tax Increment Financing
- Grant Writing

Building Community Support

- Show renderings.
- Prepare Pro Forma Studies.
- Ground truth vision.
- Encourage a mix of volunteers and professionals.
- Consider an Economic Development Investment Corporation (EDIC).

Financial Considerations

- Positive fiscal flows through property taxes.
- Increased employment opportunities for local workers.
- Flexible space for small firms to grow and prosper.
- Surrounding properties reinvest, increase in value, and result in a higher tax revenue.

Brownfield Sites

- **Brownfield Sites can be defined as:**

  Real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Brownfield Remediation Basics

- Environmental conditions should be clearly identified early in the redevelopment process.
- Remedial actions to address environmental contamination are combined with the redevelopment of a site.
- Potential for revisiting remedial actions must be minimized.

Brownfield Remediation: Environmental Site Assessment

- ***Phase I***
  - Preliminary information gathering based on existing documentation. Qualified engineers must determine if further site investigation is needed
  - Cost range: $1,000 – $5,000
- ***Phase II***
  - Collecting isolated soil and water samples, identifying potential contaminants, and preparing a work schedule for assessing the property.
  - Cost range: $50,000 - $70,000
- ***Phase III***
  - Physical cleanup of the site. Licensed Site Professionals (LSP) remove any containers of hazardous waste, treat or dispose of any contaminated soils, and remove any potential contaminates from aquifers, streams or rivers.
  - Cost range: $150,000 – Millions

Brownfield Remediation: The Investigation Phase

- Comprehensive and thorough investigation:
  - Reduce long term liability
  - Provide more and better options for remediation
- Follow DEP Site Characterization Guidance Document:
  - Develop a Conceptual Site Model
  - Communicate with DEP
- Potential Funding for Investigations:
  - Targeted Brownfield Assessments
  - Brownfields Site Assessment (Mass Development)

Brownfield Remediation: Licensed Site Professionals

- **LSP's are:**
  - **Experienced and qualified private sector environmental professionals.**
  - **Authorized to approve investigations and remedial actions.**

Funding Sources

- **Federal Programs:**
  - **U.S. Environmental Protection Agency**
  - **Brownfields Targeted Site Assessment Program**
  - **U.S. Department of Housing and Urban Development**
  - **U.S. Department of Agriculture**

For more information refer to the Brownfields module of Smart Growth Toolkit.

Funding Sources

- **State Programs:**
  - Brownfield Redevelopment Fund
  - The Massachusetts Business Development Corporation
  - Brownfields Tax Credit for Rehabilitation of Contaminated Property
  - Massachusetts Department of Environmental Protection
  - The Executive Office of Energy and Environmental Affairs
  - Massachusetts Division of Housing and Community Development
  - Clean Water State Revolving Fund Program
  - Remediation Loan Program
  - The Office of the Attorney General
  - Massachusetts Opportunity Relocation and Expansion program
  - Various Massachusetts Smart Growth Programs

For more information refer to the Brownfields module of Smart Growth Toolkit.

Case Study 1:

Clock Tower Place, Maynard, MA

Case Study: Clock Tower Place, Maynard, MA

The Buildings

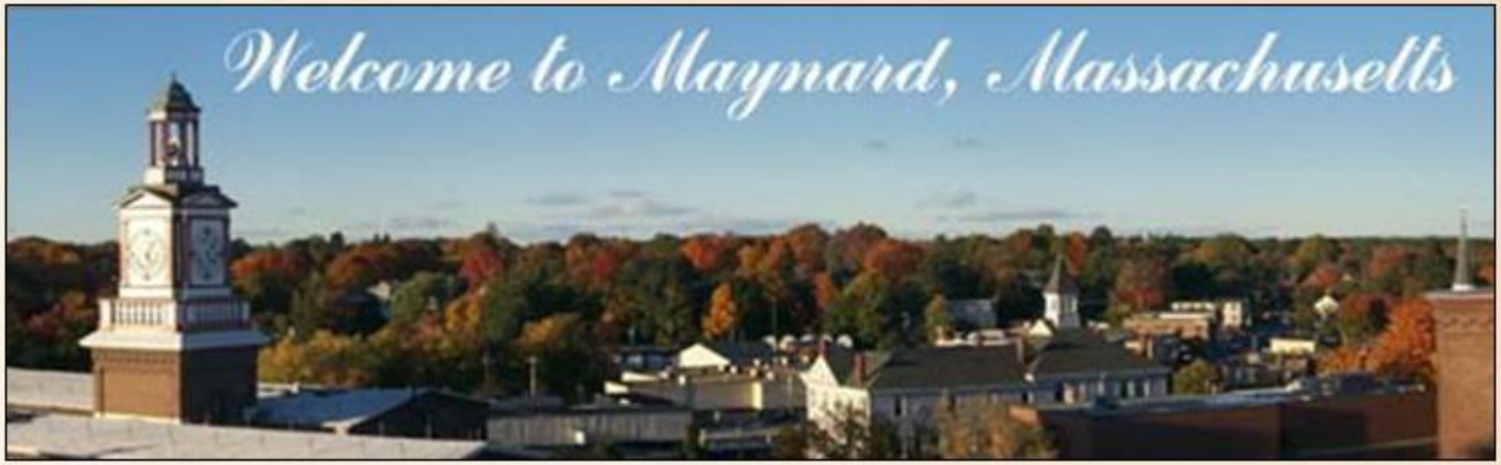
- 13 red brick buildings
- 1.1 million square feet

Manufacturing ranged from carpets to computers

Case Study: Clock Tower Place, Maynard, MA

Host Community

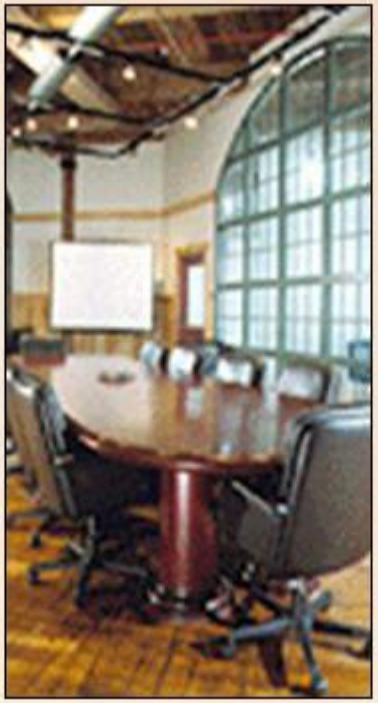
- Mid-sized town of 10,000 residents.
- 25 miles NW of Boston.
- Community is best described as industrial, and working class.



Case Study: Clock Tower Place, Maynard, MA

Market Demand

Strong market demand for office and light manufacturing space helped fill the mill with 85 different companies within the first 2 years.



Case Study: Clock Tower Place, Maynard, MA

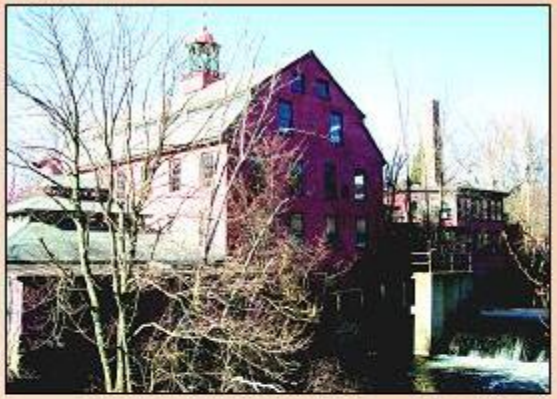
Development Entity

Wellesley/Rosewood Maynard Mills L. P. (WRP)

- Expertise in construction, property management, and marketing.
- Utilized Tax Increment Financing (TIF) to fund project.

Case Study 2:

Whitin Mill, Northbridge, MA



Case Study: Whitin Mill, Northbridge, MA

The Buildings

- Five red brick buildings
- 36,500 square feet
- Manufacturing ranged from cotton to steel spinning rings

Case Study: Whitin Mill, Northbridge, MA

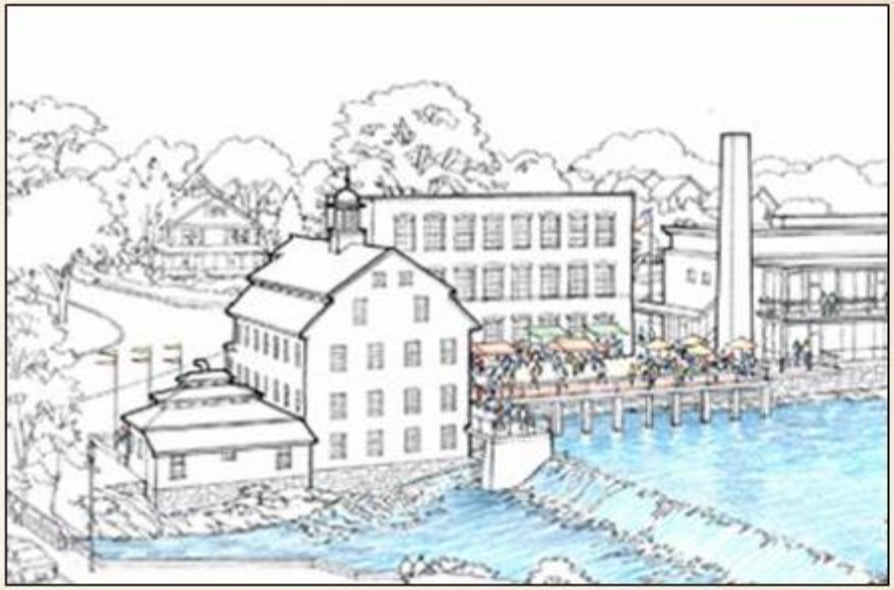
Host Community

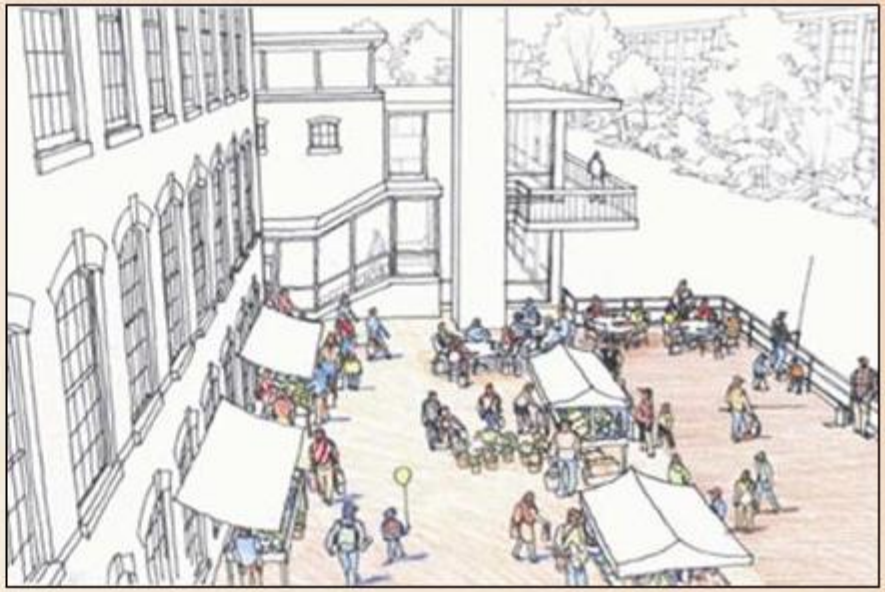
- Suburban community of 6,300 residents.
- 43 miles SW of Boston
- Strong connection to industrial heritage.

Case Study: Whitin Mill, Northbridge, MA

Market Demand

- **Redevelopment plan responds to a town need for civic space, as well as a market demand for a restaurant and additional retail.**





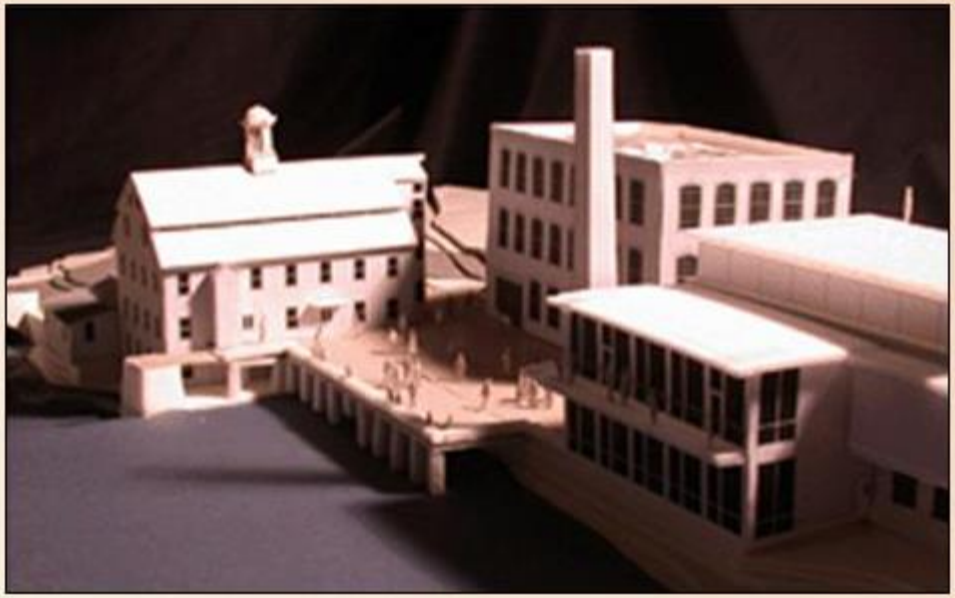
Case Study: Whitin Mill, Northbridge, MA

Development Entity

- Redeveloped by owner: Alternatives Unlimited Inc.
- Commitment to innovative alternative energy technology.
- Cost of redevelopment ($9.1M) partially funded through state grants and other donations ($3.5M).

ALTERNATIVES

Community Life For People With Disabilities



Case Study 3:

Wood Mill, Lawrence, MA

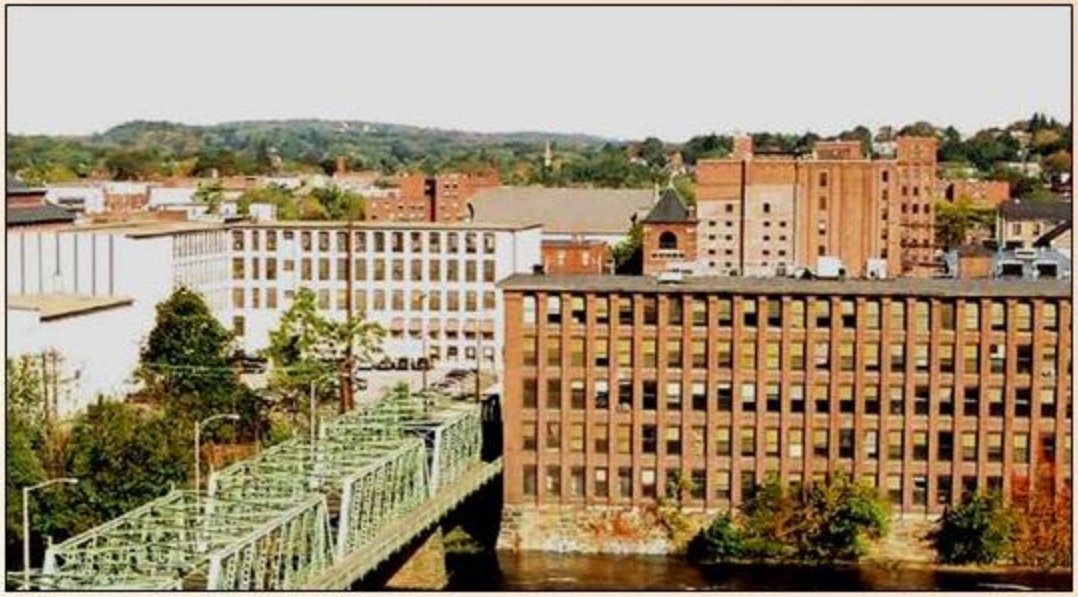
Case Study: Wood Mill, Lawrence, MA

The Building

- 1 red brick building.
- 1.3 million square feet.
- One of the largest mill buildings in the world.
- Primarily a textile mill.

Case Study: Wood Mill, Lawrence, MA

Host Community



- One of largest cities in MA with 70,000 residents.
- 30 miles north of Boston.
- Community has diverse population with history of immigrant, working class populace.

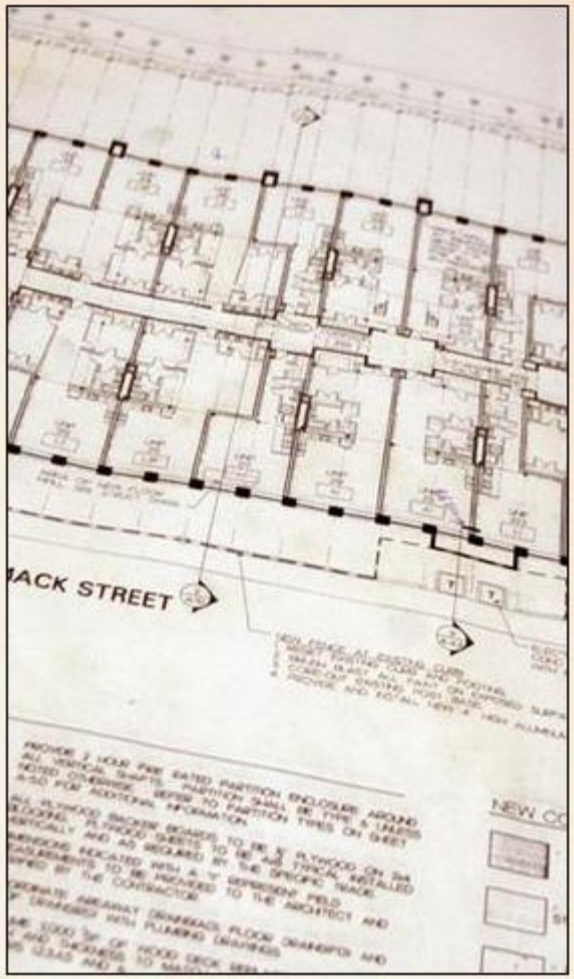
Case Study: Wood Mill, Lawrence, MA

Market Demand

- **Strong market for luxury residential condos as indicated by extensive demand for purchase.**
- **High volume of residential units being constructed creates market for supporting commercial uses.**

Case Study: Wood Mill, Lawrence, MA

Development Entity



- **Bob Ansin, MassInnovation.**
- **$200M invested into rehabilitation.**
- **Previous experience converting factories into mixed use.**
- **Commitment to alternative energy through geothermal installation.**

Additional Local Examples:

- **Francis Cabot Lowell Mill, Waltham, MA**
  - **<u>Adaptive Reuse:</u> Reuse of one of the oldest textile mills in the country. One of the first and largest mill reuse projects in MA.**
  - **<u>Program:</u> 220 residential units and a museum.**

- **Whitney Carriage Apartments, Leominster, MA**
  - **<u>Adaptive Reuse:</u> Rehabilitation of a certified historic carriage manufacturing mill.**
  - **<u>Program:</u> 151 residential units.**

A Growing Trend:
Mills Reused for Assisted Living

- **Marland Place, Andover, MA**
  - Conversion of a former historic textile mill into 129 assisted living units.
- **River Court, Groton, MA**
  - Rehabilitation of an historic former paper mill to 74 unit senior housing with assisted living and Alzheimer's care.
- **Standish Village at Lower Mills, Dorchester, MA**
  - Innovative design and space planning for mill building converted into an assisted living facility with 84 units and Alzheimer's care.
- **Taber Mill Apartments, New Bedford, MA**
  - Adaptive reuse of early 20th century textile mill into 151 senior living units.

Lowell, MA:
A Laboratory of Mill Reuse

- **Centennial Island**
  - **Adaptive Reuse:** Conversion of a 19th century historic fabric mill complex, the oldest surviving mill building in Lowell.
  - **Program:** 118 residential units.
- **Renaissance on the River**
  - **Adaptive Reuse:** Conversion of the Lawrence Mills complex.
  - **Program:** A residential community that includes 85 condominiums, 67 lofts, and a public park with a pedestrian path to the Lowell Riverwalk.
- **95 Bridge Street**
  - **Adaptive Reuse:** Renovation of a certified historic former woodworking mill building.
  - **Program:** Mixed-use development of condominiums and office space.
- **The Apartments at Boott Mills**
  - **Adaptive Reuse:** Historic reuse of portions of the East Mill buildings of the Boott Cotton Mills complex.
  - **Program:** Apartment community with 154 units.

Conclusion

- Public-private partnerships are increasingly important.
- Mill redevelopment typically involves confrontation, challenges, conflicting information, and emotionally charged people.
- There should be maximum citizen involvement, environmental protection and continuous monitoring.
- Not all old mill districts are suitable for revitalization
- But when they are, it is worth the effort!

Resources

- Clock Tower Place Website; Maynard, MA; Wellesley Management: http://www.clocktowerplace.com/ourhistory.htm
- Whitin Mill Complex Green Design Feasibility Study; Nothbridge, MA; Beals and Thomas Inc.: http://www.masstech.org/Project%20Deliverables/GB_GBI_Feasibility_AlternativesUnlimited.pdf
- Monarch on the Merrimack Website; Lawrence, MA; MassInovation: http://www.monarchlofts.com/
- Delftree Mill Reuse Plan: An Environmental Planning Project; North Adams, MA; Williams College: http://www.williams.edu/CES/mattcole/resources/onlinepaperpdfs/papers/delftree.pdf
- Apadtive Reuse and Historic Preservation Projects in Massachusetts; The Architecture Team Inc.: http://www.architecturalteam.com/portfolio/project_list_pdf/AdaptiveHistoricReuse.pdf
- U.S. Department of Housing and Urban Development; Brownfields Economic Development Intiative: http://www.hud.gov/offices/cpd/economicdevelopment/programs/bedi/index.cfm
- MassDevelopment Brownfields Funding and Incentive Programs: http://www.massdevelopment.com/development/brownfields_intro.aspx
- Massachusetts Department of Environmental Protection; Brownfields Program: http://www.mass.gov/dep/cleanup/brownfie.htm