

Final Report

The Westboro Riverfront Park Design Study

for the City of Lebanon, New Hampshire



ORW Landscape Architects and Planners

Pathways Consulting
Civil Engineers

UK Architects

Community Investments
Economic Development

Engineering Ventures
Structural Engineers

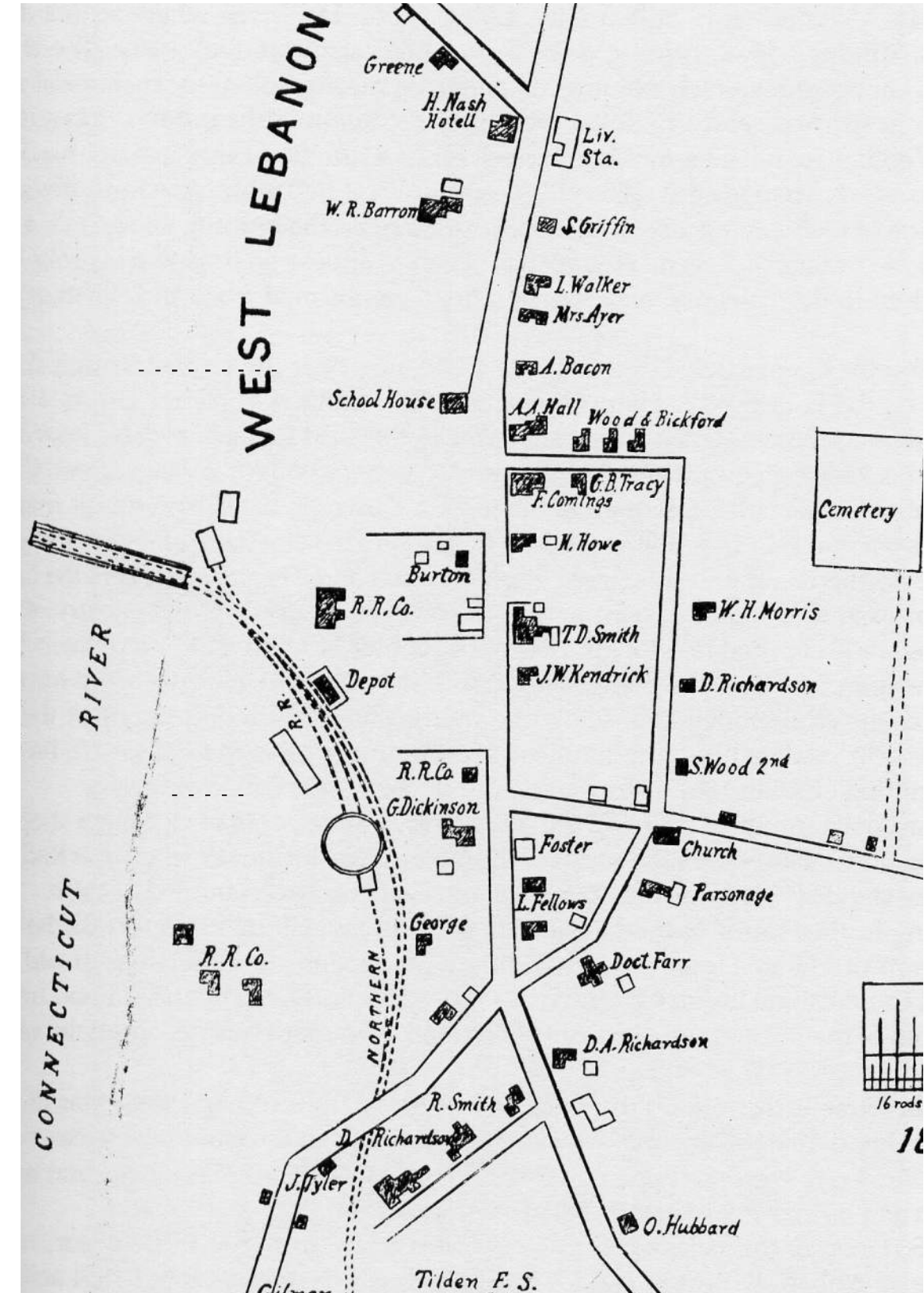
March 2004





THE WESTBORO RIVERFRONT DESIGN STUDY

Chapter	Page
I. Introduction	3
II. Site Map and Description	4
III. Existing Land Uses	5
IV. Existing Plans and Policies	6
V. The Big Picture of Westboro and the City	7
VI. Overall Plan for the Riverfront Trail and Park	8
VII. Detailed Design Plans	11
VIII. Preserving Westboro's Historic Resources	13
IX. Costs, Phasing and Funding Sources	16
X. References	18



I. Introduction



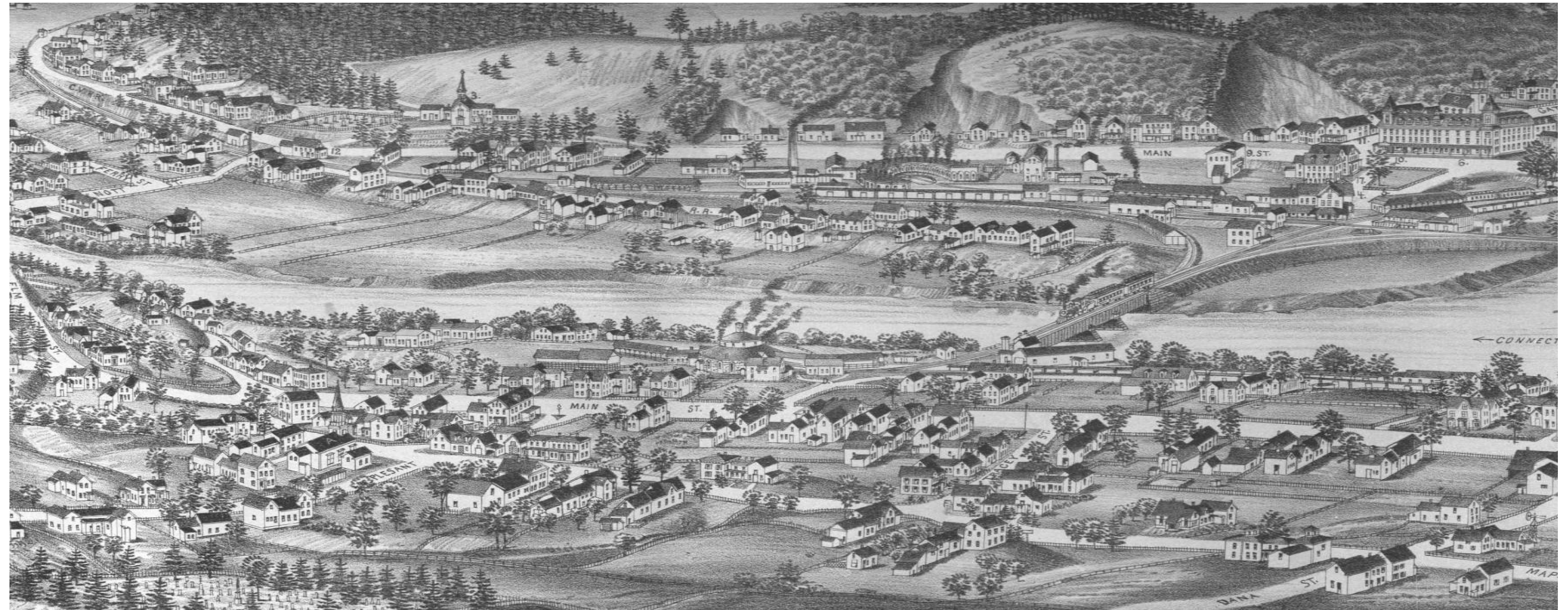
Background to the Westboro Riverfront Design Study

Established in 1848, the Westboro Railroad Yards were in continuous use for approximately 120 years until the late 1970's when the site was abandoned by the Boston and Maine Railroad. The site was purchased by the State of New Hampshire in 1998, and in 2000 rail use began anew on the site under an operating agreement between the NH Department of Transportation (NHDOT) and the Claremont Concord Railroad Company (CCRR).

In 2000, the Lebanon Rotary Club sponsored a community planning process to look at future public use and development of the Westboro Yards. Quickly, the plan grew in scope and intent as a network of greenspaces called the 'string of pearls' along the Connecticut and Mascoma Rivers was imagined by the Rotary and City officials. The Rotary planning process looked at options for enhanced public access to the Connecticut river across Westboro, and new commercial uses on the site as a part of increased rail use with CCRR.

In June 2003, the City of Lebanon engaged ORW Landscape Architects and Planners of Norwich, Vermont, assisted by UK Architects, Engineering Ventures, and Community Investments to prepare a Design Study emphasizing a detailed plan for public access to the Connecticut River including a trailhead with public parking, a walking trail along the river and assessment of two historic structures. Whereas the Rotary study looked at the entire Westboro site, under the terms of the agreement with NHDOT, land designated to be leased to the City along the river was the subject of design efforts.

An interim report was prepared for the City Council and Capital Improvement Plan Advisory Committee in December 2003. The Interim report presented initial phases and costs for work to assist with city budgeting decisions.



Unless other wise noted, the photos in this report have been generously provided by the Lebanon Historical Society.

This Final Report provides the complete project findings including existing site conditions, relevant plans and policies that are currently in place, issues and opportunities that were defined by the Project Advisory Committee, and conceptual plans for improvements along with their associated costs. Additional materials not included in this report can be acquired from the Lebanon Recreational Department.

Changes between the Interim and Final Report are based upon City Council review of the Interim report, inclusion of a design plan for enhanced access to Westboro Yards and drainage repairs that should be integrated with the replacement of the South Main Street (Route 12A) railroad bridge, associated cost updates, a phasing plan to prioritize expenditures and to focus volunteer efforts.

As a measure of public confidence, the Capital Budget Committee appropriated \$100,000 in City funds to further the efforts for implementation.

Opportunities for the City and the Region

The Westboro Yards history as a railroad facility for the City of Lebanon and the entire northern New England Region is significant. If the future sees ongoing active rail use, then economic opportunities for industrial and potentially passenger use could contribute to new business opportunities to enhance the unique identity and history of West Lebanon. Continued use of the railroad could also bring new meaning to the site through new uses and managed public access.

Restoration of the historic railroad buildings, public access to the river and views of the working rail yard, can provide a unique experience to residents and visitors to West Lebanon alike.

From an open space perspective, the Westboro site occupies a prime but overlooked site just below the Connecticut River's confluence with the White River. Today, there is growing interest in reclaiming the riverfront for its scenic amenities, open space, recreation, and environmental values. In this context, the Westboro site could provide a green and accessible riverfront in Downtown West Lebanon, be a link in a growing regional network of trails and parks connecting major open space resources, including the Mascoma River, Boston Lot, and the Northern Rail Trail to Mascoma Lake, Downtown Lebanon and White River Junction.



THE WESTBORO RIVERFRONT DESIGN STUDY

II. Site Map and Description

Property Ownership, Easements and Use Agreements

The Westboro Rail yards comprises 22 acres of land located in West Lebanon, New Hampshire between West Lebanon's historic Main Street and the Connecticut River. Bridge Street, the village center and Route 12A define the north and south boundaries of the site. The property is owned by the State of New Hampshire and managed by the New Hampshire Department of Transportation. In May, 2000, NHDOT and the Claremont Concord Railroad (CCRR) Corporation entered into a 10-year lease agreement for use of the rail line and yards. A 10-year renewal of the agreement or purchase of the facilities, provided they are maintained as an active railroad line is part of the contract.

The City of Lebanon entered into a one-year Temporary Use Agreement in June 2003 in order to conduct this study for the portion of the Westboro Rail Yards along the Connecticut River. This agreement allows for a one-year renewal. As of January of 2004, the City and NHDOT were negotiating the actual transfer of ownership from the state to the city for land along the riverbanks of the Connecticut. Ownership is a prerequisite for many grants that the city would like to use for site development. Also in January of 2004, CCRR approached City representatives with the possibility that the roundhouse could be transferred to city use. The details of that agreement and specifics of future uses of the roundhouse are beyond the scope of this report.

The City of Lebanon has a public utilities easement along the Connecticut River shoreline and within a drainage swale adjacent to Route 12A. The City's sewer line easement is contained within a 50-foot easement along the riverbank that extends from Bridge Street to the treatment plant at the confluence of the Connecticut River.



THE WESTBORO RIVERFRONT DESIGN STUDY



III. Existing Land Uses

Existing Uses and Activities

The Westboro Yards are currently used by the Concord Claremont Railroad Company to transfer aggregates from rail to trucks at a recently built transfer station. This operation involves the railroad main line coming across the Connecticut River from Vermont and rail sidings which connect to the transfer station north of the site. There is also a municipal sewer line that traverses the site running parallel to the river along the first level terrace above the river. A municipal combined sewage overflow/stormwater outfall pipe is located at the southern end of the property adjacent to the river. There are three currently occupied apartments at 26 Railroad Avenue. The remainder of the site is not currently in active use.

The Concord Claremont Railroad Company, which currently leases the Westboro Yard from the State, envisions continued use of the site for active rail use. CCRR has defined a plan with capital improvements for future operations, including improved road access to the site, additional area for bulk storage, new sidings, and a new engine house. The CCRR which is restoring the historic Flying Yankee railroad cars for future use on tourist trains, is considering locating service along this line.

Circulation

Rail. The site is currently bisected by the curving main line and sidings. The main line links to White River Junction at a bridge crossing the Connecticut River and traverses Westboro southward, crosses under Route 12A, and continues to Lebanon. Sidings branch off of the main line to the north and serve the transfer station and adjacent warehouses.

Vehicles. There are no city streets on the site. Informal vehicular access onto the site is currently obtained from Bridge Street and Railroad Avenue

via informal gravel driveways. There is also a gated driveway off of Route 12A to the wastewater facility. Access from Bridge Street and Route 12A does not involve crossing the tracks.

Pedestrian and Bicycle Access

There is currently no pedestrian or bicycle access on the site; however, informal pedestrian use of the site is common. Pedestrians use the rail bridge at the Connecticut River which provides a link between the village centers of West Lebanon and White River Junction.

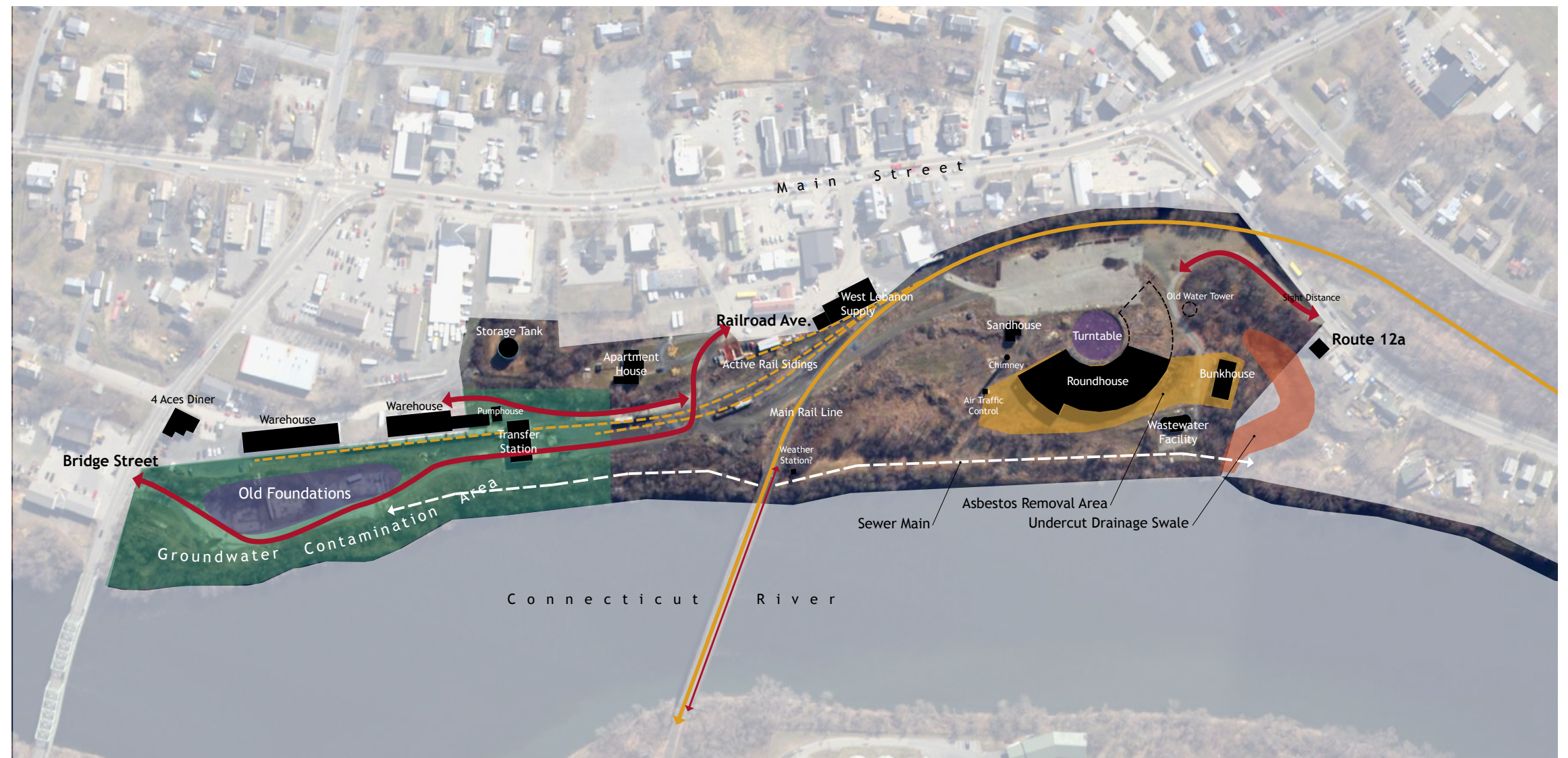
Hazardous Materials

Hazardous substances have been used and are present on the site. In the area of the Roundhouse, soil has been contaminated by petroleum and other organic compounds and asbestos containing materials are present in the building and have been buried on the site.

The northern portion of the site (below Bridge Street) was formerly owned by an oil company and includes areas of soil and groundwater

contamination. There is a designated Groundwater Management Zone on the property, which includes monitoring wells. This site also includes a 300,000 gallon above ground storage tank (AST).

In December 1974, an oil spill occurred at the Westboro and emergency remediation measures were taken to contain that spill. In 1992 an oil sheen was observed on the river adjacent to the site. The source of this contamination was identified as contaminated soil and a transmission pipe in the vicinity of the former fueling platform.





IV. Existing Plans and Policies



This plan addresses the land to be conveyed to the City of Lebanon from the State of New Hampshire, and provides the first steps to be taken in defining public access via trails and the creation of a public park and river access near Bridge Street. The larger picture of Westboro is still unfolding. This chapter outlines some of the relevant local and state policies that specifically address Westboro.

Lebanon City Master Plan

The Land Use section of the Lebanon Master Plan supports continued rail use at Westboro, defines the site as a future Rail/commercial site and links future economic and community development in West Lebanon to improved trail and public access aspects that this plan affords.

Lebanon Recreation Facilities Master Plan 1998

The Lebanon Recreation Facilities Master Plan places a high priority on the Northern Rail Trail Corridor as a multi-use recreational path that connects neighborhoods and parks within Lebanon and could, in the future, provide a link to White River Junction. Currently, the trail runs from downtown Lebanon to Mascoma Lake. The plan recognizes the recreational potential of the Westboro site and suggests a range of potential future recreational uses, including a destination and trailhead for the rail trail, a community park, amphitheater, skateboard park, community center



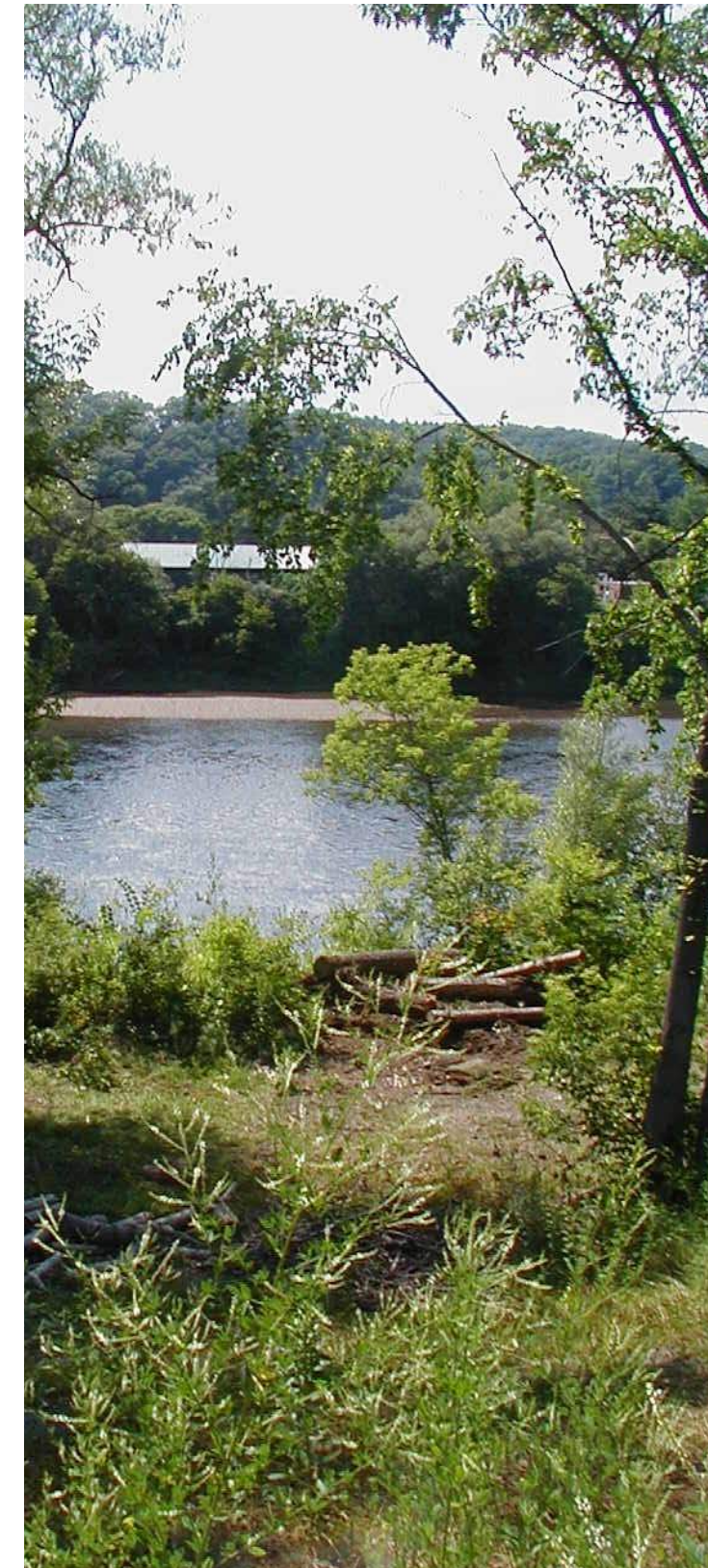
and a potential trolley link between White River Junction and Lebanon. *It should be noted that at the time the Master Plan was written, the site was not in active rail use. Some of these concepts may not be compatible with current rail operations.*

New Hampshire State Rail Plan 2001

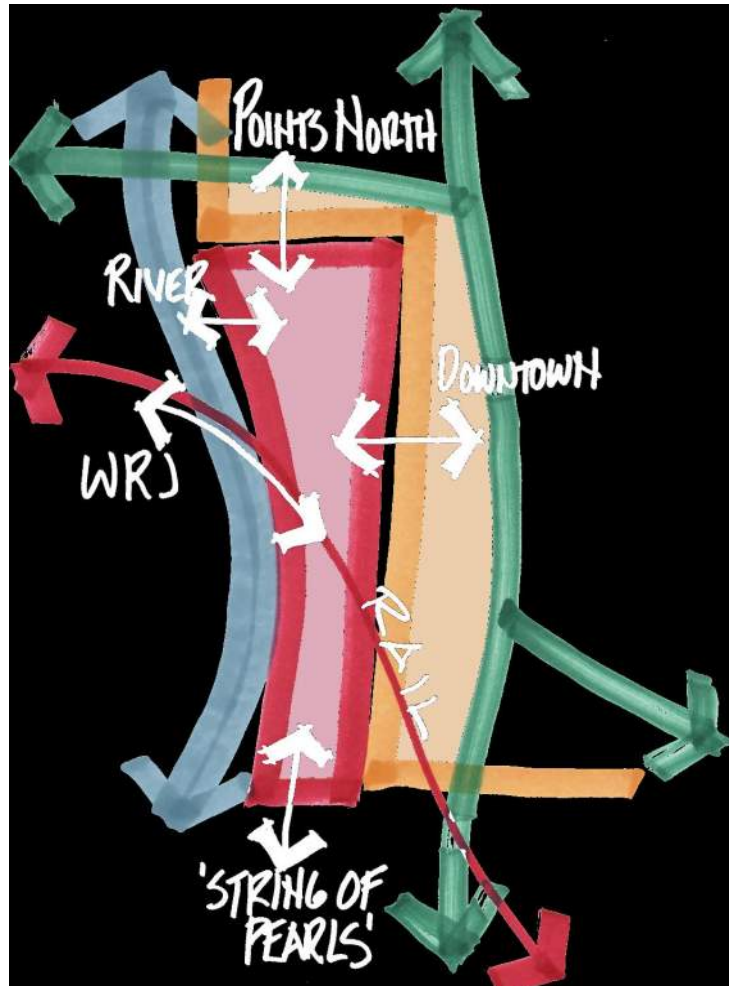
A majority of the Northern Railroad Line is owned by the State of New Hampshire. The section from Boscawen to Lebanon is abandoned, and was purchased from the Boston and Maine Corporation in 1995. In 1999, the State bought a 3-mile section in West Lebanon. In purchasing rail lines, the State Rail Plan indicates the goal of preserving abandoned railroad corridors having “potential for future transportation or public uses.” The State has purchased close to 500 miles of rail corridor for preservation purposes, including 193 miles of active rail line. The state has allowed approximately 300 miles to be used as trails as an interim use.

Boston to Montreal High Speed Rail

The Westboro yards are a part of the larger Boston to Montreal High Speed Rail (BMHSR) Corridor designated by the Federal Railroad Administration in 2000. This rail corridor is currently undergoing planning and feasibility studies. Conceptual planning studies for the BMHSR Corridor identify White River Junction, directly across the river from the Westboro Yards, as the likely station location for the Upper Valley Region.



V. The Big Picture of Westboro and the City



Relationship to the West Lebanon Community

Reconnecting the West Lebanon community with the riverfront is a desirable goal and the Westboro yard could play a central role in a trail connection between Bridge Street and South Main Street. Imminent changes to downtown West Lebanon point to a deep desire on the part of neighborhood residents to promote historic preservation and economic redevelopment of both the downtown commercial district and adjacent neighborhoods. Through the Camber of Commerce, a group of residents and business owners have come together to consider the potentials of formal "New Hampshire Downtown" designation through the New Hampshire Main Street Program.



Lebanon's 'String of Pearls'

As of January 2004, the groups decision was to defer formal application, but to instead focus of local initiatives and city policies that would make for enhanced character in downtown West Lebanon. Other changes include the planned creation of a new West Lebanon public library and downtown park.

The possible integration of redevelopment of downtown West Lebanon and the Westboro yards holds many promises. However, as of yet a concerted effort at unifying the comprehensive picture has yet to be fully realized. All the groups in West Lebanon must come together to plan their future, or risk losing the cumulative benefits.

Regional Open Space Connections

The Westboro Yard is a valuable open space resource that can help to anchor the growing threads of regional bicycle, pedestrian, canoe and kayak resources that are developing in the region.

The Lebanon Rotary Club's 'String of Pearls'

The Lebanon Rotary Club has identified Westboro as one component of a larger series of linked open spaces along the Connecticut and Mascoma Rivers. This project, called the 'String of Pearls' referring to a series of linked open spaces, is aimed at returning "Lebanon's rivers to the forefront of the City's consciousness through creation of a series of beautiful and significant, natural and improved public spaces along our rivers and rail trails."

Seen through this lens, Westboro is far beyond a site of single significance, it could become a regional center of recreational and economic activity.



VI. Overall Plan for the Riverfront Trail and Park

Overall Plan Elements

The following description of the plans for the Westboro Yard accompany the drawings on page 9.

1. Active Rail Use

This plan assumes that active use of the rail line will continue into the future.

In the near-term, it is assumed that the use of the site by a short line rail company will continue using existing tracks in their current alignment.

In the mid-term it is assumed that short line rail will continue with expanded rail sidings developed on-site.

Over the long-term, the plan may need to have the flexibility to adapt to expanded rail use such as the possibility of high-speed passenger rail service between Boston and Montreal and the planned expansion of a Rail / Industrial District in West Lebanon.

2. Hazardous Wastes

The plan assumes that hazardous waste will be remediated by the property owner (NH DOT) to a level that will allow public use of the site.

3. Historic Buildings

The Crew House, Roundhouse and Sand House, although in deteriorated condition, are significant historic resources that will require stabilization to prevent further damage. Reuse of historic buildings for interpretation or contemporary uses is a desirable goal. The future use of those buildings should be planned in concert with the Roundhouse potentially being made available to the City from CCRR. Part of the original intension of this study was to identify places where the sandhouse could be relocated. It would be most preferable to preserve the Sand

House in situ, but that will need to be negotiated with the City and the CCRR in the future.

4. Riverfront Trail

An ADA accessible trail extends the length of the property along the riverfront, linking Bridge Street, the trailhead, the Crew House and Route 12A. In order to meet ADA requirements for grades less than five percent, the trail will follow the shelf of the sewer line along the riverbank. Ultimately the trail would include kiosks for interpretation of the rich array of natural and cultural features of the site. The trail would be ten feet wide and would be surfaced with hardpack for walking and biking.

5. Trailhead

A trailhead will provide a point of access to the Connecticut River for pedestrians, picnickers, sightseers and carry-in canoe and kayak access. Primary access to the trailhead would be obtained via Bridge Street and a parking area for approximately 19 cars. Two trails lead down to the riverfront from the street: an ADA accessible route (with grades of five percent or less) which winds down the riverbank to the river, and a trail which descends the the bank via an elevated staircase.

The trailhead will include revegetation of areas affected by grading and construction activities, and will include grassy areas for picnicking and passive enjoyment of the riverfront.

6. Vehicular Access Improvements

In order to accommodate the trailhead parking, the access routes from Bridge Street will need to be improved. A new intersection at Bridge Street which meets current street design standards would be provided and would accommodate traffic associated with both the trailhead and the short line railroad operations.

A new road should be constructed to provide clear

and separate accesses to the trailhead and rail yard operations. This improvement should be integrated with the planned replacement of the Route 12A Railroad bridge under South Main Street.

7. Stabilization of the Crew House

The following initial steps should be taken to stabilize the Crew House.

- Brick walls should be protected from potential water infiltration and further damage.
- Consider putting a new roof on the building and "mothballing." This would take considerable funding to just get this far, but if the building is important enough, historically, then it must be done.

As an emergency measure, a cap could be designed to cover the top of the brick walls to keep the weather out.

8. Stabilization of the Sand Shed

At a minimum, the following interim steps should be undertaken to stabilize the Sand Shed until full rehabilitation can be undertaken.

- Remove sand from exterior walls
- Replace roofing

Relocation of the Sand Shed is also called for in Phase I as it is impeding current railroad operations. Possible locations are shown on the plan.



At right are examples of trails and a simple overlook of the type that might be used at Westboro. The photos also show an ADA compliant path made of materials other than asphalt pavement

THE WESTBORO RIVERFRONT DESIGN STUDY

Overall Plan





THE WESTBORO RIVERFRONT DESIGN STUDY

Circulation

Pedestrian and Vehicular Circulation Options

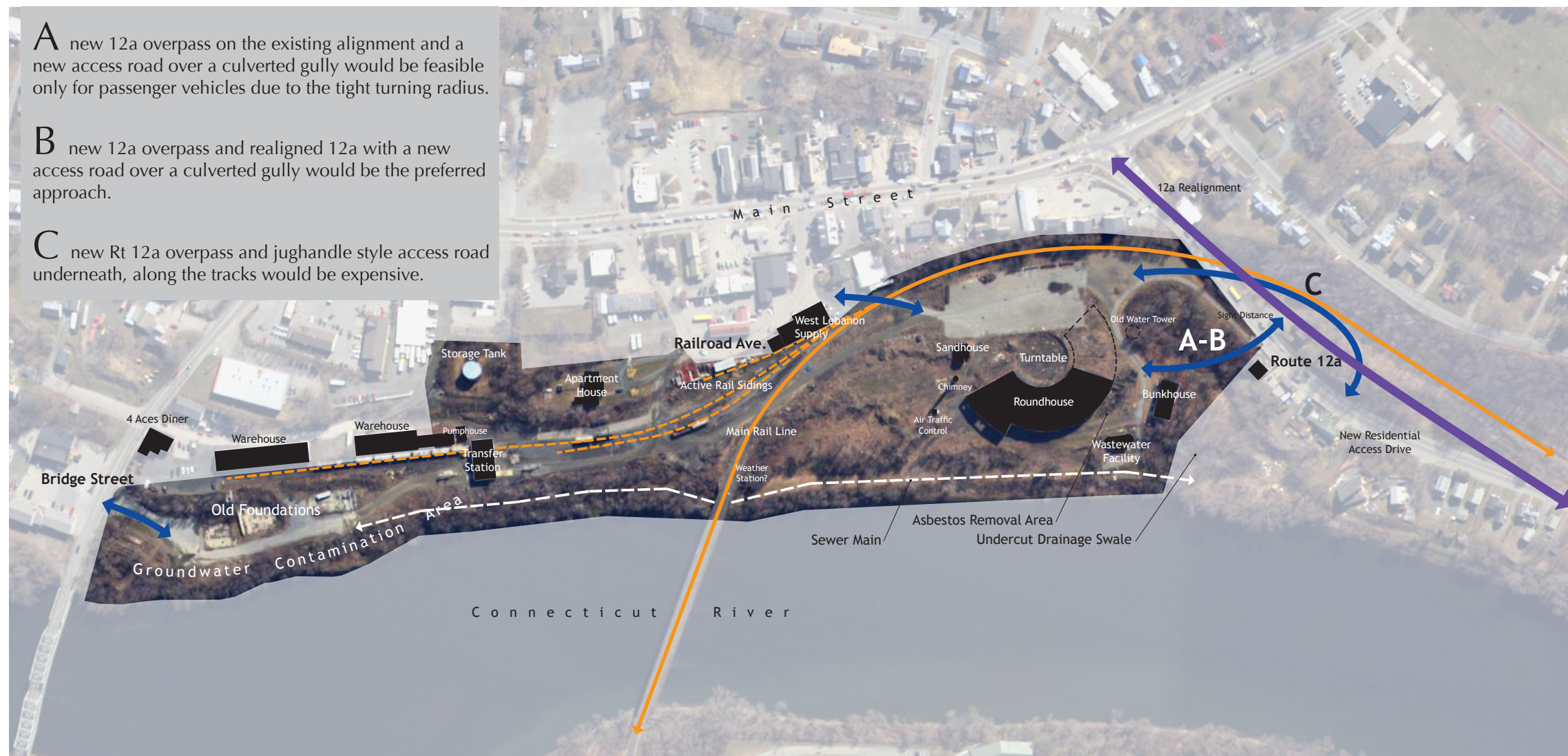
Future use of Westboro Yards for either rail or public recreational uses will require improved vehicular and pedestrian access.

On Route 12A south, an elevated “dry bridge” over the rail lines provides a grade separated crossing of the railroad. Currently, this bridge is being studied by NHDOT for improvements because of structural deficiencies and to raise the bridge height for future expanded rail use. There are opportunities to plan for improved access to the Westboro Yards in concert with this project. This location would be best for access to the crew house area at the southern end of the site and to avoid crossing an active rail line.

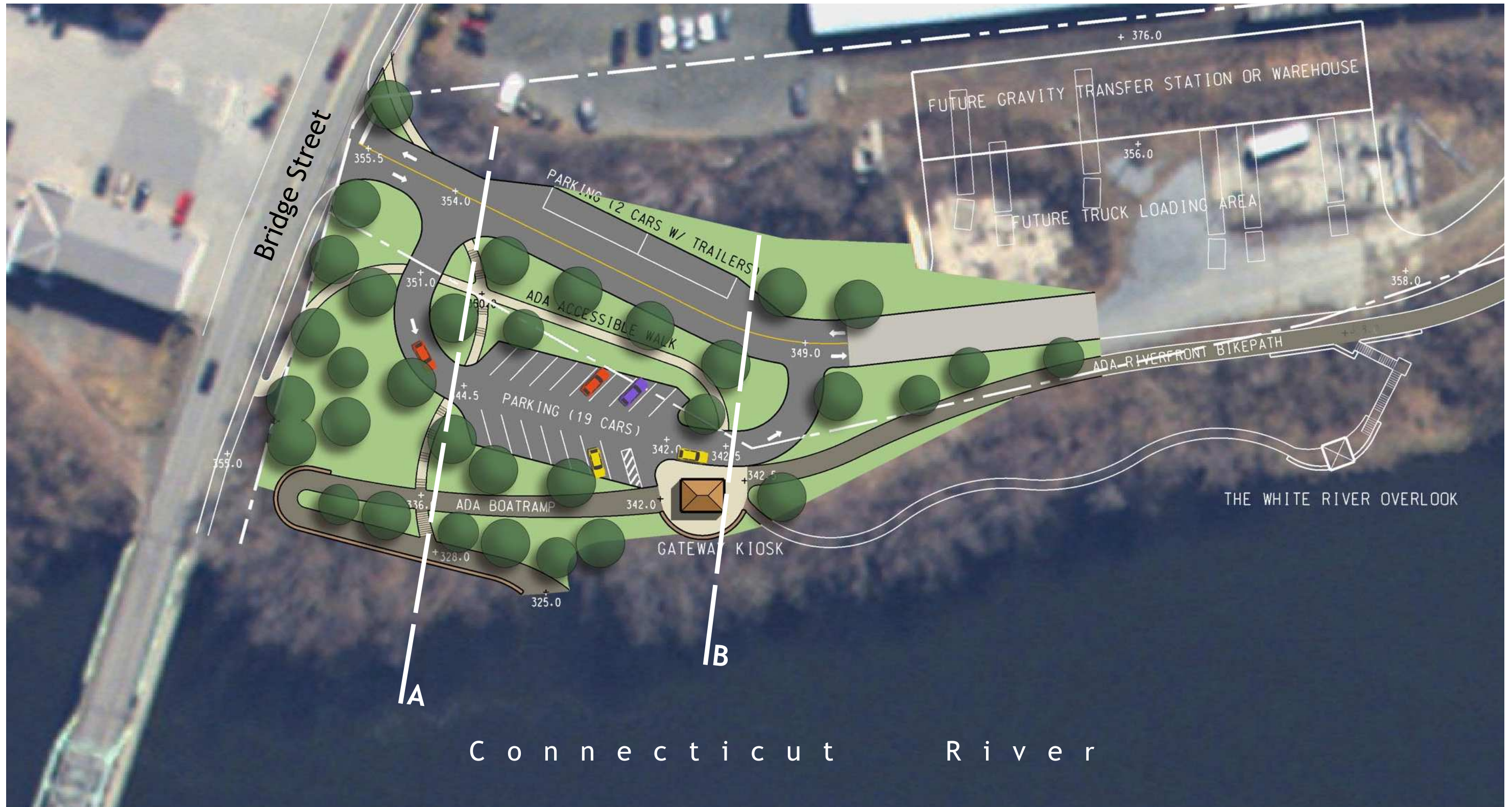
Access to the north end of the site could be obtained via a new access road at Bridge Street which runs parallel to the rail and can provide a trailhead parking area for public use. This access does not require a crossing of the active line.

Improved pedestrian access from Main Street in West Lebanon would help reconnect the community with Westboro and the river. However, access to the site from this direction involves crossing the rail line and would require a grade separated crossing over the tracks. Pedestrian use of the site would require management to ensure separation from active rail uses.

There are also possibilities that changes to rail use such as passenger excursion for the Yankee Flyer tourist train, and linkages to Downtown West Lebanon. Over the active rail line, those pedestrian crossings will have to be grade separated, but crossings from the Main Street level could drop to Westboro in the form of a pedestrian bridge.



VII. Detailed Design Plans



Detail of the Trailhead and Boat Access adjacent to Bridge Street



THE WESTBORO RIVERFRONT DESIGN STUDY



A Section thru Boat ramp and Steps



B Section thru Gateway Kiosk



Elevation of Trailhead Kiosk

VIII. Preserving Westboro's Historic Resources



Historic Setting

The Westboro Yards were constructed to serve the Northern Railroad, (later the Boston and Maine Railroad). The Northern ran from Concord, New Hampshire to White River Junction, was the fifth railroad established in New Hampshire and the first north and west of Concord, linking New Hampshire's woodlands, industrial spine to Boston. Service was initiated to West Lebanon in 1848.

In its heyday of the late 19th century, Westboro was a busy railroad yard accommodating both passenger and freight service. To meet the housing needs of the burgeoning railroad workforce, tenements were constructed within the rail yard. With the advent of automotive transportation, the development of the interstate highway system, and the decline in manufacturing in the northeast, rail traffic dwindled along this line through the mid-20th century. The Boston and Maine Railroad dropped passenger service altogether in 1964 and all railroad operations ceased in 1972. The Westboro Yard was purchased by the State of New Hampshire in 1995.

With the lease of the property by the CCRR and reactivation of rail uses on the property in 2000, nearly 30 years of inactivity at the Westboro Yards has drawn to a close.

Historic Designations

The Westboro Yard and Roundhouse are designated historic landmarks by the City of Lebanon Historic District Commission. In 1999 the Northern Railroad line, including the Westboro Yards, were determined eligible for the National Register as an historic district by the State Department of Historic Preservation.

Within the larger context of the Northern Railroad the Westboro Yards were noted as a particularly significant resource, as there are few remaining rail yards in New Hampshire. For these reasons, the Westboro Rail yard is considered eligible for both the New Hampshire State and National Registers as a separate historic district for both its historical and architectural significance. The New Hampshire Division of Historical Resources notes in its Determination of Eligibility for the Westboro Yard that, although the structures are in poor condition, Westboro remains the most complete illustration of a large working rail yard in the state.

Historic Structures

A stone roundhouse was built in 1848, and was replaced in approximately 1890 by a brick structure, remnants of which remain today. The roundhouse was used to service locomotives and included a machine shop and space for freight storage. The sand house was constructed at the turn of the century and was used to store sand that was used on the rails in bad weather. The crew house was built in 1936 and served as a facility for railroad workers to stay over between runs. There is also a smokestack on site, which is a remnant from a heating plant that was a part of the railroad building complex. This structure is a visual landmark due to its impressive height.

Another historic structure of note includes 26 Railroad Avenue, a residential building constructed in 1860 as housing for railroad workers. This building has been in continuous residential use since it was built and is sometimes referred to as the 'civil war barracks'. Anecdotal history tells that these tenements served as barracks for Union soldiers being dispatched to the front.

Condition of the Roundhouse, Sand Shed and Crew House

The roundhouse, the sand house and crew house are all structures in very poor condition and require stabilization in order to halt further deterioration and to address public safety concerns.

A structural assessment of the Roundhouse was prepared in 2000 for New Hampshire DOT. The results of this study indicate that improvements totaling an estimated \$430,000 dollars would be required to stabilize the building structure and address pressing structural issues. Future improvements plumbing, mechanical or electrical systems, architectural finishes or insulation required to upgrade the building to actual use and occupancy would be significantly in addition.

An evaluation of the Sand Shed and Crew House have been completed as a part of this planning effort. Recommendations for immediate stabilization are provided along with estimates of cost for the work involved. In the summer of 2003, the Rotary Club held a work day at the Crew House, and hauled away truckloads of debris, enclosed the downstairs window openings, and removed overgrown vegetation from the site.



IX. Costs, Phasing, and Funding Sources

Project Costs

The table below outlines a summary of the major Westboro Park features and their respective costs. Detailed spreadsheets of costs are available upon request from the Lebanon Recreation Department which is managing this project.

The majority of park elements can be phased over time as funds become available. There are numerous grants that could apply readily to the project. The primary sources are listed to the right.

Cost summary	
Stabilize Sand house	\$ 25,000
New roof, replace sills and rotten framing, relocate to a new site on leased land,	
Stabilize Crew house	\$ 107,000
Clean out debris, enclose windows, new permanent roof, clean interior	
Trail head	\$ 347,000
parking for trail head and river access	
driveway /curbcut improvements ay Bridge Street	
ADA accessible boat ramp	
Trailhead kiosk and interpretive panels	
landscaping	
seeding and erosion control	
lighting	
park benches	
picnic benches	
Westboro Park Trail	\$ 155,000
Fill to level path terrace	
Geotextle base, gravel and hardpack surface	
Boardwalk at Bridge Abutment	
erosion control, seeding and landscaping	
Access to So. Main Street	\$ 171,000
subtotal costs	\$ 805,000
add a 10% contingency	\$ 885,500
Add 10% AE/costs/permitting etc.	\$ 974,050

Phasing of Improvements

The improvement of the Westboro Yards is seen as being implemented in three overall phases for immediate and longer term projects:

Phase I are improvements that can be implemented in one to five years, and are focused on: providing public access to the river and stabilizing the Crew House and the Sand House structures. See overall plan on page 9.

Phase II Improvements are longer term, implemented in a five to ten year horizon, and include additional trail linkages and adaptive reuse of the Crew House and Sand House.

Phase III corresponds to adaptive reuse of the Roundhouse for industrial and/or public uses and is beyond the scope of this study, but is a future that's needs additional planning support.

Summary of Phasing

PHASE I

IA. Immediate stabilization of buildings by the City and rotary (Crew House) and the Lebanon historical society (Sand House).

IB. Continued volunteer efforts to create a trail as a rehabilitated grass path. Permitting clearance from NH DES for trail work.

IC. Pursue grants with LWCF, Scenic Byways, LCHIP, and local sources.

IC. Coordinate new roadway access with NHDOT for Rt 12A location.

ID. Participate with broader West Lebanon Downtown redevelopment planning for broad integration with Rotary, Library, and Chamber of Commerce.

Complete plan for Westboro buildings integrated with future rail plan.

IE. Complete land transfer from NHDOT, clearance for hazardous wastes, and integrate planning for future use of roundhouse with NHDOT and CCRR.

PHASE II:

IIA. Trailhead improvements once LWCF grants and Scenic Byways Grants are received.

IIB. Boat Ramp, once LWCF grants and Scenic Byways Grants are received.

IIC. Side trails once LWCF grants and Scenic Byways Grants are received.

Additional Phasing information

An additional trail loop that leads out from the trailhead to an interpretative kiosk and overlook is provided along an alignment that is closer to the river. This trail would have a greater scenic value and closer contact with the river than the top of bank trail; however, due to steep grades along the bank it would not meet ADA requirements. Additional interpretative signs along this length of the trail would be included in this improvement. The ADA trail could be paved if desired.

Rehabilitation of the Crew House

The following improvements are required for rehabilitation of the Bunk House:

- A complete new roof is required. Historically, there was a flat ceiling, so prefabricated wood trusses would be acceptable. Research into the profile of the eaves would need to be done to replicate them.

- All of the flooring would need to be replaced. Approximately 25% of the existing joists would need to be replaced. Some spans may need to be reinforced depending on the use proposed.

- Current building codes frown upon unreinforced masonry bearing walls for seismic resistance considerations. This can be handled in at least two ways:

- Add a wood frame stud wall system inside of the brick to support roof and floor loads. This provides an opportunity to insulate the building.

- A steel post and beam system can also be considered.

- Reinforce the masonry walls with an interior reinforced concrete paging that effectively reinforces the wall.

In additional to the work described above, additional improvements would be required to adapt the structure to accommodate a contemporary use (e.g., plumbing, electricity, mechanical systems, architectural finishes).

Rehabilitation of the Sand Shed

The following improvements are required for rehabilitation of the Sand Shed:

- Rotted members will need to be replaced or repaired using epoxy consolidation. Replacement is likely less expensive, but the historic timbers will be lost. This is usually acceptable in rehabilitation of existing buildings.

- Tie members are quite low and will be at or near head height from the base of wall elevation. It is recommended that a new foundation allow the floor to be placed below the wood sill elevation to make the ties higher relative to the floor.

- Decision needs to be made concerning sheathing the exterior...all, some, leave as-is?

- Roof rafters over the side structure should be reinforced by adding additional wood rafters.

- Moving the building is feasible. Including the chimney in the move is also feasible, but will add to the cost. The sand will need to be moved or it may be possible to lift the building "out of the sand" if the building mover can work around it.



Funding Sources

Initial funding that has been identified for the project includes the Land and Water Conservation Fund, NHLCHIP, The City of Lebanon, and Local Service organizations in Lebanon. The table below summarizes the major initially identified funding sources and reasonable amounts that could be expected. With the addition of a new road for access into Westboro, there is a deficit between apparent grant sources and the final cost project. This is a challenge for implementation for the project.

Funding sources	
Potential Grant Sources:	
Lebanon Historical Society Sand house rehab./relocation	\$ 25,000
Land and Water Conservation Fund Grant in 2005	\$ 100,000
LCHIP	\$ 20,000
Connecticut River Scenic Byways	\$ 150,000
Conn River Joint Commissions Partnership	\$ 10,000
Moose Plate	\$ 10,000
Material donations	\$ 50,000
other possible grant sources	\$ 100,000
Donations	
Rotary	\$ 30,000
in-kind labor from volunteers	\$ 30,000
other donations	\$ 10,000
City funds	
City CIP funding in 2003/2004	\$ 100,000
NHDOT	
So. Main Street access road	\$ 175,000
total	\$ 810,000
additional funding needed by unidentified sources	\$ 164,050

More Information on funding Programs

National Scenic Byways has a once yearly application process for grants that support planning and development activities on state and nationally designated scenic byways. The Connecticut River is a bi-state Scenic Byway and an American Heritage River. The byway is dotted with Waypoint Interpretive Centers, including on in the train station in White River Junction. The Byway has a Corridor Management Plan which governs its activities and the Connecticut River Joint Commissions oversees

the activities on the byway. There is currently a proposal in the final stages of development to create a signage system for the byway that will be presented to the National Scenic Byways program for funding.

<http://www.ctrivertravel.net/white-river.htm>

Allowable activities are similar to those listed under ISTE A below. This program is administered in NH by the Office of State Planning.

cbarleon@osp.state.nh.us www.byways.org

EPA Brownfields Assessment Grant

New development on "brownfield" sites such rail yards is made difficult by real or perceived environmental contamination. In order to be able to access funding for development it is necessary to first allay concerns and/or mitigate contamination through environmental assessment and where necessary remediation. currenly NHDOT has pursued this funding source for Westboro.

NH Main Street Program. For funding for Commercial, housing and mixed use as an extension of Main Street see the NH Main Street program at www.nhcdfa.org/mainstreet.html

NH CDBG feasibility offers study grants to determine whether or not a project is feasible and/or to recommend specific action(s) to be undertaken and that at least 51% of the intended beneficiaries will be low and moderate income. Eligible activities include income surveys, architectural and engineering design, cost estimates and market analyses. Applications are accepted on April 30th and October 31st. of each year.

<http://www.state.nh.us/osp/cdbg/Feasibility.htm>

NH CDBG grants for housing and public facilities development are accepted twice a year. Economic development grants are accepted year round.

<http://www.state.nh.us/osp/cdbg/EDgrants.htm>

Private foundations

Private grant sources such as the notable Upper Valley Community Foundation, the Mascoma Bank Foundation and the Agnes Lindsey Trust provide small amounts of funding for community development and preservation activities.

A detailed list of additional private foundation grant sources has also been provided to the Lebanon Rec. Department.

Designated Historic District/Certified Local Government

The New Hampshire Preservation Alliance (<http://www.nhpreservation.org>) and the New Hampshire State Historic Preservation Office can assist in Funding opportunities

Project Development Grants

The New Hampshire Preservation Alliance provides small matching grants to assist non-profit organizations in hiring a consultant to assist with preservation planning. For more information contact: [Gabrielle DiPerri](mailto:Gabrielle.DiPerri@nhpreservation.org), Project Coordinator, (603) 224-2281

Transportation Enhancement (TE) Program

The Intermodal Surface Transportation Efficiency Act (ISTEA) called for a ten percent designated share of all Surface Transportation Program funds to be used for Transportation Enhancement Activities. The intent of the program is to afford an opportunity to develop "livable communities" by selecting projects that preserve the historic culture of the transportation system and/or enhance the operation of the system for its users. The following activities are eligible if such activities relate to Surface Transportation:

- Provision of facilities for bicyclists and pedestrians
- Provision of safety and educational activities for bicyclists and pedestrians
- Acquisition of scenic easements and scenic or historic sites
- Scenic or historic highway programs (including the provision of tourist and welcome center facilities)
- Landscaping and other scenic beautification
- Historic preservation
- Rehabilitation and operation of historic transportation buildings, structures or facilities (including historic railroad facilities and canals)



X. References

References

State of New Hampshire Department of Transportation, New Hampshire State Rail Plan, 2001

Operating Agreement of the Northern Railroad Line Between the State of New Hampshire and the Claremont Concord Railroad Corporation, May 2001

Temporary Use Agreement Between State of New Hampshire Department of Transportation and City of Lebanon, June 2003

Parsons Brinckerhoff Quade & Douglas, Boston to Montreal High-Speed Rail Planning and Feasibility Study, Phase I, Final Report Executive Summary, March, 2003.

Roger Carroll, Lebanon 1761-1994, 1994.

Lebanon Historical Society,
West Lebanon Historic Resource Survey,
1996-1997.

NH Division of Historical Resources, Determination of Eligibility (DOE), Westboro Rail Yard District, February 2003.

JSN Associates, Structural Assessment Report of Westboro Roundhouse, West Lebanon New Hampshire, July, 2000

Jacques Whitford Company, Inc., several site investigation reports.