

National Park Service
U.S. Department of the Interior

Lowell National Historical Park



Lowell National Historical Park

General Management Plan Amendment & Environmental Assessment

July 7, 2010
Approved September 22, 2010

**U.S. Department of the Interior
National Park Service, Northeast Region**

FINDING OF NO SIGNIFICANT IMPACT

**Lowell National Historical Park
General Management Plan Amendment and Environmental Assessment**

INTRODUCTION

When the Lowell National Historical Park was created in 1978, it was given a unique mandate which called for the Park to not only preserve and interpret the historic and cultural resources representing Lowell's role in the 19th century American industrial revolution but also to serve as a catalyst in revitalizing the city's physical, economic and cultural environments. The model created at Lowell represents an innovative approach to national park development requiring a high level of cooperation between the federal, state, local and private sectors. The Lowell Park plan was designed to be supportive of local government preservation efforts and encourage substantial private investment in redevelopment of the City's vast 19-century urban resources.

Over the past several years, the City of Lowell in cooperation with a private developer has been undertaking a master planning process for redevelopment of the Hamilton Canal District. The project will create a dense, transit-oriented mixed-use neighborhood immediately adjacent to the Park's visitor center and at the gateway to the city and the park. The Hamilton Canal District is the last large tract within the Preservation District that has not been rehabilitated. This \$800m project involves the redevelopment of some 15-acres within the District. The land is currently blighted with derelict buildings that have fallen into disrepair and historic resources are threatened if action is not taken immediately. Site development involves both the preservation of historic resources and new development strategies.

The Hamilton Canal District master plan, prepared through a process of community consultation, and with the direct involvement of the LNHP staff, proposes new development on the site which will change access and visibility of the approach to the Park. The plan also includes a proposal by the City of Lowell to acquire the Park's visitor center parking lot for incorporation into the development project.

The Park's 1981 General Management Plan (GMP) called for the primary visitor orientation center to be located within the Lowell Manufacturing Company complex with visitor parking to be provided in the adjacent surface lot at Broadway. In response to the proposed developments at the Hamilton Canal District, the Park has undertaken a GMP planning process to reconsider the location of its visitor orientation center and parking lot within the broader context of the Park's mission and goals.

Goals

The GMP planning study identified several key goals for Park visitor orientation and access: 1) enhance the visitor experience, 2) create a sense of arrival to the Park, 3) preserve key resources in the Park, and 4) positively influence impacts of the Park on

Lowell's downtown and community while addressing the Park's functional requirements today and in the future.

Issues

The city and the park are intertwined and implementation of the Hamilton Canal District plan will cause significant changes to both. The potential for relocating NPS parking, rehabilitating historic buildings, and transforming currently vacant land with new buildings and uses will change the way the park and city are perceived and experienced. Key issues of concern to the park as a consequence of these changes include:

- Quality of the Visitor Experience
- Accessibility to park facilities
- Relationship of the park to the City of Lowell
- Potential costs to the park

These issues formed the basis on which each of the alternatives were evaluated.

SELECTED ALTERNATIVE

Based on the analysis presented in the EA, the NPS has selected Alternative 4 -*Retain Market Mills Visitor Center, Contact Station with Private Use on Parcel 17* for implementation. The selected alternative was identified as the NPS preferred alternative in the General Management Plan Amendment and Environmental Assessment (GMPA/EA) and described in Section 3.5 (pages 43-48) of the GMPA/EA.

The selected alternative assumes full redevelopment of the Hamilton Canal District as detailed in the *Hamilton Canal District Master Plan*, and implies redevelopment of parcels 15 & 16, and redevelopment of the current NPS parking lot. The idea of this alternative is to take advantage of new opportunities for visitor outreach and orientation to the park's resources through partnerships with local entities at key locations within the park.

The existing visitor center at Market Mills would be retained, with the longer range option of expansion into adjacent NPS owned spaces to meet future programming and operational needs of the park. In the future, the NPS spaces in the Market Mills could support collaborative community cultural and arts programs that take advantage of park resources. An integral part of *Selected alternative* would be comprehensive vehicular and pedestrian signage improvements to make the Market Mills Visitor Center and nearby garage parking as visible as possible to those arriving by car or bus, as well as pedestrian wayfinding from the garage to the visitor center.

At least three additional visitor orientation venues would be designated as supplemental points of contact with the public. Each visitor orientation venue would have the following characteristics:

- Strategic and highly visible location with high pedestrian traffic, access to park and community transportation systems, and community visibility.

- Provide basic orientation to the overall park and its transportation systems and pedestrian connections.
- Provide outreach to residents and visitors to Lowell who may not be fully aware of the park, its breadth, and its resources.
- Resource interpretation about the park, in general, and specific to the venue.
- Possibility for, but not a requirement of, seasonal NPS or volunteer staff support during periods of high visitor use.
- Potential to develop partnerships with public or private entities for mutual benefit.

The visitor orientation venues should not necessarily be identical, but should be customized for their locations and opportunities with a consistent and recognizable NPS brand to unify them. Facilities could range from information and interpretive installations in existing indoor and outdoor spaces in public or private buildings to custom-designed seasonally staffed facilities of up to 2,000 square feet. Detailed feasibility analysis would be required for visitor orientation venue to take account of facility requirements, staffing needs (if any), maintenance, and operational costs. The visitor orientation venues that would be part of this alternative would include:

- **Parcel 17** – an interior and exterior space from 1,000 to 2,000 square feet within a private development envisioned as part of the HCD plan. On this site, the HCD plan envisions a building of up to 32,000 square feet that could contain retail, restaurant, or other private uses. The reasons for this location are the dramatic and visible site at the junction of the Merrimack and Pawtucket Canals, the presence of the Swamp Locks, the location of boat tour dock and trolley tour stop at this site with high visitor usage, and the potential to provide expanded interpretation about the resources of the canal and lock system. Ideally, this visitor orientation venue interior space would have a visual connection as well as direct access to both the Swamp Locks boat dock and the proposed trolley stop. At this location, a partnership would be required with the private developer of the Parcel 17 site in order to allocate and design appropriate interior and exterior space that could facilitate tour operations, fulfill interpretive and orientation goals, and be an asset to the private use during non-peak periods.
- **Gallagher Transportation Terminal** – this location includes a major parking garage for commuters and, serving both the MBTA commuter rail service to and from Boston and as well as local and regional bus routes, is a crossroads for many users each day. The LRTA bus circulator connects visitors arriving via the Gallagher Transportation Terminal to the visitor center, the Canalway, and other park sites. The City is currently developing enhanced pedestrian connections from the Gallagher Terminal to the Hamilton Canal District. The connection could be further enhanced through extension of the trolley system to the Gallagher Terminal; this option is currently under study. A visitor orientation venue here could be integrated with high foot traffic activity of these diverse users and would offer the opportunity to accomplish outreach to Lowell and regional residents about the park and its resources as well as to serve park visitors who arrive by public transportation, particularly if it proves feasible to extend the trolley system to the terminal, enabling

a direct connection to park resources. The partner at this location would be the Lowell Regional Transportation Authority and, possibly, the MBTA.

- **Lower Locks** – this location is a visually dramatic setting overlooking the Concord River that is a connection point between trolley and boat tours and is also linked to the Canalway System. With the acquisition of the Doubletree Inn by the University of Massachusetts for its Inn and Conference Center, this site will be an activity center that will attract many conference and inn users who will be able to benefit from the presence of the park at their doorstep. The visitor orientation venue should combine interior and exterior space in a way that is complementary to the proposed UMass activities at the site. The University of Massachusetts would be the logical main partner at this location.

This alternative would require relocation of existing NPS parking because of the HCD project. This would require sale or transfer of the existing parking lot for consideration to be determined in accordance with applicable federal laws and regulations.

Depending on the details of such negotiations, the sale or transfer could be directly to the developer or to the city of Lowell in order to integrate the parking site. The expansion of the trolley system outlined in *Alternative 3* would be highly consistent with this alternative.

In this alternative arrival to the park would remain via Dutton Street and the Broadway extension, but the 161 parking spaces for visitors and staff currently located on parcel 15 would be eliminated due to the Hamilton Canal District development. This alternative would have two parking sub-options, *Alternatives 4a* and *4b* comparable to *Alternatives 2a* and *2b*.

The selected alternative also would be most effective if the trolley system is extended to the Gallagher Transportation Terminal to increase both visibility and access. Such an extension would most likely be planned, funded, and constructed by NPS and other public/private agencies. The trolley line would extend from its existing termination on Dutton Street across the Merrimack Canal where it would stop at the parcel 17 visitor orientation venue, described above. The extension would then cross the Pawtucket Canal, stop at the heart of the redeveloped Hamilton Canal District (between parcels 4 and 10), before crossing the Hamilton Canal and linking to the Gallagher Transportation Terminal and its visitor orientation venue. Development of a new trolley stop on the VC side of Market Street would enable a direct pedestrian connection without crossing a street for trolley users from the Market Mills visitor center.

Expansion of trolley service from seasonal to year round operations would accompany the physical extensions of the system. This would require a series of improvements to facilitate operation during winter months, including the addition of passing track / double tracking, an ITS system, electronic switches, shelters at trolley stops, and possibly additional rolling stock.

Under the selected alternative, the park boundary would be extended to the junction of the Merrimack and Pawtucket Canals. This is appropriate to recognize the canal junction as an important resource site and a location where trolley and boat tours converge and will be helpful to strengthen the NPS role in the partnership development on Parcel 17. Additionally, if the HCD project is delayed or changes substantially, this

boundary change would leave the NPS with flexibility to recommend other actions at this location in the future.

- Visitor Center would remain in Market Mills; potential to expand into NPS owned spaces in building to meet park's future programming and operational needs.
- Park would divest of its surface parking lot and relocate visitor parking to adjacent existing or proposed garages.
- Construction of at least three additional visitor orientation venues at key locations in park to provide supplemental contact with the public. These venues would provide:
 - Basic orientation to overall park, its transportation systems, and pedestrian connections
 - Additional outreach to residents and visitors not yet familiar with breadth of park
 - Resource interpretation about the park, both in general and specific to venue
 - Potential to develop partnerships with public or private entities for mutual benefit

This alternative was selected for the following reasons:

- It provides potential for redevelopment of currently vacant post-industrial land in the Hamilton Canal District into a vibrant, mixed-use residential district, including removal of surface parking lots adjacent to the Market Mills Visitor Center. This urban revitalization would most likely result in long-term, beneficial cumulative impacts to the economic health of the area.
- It increases visibility of existing NPS resources to visitors arriving by vehicle from Dutton Street and an opportunity for LNHP to refresh its image for the public, could potentially result in more visitors and a further appreciation among the public for the historic and cultural resources that exist in Lowell.
- It creates an expansion outwards from the Market Mills Visitor Center of NPS orientation and interpretation venues—at Swamp Locks, Lower Locks, and Gallagher Transportation Terminal—to residents and new visitors who might otherwise remain unaware of the breadth of resources maintained by LNHP and other cultural institutions throughout the City. This would improve access to and potentially expand appreciation of these cultural and historic resources, resulting in a long-term, beneficial, cumulative impact.
- It has the potential to expand the trolley system through a redeveloped Hamilton Canal District to the Gallagher Transportation Terminal would improve regional access to all LNHP resources and would increase the opportunities for visitors and residents to use multi-modal forms of transportation. In addition to increasing appreciation for the park's cultural and historic resources through increased access, this would improve access and reduce traffic congestion and accompanying emissions.

OTHER ALTERNATIVES CONSIDERED

In addition to the NPS Selected Alternative described above, the GMPA/EA analyzed a No-Action Alternative and two other Action Alternatives.

Alternative 1 – No Action

- Alternative 1 requires no major action by NPS regarding the existing Market Mills Visitor Center and any of its supporting facilities, though modest improvements to increase visibility and efficiency of operation could be implemented. The existing 161 space automobile and 11 space bus/RV surface parking lot to the southwest of the visitor center would remain.

Alternative 2 – Existing Visitor Center and HCD Redevelopment

- Visitor Center would remain in Market Mills.
- Parking
 - 161 spaces would be reserved in a new garage on parcel 14 or into an existing garage on Market Street, OR
 - Designated visitor parking would be eliminated under assumption that visitors and staff would pay for parking, as happens at other urban parks

Alternative 3 – New Visitor Center on Parcel 17

- Visitor center would be relocated to new NPS facilities on parcel 17.
- Market Mills Visitor Center could be renovated into space for new tenant(s) at market rate rents.
- Parking -- 161 spaces would be reserved in a new garage on parcel 14.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The Environmentally Preferred Alternative is defined by the Council on Environmental Quality (CEQ) as the alternative that will promote the national environmental policy as expressed the National Environmental Policy Act (Section 101(b)). In their *40 Most-Asked Questions*, the CEQ further clarifies the environmentally preferred alternative as the alternative that causes the least damage to the biological and physical environment and that best protects, preserves, and enhances historic, cultural, and natural resources (Qa6.). Each criterion is presented below, followed by a discussion of how well each of the alternatives evaluated in the GMPA/EA meet each one.

Fulfills the responsibilities of each generation as trustee of the environment for succeeding generations. All action alternatives emphasize the preservation of resources for future generations. *Alternative 4* has a high potential for beneficial impact.

Ensures for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings. *Alternative 4* takes steps to ensure a safe, healthful, productive and accessible environment in the long term, promoting contextually appropriate development on now vacant land adjacent to key locations in the park. *Alternative 4* also preserves and promotes aesthetically and culturally pleasing surroundings.

Attains the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences. Beneficial uses of the environment are high in *Alternative 4*, as it calls for a network of visitor orientation venues at existing key park locations to better orient and reach out to residents and visitors, while further interpreting those location specific resources. As development of the Hamilton Canal District is approved and proceeds, environmental degradation and other undesirable consequences will be avoided, to the maximum extent possible, through a development review process and mitigation measures.

Preserves important historic, cultural and natural aspects of our national heritage and maintains, wherever possible, an environment that supports diversity and variety of individual choice. *Alternative 4* would potentially result in high levels of beneficial impacts on cultural and historic resources because it includes the most extensive measures for interpretation of LNHP's resources for the public. This high level of resource interpretation and improved linkages with the community, visually through improved signage and potentially physically by extension of the trolley system, would result in a diversity of choices in visitor experience and would attract a wide audience.

Achieves a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities. By maintaining the existing location of the park's visitor center at Market Mills and expanding outreach through a network of visitor orientation venues, *Alternative 4* would enhance the dynamic and beneficial relationship between the Lowell National Historical Park and the City of Lowell's downtown district. Also, by encouraging expansion of the trolley system, and the outreach network, *Alternative 4* would facilitate the exploration of the park and its resources by more people, both residents and visitors.

Enhances the quality of renewable resources and approaches the maximum attainable recycling of depletable resources. *Alternative 4* demonstrates a high potential for protection of natural resources, which are "renewable resources." Nonrenewable resources, such as historic resources including the canals, would be afforded the highest level of protection and enhancement through improved interpretation under this alternative. Also, by maintaining the visitor center in the rehabilitated Market Mills building, *Alternative 4* encourages maximum use of existing resources.

Although all three of the action alternatives meet the above criteria to some degree, *Alternative 4*, the selected alternative, better meets the criteria of Section 101(b). *Alternative 4* had the fewest and least intensive negative impacts and had the most intensive beneficial impacts.

MITIGATION MEASURES

Aspects of the selected alternative may increase the potential for adverse impacts as a result of increased automobile traffic congestion and emissions from increased visitation

to the Park. This impact may be mitigated by multi-modal transportation opportunities provided by an expanded trolley system.

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR § 1508.27, significance is determined by examining the following criteria:

1) Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS.

No major adverse or beneficial impacts were identified that would require analysis in an EIS. The NPS Selected Alternative will have 1 minor short term adverse impact and 6 long term beneficial impacts.

2) The degree to which public health and safety are affected.

To the extent that enhancements to the park and development of the Hamilton Canal District would increase traffic in the area, there could be minor adverse effects to local air quality. An emphasis on multi-modal forms of transportation in Alternative 4 could potentially mitigate any adverse impacts from increased vehicular traffic.

3) Any unique characteristics of the area (proximity to historic or cultural resources, wild and scenic rivers, ecologically critical areas, wetlands or floodplains, and so forth).

The project area includes the Market Mills complex, known historically as the Lowell Manufacturing Company. The complex includes two buildings, one dating from 1882; the other from 1902. The Market Mills was identified in early plans as critical for the preservation and interpretation of the downtown historic district. Also included in the project area is an adjacent parking lot, the former site of the historic Lowell Machine Shop. The Market Mills and VC parking lots are located adjacent to the Merrimack Canal, one of 6 canals that comprise Lowell's 5.6-mile historic power canal system.

Historic resources including the canals would be afforded the highest level of protection and enhancement through improved interpretation under Alternative 4. In addition, by maintain the visitor center in the rehabilitated market Mills building, Alternative 4 encourages maximum use of existing resources.

No wetlands, wild and scenic rivers, or ecologically critical areas exist within the study area.

4) The degree to which impacts are likely to be highly controversial.

As measured by scoping and public comment, this project is not likely to be highly controversial. During the 30-day agency and public review period, six (6) letters of comment were received. All six respondents expressed their support for the preferred alternative.

5) The degree to which the potential impacts are highly uncertain or involve unique or unknown risks.

No highly uncertain, unique, or unknown risks were identified during preparation of the EA or the public review period.

6) Whether the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.

The NPS Selected Alternative neither establishes NPS precedent for future actions with significant effects nor represents a decision in principle about a future consideration. Future actions will be evaluated through additional, project-specific planning process that incorporates requirements of NEP, Section 106 of the NHPA, and NPS policies.

7) Whether the action is related to other actions that may have individual insignificant impacts but cumulatively significant effects. Significance cannot be avoided by terming an action temporary or breaking it down into small component parts.

The impacts of the NPS Selected Alternative to water resources, park trail and open space, archeological resources, historic districts and structures, land use, transportation and visitor access, local economy, visitor experience, and park operations were identified. The GMP Amendment was conducted as part of a larger public private partnership to redevelop the Hamilton Canal District, which is an area adjacent to key park resources, including Market Mills Visitor Center, Swamp Locks, Lower Locks, and the canals themselves. Building as they do on the past success of LNHP and the private revitalization of the of the downtown that followed them and in conjunction with the redevelopment of the HCD, the actions described in the preferred alternative were determined to have the potential to create positive city wide, cumulative effects.

Environmental impacts from the preferred alternative may cause the following cumulative positive impacts: 1) Potential for redevelopment of currently vacant post-industrial land in the HCD, 2) Increased visibility of existing NPS resources to visitors, 3) An expansion outwards from the Market Mills Visitor Center of NPS orientation and interpretation venues, and 4) Improved regional access to all LNHP resources. Aspects of the plan that may increase the potential for adverse impacts include increase automobile traffic congestion and emissions as yearly visitors increase. This impact has the potential to be mitigated by multi-modal transportation opportunities provided by an expanded trolley system. Therefore, the NPS Selected Alternative will not contribute or result in significant cumulative impacts.

8) The degree to which the action may adversely affect historic properties in or eligible for listing in the National Register of Historic Places, or other significant scientific archeological, or cultural resources.

The VC Parking lot is located in the Lowell National Historical Park National Register District. The site is classified non-contributing in the Cultural Resource Survey of the District. Because of the highly disturbed nature of sites within the immediate project area there is low potential that land within it would yield significant archeological

remains. Surveys, avoidance through design, documentation and other mitigation would be accomplished before any construction occurred, so these impacts would be minimized.

9) *The degree to which an action may adversely affect an endangered or threatened species or its habitat.*

In a letter dated January 2, 2009, the U.S. Fish and Wildlife Service concurred that there are no species of concern present on the site.

10) *Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.*

The NPS selected alternative violates no federal, state, or local environmental protection laws.

IMPAIRMENT OF PARK RESOURCES OR VALUES

The National Park Service Organic Act of 1916, and related laws, mandate that the units of the national park system must be managed in a way that leaves them "unimpaired for the enjoyment of future generations". These laws give the NPS the management discretion to allow certain impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, so long as the impact does not constitute impairment of the affected resources and values. Director's Order 12 states that environmental documents will evaluate and describe impacts that may constitute an impairment of park resources or values. In addition, the decision document will summarize impacts and whether or not such impacts may constitute an impairment of park resources or values. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

1. necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park,
2. key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
3. identified as a specific goal in the park's general management plan or other relevant NPS planning documents.

The National Park Service has determined that implementation of the selected alternative will not constitute an impairment to Lowell National Historical Park resources and values. This conclusion is based on a thorough analysis of the environmental impacts described in the Lowell National Historical Park GMP Plan Amendment & Environmental Assessment, the public comments received, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in NPS Management Policies (2001). Although the selected alternative has some negative impacts, in all cases these adverse impacts are the result of actions taken to preserve and restore other park resources and values. Overall, the selected alternative results in benefits to park resources and values, opportunities for their enjoyment, and does not result in their impairment.

PUBLIC INVOLVEMENT

The GMPA/EA planning process was undertaken by a multi-disciplinary team composed of staff from the Lowell National Historical Park and key community partners including the City of Lowell and Trinity Financial; developers of the Hamilton Canal District. NPS Northeast Region planning staff provided technical assistance throughout the planning process.

The team reviewed the purpose, significance, and goals of the park to provide the foundation for decision-making in the document. Team members, with input from park staff undertook a needs assessment to determine the desired park visitor experience, program requirements, and facility needs. Location criteria critical to the evaluation of alternatives were also defined by the team.

At several on-site workshops, the team with input from park staff undertook a needs assessment to determine the desired park visitor experience, program requirements, and facility needs. A range of feasible alternatives to address the park's visitor entry and orientation needs were also developed at these workshops. The workshops were held over a several month period on December 4, 2008, January 21, 2009, and February 23, 2009.

In addition to these workshop sessions, a public meeting was held from 5:30-7:30 on June 16, 2009 at the Park's Visitor Center. The purpose of the meeting was to present key issues and alternatives for the Park's visitor center in relationship to the Hamilton Canal District as well as to solicit comments from the public on issues of environmental concern that should be addressed in the GMPA/EA. The public was notified of the public meeting through a targeted announcement that was emailed to list of active community members as well as through an ad in the local newspaper, the Lowell Sun. Approximately 25 community representatives attended the meeting along with NPS, City of Lowell, and Trinity Financial staff.

The GMPA/EA, prepared in accordance with NEPA, CEQ regulations, Section 106 of the NHPA, and NPS Director's Order #12, was made available for public review and comment beginning July 9, 2010 and ending August 9, 2010. A press release announcing the document's availability was published on the park web site (www.nps.gov/LOWE), and on the NPS Planning, Environment and Public Comment (PEPC) site (<http://parkplanning.nps.gov/lowe>), and in the local newspaper, the Lowell Sun. Printed copies of the GMPA/EA were made available at the Lowell National Historical Park Headquarters. A digital version of the document was made available at the park's web site and PEPC site. The GMPA/EA was also distributed to federal, state, and local agencies, stakeholder organizations, public meeting participants, and interested individuals for their review.

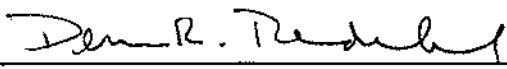
During the 30-day agency and public review period, six (6) letters of comment were received, all expressing support for the preferred alternative. One respondent suggested the Park may need for an interim plan for parking during construction of the garage and should consider opportunities for providing multiple sites for parking within the park as well as options for parking fees. The Park concurs with these suggestions and understands that these and other issues will require further evaluation as specific actions under the selected alternative are implemented. No changes have been made to the selected alternative as a result of the comments received.

FINDING OF NO SIGNIFICANT IMPACT

The NPS has selected Alternative 4- *Retain Market Mills Visitor Center, Contact Station with Private Use on Parcel 17* for implementation. The selected alternative is described in Section 3.5 (pages 43-38) of the GMPA/EA. The selected alternative will not constitute an action that normally requires preparation of an environmental impact statement (EIS). The selected alternative will not have a significant effect on the human environment. Negative environmental impacts that could occur are minor or moderate in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the selected alternative will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this action and thus will not be prepared.

Recommended:  22 Sept. 2010
Michael Creasey, Superintendent Date
Lowell National Historical Park

Approved:  9/22/10
Dennis R. Reidenbach, Regional Director Date
Northeast Region, National Park Service



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

April 2, 2009

Michael Creasey
Superintendent
Lowell National Historical Park
67 Kirk Street
Lowell, MA 01852

RE: Hamilton Canal District Redevelopment, Lowell; MHC# 44290; EEA#14240

Dear Mr. Creasy:

Thank you for submitting six original Memoranda of Agreement (MOA's) to the Massachusetts Historical Commission, office of the State Historic Preservation Officer, which were received on March 17, 2009.

I have reviewed and have signed all six MOA's and have retained one MOA for our files.

Enclosed please find five, fully-signed MOA's for your distribution to the other signatories and the ACHP.

MHC looks forward to consulting with you in the future regarding the implementation of the stipulations that are specified in the MOA.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800) and Massachusetts General Laws, Chapter 9, Section 26-27C, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71.00) and MEPA. Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Brona Simon".

Brona Simon
State Historic Preservation Officer
Executive Director
Massachusetts Historical Commission

Enclosures

xc w/o encl: Steve Stowell, Lowell Historic Board
Peter Aucella, Lowell National Historical Park
Adam Baacke, Division of Planning and Development, City of Lowell
Jim Keefe, Trinity Financial
Maureen Cavanaugh, Epsilon Associates
David Slagle, DEP (Proj # W09-2596 and W09-2597)
Bill Gage, MEPA Unit (EEA #14240)

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Preserving America's Heritage

February 13, 2009

Mr. Michael Creasey
Superintendent
National Park Service
Lowell National Historical Park
67 Kirk Street
Lowell, MA 01852-1029

***Ref: Proposed Hamilton Canal District Redevelopment Project
Lowell, Massachusetts***

Dear Mr. Creasey:

The Advisory Council on Historic Preservation (ACHP) recently received your notification and supporting documentation regarding the adverse effects of the referenced project on properties listed on and eligible for listing on the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Massachusetts SHPO and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with the opportunity to review this undertaking. If you have any questions, please contact Kelly Yasaitis Fanizzo at 202-606-8583, or via email at kfanizzo@achp.gov.

Sincerely,

Raymond V. Wallace

Raymond V. Wallace
Historic Preservation Technician
Federal Property Management Section
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION
1100 Pennsylvania Avenue NW, Suite 803 Washington, DC 20004
Phone: 202-606-8503 | Fax: 202-606-8647 | achp@achp.gov | www.achp.gov

RECEIVED

MAR 17 2009

MASS. HIST. COMM

MEMORANDUM OF AGREEMENT
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 CFR 800.6(a)
AMONG
LOWELL NATIONAL HISTORICAL PARK
CITY OF LOWELL
TRINITY HAMILTON CANAL LIMITED PARTNERSHIP
AND
MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICE/MASSACHUSETTS HISTORICAL COMMISSION
REGARDING THE
HAMILTON CANAL DISTRICT PROJECT
LOWELL, MASSACHUSETTS

This Memorandum of Agreement is entered into by and among the Massachusetts State Historic Preservation Officer/Massachusetts Historical Commission ("Massachusetts SHPO"), the National Park Service Lowell National Historical Park ("LNHP"), the City of Lowell ("City") and Trinity Hamilton Canal Limited Partnership ("Proponent").

WHEREAS, the Proponent proposes to develop the Hamilton Canal District ("Project"), which will revitalize 13 acres of underutilized land located in Lowell, Massachusetts into a mixed-use development featuring housing, commercial space, restaurants, and retail uses and will enliven the canals as the central component of the development and will provide new public access across the canals; and

WHEREAS, the Project encompasses portions of the Lowell Canal System including the Merrimack, Hamilton, and Pawtucket Canals and associated gates, control structures, bridges, and other canal related resources, which are contributing historic properties to the Locks and Canals Historic District, which is listed on the National Register of Historic Places and is a National Historic Landmark, the Lowell National Historical Park and Preservation District, which is listed on the National Register of Historic Places, and the Downtown Lowell Historic District, a local historic district listed in the State Register of Historic Places; and

WHEREAS, the Project encompasses a portion of the former Appleton Manufacturing Company mill complex and the Saco-Lowell Shops Building #14, which are contributing historic properties to the Locks and Canals Historic District, which is listed on the National Register of Historic Places and is a National Historic Landmark, the Lowell National Historical Park and Preservation District, which is listed on the National Register of Historic Places, and the Downtown Lowell Historic District, a local historic district listed in the State Register of Historic Places; and

WHEREAS, the Proponent proposes to rehabilitate a portion of the former Appleton Manufacturing Company mill complex (Building Nos. 1 and 4 and the Office Building) and a portion of the Saco-Lowell Shops Building #14 in accordance with the Secretary of the Interior's Standards for Rehabilitation; and

WHEREAS, the Proponent seeks to obtain the necessary financing for the rehabilitation for the proposed rehabilitation of a portion of the Appleton Manufacturing Company mill complex and the Saco-Lowell Shops Building #14; and

WHEREAS, the Project includes historic preservation, new construction, and open space and public realm improvements, including construction of multiple new mixed use buildings, bridges, parking structures and infrastructure, including parks, surface parking, streets, sidewalks, canal walks, pumping stations, electrical transformers and other above and below ground utilities and infrastructure; and

WHEREAS, funding from a variety of state and federal government sources may assist in development of aspects of this Project, and,

WHEREAS, the Proponent will have the right to undertake the maintenance of a portion of the public realm and open space improvements at its sole discretion; and

WHEREAS, the Project may require use of NPS land via ground lease, easement or acquisition to enable the development of the Project; and

WHEREAS, the Massachusetts SHPO and the Proponent acknowledge that LNHP has made a determination that portions of the Project will have certain adverse effects upon the historic properties, and therefore LNHP and the Proponent have consulted with Massachusetts SHPO pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and pursuant to 950 CMR 71.00 et seq, regulations implementing Massachusetts General Laws Chapter 9, Sections 26 through 27C; and

WHEREAS, Public Law 95-290, Title I, Sec 102 (Section 410cc-12), an act establishing the LNHP, contains the provision that "No Federal entity may issue any license or permit to any person to conduct an activity within the park or preservation district unless such entity determines that the proposed activity will be conducted in a manner consistent with the standards and criteria established pursuant to [this law] and will not have an adverse effect on the resources of the park or preservation district" and

WHEREAS, the Massachusetts SHPO and the Proponent acknowledge that LNHP has made a determination that certain elements of the Project will have an adverse effect upon the historic properties and that such adverse effects can be mitigated, and

WHEREAS, LNHP has identified adverse effects to historic resources to include:

- a. installation of a roadway bridge through the Dye House wall remnant of the Appleton Mill;
- b. replacement of the historic railroad and street bridges into the Saco-Lowell (Freudenberg) site over the Hamilton Canal;
- c. possible visual and contextual impacts on the Swamp Locks complex from the proposed high-rise building; and
- d. additional impacts on the Pawtucket Canal and related canal walls as a result of the creation of an extended Jackson Street roadway; and

WHEREAS, LNHP, the Proponent, and the Massachusetts SHPO have consulted and determined there are no feasible and prudent alternatives to the proposed Project, and

WHEREAS, the Project is located within the Downtown Lowell Historic District, an architectural and historic district under the design review, approval, and permitting authority of the Lowell Historic Board ("LHB"), pursuant to Chapter 566 Acts of 1983, and

WHEREAS, LNHP and the Proponent acknowledge that the LHB has ongoing review and approval authority on all proposed work on the historic resources, open space and public realm improvements, and new construction within the Project area; and

WHEREAS, the City has drafted and will be adopting a Form Based Zoning Code to regulate the buildings, open space, and public infrastructure within the Hamilton Canal District; and

WHEREAS, the LNHP and the LHB have reviewed drafts of the Form Based Zoning Code and the LHB will be amending its existing regulations and guidelines by adopting the Form Based Zoning Code adopted by the City; and

WHEREAS, the LHB has been invited to participate in the consultation and to concur to this Memorandum of Agreement; and

WHEREAS, the City of Lowell ("City") has assembled the development parcels that constitute the Project and has taken certain actions to further the goals of the Project and will continue to do so during the term of the Project.

NOW THEREFORE, LNHP, the Proponent, and the Massachusetts SHPO agree that the undertaking of the Project shall be implemented in accordance with the following stipulations in order to take into account the effect of the Project on historic properties.

STIPULATIONS

LNHP and the Proponent shall insure that the following measures are carried out in consultation with the LHB and the Massachusetts SHPO:

1. REHABILITATION OF HISTORIC RESOURCES

The Project includes the proposed rehabilitation of a portion of the former Appleton Manufacturing Company mill complex (Building Nos. 1 and 4 and the Office Building) and a portion of the Saco-Lowell Shops Building #14, as well as three bridges (loading dock bridge, vehicular bridge, and overhead stucco-clad pedestrian bridge) spanning the Hamilton Canal. The LNHP and Proponent will ensure that the buildings and bridges will be rehabilitated in accordance with the Secretary of the Interior's Standards for Rehabilitation.

The submittal to the Massachusetts SHPO for their review of the rehabilitation component of the Project will be in the form of a Historic Preservation Certification Application, Parts 1 and 2 for Building Nos. 1 and 4 and the Office Building within the Appleton Manufacturing Company mill complex and the Saco-Lowell Shops Building #14.

Review and approval of the proposed rehabilitation portions of the project will be undertaken by the LHB. The submittal to the LHB will be in the form of a submittal of a series of Historic Permit applications for specific Project elements. The Proponent will provide a copy of all proposed work on historic resources to the Massachusetts SHPO for its records. A copy of the LHB's approval letters will be provided to the Massachusetts SHPO.

2. OPEN SPACE AND PUBLIC REALM IMPROVEMENTS

The Proponent will undertake landscaping, park, and infrastructure improvements to enhance the historic districts, including: re-creation of a mill yard framed by residential housing, retention and repair of the remnant north elevations of the Appleton Manufacturing Company Mill No. 3 and the Dye House to be stabilized and maintained in place along the southern wall of the Pawtucket Canal, creation a right-of-way for a future trolley track connection to the Gallagher Terminal, and setting aside of land for three new district parks.

Review and approval of the proposed open space and public realm improvements within the Project area will be undertaken by the LHB. The submittal to the LHB will be in the form of a submittal of a series of Historic Permit applications for specific Project elements. The Proponent will provide a copy of all proposed work on open space and public realm portions of the Project to the Massachusetts SHPO for its records. A copy of the LHB's approval letters will be provided to the Massachusetts SHPO.

3. DESIGN REVIEW OF NEW CONSTRUCTION

Review and approval of proposed new construction within the Project area will be undertaken by the LHB. The submittal to the LHB will be in the form of a series of Historic Permit applications for specific Project elements. The Proponent will provide a copy of all proposed new construction to the Massachusetts SHPO for its records. A copy of the LHB's approval letters will be provided to the Massachusetts SHPO.

4. MITIGATION REQUIREMENTS

For those adverse effects already identified as applicable to this Project, the following mitigation will be implemented by the Project Proponent and the City:

- a) Attention to the design character of the replacement bridges from Jackson Street into the Saco-Lowell (Freudenberg) site and for the roadway bridge over the Pawtucket Canal through the Appleton Mills Dye House wall remnant.
- b) The rehabilitation of the Appleton Manufacturing Company mill complex (Building Nos. 1 and 4 and the Office Building) including the restoration of the existing overhead pedestrian bridge and the two pedestrian bridges from the Appleton Mills to Jackson Street. This restoration will not preclude the future ability for the restoration of the previously removed overhead bridge to be reattached to the Appleton Mills, should the funding and permitting be attained by the City and the LNHP.
- c) The rehabilitation of the Saco-Lowell Shops Building #14.
- d) The retention and repair of the remnant north elevations of the Appleton Manufacturing Company Mill No. 3 and the Dye House to be stabilized and maintained in place along the southern wall of the Pawtucket Canal.
- e) The commitment that Phase I of the project will have no adverse effect on the waterwheel and raceway in the eastern end/rear ell of Mill No. 1 of the Appleton Mills. Phase I activities will not result in the demolition of the raceway and waterwheel in the eastern end/rear ell of Mill No 1 of the Appleton Mills and will not preclude the future reuse of these structures for hydroelectric power generation.

5. PROJECT CHANGES

In the course of ongoing project design reviews, should any additional adverse effects become apparent, LNHP and the Proponent will consult with Massachusetts SHPO pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and pursuant to 950 CMR 71.00 et seq, regulations implementing Massachusetts General Laws Chapter 9, Sections 26 through 27C.

If material changes in elements of the Project design, which the LHB staff have reviewed and approved on are proposed, the LHB staff shall be afforded the opportunity to review and approval on the proposed changes, pursuant to Chapter 566 Acts of 1983.

6. DISPUTE RESOLUTION

Should the Massachusetts SHPO object within thirty (30) days to any actions proposed or carried out pursuant to this agreement, LNHP shall consult with the Massachusetts SHPO to resolve the objection. If LNHP determines that the objection cannot be resolved, LNHP shall forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation ("Council"). Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

- a. provide LNHP with recommendations, which LNHP will take into account in reaching a final decision regarding the dispute; or
- b. notify LNHP that it will comment pursuant to 36 CFR 800.6(b), and proceed to comment. Any recommendations or comment provided by the Council will be understood to pertain only to the subject of the dispute; LNHP responsibility to carry out all actions under the Memorandum of Agreement that are not subject to the dispute will remain unchanged.

At any time during the implementation of the measures stipulated in this agreement, should any objection regarding the subject matter of this agreement be raised by a signatory to this agreement, LNHP shall take the objection into account and consult as needed with the Massachusetts SHPO or the Council to resolve the objection.

Nothing contained in this document shall supersede the statutory authority of the LHB pursuant to Chapter 566 Acts of 1983.

7. MEMORANDUM OF AGREEMENT AMENDMENTS


The language of the stipulations in this Memorandum of Agreement may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the Council.

8. DURATION


This Memorandum of Agreement will remain in force until such as time as the Project is completed.

Execution of the Memorandum of Agreement by LNHP, the City, the Massachusetts SHPO, and the Proponent, its subsequent filing with the Council, and the implementation of its terms, shall establish that LNHP has taken into account the effects of the Project on historic properties.

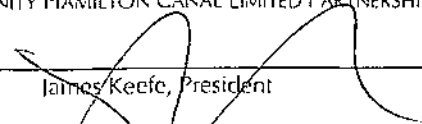
LOWELL NATIONAL HISTORICAL PARK

By:  Date: 2 March 2009
Michael Creasey, Superintendent

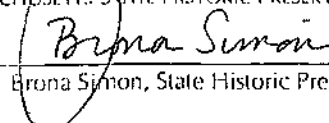
CITY OF LOWELL

By:  Date: 3/5/09
Bernard F. Lynch, City Manager

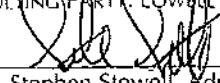
TRINITY HAMILTON CANAL LIMITED PARTNERSHIP

By:  Date: 3/9/09
James Keefe, President

MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICE/MASSACHUSETTS HISTORICAL COMMISSION

By:  Date: 4/2/09
Brona Simon, State Historic Preservation Officer

CONSULTING PARTY: LOWELL HISTORIC BOARD

By:  Date: 2/6/09
Stephen Stowell, Administrator

Executive Summary

Overview

When the Lowell National Historical Park was created in 1978, it was given a unique mandate which called for the Park to not only preserve and interpret the historic and cultural resources representing Lowell's role in the 19th century American industrial revolution but also to serve as a catalyst in revitalizing the city's physical, economic and cultural environments. The model created at Lowell represents an innovative approach to national park development requiring a high level of cooperation between the federal, state, local and private sectors. The Lowell Park plan was designed to be supportive of local government preservation efforts and encourage substantial private investment in redevelopment of the City's vast 19-century urban resources.

Over the past several years, the City of Lowell in cooperation with a private developer has been undertaking a master planning process for redevelopment of the Hamilton Canal District. The project will create a dense, transit-oriented mixed-use neighborhood immediately adjacent to the Park's visitor center and at the gateway to the city and the park. The Hamilton Canal District is the last large tract within the Preservation District that has not been rehabilitated. This proposed \$800,000,000 project involves the redevelopment of some 15-acres within the District. The land is currently blighted with derelict buildings that have fallen into disrepair and historic resources are threatened if action is not taken immediately. Site development involves both the preservation of historic resources and new development strategies.

The Hamilton Canal District master plan, prepared through a process of community consultation, and with the direct involvement of the LNHP staff, proposes new development on the site which will change access and visibility of the approach to the Park. The plan also includes a proposal by the City of Lowell to acquire the Park's visitor center parking lot for incorporation into the development project.

The Park's 1981 General Management Plan (GMP) called for the primary visitor orientation center to be located within the Lowell Manufacturing Company complex with visitor parking to be provided in the adjacent surface lot at Broadway. In response to the proposed developments at the Hamilton Canal District, the Park has undertaken a GMP planning process to reconsider the location of its visitor orientation center and parking lot within the broader context of the Park's mission and goals.

Goals

The GMP planning study identified several key goals for Park visitor orientation and access: 1) enhance the visitor experience, 2) create a sense of arrival to the Park, 3) preserve key resources in the Park, and 4) positively influence impacts of the Park on Lowell's downtown and community while addressing the Park's functional requirements today and in the future.

Alternatives

At several on-site workshops, a range of feasible alternatives to address the Park's visitor entry and orientation needs were developed. The alternatives evaluated in the study included:

Alternative 1 – No Action

- Alternative 1 requires no major action by NPS regarding the existing Market Mills Visitor Center and any of its supporting facilities, though modest improvements to increase visibility and efficiency of operation could be implemented. The existing 161 space automobile and 11 space bus/RV surface parking lot to the southwest of the visitor center would remain.

Alternative 2 – Existing Visitor Center and HCD Redevelopment

- Visitor Center would remain in Market Mills.
- Parking
 - 161 spaces would be reserved in a new garage on parcel 14 or into an existing garage on Market Street, OR
 - Designated visitor parking would be eliminated under assumption that visitors and staff would pay for parking, as happens at other urban parks

Alternative 3 – New Visitor Center on Parcel 17

- Visitor center would be relocated to new NPS facilities on parcel 17.
- Market Mills Visitor Center could be renovated into space for new tenant(s) at market rate rents.
- Parking — 161 spaces would be reserved in a new garage on parcel 14.

Alternative 4 – Retain Market Mills Visitor Center, Contact Station with Private Use on Parcel 17

- Visitor Center would remain in Market Mills; potential to expand into NPS owned spaces in building to meet park's future programming and operational needs.
- Park would divest of its surface parking lot and relocate visitor parking to adjacent existing or proposed garages.
- Construction of at least three additional visitor orientation venues at key locations in park to provide supplemental contact with the public. These venues would provide:
 - Basic orientation to overall park, its transportation systems, and pedestrian connections
 - Additional outreach to residents and visitors not yet familiar with breadth of park
 - Resource interpretation about the park, both in general and specific to venue
 - Potential to develop partnerships with public or private entities for mutual benefit

Key Issues of Concern

The city and the park are intertwined and implementation of the Hamilton Canal District plan will cause significant changes to both. The potential for relocating NPS parking, rehabilitating historic buildings, and transforming currently vacant land with new buildings and uses will change the way the park and city are perceived and experienced. Key issues of concern to the park as a consequence of these changes include:

- Quality of the Visitor Experience
- Accessibility to park facilities
- Relationship of the park to the City of Lowell
- Potential costs to the park

These issues formed the basis on which each of the four alternatives were evaluated.

Preferred Alternative

Alternative 4 was selected as the preferred alternative for addressing visitor orientation and access to the Lowell National Historical Park. This alternative was selected for the reasons summarized below:

- Potential for redevelopment of currently vacant post-industrial land in the Hamilton Canal District into a vibrant, mixed-use residential district, including removal of surface parking lots adjacent to the Market Mills Visitor Center. This urban revitalization would most likely result in long-term, beneficial cumulative impacts to the economic health of the area.
- Increased visibility of existing NPS resources to visitors arriving by vehicle from Dutton Street and an opportunity for LNHP to refresh its image for the public, could potentially result in more visitors and a further appreciation among the public for the historic and cultural resources that exist in Lowell.
- An expansion outwards from the Market Mills Visitor Center of NPS orientation and interpretation venues—at Swamp Locks, Lower Locks, and Gallagher Transportation Terminal—to residents and new visitors who might otherwise remain unaware of the breadth of resources maintained by LNHP and other cultural institutions throughout the City. This would improve access to and potentially expand appreciation of these cultural and historic resources, resulting in a long-term, beneficial, cumulative impact.
- The potential to expand the trolley system through a redeveloped Hamilton Canal District to the Gallagher Transportation Terminal, would improve regional access to all LNHP resources and would increase the opportunities for visitors and residents to use multi-modal forms of transportation. In addition to increasing appreciation for the park's cultural and historic resources through increased access, this would improve access and reduce traffic congestion and accompanying emissions.

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List of Acronyms

- HCD, Hamilton Canal District
- GMP, General Management Plan
- LHPC, Lowell Historic Preservation Commission
- LDFC, Lowell Development and Financial Corporation
- LNHP, Lowell National Historical Park
- FONSI, Finding of No Significance
- GPRA, Government Performance and Results Act
- NHESP, Natural Heritage & Endangered Species Program
- MESA, Massachusetts Endangered Species Act
- RTP, Regional Transportation Plan
- NEPA, National Environmental Protection Act
- ITS, Intelligent Transportation System
- MBTA, Massachusetts Bay Transportation Authority

- ADA, Americans with Disabilities Act
- GTT, Gallagher Transportation Terminal
- EA, Environmental Assessment
- NEPA, National Environmental Policy Act
- EJ, Environmental Justice
- TF, Trinity Financial

1. Background

1.1. Introduction

Lowell National Historical Park, one of 392- units of the National Park Service in the United States, is located in the City of Lowell, 30-miles northwest of Boston. The Park includes a 142-acre Park District and an adjacent and overlapping 583-acre Preservation District. The Lowell National Historical Park represents an innovative park concept that provides for an historical/cultural park in a living, working, urban environment where federal fee ownership of cultural and historic resources is minimal - only 10.73-acres of the Park and Preservation District are in federal ownership.

Created in 1978, the Park was given a unique mandate which called for the Park to not only preserve and interpret the historic and cultural resources representing Lowell's role in the 19th century American industrial revolution but also to serve as a catalyst in revitalizing the city's physical, economic and cultural environments. The unique model created at Lowell represents an unusual approach to national park development requiring a high level of cooperation between the federal, state, local and private sectors. The Lowell Park plan was designed to be supportive of local government preservation efforts and encourage substantial private investment in redevelopment of the City's vast 19-century urban resources.

Over the past three decades, the Lowell National Historical Park has played a key role in the City's revitalization process. Working in cooperation with the City, State, and other public/private partners, the Park has been responsible for the rehabilitation of over 400 structures and the creation of extensive public programs to preserve and interpret the city's cultural resources. The Lowell National Historical Park has played a consistent role over the years advocating for reuse of key buildings, opposing inappropriate actions such as demolition, participating in the City design control program and assisting in providing incentive financing to assure the highest quality of rehabilitation for nationally significant historic structures in the Park and Preservation District. It is estimated that over \$1 billion in private investment has occurred in the Lowell Park and Preservation District since the creation of the Park. To date, nearly 80% of the 5 million square feet of vacant mill space that existed when the LNHP was first established has been renovated. The Hamilton Canal District is the last large tract within the Preservation District that has not been rehabilitated. This proposed \$800,000,000 project involves the redevelopment of some 15 acres within the District.

The land is currently blighted with derelict buildings that have fallen into disrepair and historic resources are threatened if action is not taken immediately. The approach to enter Lowell National Historical Park is along Dutton Street that passes by the HCD as visitors enter the LNHP visitor center parking area. The Park also has its major boat landing within the core project area and provides canal barge tours along the Canalway. The current condition of the Hamilton Canal District poses serious safety concerns for visitors walking within the area or touring the canal system by boat. It is also a challenge in marketing Lowell as a national park maintaining high standards in interpretive and preservation excellence. The City has accumulated this land and has entered into an agreement with a private developer, Trinity Financial, to develop a master plan for the entire site that has become the basis for the City adopting a "form-based" code (appendix) for the District. The proposed project involves both the preservation of historic resources and new development strategies. The National Park Service has been actively

engaged in the master planning process. This amendment to the General Management Plan will formalize the NPS position relating to the Hamilton Canal District project.

1.2. Purpose and Significance

Lowell is a “living museum” and an “educative city” for the purposes of preservation and education centered on the natural and historic resources and cultural heritage of this uniquely evolved city. The mission of the Lowell National Park calls for the Park to be a vehicle for economic progress in the community, encouraging creative and cooperative programs to support the preservation and interpretation of Lowell’s historic and cultural resources. The unique mission of the Park mandates that it join with many cooperators to carry out the ideals set forth in its enabling legislation.

Lowell National Historical Park preserves and interprets the nationally significant historic and cultural sites, structures and districts in Lowell, Massachusetts, that represent the most significant planned industrial city in the United States and symbolize, in physical form, the Industrial Revolution. The park tells the human story of the Industrial Revolution and the changing role of technology in a 19th and 20th century setting. The cultural heritage of many of the ethnic groups that immigrated to the U.S. during the 19th and early 20th century, and which continues today, is still preserved in Lowell’s neighborhoods. The park provides a vehicle for economic progress in the community, encouraging creative and cooperative preservation and interpretive programs.

1.3. Site Description

The Park’s visitor orientation center is located in the Market Mills complex, known historically as the Lowell Manufacturing Company. The complex includes two building, one dating from 1882; the other from 1902. The site is located at the southern end of the Park’s “intensive-use zone”. The mill complex, severely damaged by fire in 1980 following a decade of neglect and abandonment was identified in early plans as critical for the preservation and interpretation of the downtown.

In the early 1980’s, the Market Mills was jointly redeveloped by Market Mills Associates, private developers and the Park’s sister agency, the Lowell Historic Preservation Commission (LHPC). The developers rehabbed the upper floors of the complex, creating 230 units of subsidized housing for families and the elderly. LHPC was responsible for development of 42,000 sq. ft. of the complex comprising most of the ground floor space. The majority of this space was designated for the Park’s visitor orientation center and for visitor support services including retail and restaurant space. The visitor center parking lot provides space for 161 cars as well as 11 spaces for Busses and RV’s

Completed in 1982, Market Mills provides a gateway to the Park and City. Visitors are directed to the Visitor Center along Dutton and Thorndike Street, the historic gateway to the City. They park in a landscaped parking lot located on the former site of the historic Lowell Machine Shop. They walk through a passageway carved out of the Market Mills façade to enter the mill courtyard. On the opposite side of the courtyard is the Visitor Center where a multi-image slide show, introductory exhibits, and kiosks displaying information on cultural resources and attractions provide basic orientation to the Park and the City. It is at this site that visitors are introduced to the Park themes – Power, Capital, Labor, Technology, and the Industrial City - and daily tour offerings.

The 142-acre Lowell National Historical Park district contains a critical mass of structures from the nineteenth century, when Lowell was America's textile capital. Lowell contains a total of 13

districts listed on the National Register of Historic Places and 16-individually listed National Register properties scattered throughout the community in the downtown and neighborhoods. The Lowell canal system, which provided the framework that shaped the entire development of Lowell, is listed as a National Historical Landmark and is a designated Civil and Mechanical Engineering Landmark. Lowell's physical resources include the original 5.6-mile power canal system, major cotton textile mill complexes, and evolutionary streetscapes of commercial and residential structures.

Figure 1 shows the project location, including the park boundary, land ownership, and affected lands.

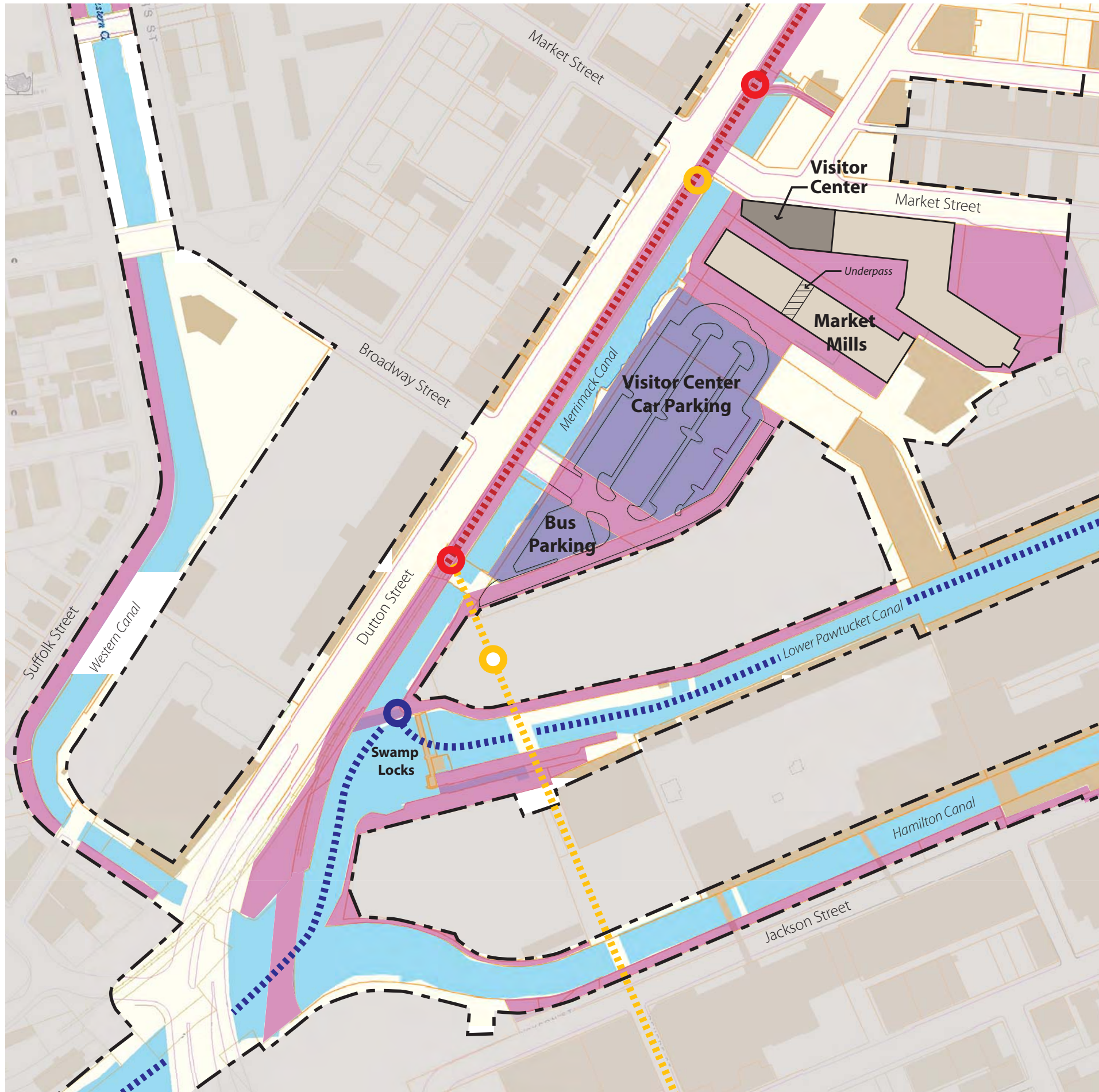
Figure 2 shows the entire boundary of the Lowell National Historical Park as well as the Lowell Historic Preservation District.

Figure 1



PROJECT LOCATION MAP

Lowell National Historical Park
Lowell, MA



- Park Boundary
- Federal Land (Less than Fee)
- Federal Land (Fee)
- Land outside the park boundary
- Existing Trolley Track
- Existing Trolley Stop
- Proposed Trolley Track
- Proposed Trolley Stop
- Existing Boat Tour Route
- Existing Boat Tour Landing

Figure 2



FULL BOUNDARY MAP
Lowell National Historical Park
Lowell, MA

 Project Area

1.4. Historical Background / Legislative History

Public Law 95-290, enacted in 1978, established the Lowell National Historical Park to preserve and interpret the nationally significant historical and cultural sites, structures, and districts in Lowell, Massachusetts. That same law established the Lowell Historic Preservation Commission for a ten-year term to complement and coordinate the efforts of the LNHP and various other state, local, and private entities in developing and managing the historic and cultural resources of Lowell.

Public Law 100-134, enacted in 1987 extended the Commission for an additional seven years, and increased the authorization levels of the establishing Act. The Commission was reauthorized for the primary purpose of carrying out the Canalway Plan, providing public access to Lowell's 5.6-mile historic power canal system, a National Historic Engineering Landmark, and for the purpose of developing a folklife program to document and present Lowell's cultural heritage.

In 1994, H.R. 4448 was filed in Congress by Representative Martin Meehan (5th Congressional District - Massachusetts). The bill proposed several changes in the establishing Act for the purposes of extending the Commission and increasing authorization levels for the Park, as well as for facilitating the transfer of the Commission's authorities to the Park. The bill called for the extension of the Commission for an additional five years and a \$10.33 million increase in the Commission's development authorization. In addition, it directed the National Park Service to assume all responsibilities for loan and grant agreements previously ascribed to the Commission, and authorized any revenues or assets acquired accordingly to be used for park purposes. A provision in the bill also proposed to correct defects in the 1978 law by requiring the Lowell Development and Financial Corporation to repay to the Secretary of the Treasury loans and interest from the low-interest loan fund set up in 1978, "except for any losses incurred after all reasonable efforts at collection had been completed."

H.R. 4448 passed the House on September 26, 1995, but died on the floor of the U.S. Senate due to inaction on the last day of the 103rd Congress. This bill was widely supported and according to Senator Edward Kennedy was not blocked on its merits. As a result of the non-passage of this bill, the Lowell Historic Preservation Commission was terminated on June 5, 1995.

Legislation was redrafted in 1995 to address only housekeeping issues. From 1995 to 2000, the LNHP staff worked closely with the Solicitors Office, Congressman Martin T. Meehan's Office, NPS WASO Legislative Affairs Staff, and the Lowell Development & Financial Corp. (LDFC) to move the legislative proposal forward. The major issue requiring legislation related to liability for loan losses under the Preservation Loan Program. After repeated efforts, the Solicitor of the Interior Department concurred on December 16, 1999 with the Lowell Park position that it does not make the LDFC a guarantor of each loan made. This achievement caused NPS Legislative Division to urge that the remaining issues – considered to be housekeeping issues – be resolved administratively without further legislation through a Delegation of Authority.

On January 19, 2001, Assistant Secretary Smith signed off on a revision to the Departmental Manual 245 DM 1 (22) delegating to the Director, National Park Service, all of the authorities delegated to the Assistant Secretary, Fish and Wildlife and Parks, in 209 DM 6.8 to administer the Lowell Historic Preservation District (Public Law 95-290). A subsequent memorandum dated March 9, 2001, from the Acting Director, National Park Service provides for the delegation of authority for administration of the Preservation District to the Regional Director, Northeast Region.

1.4.1 Delegation of Authority

The following authorities were provided to the Park in the Delegation of Authority:

- A longstanding goal of the Park has been to assure that portions of the Preservation District not already designated as National Register Districts be added to the National Register in order to assist private owners in accessing the Federal Investment Tax Credits for Historic Preservation. The Delegation of Authority 245 DM 1 (22), delegates to the Director of the National Park Service, the Secretary's authority to carry out the provisions of the Act of June 5, 1978, 16 U.S.C. 410cc relating to the administration of the Lowell Historic Preservation District. By virtue of this new designation, the Preservation District now meets the procedural requirements (it is an administrative unit of the NPS) for listing of properties on the National Register as set forth in 36 CFR Chapter 1, Section 60.1. Preservation District properties are considered officially listed on the National Register as of January 19, 2001.
- The Park's enabling legislation provided for a preservation loan program to the year 2018, but each loan required Commission approval. Over \$1M in loan funds are available in the accounts of the Lowell Development & Financial Corporation but prior to the Delegation of Authority could not be accessed by the Park due to lack of signature authority. The Delegation of Authority now allows new loans to be made out of available LHPC Preservation Loan funds with the approval of the Superintendent of the Lowell National Historical Park.

1.4.2 Boundary Revisions

The Lowell National Historical Park enabling legislation provided for the creation of the 127-acre Lowell National Historical Park and the establishment an adjacent and overlapping 583 acre Lowell Historic Preservation District which was to be administered by the Secretary and by the Commission.

The following boundary revisions were subsequently authorized:

- The Lowell National Historical Park boundary was revised June 1980 to include an additional 3.08 acres along the Western Canal at 220 Aiken Street to provide for a Park maintenance facility.
- The Lowell National Historical Park boundary further revised March 1987 to include an additional 48,000 sq. ft. consisting of 2400 linear feet of rail right-of-way.
- October 1989, the boundaries of the Lowell National Historical Park and Lowell Historic Preservation District were revised to include additional tracts consisting of .82 and 11.43 acres respectively.
- May 2008, Public Law 110-229 Title III, Section 312 authorized the Secretary of the Interior to adjust the boundary of Lowell National Historical Park to include five small parcels, totaling less than one acre, to complete the development of the Canalway.

The Lowell Park boundary now includes a total of 142-acres.; federal ownership includes fee interest in 10.73 acres and easement interest in 21.08 acres.

Although the Delegation of Authority provides for the transfer of authorities of the Commission to the Park for administration of the Preservation District it in no way affects the boundaries of the Park and Preservation District as established in the enabling legislation and subsequent minor boundary changes.

1.5. Need for GMP Amendment

The City of Lowell is undertaking, in collaboration with a private developer, a 15 acre project combining new construction and adaptive reuse for the Hamilton Canal District (HCD). The project will create a dense, transit-oriented, mixed-use neighborhood located immediately adjacent to the Park's visitor center and at the gateway to the city and the park.

The HCD project has been based on the City of Lowell's proposal to acquire the Park's visitor center parking lot in order to incorporate this into the development project, requiring a new parking garage to serve the new development and potentially accommodate park visitors. The current parking lot adjoins open lands which contribute to the high visibility and ease of visitor access to the visitor center. The HCD plan, prepared through a process of community consultation, and with the direct involvement of LNHP staff, indicates new development on the 15 acre site which will change access and visibility of the approach to the park.

The Park's 1981 General Management Plan called for the primary visitor orientation center to be located within the Lowell Manufacturing Company complex with visitor parking to be provided in the adjacent surface lot at Broadway. At the same time, the Park's GMP Management Objectives call for the Park 1) incorporate community goals and needs into the development and management of the park, 2) to provide for park activities and building uses that are community oriented and not strictly related to park visitors, 3) to contribute to the economy and revitalization of Lowell through park activities, and 4) to minimize NPS landownership to that necessary for vital resource management with the park and encourage interagency and private sector management approaches.

The GMP planning process provides an opportunity for the Park to reconsider the location of the visitor center and adjacent parking lot in the broader context of the Park's mission and goals. The Park's 1980 Preservation Plan notes that surface parking lots are not the most desirable land uses within the Park and Preservation District.

Figure 3 shows the Concept Master Plan for the HCD, indicating major uses and relationships to park and city features noted in **Figure 1**. **Figure 4** shows the parcels defined within the HCD plan, which are referred to in the remainder of this GMP Amendment.

Figure 3: Hamilton Canal District Concept Master Plan

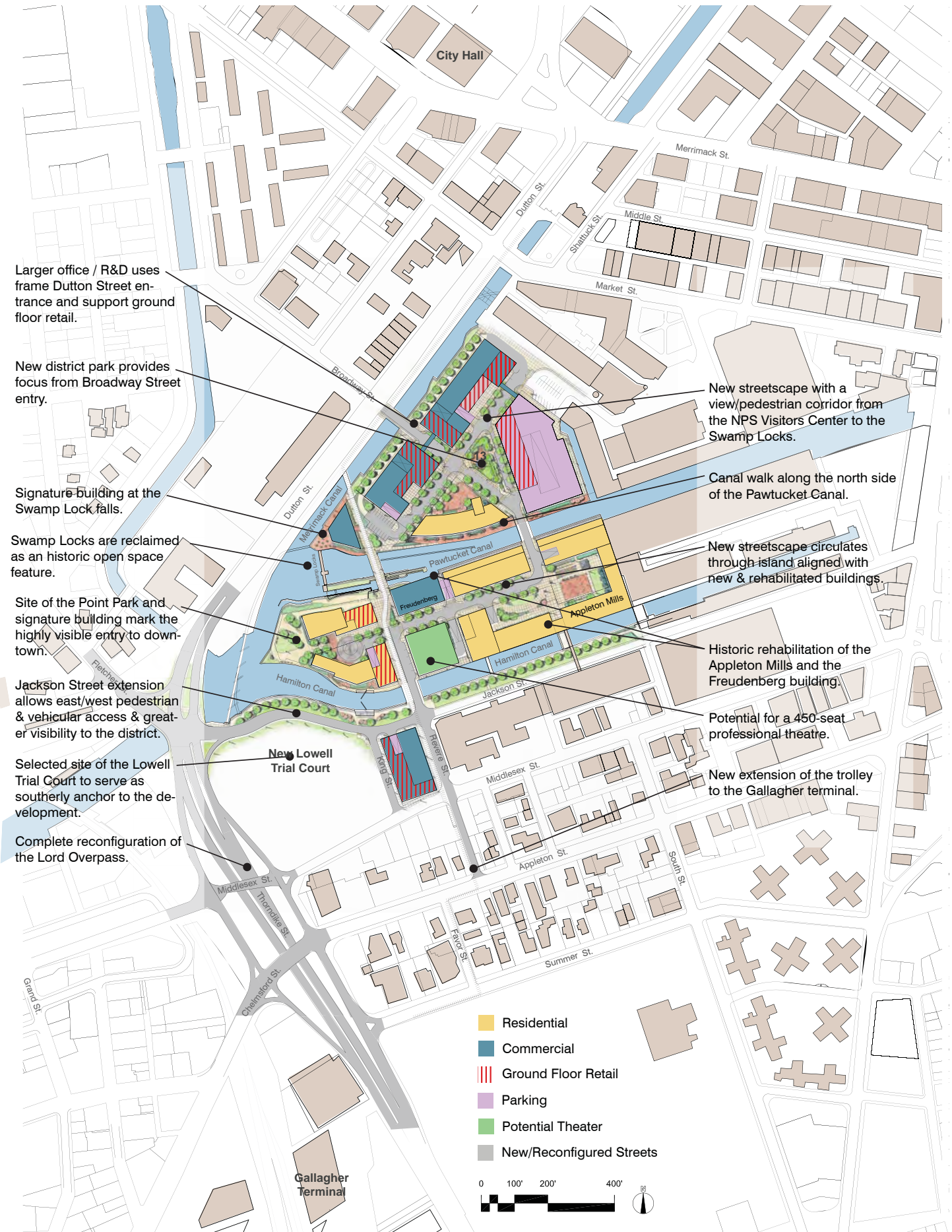
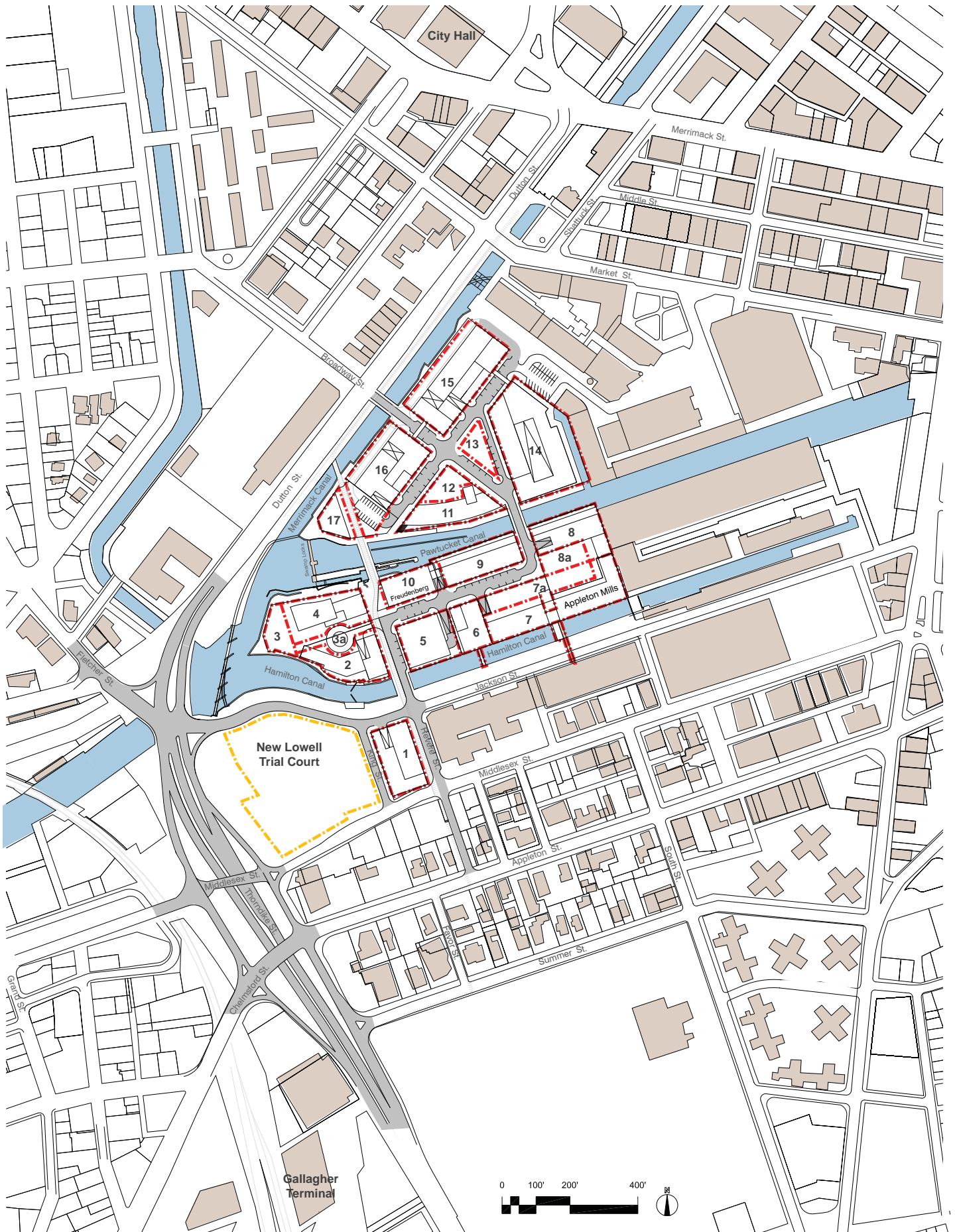


Figure 4: Hamilton Canal District Parcel Map



1.6. Planning Process

The Amendment process was undertaken by a multi-disciplinary team composed of staff from the Lowell National Historical Park and key community partners. NPS Northeast Region planning staff provided technical assistance throughout the planning process. The process involved an ongoing dialogue with City of Lowell staff and architects and developers of the Hamilton Canal District. Several workshops were held over a six-month period to address key planning issues. These workshops were held on December 4, 2008, January 21, 2009, February 23, 2009 and June 16, 2009.

The following steps were undertaken to advance the plan:

- **Review of Planning Documents:** The team reviewed the purpose, significance, and goals of the park to provide the foundation for decision-making in the document. The park's original GMP was reviewed to identify relevant management objectives. Hamilton Canal District Site Development Plans were reviewed to identify potential impacts of the HCD development on visitor experience.
- **Identification of planning issues:** Team members, with input from staff undertook a needs assessment to determine the desired park visitor experience, program requirements, and facility needs. Location criteria critical to the evaluation of alternatives were also defined. The planning issues identified formed the basis of the "Key Issues" section of this planning document.
- **Development of Alternatives:** At several on-site workshops, the team developed a range of feasible alternatives to address the park's visitor entry and orientation needs. The alternatives developed at these workshops are described in Section 4 of this document.
- **The alternatives were examined against several factors in a value analysis to determine which were the most advantageous.** A table summarizing the findings of the value analysis is located in Section 5 of this planning document. Based on this value analysis Alternative 4 was determined to be the most advantageous of the alternatives considered.

Assessment of Alternatives:

The team conducted an environmental assessment of the potential impacts on the pertinent cultural and historical resources associated with the alternatives considered and determined that Alternative 4 provides the greatest benefits in terms of visitor experience with the fewest impacts on the cultural and historical environment and park operations.

Alternative 4 is the most flexible of the alternatives and allows the park to proceed in concert with the Hamilton Canal District development process, whose detailed timeline is, by nature, difficult to predict. This alternative also allows the park to extend and strengthen its outreach in a way that is both consistent with its strategy to date and which is also very cost-effective.

Therefore, Alternative 4 has been chosen as the preferred alternative.

NEPA Process:

The National Environmental Policy Act (NEPA) of 1969, as amended, calls on federal agencies to consider environmental issues as part of their decision making process and to involve interested parties in the process. The NEPA process was initiated in June 2009 with a public information

meeting soliciting issues and concerns on preliminary program plans. Comments from this meeting were used during preparation of the Environmental Assessment (EA).

The EA was prepared to assess the impacts of each alternative on the affected environment. Specific impact topics were identified based on the results of the NPS Environmental Screening form to allow comparison of the environmental consequences of each of the 4 alternatives. Impact topics evaluated included: Surface Water Resources, Parks, Trails and Open Spaces, Historic Districts and Structures, Land Use, Transportation and Visitor Access, Local Economy, Visitor Experience, and Park Operations. The environmental impacts attributable to each of these topic areas were evaluated in terms of their Magnitude of Impact, Duration of Impact, and Quality of Impact.

The EA will be available for public review and comment for a period of 30 days, following final NPS review of the draft document.

1.6.1. Next Steps

After the distribution of the Draft General Management Plan/Environmental Assessment there will be a 30-day public review and comment period after which the Park planning team will evaluate comments from other federal agencies, organizations, community groups, and individuals regarding the draft plan. Appropriate changes will be incorporated into a Final General Management Plan Amendment/Environmental Assessment. The final plan will include letters from governmental agencies, any substantive comments on the draft document, and NPS responses to those comments. Following distribution of the Final General Management Plan Amendment/Environmental Assessment a FONSI will be issued on the Environmental Assessment and the final plan will be signed by the NPS Northeast Regional Director. The FONSI documents the NPS selection of an alternative for implementation. With the FONSI and signature of the NPS Northeast Regional Director, the plan can then be implemented. The implementation of the approved plan will depend on future funding. Approval of the plan does not guarantee that funding and staffing needed to implement the plan will be forthcoming. Full implementation of the approved plan could be many years in the future.

1.7 Existing Documents and Plans

This General Management Plan Amendment builds on several documents already in force at the Lowell National Historical Park, including the original 1981 General Management Plan. These plans and related documents are summarized below.

1.7.1 Lowell National Historical Park Planning

Lowell National Historical Park - GMP, August 1981

The Lowell National Historical Park General Management Plan was completed in August 1981 as mandated in the Park's enabling legislation. The GMP provides the framework to interpretation and visitor use, cultural resources management, and general development within the Park. The plan also outlines cooperative agreements and technical assistance measures that will be undertaken to fulfill the goals of the Park. Although much of park's general development have been implemented, the management objectives described in the plan remain fundamentally relevant and continue to serve as a long-range guide for park operations and development. The GMP management objectives however, specifically called for the Park to "establish the primary visitor information/orientation operation within the Lowell Manufacturing Company complex."

General Management Plan Addendum, January 2003

This addendum provides clarification on the role and responsibilities of the Lowell National Historical Park in the absence of the former Lowell Historic Preservation Commission and formally incorporates into the Park's GMP, the Preservation Commission's Preservation Plan and Amendment.

Preservation Plan, 1980/Details of the Preservation Plan

The Preservation Plan and Details are a two-volume plan, mandated under Public Law 95-290. The Preservation Plan is an action plan that outlines initiatives for the preservation of Lowell's historic and cultural resources. It outlines projects mandated by the Act including development of: The Lowell Manufacturing Company; Early Residence; H&H Paper Company; Boott Mill Park (Boardinghouse Park); and the Boott Mills. Because of its strategic location at the Gateway to the Park and its historical significance, the Lowell Manufacturing Company was selected as the preferred alternative as the site for the Park Visitor Center. The plan outlines the following objectives for the Lowell Manufacturing Company: 1) To ensure the preservation and appropriate rehabilitation of the two mill buildings, 2) To provide space for the National Park Service Visitor Center and commercial activities, 3) To provide public exhibit space that can be used to introduce the National Park visitor to Lowell's cultural resources, and 4) To ensure that the renovation of the millyard is appropriate to its role as the 'gateway' to the National Park.

The Details of the Preservation Plan is a technical appendix to the Preservation Plan. The Details of the Preservation Plan identifies several critical concerns with respect to Parking Lots. The plan states that: "In the long term, the construction of garages is preferable in the District to open air parking lots." In addition, it states that: some special opportunities unique to the District that could turn parking lots into interesting arrival experiences should not be missed. "

Preservation Plan Amendment, 1990

This report, mandated by Congress in PL 100-134, is an amendment to the 1980 Preservation Plan. The Plan summarizes the accomplishments of the Commission and outlines its proposed activities for the following 7-years. The primary focus of the plan is on the Canalway and Folklife; two important elements of the Park development program that had not yet received the attention they deserved.

Interpretive Prospectus, 1984

The Lowell National Historical Park Interpretive Prospectus outlines the Park's basic approach to interpretation. This plan identified five aspects of Lowell's industrial history around which interpretive programs, activities and permanent museum exhibits are organized. These included: Power, Capital, Labor, Machines (Technology), and The Industrial City.

Comprehensive Interpretive Plan, 1997

The Comprehensive Interpretive Plan provides a long range vision of the Park's comprehensive interpretive program. It is implemented each year through the Park's Annual Plan as part of the Government Performance and Results Act (GPRA) planning process. The thematic statements and topics presented in the plan provide the basic framework on which individual park programs are developed. The plan defines the essential visitor experience and role of the Visitor Center as the all-important first stop at the Park.

Cultural Resources Inventory

Mandated in the park's enabling legislation, the Cultural Resource Inventory, prepared in 1979 by Shepley, Bulfinch, Richardson and Abbott, provides an inventory and assessment of historical significance for every structure in the Park and Preservation District.

Cultural Resource Inventory Update, 1993

The Cultural Resource Inventory was updated in 1993 to include inventory sheets for the properties added to the Preservation District through a minor boundary change in 1989.

1.7.2 Hamilton Canal District Planning

Two major efforts comprised the Hamilton Canal District planning process. The first effort was a 9- month public master planning process that produced a transit-oriented, mixed-use Master Plan which incorporated extensive input from the public process; this process is described in detail in Chapter 6, Section 6.1: Public Involvement .

The second effort was the approvals process, which required agreements among key stakeholders, as well as mandatory permitting regarding the project's ability to meet state and federally mandated environmental quality and impact standards. The two major components of this process are described below.

Final Environmental Impact Report

Trinity Hamilton Canal Limited Partnership filed an Expanded Environmental Notification form with the Massachusetts Executive Office of Energy and Environmental Affairs (EEF) MEPA Office on April 30, 2008. The MEPA Office conducts reviews of the environmental impacts of development projects and other activities that require one or more State Agency Actions and that exceed MEPA review thresholds. MEPA issued a Phase One Waiver to allow commencement of the first phase of the project on July 11, 2008. Trinity Hamilton Canal Limited Partnership filed a Final Environmental Impact Report (FEIR) with the EEA MEPA Office on March 31, 2009. On May 15, 2009, the Secretary of Energy and Environmental Affairs determined that the Final Environmental Impact Report (FEIR) submitted on the project "adequately and properly complies with the Massachusetts Environmental Policy Act (M.G.L. c.30, ss. 61-62I) and with its implementing regulations (301 CMR 11.00)."

Early on in the Hamilton Canal District planning process, adverse impacts associated with several components of the development plan were identified. These components included: 1) warehouse demolition, 2) need to replace the Revere St. Bridge, and 3) need to demolish remnants of the Appleton Mills. Trinity Financial and City requested the cooperation of the Lowell National Historical Park and the Lowell Historic Board in the drafting of a MOA to address these adverse impacts.

On April 2, 2009, Lowell National Historic Park, City of Lowell, Trinity Hamilton Canal Limited Partnership and Massachusetts State Historic Preservation Office/Massachusetts Historical Commission signed a Memorandum of Agreement regarding the Hamilton Canal District Project, in Lowell, Massachusetts. This MOA was included in the DEIR for the Hamilton Canal District.

The *Memorandum of Agreement* identified the redevelopment of the Hamilton Canal District as a positive project that could benefit the city and region then outlined a host of issues associated with redevelopment of the 13 acre district, including: 1) Rehabilitation of Historic Resources; 2) Open Space and Public Realm Improvements; 3) Design Review of New Construction; 4)

Mitigation Requirements; 5) Project Changes; 6) Dispute Resolution; 7) Memorandum of Agreement Amendments; and, 8) Duration.

Appendix A includes all Agency Correspondence regarding compliance to state and federal laws, including the Memorandum of Agreement.

1.8 Applicable Laws, Policies, and Mandates

As a unit of the national park system, the management of Lowell National Historical Park is guided by the 1916 Organic Act (which created the National Park Service); the General Authorities Act 10 1970; the act of March 27, 1978, relating to the management of the national park system; other applicable federal laws and regulations, such as the National Historic Preservation Act; and the LNHP enabling legislation.

Actions are also guided by the National Park Service Management Policies. This planning effort is guided by NPS Management Policies 2006, current park planning standards, and the General Management Plan Dynamic Source Book 2008. The assessment of environmental impacts is guided by Directors Order #12.

The applicable laws, regulations, and policies most pertinent to planning are described below. Lowell National Historical Park must be managed in accordance with these laws and policies regardless of which alternative is chosen as the final plan.

Archeological Resources

Laws and policies in effect for the protection of archeological resources include National Park Service Management policies, the National Historic Preservation Act, Executive Order 11593: “Archeological Resources Protection Act,” and the Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation. The laws and policies require that archeological sites be identified and inventoried and their significance determined and documented. Archeological sites are to be protected in an undisturbed condition unless it is determined through formal processes that disturbance or natural deterioration is unavoidable. When disturbance or deterioration is unavoidable, the site is to be professionally documented and salvaged in consultation with the State Historic Preservation Officer and American Indian tribes.

Environmental Compliance

Congress enacted the National Environmental Policy Act in 1969 to “declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.” This act requires federal agencies to: utilize an interdisciplinary approach to planning, consider a range of alternatives in planning, and evaluate the environmental impacts of proposed actions.

Historic Resources

Numerous laws and policies are in effect for the protection of historic resources, including the National Historic Preservation Act, the Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation, and the Secretary of the Interior’s Standards for the Treatment of Historic Properties. The laws and policies require that historic resources be inventoried and their significance and integrity evaluated under National Register of Historic Places criteria. The qualities that contribute to the listing or eligibility for listing on the National

Register are to be protected in accordance with the Secretary of the Interior's Standards, unless it is determined through a formal process that disturbance or natural deterioration is unavoidable.

Universal Accessibility

Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 791), and federal guidelines published in accordance with Americans with Disabilities Act of 1990 define specific access requirements for persons with disabilities to parking facilities, pathways, and buildings. The accessibility requirements apply to government facilities (Title II) and to private entities that provide public accommodations (Title III). Accordingly, NHS managers are to strive to ensure that disabled persons are afforded experiences and opportunities with other visitors to the greatest extent practicable. Special, separate, or alternative facilities, programs, or services are to be provided only when existing ones cannot reasonably be made accessible.

Sustainable Design/Development

Sustainability can be described as the result achieved by managing national parks in ways that do not compromise the environment or its capacity to provide for future generations. Federal laws, executive orders, and executive memoranda, including Executive Order 13123: "Greening the Government through Efficient Energy Management," Executive Order 13101: "Greening the Government through Waste Prevention, Recycling, and Federal Acquisition," and the National Park Service Guiding Principles of Sustainable Design require park managers to reduce impacts of federal government activities on the environment. The NPS strives to reduce energy costs, eliminate waste, and conserve energy resources by using energy-efficient and cost-effective technology and incorporate energy efficiency into the decision-making process during the design and acquisition of buildings, facilities, and transportation systems.

1.9 Environmental Assessment Scoping Issues

At the June 16, 2009 community workshop on the General Master Plan Amendment, the chart below was distributed, indicating impacts likely to be addressed and impacts not likely to be addressed. Participants were asked to comment on other impacts or on these categories and offered no further comments.

Environmental Assessment Topics

The Environmental Assessment needs to consider potential significant impacts of alternatives. Likely topics include:

	Topics	Likely to be addressed	Likely to be not addressed
Natural and Recreational Resources	Physiography and soils		Physiography and soils
	Surface water resources	Surface water resources	
	Vegetation		Vegetation
	Fish and wildlife		Fish and wildlife
	Threatened and endangered species		Threatened and endangered species
	Air quality		Air quality
	Parks, trails, and open spaces	Parks, trails, and open spaces	
	Boating and fishing		Boating and fishing
Historic and Cultural Resources	Archeological resources	Archeological resources	
	Historic districts and structures	Historic districts and structures	
	Cultural Landscape		Cultural Landscape
	Ethnographic Resources		Ethnographic Resources
	Indian Trust Resources		Indian Trust Resources
Socio-economic Resources	Land use	Land use	
	Transportation and visitor access	Transportation and visitor access	
	Local economy	Local economy	
	Visitor experience	Visitor experience	
	Park operations	Park operations	

1.10 Important Topics Retained for Further Analysis and Dismissed from Analysis

As required for an Environmental Assessment, the following section of the document identifies topics that have been selected for impact analysis in the “Environmental Consequences” section of this document. An explanation of which impact topics were dismissed from further analysis is also included. Specific impact topics were identified to allow comparison of the environmental consequences of each alternative. The planning team identified the impact topics based on federal laws, regulations, and Executive Orders.

The Preservation District that encompasses the Lowell National Historical Park is large, encompassing approximately 583 acres of land area and much of the City’s downtown. However, relatively little land or buildings are owned by the National Park Service, including the canals and their banks, some river frontage, and several downtown buildings including the site of the Market Mills.

The immediate project area for this GMP Amendment that may be subject to impacts includes the Market Mills complex south of Market Street and the adjacent Mack Plaza north of Market Street, parcels 15 and 16 on which NPS parking is now located, and the canal banks that surround parcel 17 at “the point.” For the remainder of this document, “immediate project area” will refer to just this portion of the park outlined in red in the illustration below.



Below is an overview of the rationale for selecting each impact topic.

Natural and Recreational Resources

Surface Water Resources

The Lowell National Historical Park boundary includes 9.6 miles of major riverbanks and all 5.6 miles of historic canals in Lowell, which include the Pawtucket, Merrimack, Hamilton, Western, Eastern, and Northern Canals. The immediate project area includes portions of the Merrimack and Lower Pawtucket Canals and canal banks. This topic was carried further for further analysis because elements of some action alternatives could have impacts on these surface water resources.

Parks, Trails, and Open Spaces

This topic was carried forward for further analysis because all action alternatives would affect circulation patterns along the Canalway system and, in turn, impact how visitors interact with the park and its existing trail network.

Historic and Cultural Resources

Historic Districts and Structures

This topic was carried forward for further analysis because the historic resources within LNHP are essential character-defining elements of the park including numerous National Register historic districts and resources and, therefore, changes proposed in each of the action alternatives would impact these resources. Additionally, changes of use to the Market Mills building would affect a key structure within the historic district that is also specified as the location for the park visitor center in the enabling legislation for the park.

Socio-economic Resources

Land Use

This topic was carried forward for further analysis because each action alternative proposes a change in use to two NPS-owned parcels as identified in Figure 3; Parcel 15 would change from automobile surface parking to mixed-use and Parcel 16 would change from bus/RV surface parking to mixed-use. These changes would be facilitated as part of a much larger redevelopment of the Hamilton Canal District by a private entity from its current state as underutilized, post-industrial land to a mixed-use district.

Transportation and Visitor Access

This topic was carried forward for further analysis because all action alternatives would cause changes to visitor arrival and access routes to the park, to the park's intermodal transportation system of trolleys, boats, and walkways and to existing visitor parking on parcels 15 and 16.

Local Economy

The Lowell National Historical Park has a strong connection to the function and health of Lowell's downtown. Because its resources are embedded within this larger downtown fabric, the approximately 630,000 "recreational" visitors the park draws to Lowell each year impact downtown businesses and services. This topic was carried forward for further analysis because some action alternatives have the potential to alter the quality of the relationship between the existing visitor center at Market Mills and the downtown.

Visitor Experience

This topic was carried forward for further analysis because all action alternatives propose some change in visitor patterns, visitor facilities, and the relationship among park visitor venues.

Park Operations

This topic was carried forward for further analysis because all action alternatives would imply changes to current operations of visitor facilities, park transportation systems, and could affect staff and services requirements.

1.11 Environmental Impact Topics Dismissed from Analysis

Natural and Recreational Resources

Physiography and Soils

Lowell is situated within the Nashoba terrane, a narrow belt squeezed between the Merrimack and Avalon terranes that extends from the Atlantic coastline in northeastern Massachusetts south to Chester, Connecticut, near Long Island Sound. The Nashoba terrane first formed in the early Paleozoic time. Its formation completed in the Silurian era. Much of the site within the park boundary is level.

The principal sites affected by alternatives in this GMP Amendment are between the Pawtucket and Merrimack Canals in an area that was formerly the site of the Lowell Machine Shops and other subsequent industries now demolished. The site is currently vacant.

“Physiography and Soils” was dismissed as an impact topic because the site’s physiography is unremarkable and its soils have been disturbed by industrial development.

Vegetation

The vegetation found within the park boundaries are typical of an urbanized setting in this region. The area contains sparse patches of urban vegetation including grasses, weeds, and scattered wild shrubs.

Because of this limited vegetation in the project area, “vegetation” was dismissed as an impact topic.

Fish and Wildlife

Given the urbanized nature of the site, no wildlife inventory has been conducted. The area is habitat for typical urban wildlife including squirrels, sparrows, starlings and field mice.

The Anadromous Fish Conservation Act of 1965 led to a joint state-federal effort to restore migratory Merrimack River fish such as salmon and shad. Salmon are taken from Lawrence to Nashua to spawn in a hatchery and are later released back into the river. Both wild and domestic salmon are stocked at various life-cycle stages. The goal is to get 3,000 salmon beyond Manchester, as compared to the historic salmon population of 30,000. Shad are brought from Lawrence and released above Lowell to continue their journey. Fish ladders and elevators facilitate the migration of these fish. Other Merrimack fish include alewives, herring, and eels.

The project area is localized adjacent to the Merrimack and Pawtucket Canals and will not change these waterways or affect the Merrimack River or fish living in this habitat. Accordingly, “Fish and Wildlife” was dismissed as an impact topic.

Threatened and Endangered Species

There are 22 animal species and 5 plant species native to Massachusetts listed on the federal Endangered Species List. Lowell is not known to provide habitat for any of these listed species.

The Massachusetts Division of Fisheries & Wildlife monitors, by town, sightings of species listed by the state as “endangered” or “threatened” per the Massachusetts Endangered Species Act. The table below lists the three species from this list sighted in Lowell in the last 25 years.

Common Name	Scientific Name	Taxonomic Group	MESA Status	Most Recent Observation
Peregrine Falcon	<i>Falco peregrinus</i>	Bird	Endangered	2004
Arrow Clubtail	<i>Stylurus spiniceps</i>	Dragonfly/Damselfly	Threatened	2004
Blanding's Turtle	<i>Emydoidea blandingii</i>	Reptile	Threatened	2007

The project was reviewed for the presence of federally-listed or proposed, threatened or endangered species or critical habitats. Based on the information currently available, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area (Letter of determination – Appendix B).

Mass Division of Fisheries and Wildlife was consulted to determine if the project was subject to review by the Natural Heritage & Endangered Species Program (NHESP) for Massachusetts Endangered Species Act (MESA) compliance. It was determined based on review of the NHESP Priority Habitat Map (Appendix B) that the project site is not located in a priority habitat and thus is not subject to MESA compliance.

Based on the results of this comprehensive review, “Threatened and Endangered Species” was dismissed as an impact topic.

Air Quality

The Clean Air Act (42 USC 7401 et seq.) requires federal land managers to protect air quality, and National Park Service Management Policies address the need to analyze air quality during park planning. States are responsible for the attainment and maintenance of national ambient air quality standards developed by the Environmental Protection Agency. These standards have been established for several pollutants: inhalable particulate matter, sulfur dioxide, nitrogen oxides, ozone, carbon monoxide, and lead. Elevated concentration of these pollutants can have adverse impacts on park resources, visitors, and staff.

Three air quality categories are established for the national park system areas: Class I, Class II, and Class III. Lowell National Historical Park is designated a Class II area, meaning that the state may permit a moderate amount of new air pollution as long as neither ambient air quality standards, nor the maximum allowable increases over established baseline concentrations are exceeded.

In April 2002, the City of Lowell was designated an attainment area for carbon monoxide with an EPA-approved limited maintenance plan. Air quality analyses were conducted in 2007 for the Northern Middlesex region on behalf of the Regional Transportation Plan (RTP). Conformity determinations were performed to ensure that all regionally significant projects were included in the RTPs. The Massachusetts Executive Office of Transportation found the emission levels from the 2007 RTP to be in conformance.

The primary source of air pollution associated with the site is vehicle emissions. However, the primary sources of regional air pollution are outside the site, and include stationary sources in the surrounding counties, motor vehicle use in the region, and other windward sources.

Any construction related to the actions proposed in the alternatives would have negligible impacts to air quality due to vehicle and construction equipment emissions and fugitive dust during construction. Once construction activities were complete, these impacts would cease. None of

the action alternatives are expected to significantly increase site visitation, or vehicular access to the site, in and of themselves. Therefore, “Air Quality” was dismissed as an impact topic.

Boating & Fishing

Some fishing takes place on the Merrimack River and the contributing canals, especially by members of the local Cambodian community. Interpretive boat tours run by LNHP constitute the only boating on the canals.

Because none of the alternatives include actions that would disrupt or impede either of these activities, “Boating and Fishing” was dismissed as an impact topic.

Historic and Cultural Resources

Archeological Resources

The Hamilton Canal District comprises most of the historic sites of the Lowell Machine Shop and the Appleton Manufacturing Company. Both sites have been significantly compromised archeologically.

All but one of the Lowell Machine Shop buildings were demolished in 1930, immediately upon the closing of the plant. Much of the archeological footprint of those buildings was significantly altered by the subsequent construction of a modern industrial plant in the southern portion of site and successive parking lot overlays of the northern part. Because of these alterations, the SBRA Cultural Resources Inventory (1979) indicated that:

“This property has a low potential for yielding archeological information in a context useful in further understanding the physical construction of the Lowell Machine Shop.”

The Appleton buildings were largely replaced with new mill construction about 1915. The SBRA Cultural Resources Inventory (1979) indicated that:

“Successive raising and rebuilding likely has obliterated most remains of previous periods. Although it is possible that elements of early structures are incorporated into present structures, this property has a low potential for yielding significant archeological remains.”

Many of those derelict and collapsing later Appleton mill buildings in turn were demolished in 2006.

On both sites, the major surviving archeological resources are the watercourses of the hydraulic power system, including covered headraces and tailraces and turbine wheelpits. Four such watercourses remain beneath the Machine Shop site, stripped of their turbines, with the wheel pits filled in. Three such watercourses run through the Appleton mills site. There the wheelpits have not yet been filled in, and some hydropower equipment is thought to remain in either derelict or abandoned condition at all three. The NEPA filing for the redevelopment of the site indicates that the more intact, abandoned equipment, and perhaps headrace and tailrace of the easterly hydraulic watercourse will be preserved, while the other two will be demolished and their sites filled.

Because of the highly disturbed nature of sites within the immediate project area and the low potential for yielding significant archeological remains, “Archeological Resources” has been dismissed as an impact topic.

Cultural Landscape

Lowell National Historical Park was founded, in part, to support the preservation and interpretation of Lowell's history as embodied in the mill complexes, related buildings, neighborhoods and canals that define its unique cultural landscape. The park carries out this mission daily.

The immediate project area, defined earlier in this section, is but one part of this broad and geographically dispersed cultural landscape. All the action alternatives allow the redevelopment of the Hamilton Canal District to proceed, which may support and even improve the park's overall ability to pursue its mission of preservation and interpretation.

The HCD Master Plan was developed through an intensely collaborative and public process involving NPS, the City of Lowell, private entities and the public. The insertion of each of the proposed buildings into the master plan for this existing post-industrial devastated area was considered with great care for the relationships between existing and new buildings, and with great sensitivity for LNHP's mission and operations.

The action alternatives will not appreciably change the cultural landscape, through demolition or significant modification of any historically or culturally significant structures, infrastructure, or other resources within the immediate project area. For this reason, "Cultural Landscape" was dismissed as an impact topic.

Ethnographic Resources

One of Lowell's significant resources is its rich ethnographic history, created through waves of immigration throughout the 19th century—at local, regional, and transcontinental levels. It is a history whose legacy lives on today in neighborhood populated by descendants of these first immigrants, and by the newer immigrant populations who have come to Lowell in search of opportunities. It is also a subject that LNHP presents and interprets at various venues throughout the park.

Because the action alternatives in the immediate project area will not disrupt these resources, "Ethnographic Resources" was dismissed as an impact topic.

Indian Trust Resources

The Department of the Interior Secretarial Order 3175 (Departmental Responsibilities for Indian Trust Resources) requires that any anticipated impacts to Indian Trust Resources from a proposed action by Department of the Interior agencies be explicitly addressed in environmental documents. The Federal Indian Trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights. It represents a duty to carry out the mandates of federal law with respect to Native American and Alaskan native tribes.

Based upon the professional judgment of the NPS Regional Ethnographer, and review of the Draft Lowell ethnography, "Immigration, Globalization, and the All-American City", there are no Indian Trust Resources contained within the LNHP boundary and the lands are not held in trust by the Secretary of the Interior for the benefit of Native American and Alaskan native tribes. The early Pawtucket and Wamesit tribes settled within the limits of what is today the City of Lowell ceased to exist following the King Philip War in 1676. As a result, "Indian Trust Resources" was dismissed as an impact topic for further consideration.

2. Key Issues

In addition to preserving the key resources in the park, the NPS goals are to enhance the visitor experience, create a sense of arrival to the park, and positively influence impacts of the park on Lowell's downtown and community while addressing the park's functional requirements today and in the future. Key functional requirements of the Park's visitor orientation center include: 1) provide visitor information and orientation to the city - promote the city, 2) provide visitor information and orientation to the story in order to promote the park and its resources, 3) provide access to boat and trolley park tours and information about transportation within the park, 4) place Lowell NHP in the context of the National Park Service, 5) demonstrate the relevance of the Park and the NPS, 6) provide a connection to other parks and related stories, 7) provide a space for community activities and events, and; 8) provide a place to meet basic visitor needs - shelter, food, rest-room, and gift shop.

The city and the park are intertwined and implementation of the HCD plan will cause significant changes to both. The relocation of NPS parking, historic building rehabilitation, and the construction of new buildings and uses on currently vacant lands will change the way the park and city are perceived and experienced. Key issues of primary concern to the park as a consequence of these changes include:

- Quality of the visitor experience.
- Accessibility to park facilities.
- Relationship of the park to the City of Lowell.
- Potential costs to the park.

Each of these is reviewed in the remainder of this section.

2.1 Quality of the Visitor Experience

Lowell National Historical Park is unique because it includes only a handful of NPS structures and spaces within a larger 19th century industrial historic setting that encompasses much of Lowell's downtown and beyond. The park and the city are intertwined. Key interpretive facilities closely related to the current visitor center in the Market Mills include the Boott Cotton Mills Museum, the Mogan Cultural Center (in a rehabilitated boarding house), and the Wannalancit/Suffolk Mills "River Transformed" exhibit. These resources and others are dispersed across the park, are typically located in historic structures, and are not immediately apparent to new visitors, as they are within buildings that are not readily distinguishable from their neighbors. For this reason, visitor orientation to the park's resources is particularly important in enabling a positive visitor experience.

2.1.1 Sense of arrival to the park

Signs from approach streets to the current entry to the parking lot for the Market Mills visitor center prominently display the NPS logo. From the current NPS parking lot, the entry to the visitor center space itself is not prominent, as visitors must navigate stairs or a ramp to pass under one wing of this mill complex and across a courtyard before reaching the visitor center. The entry doors to the visitor center are in a shadowed passage a half-level below grade. Development of the HCD will retain the existing vehicular entry from Dutton Street, although new buildings will be located on either side of the entry road, blocking existing views of the Market Mills entry portal.

Visitors arriving by car will have to be guided to parking and will then have to find their way from their parking space to the visitor center.

2.1.2 Visibility of the visitor center

With completion of the HCD development, the current Market Mills Visitor Center will no longer be readily visible from Dutton Street, the main entry to the city and to the park. Whether the visitor center stays in its current location or is relocated, clear signage and way finding must be provided to help visitors arriving at the park to find their initial destination.

2.1.3 Convenience for visitors using park resources and tours

Due to the size of the park and the dispersion of its resources, the visitor center must provide easily understandable information to help visitors plan their experience. The park has several tours – by boat on the canals and by a period trolley by rail – that enable visitors to manage distances between resource locations and to structure their visits. The existing trolley stop across Market Street from the current visitor center provides access to other downtown park resources to the north as well as a connection to the south to the boarding point for boat tours adjacent to the Swamp Locks. Convenient connections between the visitor center and these park tours are important elements in maintaining a positive visitor experience.

2.2 Accessibility

The park is within a complex urban setting that includes Lowell's downtown, residential neighborhoods, and higher educational facilities. Visitors coming to the park and circulating within the park will encounter normal urban traffic in the course of finding their way to the visitor center and other park facilities.

2.2.1 Parking

Car

Maintaining adequate parking for visitors is always a key issue. There are currently 161 car spaces in the surface parking lot serving park visitors and staff, at no charge. The HCD project will displace this surface parking. If these spaces are replaced in kind, a comparable number of free spaces could be set aside in a new or existing garage facility. Two options for such a garage facility include the City's Market Street Garage and a new parking facility to be built as part of the HCD development on Parcel 14. If the spaces are not replaced, visitors might be required to pay for downtown parking. If visitors are required to pay for parking, as happens today in other urban sites such as Boston National Historical Site or Salem Maritime National Historical Site, there is some risk that pay parking could be a disincentive that would reduce visitation, as Lowell does not have the same level of public recognition as Boston or Philadelphia.

Handicap

ADA requirements typically require 5% of parking spaces to be accessible to the disabled and to be close to the facility they are intended to serve.

Bus

Busses today have easy drop-off at the existing NPS lot and can layover on adjoining NPS land to the southwest of the existing visitor center parking lot. This lot which can accommodate up to 11

buses and RV's is generally filled to capacity. Tsongas Center educational programs alone generate approximately 1,000 bus visits during the nine month school year. With HCD development, the layover site will be used for a new building and an alternate layover location will have to be found. Bus layover is important as some tour groups use their own busses to move between the visitor center and other park sites. An acceptable bus parking site in reasonable proximity to the Visitor Center and the Boott Mill complex would need to be identified as part of the implementation process.

RV/Trailer

Current visitors driving recreational vehicles (RVs) or with camping trailers can be accommodated on the NPS lot to the southsest of the existing visitor center parking lot. With HCD development, this property will no longer be available and RV or trailer parking would not be appropriate on such valuable urban property. Nonetheless, either a workable alternative site would have to be found or visitors arriving with RVs or trailers would have to be advised that they may have difficulty finding proximate parking.

2.2.2 Bus Loading / Unloading

Accessible space for bus unloading is essential to serve tour groups, although layover may be located elsewhere, as noted above.

2.2.3 Linkage and relationship to other park venues

Park venues are scattered across a wide area. The distance between the visitor center and the Boott Mill complex – the two most heavily used venues – is nearly ½ mile. Accordingly many visitors rely on the park trolley system, as noted in point 1c, above.

2.2.4 Multi-modal connections

The park and the city are studying possible expansion of the trolley system to connect with the Gallagher Transportation Terminal – serving commuter rail between Lowell and Boston. Such a linkage would be more than a park tour; it would be a transportation system that could serve downtown residents, students, and workers. Visitors would be able to transfer from the commuter rail terminus to access the visitor center. Additionally, there is a potential for a more effective linkage between the trolley system and boat tours, depending on the final location of the visitor center, as noted in 1c, above. Additionally, these expanded connections could also link to the Canalway and Riverwalk, expanding modes of access to these pedestrian amenities.

2.3 Relationship to the City of Lowell

The park encompasses many resources within Lowell's downtown and is closely tied to the city's future. Park facilities were located to frame the downtown, creating interaction and synergy between park visitors and downtown businesses. A major priority of the park has been to encourage appropriate public and private investment in adaptive reuse and rehabilitation of hundreds of historic structures that are part of the city's character.

2.3.1 Linkage to Lowell's Downtown

The existing visitor center sits at the edge of downtown, close enough to encourage visitors to explore or seek out food, beverage, or other services after arrival at the park. For this reason, there is strong support in the city for maintaining an easy and convenient connection between the park's visitor center and the heart of the downtown.

2.3.2 Potential to encourage economic development

The park was established to achieve very broad purposes: to preserve historic buildings and their settings in a learning environment; to provide a vehicle for economic progress and source of local pride; to restore historical artifacts and capture the spirit of the industrialization period, and; to demonstrate how national parks can help to create learning, living, and working environments that imbue their communities with quality and character. In the 30 years since the park's inception, these purposes have been well-achieved. Continuing economic development is critical to all of these, as older, historic buildings require an economic purpose to justify reinvestment. The HCD project – principally new construction on vacant sites with adaptive reuse of historic structures - is potentially the largest investment in downtown since establishment of the park over 30 years ago and would be impossible to envision without the positive influence of the park.

2.4 *Potential Cost to NPS*

The Hamilton Canal District is a large project that will be implemented over many years and will be subject to market forces that may cause changes in focus, pace, and the viability of the development. Further, the park needs to consider the time and cost implications of the HCD development.

2.4.1 Cost of park facilities

Capital costs on the part of NPS are always important in decision-making, as federal funds have been and may continue to be scarce. Many park projects have been partnership efforts and it is possible that collaboration with public or private entities, including the HCD developer, could facilitate new investments in park facilities.

2.4.2 Park operations / facility costs

Staffing and service costs of operating the park, as well as special park activities, may be affected by alternatives for visitor services and orientation and need to be taken into account. For example, during the Lowell Folk Festival the NPS parking lot is used as a site for the Dutton Street Dance Pavilion. As no open sites of similar size would be part of the HCD plan, this activity would have to either be eliminated, downsized, or relocated to another site in the downtown. The open space shown by the HCD on Parcel 13 might be used for some public activities, although it is smaller than the NPS parking lot.

2.4.3 Land ownership costs

The HCD plan shows use of the existing NPS parking lot as part of the proposed development. To the extent that any changes resulting from the HCD development or this General Management Plan Amendment require land exchange, conveyance, or acquisition, specific federal legislation may be required. Additionally, specific federal legislation is likely to be required if new NPS facilities are proposed on lands beyond the current park boundary.

2.5 *Other Issues for Consideration*

The Hamilton Canal District is a unique opportunity for the City of Lowell and LNHP. However, the park needs to function efficiently for staff and visitors during the inevitable long-term development process for HCD, and the potential for uneven or sporadic development and that impact on LNHP operations should be considered in relation to each Alternative. Further,

the park needs to consider any consequent changes to visitor entry and orientation as a result of HCD development.

2.5.1 Possible delays in relation to HCD development

If replacement parking is deemed essential, the proposed new parking garage on Parcel 14 and the existing garage at Market Mills will be considered potential locations for this replacement parking. Developments of some elements of the HCD are dependent on others and any plans the park makes to modify its facilities or operations should be mindful of those dependencies.

2.5.2 Boundary Adjustment

A minor boundary adjustment may be necessary to include Parcel 17 at the Swamp Locks Point. This parcel is located within the larger Preservation District boundary but is currently outside the Park boundary. Boundary revisions may not require legislation, but any proposed changes will require consent of the City Manager of Lowell and the City Council, timely notice in writing to Congress, and publication of the revised boundary description in the federal register. A boundary adjustment study would need to be undertaken as a follow-up activity to this planning process.

3. The Alternatives

No Action Alternative

3.1 Alternative 1 – Existing – No Action

Alternative 1 requires no major action by NPS regarding the existing Market Mills Visitor Center and any of its supporting facilities. The 12,000 sf visitor center would remain in two floors of Market Mills, although modest improvements to increase visibility and efficiency of operations could be implemented. Visitors would continue to arrive at the park via Dutton Street and the Broadway extension, parking in the existing 161 space surface parking lot to the southwest of the visitor center. This alternative assumes that Hamilton Canal District does not acquire the NPS parking lot.

In summary, this alternative responds to the key issues noted above as follows:

3.1.1 Visitor Experience

- a. **Sense of arrival to the park** – The entry to the park would remain unchanged. Signage to the park visitor center would continue to direct traffic to the Broadway Street Extension.
- b. **Visibility of the visitor center** – The Market Mills would remain readily visible from Dutton Street, which is the main entry to the city. Modest signage improvements might be made to increase the visibility of the visitor center.
- c. **Convenience for visitors using park resources/tours** – Visitors would continue to board trolleys at Mack Plaza to go north towards Boott Mill or south to the boat tour boarding areas at Swamp Locks.

3.1.2 Accessibility

- a. **Parking**
 - i. Car – The 161 spaces in the surface parking lot would remain to serve park visitors and staff.
 - ii. Handicap – The existing lot satisfies this requirement.
 - iii. Bus/RV – The existing 11-space bus/RV lot would remain.
- b. **Bus Loading/Unloading** – Busses would continue to unload adjacent to the visitor center.
- c. **Multi-modal Connections** – The existing trolley system and boat landing areas would remain. The trolley system may be expanded in the future.

3.1.3 Relationship to City of Lowell

- a. **Linkage to Lowell's Downtown** – There would be no change to the park's relationship to downtown with this alternative.
- b. **Potential to encourage economic development** – If NPS parking is not made available to the Hamilton Canal District development, this would adversely impact completion of the Hamilton Canal District investment, especially to the southwest.

3.1.4 Potential Cost to NPS

- a. **Cost of park facilities** – There would be modest costs associated with improvements to signage and visibility.
- b. **Park operations/facility costs** – No major change is anticipated.
- c. **Land ownership costs** – No change would be required.
- d. **Enumeration of Current and Potential Costs** – The costs enumerated in Table 1 reflect only those costs associated with the operation of the Visitor Center. Annual operation cost reflects the current costs associated with the maintenance and operation of the park visitor center and parking lot. This figure includes the costs associated with the 5.0 FTE. Included in the FTE are front desk rangers, interpretive rangers, and maintenance staff associated daily upkeep of the Parking Lot and VC facility.

The park is currently undertaking a project to reconfigure the visitor orientation desk and book store area of the visitor center. The cost of this work is \$150,000. In addition, the park is developing a new orientation film for the visitor center. The cost of the new film is \$395,000.

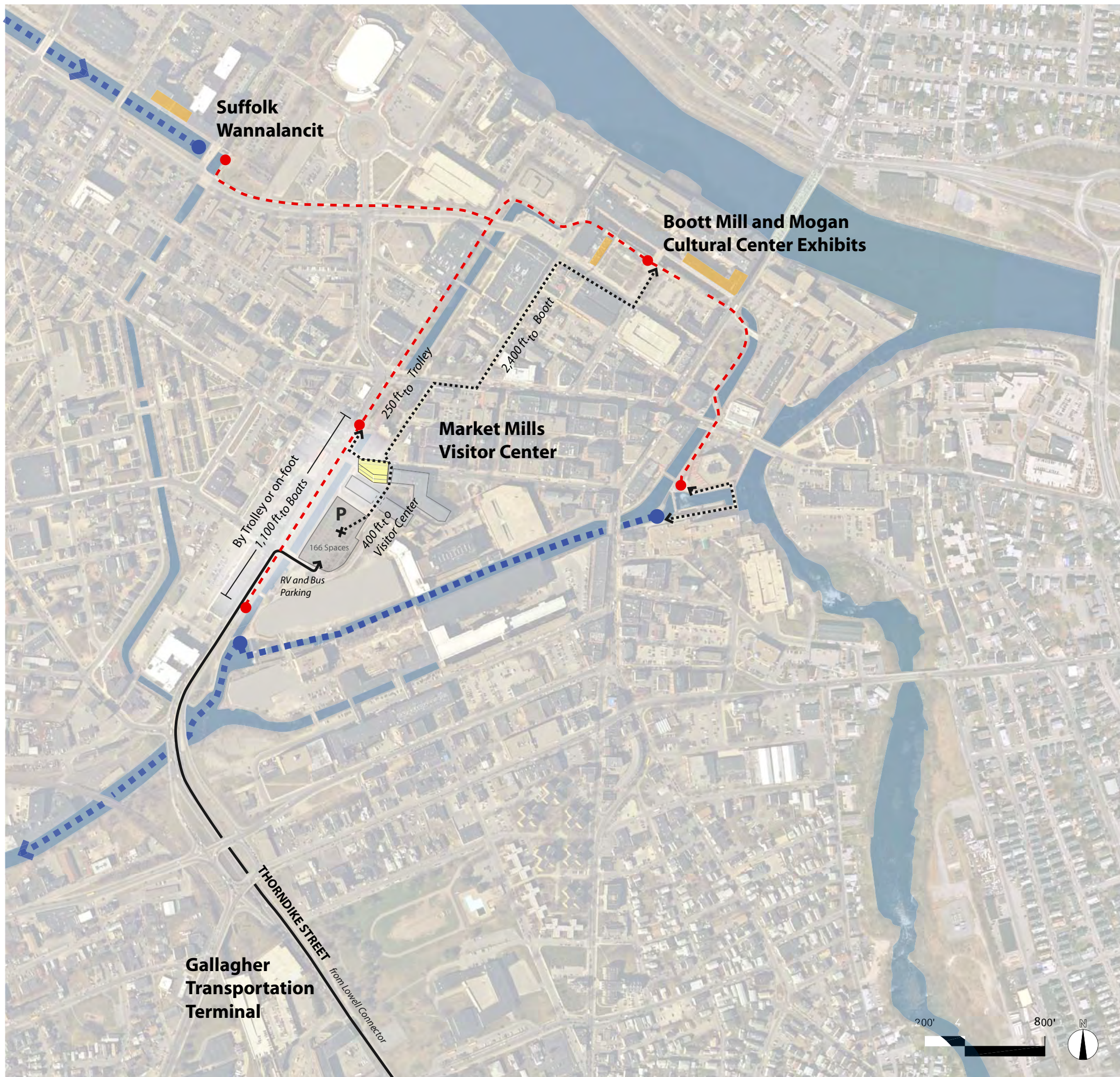
Table 1: Current Costs and Approximate Costs Associated with Alternative 1

	Alternative 1
Annual Operating Costs (Maintenance, Utility, Staffing Costs)	\$475,418
Staffing - FTE	5.0 FTE
Total One-Time Costs (Orientation Desk and Film)	\$545,000
Facility Costs (Orientation Desk)	\$150,000
Non-Facility Costs (Film)	\$395,000
Other Costs – Land Acquisition/Transfer Costs	NONE

3.1.5 Other Issues for Consideration

- a. Possible delays in relation to HCD – See 3.1.3b.
- b. No boundary change adjustment would be needed

Figure 5



Alternative 1

EXISTING - NO ACTION

Description:

- 12,000 sf Visitor Center in 2 floors of Market Mills
- Arrival via Dutton Street; Broadway extension
- RV and bus parking in parcel to southwest of existing parking
- 166 parking spaces in existing surface lot
- Modification of HCD development plan required due to NPS retention of parking lot

Access Advantage:

- Closest to downtown
- Visible surface parking lot

Access Disadvantage:

- Need to take trolley and then walk across canal to access boat tours

LEGEND

- - - TROLLEY LINE
- TROLLEY STOP
- BOAT TOUR
- BOAT TOUR ENTRY AND TERMINUS
- VEHICULAR ACCESS
- PEDESTRIAN PATH
- P PARKING
- INTERPRETIVE VENUE

Action Alternatives

3.2 Assumptions Common to All Action Alternatives

The Hamilton Canal District Master Plan is the result of a cooperative planning process among the City of Lowell, the National Park Service, and the development team led by Trinity Financial leading to an ambitious vision for this unique 13 acre area. Citizens have participated in numerous workshops that have had a major influence on the vision.

At full build out, the plan proposes building up to 425,000 square feet of commercial/office space, up to 55,000 square feet of retail space, and up to 725 units of market rate and affordable housing. This level of redevelopment activity will represent up to \$800 million in total development costs over a time span of 10 years or more.

Given the duration of the development schedule, all action alternatives assume the following conditions with regard to HCD development:

1. The plan may evolve in response to changing market conditions in the coming years;
2. The consensus achieved between private parties, federal, state, and local entities, and the public during the course of the nine month planning process should ensure that the spirit of the plan is ultimately carried out;
3. Cooperative long-term relationships will continue among the parties, especially continuing cooperation between the City of Lowell and the National Park Service;
4. The development team will continue to put forth its best effort to implement the Hamilton Canal District Master Plan as approved.

In addition, all action alternatives assume the following conditions with regard to Park visitation:

5. The park will continue to implement new marketing materials, new programs, wayfinding and signage to improve its outreach to potential visitors and to enhance their experience while at the park.
6. Park visitation will be at or above current levels due to the foregoing efforts.
7. Travel trends will remain relatively steady, with the possibility of increased demand in fuel efficient travel modes, including public transit.
8. Visitor parking will be provided within a safe and convenient distance of the Park Visitor Center

Finally, all action alternatives acknowledge:

9. Any land exchange or disposition of the parking lot would require legislation. The Park's current legislation authority limits acquisition to donation. Standard disposition process requires disposition of land through a competitive process generally through GSA and funds revert to the Treasury Department. All actions will be undertaken consistent with NPS policies to ensure NPS interests are met.
10. Although the future of the trolley extension, in terms of both plans and funding sources, cannot be predicted with certainty at this time, the City of Lowell and the National Park Service will use best efforts to expand and/or improve trolley service as an important element in overall improvement of the city and LNHP.

3.3 Alternative 2: Existing Visitor Center and HCD Redevelopment

Alternative 2 assumes best efforts by all parties to complete the Hamilton Canal District development as detailed in the Hamilton Canal District Master Plan, and implies redevelopment of parcel 15 where NPS parking is now located.

In this alternative the visitor center would remain at its existing location and size in two floors of Market Mills and NPS would continue to lease other spaces to public or private entities in the building. Arrival to the park would remain via Dutton Street and the Broadway extension, but the 161 parking space lot for visitors and staff currently located on parcel 15 would be eliminated, as it would be part of the Hamilton Canal District development. Two options for parking are possible under this alternative. *Alternative 2a* would reserve 161 spaces in the new garage on parcel 14 or into an existing garage on Market Street controlled by the City of Lowell. *Alternative 2b* would eliminate designated visitor parking, assuming that visitors and staff would pay for parking, as happens at other urban parks.

Finally, RV and bus parking / layover space would need to be relocated. The City of Lowell is committed to working with LNHP in this process and has identified a variety of possible choices for replacement parking at locations throughout the city. A full list of possible replacement sites identified by the city can be found in *Appendix C*, “Memorandum to LNHP from City of Lowell: Potential Replication Sites for LNHP Parking.”

Alternative 2 would require comprehensive signage improvements to make the visitor center and garage parking (new or existing) as visible as possible to visitors arriving by car or bus, as new buildings of the Hamilton Canal District development will be located between Dutton Street and the visitor center.

Alternative 2 would also include two modest modifications to the trolley system to increase both visibility and access. First, the existing trolley stop at Mack Plaza would be relocated to the site adjacent to the visitor center on the south side of Market Street, eliminating the need for visitors to cross a street to get to the trolley from the visitor center. Second, the trolley line would be extended from its existing termination on Dutton Street across from parcels 16 and 17 to cross the Merrimack Canal, bringing visitors to a point close to the boat boarding dock adjoining the Swamp Locks.

In summary, this alternative responds to the key issues noted above as follows:

3.3.1 Visitor Experience

- a. **Sense of arrival to the park** – This alternative would require new signage leading to garage parking. The alternative would also benefit from signage on the actual garage structure that creates or reinforces the NPS identity as well as signage and streetscape improvements to create an identifiable pedestrian path from the parking facility to the visitor center. This targeted visibility strategy would be an opportunity to renew the NPS identity as new development occurs to the south of the Market Mills, while improving visitors’ initial experiences upon arrival to the park.
- b. **Visibility of the visitor center** – Complementing the signage improvements for the park entrance and garage described above, new and improved signage at the Market Mills Visitor Center would increase the center’s visibility.

- c. **Convenience for visitors using park resources/tours** – This option would be comparable to Alternative 1, although improved by location of a new trolley stop on the VC side of Market Street and extension of the trolley to the Swamp Lock boat boarding dock.

3.3.2 Accessibility

a. Parking

- i. **Car** – *Alternative 2* would eliminate the 161 space surface parking lot serving park visitors and staff. Spaces could either be reserved in a nearby garage (Market Street Garage or new HCD garage) (*Alternative 2a*) or not be replaced assuming that visitors and staff will pay for parking (*Alternative 2b*).
 - ii. **Handicap** – A new garage on parcel 14 would have to comply to ADA requirements. Handicap parking exists on Market Street at the visitor center.
 - iii. **Bus** - Lay over space would have to be found by other arrangement as the Hamilton Canal District development plans require the vacant land now used for this purpose. The City of Lowell is committed to working with LNHP in this process and has identified a variety of possible choices for replacement parking at locations throughout the city. See *Appendix C*.
 - iv. **RV/trailer parking** – This alternative would require measures to accommodate visitors arriving in larger RV vehicles or with camping trailers that could not fit in typical urban parking garages and will no longer be able to park in the current location, which will ultimately be developed as part of the HCD plan. This could either involve cooperative measures with the city to find an alternate location that could be linked to the park or special efforts to advise visitors arriving with these types of vehicles to make other arrangements.
- b. **Bus Loading/Unloading** – Busses would either drop off visitors at the visitor center on Market Street or at the visitor center's southwestern entrance via the Broadway extension to loop around parcel 15 on new Hamilton Canal District streets.
 - c. **Multi-modal Connections** – *Alternative 2* would include location of a new visitor center trolley stop on the south side of Market Street that is adjacent to the visitor center, improving ease of access for trolley users coming from or to Market Mills. By extending the trolley's southern termination point across the Merrimack Canal to the Swamp Locks, the new trolley would link visitors more closely to the boat tours, which leave from "the point" and improve multi-modal connections.

3.3.3 Relationship to City of Lowell

- a. **Linkage to Lowell's Downtown** – The linkage between the Market Mills Visitor Center to Lowell's downtown would not change.
- b. **Potential to encourage economic development** – Relocation of existing NPS parking from parcel 15 would allow the Hamilton Canal District development to proceed, enabling this large investment and, presumably, encouraging ongoing investment in Lowell's downtown.

3.3.4 Potential Cost to NPS

- a. **Cost of park facilities** – Implementation of this alternative would include costs associated with signage improvements to improve car and pedestrian way finding to the visitor

center. Operations/facility costs are reduced as a result of the elimination of the parking lot.

- b. **Park operations/facility costs** – *Alternative 2* would improve the park’s facilities by extension of the trolley to the Swamp Locks and relocation of the visitor center trolley stop closer to the visitor center.
- c. **Land ownership costs** – Any exchange of property necessitated by use of the current NPS parking lot for private development may require specific federal legislation.
- c. **Enumeration of Current and Potential Costs** – Costs enumerated in Table 2 only reflect costs associated with development and operation of the Visitor Center. Annual operation cost figure includes costs associated with the 4.9 FTE. Included in the FTE are front desk rangers, interpretive rangers, and maintenance staff associated daily upkeep of the VC facility. Also included in the annual operation cost are facility utility costs.

The park is currently undertaking a project to reconfigure the visitor orientation desk and book store area of the visitor center. The cost of this work is \$150,000. An estimated \$100,000 would be needed to address branding and signage issues associated with the relocation of visitor parking to city facilities. In addition, the park is developing a new orientation film for the visitor center. The cost of the new film is \$395,000.

Operating and facility costs associated with trolley system enhancement have not yet been calculated. A consultant study is underway. This study will evaluate the Park’s current visitor trolley service and make recommendations for improving the operational efficiency of the system in meeting visitor transportation needs. This study is independent of the larger trolley expansion study being undertaken in cooperation with the City of Lowell and other local partners.

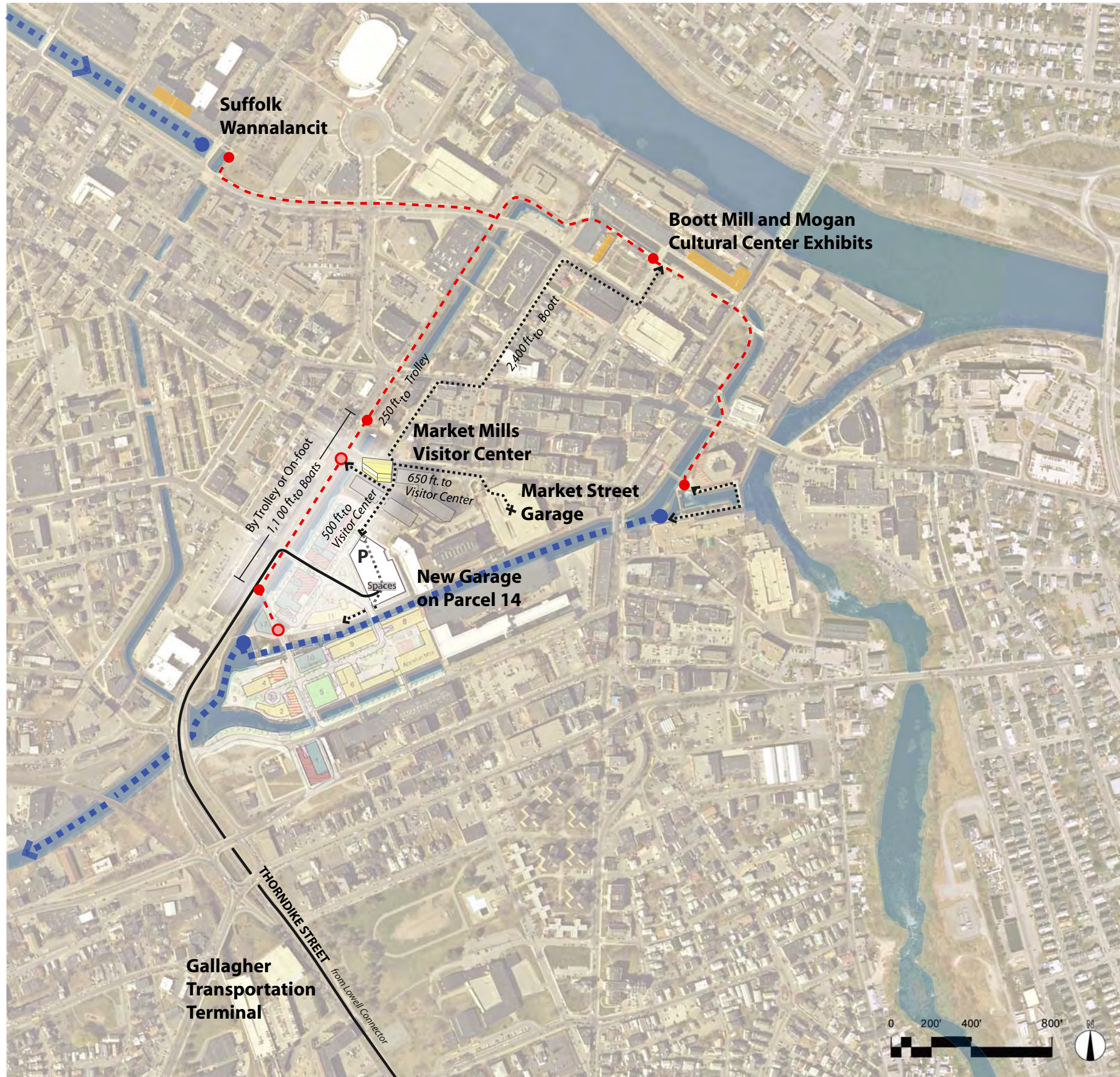
Table 2 – Current Costs and Approximate Costs Associated with Alternative 2

	Alternative 2
Annual Operating Costs (Maintenance, Utility, and Staffing Costs)	\$432,348
Staffing - FTE	4.9 FTE
Total One-Time Costs (Orientation Desk, Film, and Branding and Signage)	\$545,000
Facility Costs (Orientation Desk, and Branding and Signage)	\$250,000
Non-Facility Costs (Film)	\$395,000
Other Costs – Land Acquisition/Transfer Costs	Donated

3.3.5 Other Issues for Consideration

- a. **Possible delays in relation to HCD** – The new garage on parcel 14 proposed as part of *Alternative 2* is a prerequisite for additional development of the Hamilton Canal District to the southwest of the visitor center. Therefore delays in the Hamilton Canal District development would not impact NPS operations or visitors’ experience.
- b. **Boundary Adjustment** – A boundary change adjustment would not be necessary as part of this Alternative.

Figure 6



Alternative 2

**EXISTING VISITOR CENTER
INTEGRATED WITH HCD
REDEVELOPMENT**

Description:

- 12,000 sf Visitor Center in 2 floors of Market Mills
- Arrival via Dutton Street; Broadway extension
- RV and bus parking needs to be relocated due to HCD development
- 161 parking spaces in Parcel 16 surface lot eliminated
- Sub-option 2a would replace these spaces in a new garage on Parcel 14 or in the existing Market Street garage.
- Sub-option 2b would not replace parking; visitors & staff would pay.

Access Advantage:

- _Closest to downtown
- _Connection to Visitor Center from new garage needs to be signed
- _Trolley connection to visitor center and boat tours improved by extension and additional stop

Access Disadvantage:

^Risk that garage spaces will be taken if parking is not reserved for NPS visitors

LEGEND

- | | | | |
|-------|-----------------------|-------|------------------|
| - - - | TROLLEY LINE | — | AND TERMINUS |
| ● | EXISTING TROLLEY STOP | | VEHICULAR ACCESS |
| ○ | PROPOSED TROLLEY STOP | P | PEDESTRIAN PATH |
| ■ | BOAT TOUR | ■ | PARKING |
| ● | BOAT TOUR ENTRY | | |

3.4 Alternative 3 – New Visitor Center on Parcel 17

Alternative 3 assumes full redevelopment of the Hamilton Canal District as detailed in the Hamilton Canal District Master Plan, including redevelopment of parcels 15 & 16. This alternative would include construction of a new visitor center, a new parking garage as part of the HCD project on parcel 14, as well as an extension of the trolley system.

This alternative would relocate the visitor center to a prominent location on parcel 17, the point of land at the convergence of the Merrimack and Pawtucket Canals that is highly visible from Dutton Street. Overlooking the Swamp Locks and situated amongst private development of parcels 11 and 16 that include ground floor retail and a canal-side promenade, the new visitor center would be at the hub of the Hamilton Canal District development and, because of its proximity to the canals, also would give visitors an immediate sense of what the Lowell Historic park is about upon arrival. Preferably, this new 11,000 square foot, two-story facility would stand alone without adjacent or attached private development on the parcel to emphasize NPS identity. The 11,000 square foot facility is within the range for facility size projected by the NPS Facility Planning Model Report for the Lowell VC certified by the NPS Regional Office.

The former Market Mills Visitor Center could then be reused for other purposes. It could be transformed into a 12,000 square foot arts complex incorporating programmable space that could support park activities or, alternatively, it could be renovated for rental to new tenants.

Arrival to the park would remain via Dutton Street and the Broadway Street Extension, but the 161 parking spaces for visitors and staff currently located on parcel 15 would be relocated to a new garage on parcel 14. As in *Alternative 2*, suitable RV and bus parking / layover space would need to be found in close proximity to the park. The City of Lowell is committed to working with LNHP in this process and has identified a variety of possible choices for replacement parking at locations throughout the city. See *Appendix C*.

Alternative 3 would require signage improvements to make the new visitor center and new garage parking as visible as possible to those arriving by car and bus, as well as to guide visitors from the garage to the visitor center. One opportunity in this alternative is to create a pedestrian route from the garage to the visitor center along the Pawtucket Canal, with its dramatic juxtaposition of mills directly adjoining the canal.

Alternative 3 also would be most effective if the trolley system is extended to the Gallagher Transportation Terminal to increase both visibility and access. Such an extension would most likely be planned, funded, and constructed by NPS and other public private agencies.

The trolley line would extend from its existing termination on Dutton Street across the Merrimack Canal where it would stop at the new parcel 17 visitor center. The extension would then cross the Pawtucket Canal, stop at the heart of the redeveloped Hamilton Canal District (between parcels 4 and 10), before crossing the Hamilton Canal and linking to the Gallagher Transportation Terminal. The existing trolley stop at Mack Plaza would remain.

Expansion of trolley service from a seasonal park tour to a year round transportation system with broader service to residents, visitors, and workers, would accompany the physical extensions of the system. This would require a series of improvements to facilitate operation during winter months, including the addition of passing track / double tracking, an ITS system, electronic switches, shelters at trolley stops, and possibly additional rolling stock.

In this alternative, the park boundary would be extended to the junction of the Merrimack and Pawtucket Canals to enable NPS construction of the new visitor center on parcel 17.

In summary, this alternative responds to the key issues noted above as follows:

3.4.1 Visitor Experience

- a. **Sense of arrival to the park** – Like *Alternative 2*, *Alternative 3* would require new signage leading to the parking garage and on the structure itself, to create or reinforce the NPS identity. It would require streetscape improvements to create an identifiable pedestrian path connecting the new parcel 14 parking facility to the new parcel 17 visitor center. The 660 foot walk from the garage to the new visitor center would follow the Pawtucket Canal, giving visitors an immediate view of the canals, existing mill structures, and Swamp Locks as they approach. This targeted visibility strategy would directly engage visitors with the canal system, one of Lowell’s really unique features.
- b. **Visibility of the visitor center** – Ideally, the new visitor center would be the only development on parcel 17 and would be designed to be highly visible to create a strong presence for NPS within the new development.
- c. **Convenience for visitors using park resources/tours** – With the implementation of the proposed trolley extension, a visitor center on parcel 17 would be near the canal tour boarding dock, trolleys and the Swamp Locks and gatehouse, but would be further from other park facilities at the Boott and Suffolk Mill complexes. This new location would allow direct access to both the trolley and the boat tours, which leave from the Swamp Locks, adjoining the proposed new visitor center.

3.4.2 Accessibility

- a. **Parking**
 - i. **Car** – *Alternative 3* would relocate the 161 spaces in the surface parking lot serving park visitors and staff to a garage on parcel 14.
 - ii. **Handicap** – This alternative would require that handicapped parking spaces be located next to the parcel 17 visitor center.
 - iii. **Bus** – Lay over space would have to be found through a cooperative arrangement with entities controlling open land or parking lots as the Hamilton Canal District development may require the vacant city land now used for this purpose. The City of Lowell is committed to working with LNHP in this process and has identified a variety of possible choices for replacement parking at locations throughout the city. See *Appendix C*.
 - iv. **RV/Trailer** – This alternative would require measures to accommodate visitors arriving in larger RV vehicles or with camping trailers that could not fit in typical urban parking garages and will not longer be able to park in the current location, which will ultimately be developed as part of the HCD plan. This could either involve cooperative measures with the city to find an alternate location that could be linked to the park or special efforts to advise visitors arriving with these types of vehicles to make other arrangements.
- b. **Bus Loading/Unloading** – Busses would access the Hamilton Canal District via the Broadway Street Extension, drop visitors off in front of the new visitor center and loop back around to access Dutton Street via new HCD streets.
- c. **Multi-modal Connections** – *Alternative 3* would create a multi-modal hub at the parcel 17 visitor center, providing a connection between boat and trolley tours.

Alternative 3 would also assume connection of the trolley to the Gallagher Transportation Terminal, which links to Boston via the MBTA commuter rail. In addition, the trolley

extension to Gallagher Transportation Terminal would allow for additional stops within the Hamilton Canal District that would knit the new development more immediately and substantively into the existing city, including the downtown.

3.4.3 Relationship to City of Lowell

This alternative would place the visitor center farther from the downtown than other alternatives, with a risk of weakening connections with the downtown and its business services. However, given that most park visitors use the trolley and that the intent of an extension is to provide broader transportation services, there would still be opportunities for visitors to engage with the downtown.

- a. **Linkage to Lowell's Downtown** – Contributors at the Hamilton Canal District Lowell visioning sessions expressed concern that the overall project needed to maintain strong pedestrian connections between the downtown and the park. There is a risk that visitors going to a parcel 17 visitor center might “skip” the downtown—which is the heart of the built historic resource—as it would be a longer walk than from the existing visitor center. As many visitors going from the new visitor center might elect to take the trolley to the Boott Mill complex, due to the increased distance, NPS could encourage visitors to engage with the downtown either by walking back from the Boott to the new parking garage (which would not be any more distant than the current lot) or by using an intermediate trolley stop at Merrimack Street on one leg of their journey.
- b. **Potential to encourage economic development** – A new visitor center on parcel 17 would benefit ground floor retail proposed for buildings in adjacent parcels 15 and 4.

3.4.4 Potential Cost to NPS

Alternative 3 is potentially the most expensive of the alternatives. Any action on Parcel 17, such as development of a new visitor center, is dependent upon completion of the parcel 14 garage, while its viability depends upon the development of some of the intermediate Hamilton Canal District Sites on Parcels 11, 12, 15 and 16. The completion of this development could be some years in the future, dependent as it is on marketability and financing of a private development.

- a. **Cost of park facilities** – Building a new 11,000 square foot visitor center would require new funding. Although this could hypothetically be all provided by NPS, federal funds are difficult to assure in a time of large deficits. There is a potential for Parcel 17 to serve as a “multi-modal transportation facility” which could provide a source of supplemental funds from outside the NPS. Other possibilities could include a private sector development and leaseback to NPS or the injection of additional revenue associated with the sale of the existing parking lot to the HCD developer.

Park operations/facility costs – Another concern for NPS is that reuse of the Market Mills space is also a critical component in *Alternative 3*. An Arts and Cultural Center is considered desirable by many, but it is not clear that the arts community in Lowell has the resources to put towards such a facility. Moving NPS programming activities from the Mogan Cultural Center (which is ill-suited for these activities) to some of the vacated spaces in the Market Mills could provide some level of tenant stability, but would likely need to be supplemented by other public or private uses. In either case, NPS may incur additional costs either through management and maintenance of an additional park facility or through the risk associated with the potential inability of cultural/arts tenants to pay market rents for the space.

- d. **Land ownership costs** – Any exchange of property necessitated by use of the current NPS parking lot for private development may require specific federal legislation. Additionally, a new NPS visitor center on Parcel 17 may require a minor boundary revision.
- e. **Enumeration of Current and Potential Costs** – Costs enumerated in Table 3 only reflect costs associated with development and operation of the Visitor Center at the Swamp Locks Point. Annual operation cost figure includes costs associated with the 4.9 FTE. Included in the FTE are front desk rangers, interpretive rangers, and maintenance staff associated daily upkeep of the VC facility. Also included in the annual operating cost are facility utility costs. One time facility costs documented in *Alternative 3* reflects cost for design and construction of new VC facility at the Swamp Locks Point. Cost is based on an 11,000 square foot facility at a cost of \$425/sf. This figure includes the following additional costs: 1) 5% compliance, 2) 5% pre design, 3) 10% final design, 4) 2% supplemental services, 5) 8% construction management, and 6) 10% contingency. The one time non-facility cost is for design, fabrication and installation of new exhibits in the new visitor center. Exhibit space is estimated at 6,000 sq. ft. with hi-end exhibits. This is a Class C Estimate prepared by Harpers Ferry Center.

Operating and facility costs associated with trolley system enhancement have not yet been calculated. A consultant study is underway. This study will evaluate the Park’s current visitor trolley service and make recommendations for improving the operational efficiency of the system in meeting visitor transportation needs. This study is independent of the larger trolley expansion study being undertaken in cooperation with the City of Lowell and other local partners.

Table 3: Current Costs and Approximate Costs Associated with Alternative 3

	Alternative 3
Annual Operating Costs (Maintenance, Utility, and Staffing Costs)	\$432,348
Staffing - FTE	4.9 FTE
Total One-Time Costs	\$10,910,000
Facility Costs (New 11,000 sq ft facility)	\$6,545,000
Non-Facility Costs (Design, Fabrication and Installation of Exhibit)	\$4,365,900
Other Costs – Land Acquisition/Transfer Costs	Donated

3.4.5 Other Issues for Consideration

Alternative 3 is potentially the most expensive of the alternatives. Any action on Parcel 17, such as development of a new visitor center, is dependent upon completion of the parcel 14 garage, while its viability depends upon the development of some of the intermediate Hamilton Canal District Sites on Parcels 11, 12, 15 and 16. The completion of this development could be some years in the future, dependent as it is on marketability and financing of a private development.

- f. **Possible delays in relation to HCD** – NPS’s plans to move forward with a new visitor center on parcel 17 will be delayed in tandem with any delays associated with completion of the parcel 14 parking garage.

Boundary Adjustment – A minor boundary adjustment may be necessary to include Parcel 17 at the Swamp Locks Point. This parcel is located within the larger Preservation District boundary but is currently outside the Park boundary. Boundary revisions may not require legislation, but any proposed changes will require consent of the City Manager of Lowell and the City Council, timely notice in writing to Congress, and publication of the revised boundary description in the federal register. A boundary adjustment study would need to be undertaken as a follow-up activity to this planning process.

A major, related issue that could impact the success of a new visitor center on parcel 17 is the timing of construction on parcels 15 and 16. Currently, plans anticipate construction for late in the district's development time frame, so it is conceivable that a new visitor center on parcel 17, completed in the next several years, would overlook an expanse of undeveloped land for some years. It is also possible that when construction did commence it would have a negative impact on the visitor experience to the park.

Alternative 3

NEW VISITOR CENTER ON PARCEL 17 INTEGRATED WITH HCD REDEVELOPMENT

Description:

- 12,000 sf two-story purpose-built Visitor Center to emphasize NPS identity
- 12,000 sf arts complex, programmable space, or rental in Market Mills through reuse of existing Market Mills Visitor Center
- Arrival via Dutton Street; Broadway extension
- RV and bus parking needs to be relocated due to HCD development
- 161 parking spaces in new garage on Parcel 14

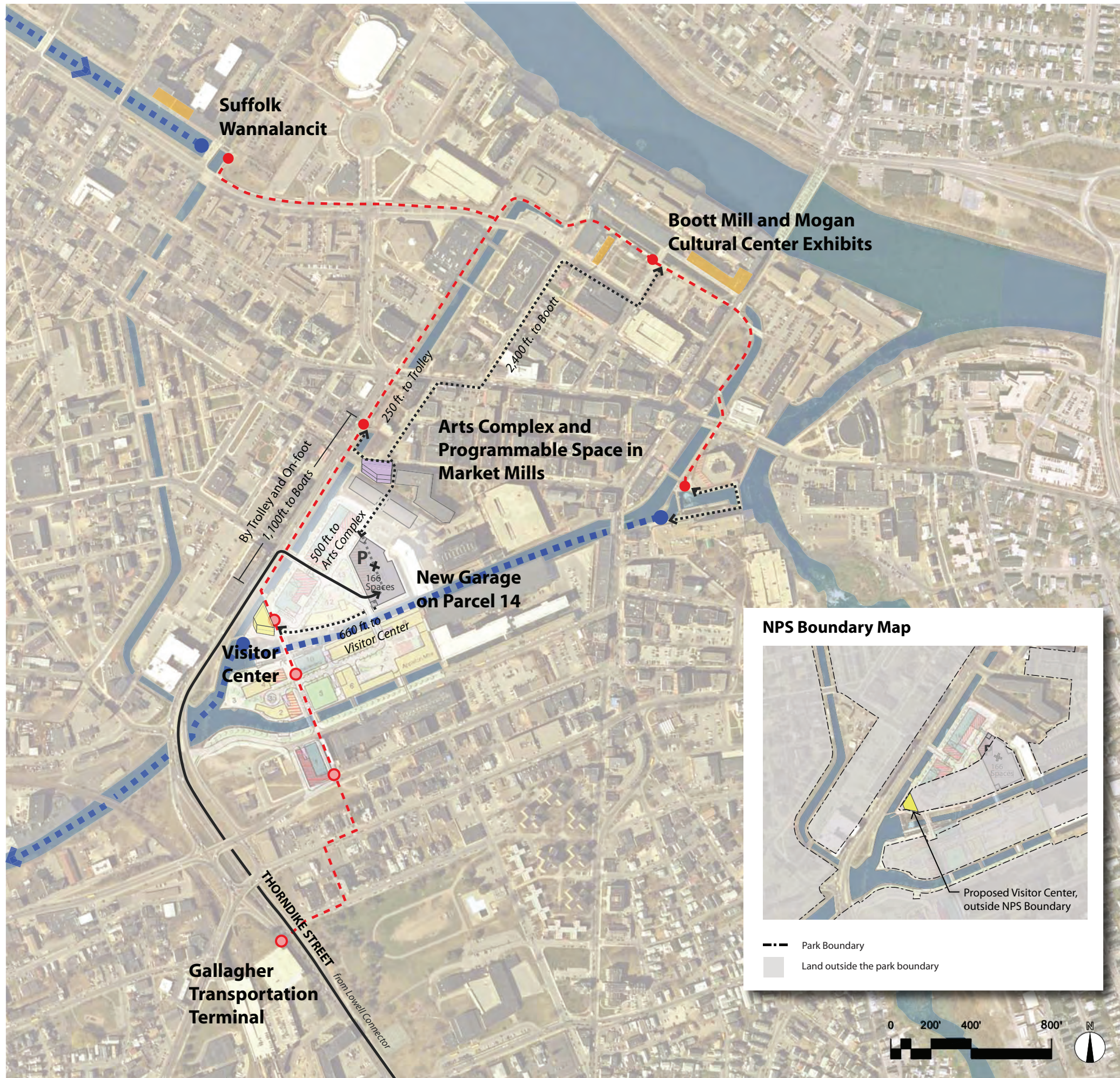
Access Advantage:

- Visitor Center has highly visible presence for NPS
- Visitor Center at nexus of trolley and boat tours
- Trolley operates year 'round, serves expanded user groups

Access Disadvantage:

- Visitor Center further from downtown although trolley access to Market Mills and Boott Mills is comparable

*Trolley extension is shown beyond Parcel 17, although plans and funding have not been determined.



LEGEND

- - - TROLLEY LINE
- EXISTING TROLLEY STOP
- PROPOSED TROLLEY STOP
- - - BOAT TOUR
- BOAT TOUR ENTRY AND TERMINUS
- VEHICULAR ACCESS
- ⋯ PEDESTRIAN PATH
- P** PARKING
- INTERPRETIVE VENUE

3.5 Alternative 4 (Preferred Alternative) – Retain Existing Market Mills Visitor Center and Expand Visitor Contact Points and Program Facilities Through New Partnerships

Alternative 4 assumes full redevelopment of the Hamilton Canal District as detailed in the Hamilton Canal District Master Plan, and implies redevelopment of parcels 15 & 16, and redevelopment of the current NPS parking lot. The idea of this alternative is to take advantage of new opportunities for visitor outreach and orientation to the park's resources through partnerships with local entities at key locations within the park.

The existing visitor center at Market Mills would be retained, with the longer range option of expansion into adjacent NPS owned spaces to meet future programming and operational needs of the park. In the future, the NPS spaces in the Market Mills could support collaborative community cultural and arts programs that take advantage of park resources. An integral part of *Alternative 4*, as with *Alternative 2*, would be comprehensive vehicular and pedestrian signage improvements to make the Market Mills Visitor Center and nearby garage parking as visible as possible to those arriving by car or bus, as well as pedestrian wayfinding from the garage to the visitor center.

At least three additional visitor orientation venues would be designated as supplemental points of contact with the public. Each visitor orientation venue would have the following characteristics:

- Strategic and highly visible location with high pedestrian traffic, access to park and community transportation systems, and community visibility.
- Provide basic orientation to the overall park and its transportation systems and pedestrian connections.
- Provide outreach to residents and visitors to Lowell who may not be fully aware of the park, its breadth, and its resources.
- Resource interpretation about the park, in general, and specific to the venue.
- Possibility for, but not a requirement of, seasonal NPS or volunteer staff support during periods of high visitor use.
- Potential to develop partnerships with public or private entities for mutual benefit.

The visitor orientation venues should not necessarily be identical, but should be customized for their locations and opportunities with a consistent and recognizable NPS brand to unify them. Facilities could range from information and interpretive installations in existing indoor and outdoor spaces in public or private buildings to custom-designed seasonally staffed facilities of up to 2,000 square feet. Detailed feasibility analysis would be required for visitor orientation venue to take account of facility requirements, staffing needs (if any), maintenance, and operational costs. The visitor orientation venues that would be part of this alternative would include:

- **Parcel 17** – an interior and exterior space from 1,000 to 2,000 square feet within a private development envisioned as part of the HCD plan. On this site, the HCD plan envisions a building of up to 32,000 square feet that could contain retail, restaurant, or other private uses. The reasons for this location are the dramatic and visible site at the junction of the Merrimack and Pawtucket Canals, the presence of the Swamp Locks, the location of boat tour dock and trolley tour stop at this site with high visitor usage, and the potential to provide expanded interpretation about the resources of the canal and lock system. Ideally, this visitor

orientation venue interior space would have a visual connection as well as direct access to both the Swamp Locks boat dock and the proposed trolley stop. At this location, a partnership would be required with the private developer of the Parcel 17 site in order to allocate and design appropriate interior and exterior space that could facilitate tour operations, fulfill interpretive and orientation goals, and be an asset to the private use during non-peak periods.

- **Gallagher Transportation Terminal** – this location includes a major parking garage for commuters and, serving both the MBTA commuter rail service to and from Boston and as well as local and regional bus routes, is a crossroads for many users each day. The LRTA bus circulator connects visitors arriving via the Gallagher Transportation Terminal to the visitor center, the Canalway, and other park sites. The City is currently developing enhanced pedestrian connections from the Gallagher Terminal to the Hamilton Canal District. The connection could be further enhanced through extension of the trolley system to the Gallagher Terminal; this option is currently under study. A visitor orientation venue here could be integrated with high foot traffic activity of these diverse users and would offer the opportunity to accomplish outreach to Lowell and regional residents about the park and its resources as well as to serve park visitors who arrive by public transportation, particularly if it proves feasible to extend the trolley system to the terminal, enabling a direct connection to park resources. The partner at this location would be the Lowell Regional Transportation Authority and, possibly, the MBTA.
- **Lower Locks** – this location is a visually dramatic setting overlooking the Concord River that is a connection point between trolley and boat tours and is also linked to the Canalway System. With the acquisition of the Doubletree Inn by the University of Massachusetts for its Inn and Conference Center, this site will be an activity center that will attract many conference and inn users who will be able to benefit from the presence of the park at their doorstep. The visitor orientation venue should combine interior and exterior space in a way that is complementary to the proposed UMass activities at the site. The University of Massachusetts would be the logical main partner at this location.

This alternative would require relocation of existing NPS parking because of the HCD project. This would require sale or transfer of the existing parking lot for consideration to be determined in accordance with applicable federal laws and regulations. The Park will work closely with appropriate agency staff to ensure NPS interests are met. Depending on the details of such negotiations, the sale or transfer could be directly to the developer or to the city of Lowell in order to integrate the parking site. The expansion of the trolley system outlined in *Alternative 3* would be highly consistent with this alternative.

In this alternative arrival to the park would remain via Dutton Street and the Broadway extension, but the 161 parking spaces for visitors and staff currently located on parcel 15 would be eliminated due to the Hamilton Canal District development. This alternative would have two parking sub-options, *Alternatives 4a* and *4b* comparable to *Alternatives 2a* and *2b*. RV and bus parking / layover space would also need to be relocated. The City of Lowell is committed to working with LNHP in this process and has identified a variety of possible choices for replacement parking at locations throughout the city. See *Appendix C*.

Alternative 4 also would be most effective if the trolley system is extended to the Gallagher Transportation Terminal to increase both visibility and access. Such an extension would most likely be planned, funded, and constructed by NPS and other public/private agencies. The trolley line would extend from its existing termination on Dutton Street across the Merrimack Canal where it would stop at the parcel 17 visitor orientation venue, described above. The extension would then cross the Pawtucket Canal, stop at the heart of the redeveloped Hamilton Canal

District (between parcels 4 and 10), before crossing the Hamilton Canal and linking to the Gallagher Transportation Terminal and its visitor orientation venue. Development of a new trolley stop on the VC side of Market Street would enable a direct pedestrian connection without crossing a street for trolley users from the Market Mills visitor center.

Expansion of trolley service from seasonal to year round operations would accompany the physical extensions of the system. This would require a series of improvements to facilitate operation during winter months, including the addition of passing track / double tracking, an ITS system, electronic switches, shelters at trolley stops, and possibly additional rolling stock.

In this alternative, the park boundary would be extended to the junction of the Merrimack and Pawtucket Canals. This is appropriate to recognize the canal junction as an important resource site and a location where trolley and boat tours converge and will be helpful to strengthen the NPS role in the partnership development on Parcel 17. Additionally, if the HCD project is delayed or changes substantially, this boundary change would leave the NPS with flexibility to recommend other actions at this location in the future.

In summary, this alternative responds to the key issues noted above as follows:

3.5.1 Visitor Experience

- a. **Sense of arrival to the park** – This alternative would require new signage leading to relocated parking. The alternative would also benefit from signage on the actual garage structure that creates or reinforces the NPS identity as well as signage and streetscape improvements to create an identifiable pedestrian path from the parking facility to the visitor center. This targeted visibility strategy would be an opportunity to renew the NPS identity as new development occurs to the south of the Market Mills, while improving visitors' initial experiences upon arrival to the park.

Because of the proposed extension of the trolley line to Gallagher Transportation Terminal, *Alternative 4* would require additional signage to create a sense of arrival for those visitors arriving via the trolley from the commuter rail station. To avoid confusion, this signage would have to clearly indicate that the 1,500 sf Contact Station in the ground floor of a private Parcel 17 development proposed in this alternative was not the primary visitor center. Coordination of the information offered at the Gallagher Transportation Terminal Contact Station and the Swamp Locks Contact Station would also be important.

- b. **Visibility of the visitor center** – New and improved signage at the Market Mills Visitor Center would increase the center's visibility and offer an opportunity to renew/refresh the NPS identity and brand in the Lowell setting.
- c. **Convenience for visitors using park resources/tours** – At Market Mills, the visitor center is at the center of the park's constellation of resources, which can be accessed via the modified trolley system.

Alternative 4 adds a trolley stop to a parcel on the south side of Market Street that is adjacent to the visitor center, improving ease of access for visitors coming from or to Market Mills.

The extension of the trolley line would provide links between visitors from the Gallagher Transportation Terminal to both the Swamp Locks Contact Station and the Market Mills Visitor Center.

3.5.2 Accessibility

a. Parking

- v. Car – *Alternative 4* would eliminate the 161 space surface parking lot serving park visitors and staff. Spaces could either be reserved nearby at either the existing Market Street Garage or in the proposed new HCD garage when completed (*Alternative 4a*) or not be replaced assuming that visitors and staff will pay for parking (*Alternative 4b*).
 - vi. Handicap – A new garage on parcel 14 would have to comply with ADA requirements. Handicap parking exists on Market Street at the visitor center.
 - vii. Bus – Lay over space would have to be found by other arrangement as the Hamilton Canal District development may require the vacant land used for this purpose. The City of Lowell is committed to working with LNHP in this process and has identified a variety of possible choices for replacement parking at locations throughout the city. See *Appendix C*.
 - viii. RV/Trailer - This alternative would require measures to accommodate visitors arriving in larger RV vehicles or with camping trailers that could not fit in typical urban parking garages and will not longer be able to park in the current location, which will ultimately be developed as part of the HCD plan. This could either involve cooperative measures with the city to find an alternate location that could be linked to the park or special efforts to advise visitors arriving with these types of vehicles to make other arrangements.
- b. **Bus Loading/Unloading** – Busses would drop off visitors at the visitor center on Market Street or at the visitor center’s southwestern entrance via the Broadway Street Extension to loop around parcel 15 to exit.
- c. **Multi-modal Connections** – *Alternative 4* would include, but not require, extensive modifications to the trolley system to increase access, for which additional multi-modal connections play a critical role. By connecting to the Gallagher Transportation Terminal, the trolley system would enable visitors to ride the trolley, connecting to the boat tour and also to the city’s dense, and highly walkable downtown and redeveloped Hamilton Canal District. *Alternative 4* would increase the effectiveness of the Swamp Locks Contact Center as a hub for the park’s transit system.

3.5.3 Relationship to City of Lowell

- a. **Linkage to Lowell’s Downtown** – The linkage to Lowell’s downtown would not change unless the proposed expansions to the trolley system proposed in *Alternative 4* were implemented. Completion of that expansion would link visitors arriving from Gallagher Transportation Terminal directly to downtown via the trolley system at the relocated Market Street stop, strengthening linkage between the park and downtown.
- b. **Potential to encourage economic development** – Relocation of existing parking from parcel 15 would allow Hamilton Canal District development to proceed. Additionally, collocation of the contact station with a private use on parcel 17 could benefit both NPS and the private development.

3.5.4 Potential Cost to NPS

- a. **Cost of park facilities** – Implementation of this alternative would include costs associated with the signage improvements and construction of the contact stations, although it is

possible that the contact station on parcel 17 could be a public-private venture. Funding sources for trolley extensions described earlier have not yet been determined. It is possible that some NPS costs might be supported by partnerships with the private sector, depending on the details of the overall transaction and agreement regarding the NPS parking lot.

- b. **Park operations/facility costs** – The improvements included in *Alternative 4* would greatly improve the visitor experience to the park with relatively modest interventions. The proposed Contact Stations would be targeted to support visitors' experience of historic resources, park navigation routes and infrastructure that are already place, improving a park that already functions well.
- c. **Land ownership costs** – Any exchange or disposition of property necessitated by use of the current NPS parking lot for private development may require specific federal legislation. If the proposed Contact Station on parcel 17 is provided as part of a private development, this may not require specific legislation.
- d. **Enumeration of Current and Potential Costs** -- Costs enumerated in Table 4 only reflect costs associated with development and operation of the Visitor Center and proposed contact stations. Annual operation cost figure includes costs associated with the 5.4 FTE. Included in the FTE are VC front desk rangers, interpretive rangers, seasonal ranger at the Swamp Locks Contact Station, and maintenance staff associated daily upkeep of the VC facility and contact stations. Also included in the annual operating cost are facility utility costs.

Facility costs include cost for reconfiguration of the Park's visitor center visitor orientation desk and book store area. This project estimated at \$150,000 is funded and under development by the Park. One time facility cost also includes an estimated \$100,000 to address branding and signage issues associated with the relocation of visitor parking to city facilities. Non-facility costs include: 1) \$395,000 for a new orientation film for the visitor center. This project is funded and under development, and 2) \$877,500 for design, fabrication and installation of contact station kiosks and exhibits.

Operating and facility costs associated with trolley system enhancement have not yet been calculated. A consultant study is underway. This study will evaluate the Park's current visitor trolley service and make recommendations for improving the operational efficiency of the system in meeting visitor transportation needs. This study is independent of the larger trolley expansion study being undertaking in cooperation with the City of Lowell and other local partners.

Table 4: Current Costs and Approximate Costs Associated with Alternative 4

	Preferred Alternative Alternative 4
Annual Operating Costs (Maintenance, Utility, Staffing Costs)	\$500,000
Staffing - FTE	5.4 FTE
Total One-Time Costs (Orientation Desk, Branding and Signage, Contact Station Exhibit Costs and Film)	\$1,522,500
Facility Costs (Orientation Desk, Branding and Signage)	\$250,000
Non-Facility Costs (Contact Station Exhibit Costs, Film)	\$1,272,500
Other Costs –Land Acquisiton/Transfer Costs	Donated

3.5.5 Other Issues for Consideration

- a. **Possible delays in relation to HCD** – The new garage identified on parcel 14 proposed as part of the development of the Hamilton Canal District to the southwest of the visitor center. Delays in the Hamilton Canal District development would not significantly impact NPS operations or visitors’ experience.
- b. **Boundary Adjustment** – Depending on the level of development proposed for the visitor contact station at the Swamp Locks point, a minor boundary adjustment may be necessary to include Parcel 17. This parcel is located within the larger Preservation District boundary but is currently outside the Park boundary. Boundary revisions may not require legislation, but any proposed changes will require consent of the City Manager of Lowell and the City Council, timely notice in writing to Congress, and publication of the revised boundary description in the federal register. A boundary adjustment study would need to be undertaken as a follow-up activity to this planning process.

Figure 8

Alternative 4

RETAIN MARKET MILLS VISITOR CENTER AND EXPAND VISITOR CONTACT POINTS AND PROGRAM FACILITIES THROUGH NEW PARTNERSHIPS

Description:

- 12,000 sf Visitor Center in 2 floors of Market Mills — potential to expand into NPS owned space in the future if need arises
- Up to 1,500 sf Contact Station on Parcel 17
- Up to 32,000 sf private development on Parcel 17
- Arrival via Dutton Street; Broadway extension
- RV and bus parking needs to be relocated due to HCD development
- 161 parking spaces in Parcel 16 surface lot eliminated
- *Sub-option 2a* would replace these spaces in a garage on Parcel 14 or in the Market Street garage.
- *Sub-option 2b* would not replace these spaces; visitors and staff would pay

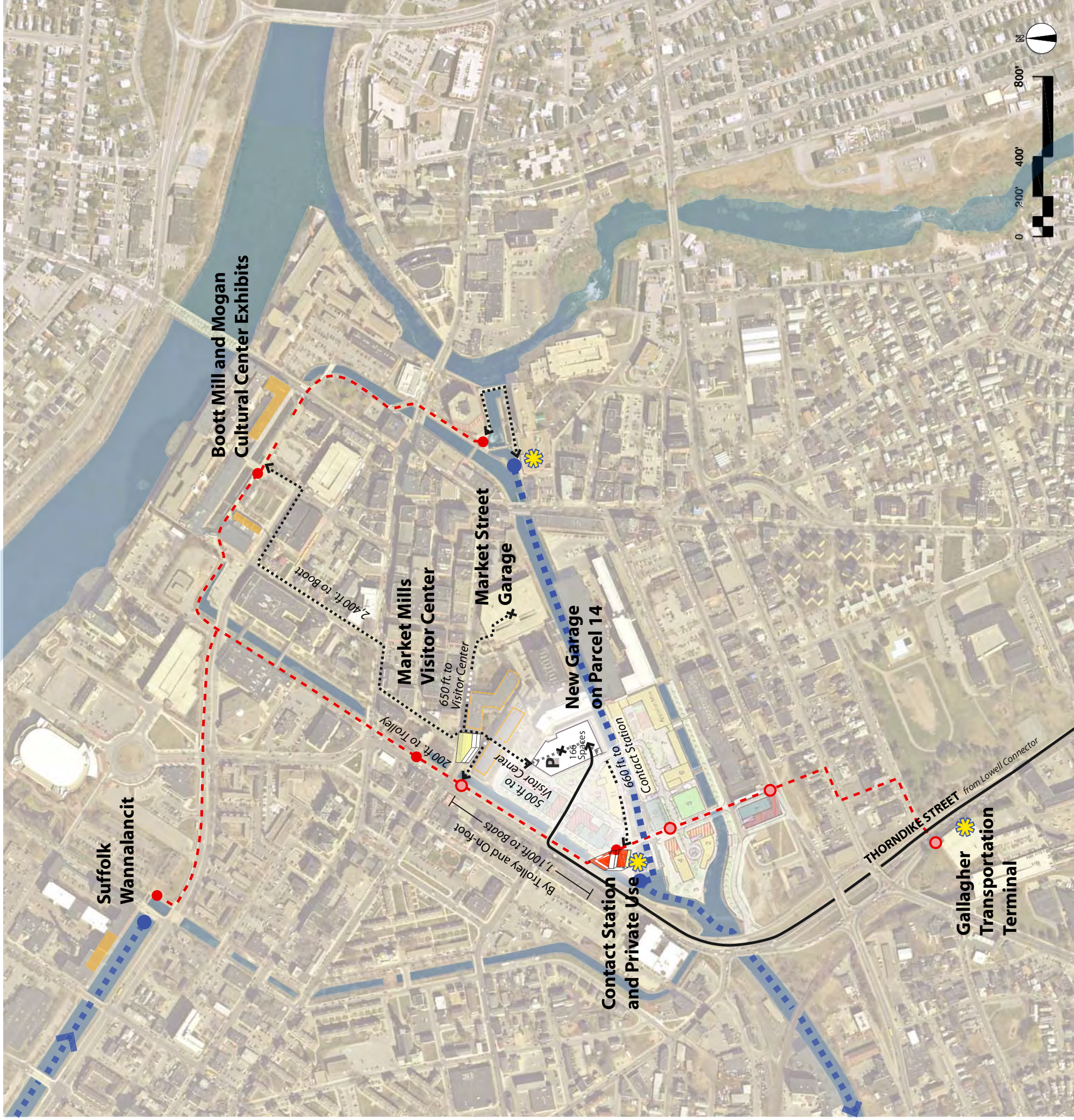
Access Advantage:

- Visitor Orientation Venue could serve as park orientation and tour planning center; provide outreach to visitors and residents
- Could provide resource interpretation, both in general and specific to individual venues; potential to develop partnerships
- Trolley operates year 'round, serves expanded user groups

Access Disadvantage:

- Some confusion between Contact Station and Visitor Center-- Where is the first stop?
- Access from garage needs to be made clear to both Visitor Center and Contact Station

*Trolley extension is shown beyond Parcel 17, although plans and funding have not been determined.



LEGEND

- TROLLEY LINE
- EXISTING TROLLEY STOP
- PROPOSED TROLLEY STOP
- BOAT TOUR
- BOAT TOUR ENTRY AND TERMINUS
- ✱ SMALL INTERPRETIVE / ORIENTATION VENUE
- VEHICULAR ACCESS
- ⋯ PEDESTRIAN PATH
- P PARKING
- INTERPRETIVE VENUE

4. Alternatives Comparison

4.1 Comparison vis-a-vis Hamilton Canal District and Key Issues

Table 5 presents a comparison of key elements of each the four alternatives related to Hamilton Canal District development.

Table 5: Key Elements of GMP Amendment Alternatives

	Alternative 1: Existing No Action	Alternative 2: Existing Visitor Center and HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17 (The Point)	Alternative 4 (Preferred Alternative) : Retain Market Mills Visitor Center; Contact Station on Parcel 17 within private development
Visitor Facilities				
Market Mills	12,000 SF, as is	12,000 SF, minor changes to increase visibility and improve function	Modify for Arts and NPS Program spaces or other rental. Need to find new users who are sustainable	12,000 SF, minor changes to increase visibility and improve function
Parcel 17 The Point	none	none	12,000 SF, 2 story NPS visitor center including no private use	Up to 1,500 SF contact venue within a private development of up to 32,000 SF
Other new visitor service locations	none	none	none	Small visitor orientation venues at Lower Locks and Gallagher Transportation Terminal
Parking				
Base assumption	161 free spaces, existing lot	<i>2a:</i> 161 parking spaces relocated to garage—either to new garage on Parcel 14 or to existing Market Street garage	161 spaces relocated to new garage on Parcel 14	<i>4a:</i> 161 parking spaces relocated to garage—either to new garage on Parcel 14 or to existing Market Street garage
Option		<i>2b:</i> Parking not replaced; assume that visitors and staff will pay for parking		<i>4b:</i> Parking not replaced; assume that visitors and staff will pay for parking
Related Park Improvements				
Trolley System Improvements	None	Extend trolley across Merrimack Canal to the point to facilitate access to boat tours; develop new trolley stop on parcel adjacent to existing Market Mills visitor center.	Extend trolley across Merrimack Canal to the point to facilitate access to boat tours and new Parcel 17 visitor center Extend trolley to Gallagher Transportation Terminal (GTT) Year ‘round service of trolley as broader transportation link would accompany trolley link to GTT. Operation during winter months would require capital improvements. Funding sources for extension and continued maintenance and operation have not yet been determined.	Extend trolley across Merrimack Canal to the point to facilitate access to boat tours; develop new trolley stop on parcel adjacent to existing Market Mills visitor center. Potentially extend trolley further to link to Gallagher Transportation Terminal. If trolley system extended to GTT, institute year ‘round service of trolley as broader transportation link would accompany trolley link to GTT. Operation during winter months would require capital improvements. Funding sources for extension and continued maintenance and operation have not yet been determined.

Table 6 presents a characteristic comparison between the three action alternatives in regards to each of the key issues.

Table 6: Comparison of How Alternatives Address Key Issues

	Alternative 1: Existing No Action	Alternative 2: Existing Visitor Center and HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17 (The Point)	Alternative 4: (Preferred Alternative) Retain Market Mills Visitor Center; Contact Station on Parcel 17 within private development
1.. Visitor Experience				
a. Sense of arrival to the park	Unchanged	Signage improvements from Dutton Street to garage, from garage to visitor center, and at visitor center	Signage improvements from Dutton Street to garage, from garage to Parcel 17 visitor center, and at Parcel 17 visitor center	Signage improvements from Dutton Street to garage, from garage to visitor center, and at visitor center
b. Visibility of the visitor center	Unchanged, could benefit from modest signage improvements	Signage improvements to direct visitors to current visitor center located behind new buildings	High visibility from Dutton Street entry to Lowell of new stand-alone facility with branded signage	Signage improvements to direct visitors to current visitor center located behind new buildings
c. Convenience for visitors using park resources/tours	Unchanged	Development of new trolley on parcel adjacent to visitor center and trolley extension to Swamp Locks improves convenience of trolley for visitors	New NPS visitor center at Swamp Locks improves connections between trolley and boat tours. Trolley extension to GTT would benefit public transportation users.	Development of new trolley stop on parcel adjacent to visitor center and trolley extension to Swamp Locks improves convenience of trolley for visitors. Trolley extension to GTT would benefit public transportation users.
2. Accessibility				
a. Parking				
i. Car	161 parking spaces in existing lot Average walk of 400 feet from parking lot to visitor center.	<i>2a:</i> 161 parking spaces provided in garage—either in new garage on Parcel 14 (average walk of 500 feet to visitor center) or to existing Market Street garage (650 feet to visitor center) <i>2b:</i> Existing parking spaces not replaced; assume visitors and staff will pay for parking	161 parking spaces provided in new garage on Parcel 14 (average walk of 660 feet to visitor center)	<i>4a:</i> Parking relocated to garage—either to new garage on Parcel 14 (500 feet to visitor center) or to existing Market Street garage (650 feet to visitor center) <i>4b:</i> Existing parking spaces not replaced; assume visitors and staff will pay for parking
ii. Handicap	Unchanged	Either garage would comply with ADA requirements	HC parking needs to be located next to Parcel 17 visitor center	Either garage would comply with ADA requirements
iii. Bus	Unchanged	New layover space required	New layover space required	New layover space required
iv. RV/Trailers	Unchanged	New location required	New location required	New location required
b. Bus Loading/Unloading	Unchanged	Busses would either drop off at the visitor center at Market Street or at the visitor center's	Loop through HCD and drop off next to Parcel 17 visitor center	Busses would either drop off at the visitor center at Market Street or at the visitor center's

	Alternative 1: Existing No Action	Alternative 2: Existing Visitor Center and HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17 (The Point)	Alternative 4: (Preferred Alternative) Retain Market Mills Visitor Center; Contact Station on Parcel 17 within private development
		southwestern entrance via the Broadway Street extension to loop around parcel 15 on new HCD streets		southwestern entrance via the Broadway Street extension to loop around parcel 15 on new HCD streets
d. Multi-modal connections	Unchanged	New direct connection between visitor center trolley stop and Swamp Locks/boat tours	Multi-modal hub at Parcel 17 visitor center for trolley and boat tours as well as assumed trolley extension to GTT	Multi-modal hub at new visitor orientation venue for trolley and boat tours as well as potential trolley extension to GTT
3. Relationship to City of Lowell				
a. Linkage to Lowell's Downtown	Unchanged	Unchanged	Visitor center farther from downtown; but trolley connections to downtown can be emphasized. Visitors who wish to walk can still readily walk back from Boott Mill complex to garage; distance remains comparable to existing to parking lot.	Unchanged
b. Potential to encourage economic development	If NPS parking remains, loss of redevelopment on parcels to southwest of visitor center will endanger private investment in HCD and elsewhere in downtown	Allows HCD development to proceed, enabling large investment	Allows HCD development to proceed, enabling large investment ; New Parcel 17 visitor center would benefit HCD ground floor retail proposed for adjacent Parcels 15 & 4	Allows HCD development to proceed, enabling large investment
4. Potential Cost to NPS				
a. Cost of park facilities	Modest costs	Costs associated with signage improvements to improve car and pedestrian way finding to the visitor center	Costs associated with a new visitor center.	Costs associated with signage improvements to improve car and pedestrian way finding to the visitor center; costs associated with contact stations
b. Park operations/facility costs	No major change	Improved convenience to visitors through trolley extension across Merrimack Canal to the point to facilitate access to boat tours and relocation of Mack Plaza trolley stop to parcel adjacent to Market Mills	Improved convenience to visitors through trolley extension across Merrimack Canal to the point to facilitate access to boat tours; and further extension to link visitors from commuter rail service at Gallagher	Trolley extension across Merrimack Canal to the point to facilitate access to boat tours; and further extension to link visitors to commuter rail service at Gallagher Transportation Center. Year 'round trolley

	Alternative 1: Existing No Action	Alternative 2: Existing Visitor Center and HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17 (The Point)	Alternative 4: (Preferred Alternative) Retain Market Mills Visitor Center; Contact Station on Parcel 17 within private development
		visitor center.	<p>Transportation Terminal.</p> <p>Year 'round trolley operation would accompany trolley link to GTT to serve expanded user groups. This would require a series of capital improvements to facilitate operation during winter months. Funding sources for the extension and continued maintenance and operation have not yet been determined.</p> <p>New Parcel 17 visitor center would provide dramatic views of Swamp Locks; but visitors end up further from downtown.</p> <p>Risk to NPS associated with need to find economically viable reuse of Market Mills space.</p>	<p>operation would accompany trolley link to GTT to serve expanded user groups. This would require a series of capital improvements to facilitate operation during winter months.</p> <p>Funding sources for the extension and continued maintenance and operation have not yet been determined.</p> <p>Improved connection between visitor center and Swamp Locks/ boat tours; Contact Stations improve visitor experience of historic resources, park navigation routes and infrastructure that are already in place</p>
c. Land ownership and/or boundary change costs	No change	Any exchange of property necessitated by use of the current NPS parking lot for private development may require specific federal legislation and would incur administrative costs.	Any exchange of property necessitated by use of the current NPS parking lot for private development may require specific federal legislation. A new NPS visitor center on Parcel 17 would likely require specific federal legislation to modify the park boundary to include this parcel. Both actions would incur administrative costs.	Any exchange of property necessitated by use of the current NPS parking lot for private development may require specific federal legislation and would incur administrative costs.
5. Other Issues for Consideration				

	Alternative 1: Existing No Action	Alternative 2: Existing Visitor Center and HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17 (The Point)	Alternative 4: (Preferred Alternative) Retain Market Mills Visitor Center; Contact Station on Parcel 17 within private development
a. Possible delays in relation to HCD	Unchanged	Delays in HCD development would not impact NPS operations	Timing of construction on Parcels 15 & 16 scheduled for late in the development time frame; could leave the new Parcel 17 visitor center overlooking undeveloped land	Delays in HCD development would not impact NPS operations

4.2 Cost Estimates for the Alternatives

The GMP Amendment provides a framework for coordinating and integrating subsequent planning and management decisions affecting Lowell National Historical Park. When funds become available to begin designing facilities or undertaking individual actions consistent with the GMP, site-specific planning, research, and environmental analysis will take place. Specific actions will be subject to federal and state consultation requirements, and the public will be involved throughout the process. The environmental assessment accompanying the general management plan amendment is essentially a programmatic statement that presents an overview of potential impacts.

The presentation of costs within the GMP Amendment is applied to the types and general intensities of development in a comparative format. The costs are presented as estimates that allow for flexibility in application of components and are not appropriate for budgeting purposes.

The costs presented have been developed using industry standards to the extent available. Actual costs will be determined at a later date, considering the design of facilities, identification of detailed resource protection needs, and changing visitor expectations. The cost estimates presented represent the total costs of projects. Potential cost-sharing opportunities with partners would reduce the overall costs.

Approval of the GMP Amendment does not guarantee that funding or staffing for proposed actions will be available. Implementation of the plan will depend on the availability of funds. Full implementation of the general management plan amendment may occur many years in the future. All NPS construction and staffing proposals are contingent on NPS funding limitations and have to compete for funds through the NPS priority-setting process.

Table 7: Comparison of Cost Estimates for the Alternatives

	Alternative 1	Alternative 2	Alternative 3	Preferred Alternative Alternative 4
Annual Operating Costs (ONPS)(1)	\$475,418	\$432,348	\$432,438	\$500,348
Staffing - FTE(2)	5.0 FTE	4.9 FTE	4.9 FTE	5.4 FTE
Total One-Time Costs	\$545,000	\$645,000	\$10,910,000	\$1,522,500
Facility Costs(3)	\$150,000	\$250,000	\$6,545,000	\$250,000
Non-Facility Costs(4)	\$395,000	\$395,000	\$4,365,900	\$1,272,500
Other Costs- Land Acquisition/Transfer Costs	-----	Donated	Donated	Donated

1. Annual operating costs are the total annual costs for park operations associated with each alternative, including: maintenance, utilities, staff salaries and benefits, supplies, and other materials. Cost estimates assume that the alternative is fully implemented as described in the narrative.

Alternatives 2 and 3 reflect reduced operating costs associated with the maintenance and protection of the VC parking lot. Annual operating costs in Alternative 4 include a reduction for the VC parking lot and an added cost associated with seasonal staffing of a contact station at the Swamp Locks point.

2. The total FTE is the number of person-years required to maintain the assets of the parks at a good level, provide acceptable visitor services, protect resources, and generally support the parks' operations. The FTE number indicates the ONPS-funded staff only, not volunteer positions or positions funded by partners.

FTE salaries and benefits are included in the annual operating costs. Alternatives 2 and 3 reflect reduced FTE associated with the maintenance and protection of the VC parking lot. FTE in Alternative 4 include a reduction for the VC parking lot and an added cost associated with seasonal staffing of a contact station at the Swamp Locks point.

3. One-time facility costs include design, construction, rehabilitation, or adaptive re-use of visitor centers, roads, parking areas, administrative facilities, comfort stations, educational facilities, maintenance facilities, museum service facilities, and other visitor facilities.

The one time facility costs documented in Alternatives 1,2and 4 reflect costs for reconfiguration of front desk/bookstore area. This work is currently under development. Also include in this cost for Alternatives 2 and 4 is an estimated \$100,000 to address signage and branding issues associated with the relocation of parking from the existing lot to a city parking facility. The added costs included in Alternative 4 reflect cost of development of contact stations. One time facility costs documented in Alternative 3 reflects cost for design and construction of new VC facility at the Swamp Locks Point. Cost is based on an 11,000 square foot facility at a cost of \$425/sf. This figure includes the following additional costs: 1) 5% compliance, 2) 5% pre design, 3) 10% final design, 4) 2% supplemental services, 5) 8% construction management, and 6) 10% contingency.

4. One-time non-facility costs include actions not related to facilities, such as the treatment of cultural or natural resources, the development of exhibits or visitor materials, and other park activities that would require substantial funding above annual operating costs.

The one-time Non-Facility Costs documented in Alternatives 1, 2, and 4 reflect costs for new orientation film. This project is currently under development. One-time Non Facility Costs documented in Alternative 3 reflects cost for design and fabrication of new exhibits for the VC facility at the Swamp Locks Point.

5. Environmental Assessment

5.1 Introduction

This section describes the existing environment that would be affected by the alternatives proposed in the GMP Amendment and assesses the impacts of each alternative on that affected environment

5.2 Affected Environment

Surface Water Resources

The Lowell National Historical Park boundary includes 9.6 miles of major riverbanks and all 5.6 miles of historic canals in Lowell. The canals, which both originate and empty into the Merrimack River, include the Pawtucket Canal, the Merrimack Canal, the Hamilton Canal, and the Western, Eastern, and Northern Canal. In the 19th century these canals powered mill complexes that sparked the transformation of manufacturing in the United States from cottage industry to large-scale enterprise.

Water quality has improved considerably since the formation of the park, but the Merrimack and associated canals still suffer from pollution problems. Salt, grease, trash and pesticides run off into the river from cities and suburbs. There are still illegal discharges and Combined Sewage Overflows remain a problem in heavy rains, periodically lowering water quality.

The action alternatives considered in this document would have potential impact to the river and canals in so much as unmitigated development activity would create potentially negative storm water runoff. Only portions of the Merrimack and Lower Pawtucket canals are within the immediate project area; the Hamilton and Western Canals are close by.

Parks, Trails and Open Spaces

In addition to city streets, there is a network of designated Canalways and Riverwalk trails that connect resources within LNHP and provide pedestrian connections for visitors. The first Canalway walk begins at the southern termination of the trolley on Dutton Street across from the Swamp Locks and continues northeast along the Merrimack Canal where it meets the Market Mills Visitor Center. From this juncture at the Visitor Center, the Canalway splits into two branches that meet at the Boot Cotton Mills Museum to form a loop.

One Canalway branch continues northeast along the Merrimack Canal through Lucy Larcom Park, turning southeast as it follows the Eastern Canal past Boarding House Park and Boot Mills. From the Visitor Center, the other Canalway branch goes east along Market Street then cuts south to reach the Pawtucket Canal, which it follows northeast to Lower Locks. From Lower Locks it follows the Pawtucket Canal northeast across the canal, through Eastern Canal Park, where it turns northwest and meets Boot Mills.

A second, separate Canalway walk begins at the Suffolk Mill Trolley Stop at the Tremont Gatehouse and Power House and extends northwest along the Northern Canal to the University of Massachusetts-Lowell North Campus, where it connects with the Northern Canal Island and Great River Wall Walkway

A third walkway extends along the Western Canal from the Merrimack River to Swamp Locks where it connects with the Merrimack Canal Walkway and the soon to be completed Hamilton Canal Walkway..

There are several parks and open spaces within LNHP. The parks that are in proximity to the Immediate Project Area include Boarding House Park, Lucy Larcom Park, Eastern Canal Park and Mack Plaza.

The Canalways and canal-side parks are integral to visitors' experience of the LNHP, as the canals themselves are such a key element of the Lowell story.

Historic Districts and Structures

The LNHP Preservation District encompasses about 583 acres of land area and contains most of the primary historic resources in the City of Lowell. Within the District's boundaries there are 383 buildings and structures of national historical significance and 227 buildings of local historical or architectural significance. There are also numerous sites of historical significance and a variety of special historic resources such as old canal locks and mill machinery.

Much of the Preservation District consists of commercial and industrial buildings and uses. Historically, residential uses in the Preservation District were centered in the Acre and Chapel Hill neighborhoods, although adaptive use development has converted some of the larger mill properties to residential use. The overall pattern of buildings and structures is generally that of a densely developed, industrialized 19th century city. The commercial buildings on Central and Merrimack Streets and the large mill complexes are the dominant structure types.

The immediate project area that contains resources which the action alternatives could impact is much smaller than the overall Preservation District and includes the Market Mills complex south of Market Street and the adjacent Mack Plaza north of Market Street, as well as parcels 15 and 16 on which NPS parking is now located, and the canal banks that surround parcel 17 at "the point." The Market Mills complex is part of the Lowell National Historical Park National Register District as are the canals that define this area. The canals are also listed as a National Historic Landmark and have been designated a Civil and Mechanical Engineering Landmark. The Swamp Locks, along the Pawtucket Canal, adjoining the Immediate Project Area, is an important control structure that is part of the system regulating the water flow along the canals connecting the Merrimack and Concord Rivers.

Land Use

The project area is part of the Preservation District, which encompasses city fabric at varying scales, including most of Lowell's downtown and two adjacent neighborhoods. The land use pattern encompasses the mixed-use core of a densely developed, industrial 19th century city, although nearly all of the large mill complexes have been adaptively reused for residential, office, commercial, and cultural uses.

The immediate project area is part of the Hamilton Canal District (HCD), defined by the City of Lowell as a major opportunity for adaptive use and new development. The HCD was the site of now defunct manufacturing and industrial uses dating to the early 19th century. Bounded by the Merrimack and Hamilton Canals, and bifurcated by the Lower Pawtucket Canal, at least half of the HCD land is vacant, though some former industrial mill buildings or portions of them remain.

On the western side of the Merrimack Canal, across from the immediate project area, Dutton Street is an arterial street that leads from the city's natural "gateway" where Thorndike Street crosses the Pawtucket Canal into the downtown. A variety of building types and uses line Dutton Street, including the American Textile History Museum, on Dutton Street across from the Swamp Locks. At 305 Dutton, a renovated industrial building now houses lofts; going north past

Broadway, two- to three- story modest brick buildings house ground floor retail and commercial uses; at the intersection with Market Street, both scale and uses begin to intensify.

Existing uses within the immediate project area are varied. Parcels 15 and 16 are NPS owned and are now used for automobile (parcel 15) and bus/RV (parcel 16) surface parking. Parcel 11, 12, 13, and 17 (“the point”)—all adjacent to NPS uses, but not controlled by NPS—are vacant, former industrial sites.

The Market Mills complex contains a variety of uses, including the LNHP Visitor Center, NPS offices, cultural and commercial uses, and residential use on most upper floors.

Transportation and Visitor Access

Most visitors access LNHP by car or bus via Dutton Street—a major gateway to the City’s downtown. From Dutton Street vehicles cross over the Merrimack Canal on the Broadway Street Extension to park or drop off passengers in a 161 space surface parking lot adjacent to the historic Market Mills complex, which houses the LNHP Visitor Center. The surface parking on parcels 15 and 16 provide visitors arriving from Dutton Street an unobstructed view across the Merrimack Canal to the Market Mills Visitor Center as they approach the park entry.

The Gallagher Transportation Terminal is the end of a commuter rail line to Boston and a hub for local and regional bus service. The facility is half a mile from the Market Mills Visitor Center, accessed from Thorndike Street. The Lowell Regional Transit Authority (LRTA) operates shuttle buses between the Gallagher Transportation Terminal and downtown Lowell Monday through Saturday, providing a means for LNHP visitors using public transportation to get to the park.

Once at the park, visitors can access many of the park sites in and adjacent to the downtown on foot, although some distance separates the major attractions from each other. The walking distance between the Swamp Locks, at the park’s southwestern edge, to Boott Mills, at its northeastern edge, is just over half a mile; the distance from Swamp Locks to the end of the Northern Canalway is three quarters of a mile; and the distance from Lower Locks at the eastern edge and the Francis Gate at the western edge is just over one mile.

A trolley system and boat tour route transport visitors to major sites within the park. The trolley system operates from March through November and stops at major sites within the park, including Swamp Locks, Visitor Center, Boott Mills, Lower Locks, and Suffolk Mills. Boat tours operate from late May until the end of August; schedule varies.

Local Economy

The City of Lowell is best known for its early 19th century history of innovation in textile manufacturing, as well as its economic woes in the later part of the 19th and early 20th century when competition from textile production in the south and larger structural changes in the national economy diminished the viability of manufacturing as a key sector in the city’s economy.

Since the mid-1970’s members of Lowell’s public and private sectors have worked to transform the city’s economy for the better, with some success. Renovated historic textile mills now house affordable and attractive office space, which house a host of well-known businesses such as Coca-Cola, M/A Com, Raytheon, NYNEX, and Textron. Other long-established firms include Colonial Gas and the Lowell Sun Publishing Company.

Manufacturing constitutes 15% of the city’s job base, but services are now the largest sector, comprising more than 25% of the city’s jobs. Other important sectors are trade, transportation and government.

Tourism has been a key in Lowell's new economy and the Lowell National Historical Park now draws over 700,000 "recreational" visitors a year. Since the creation of the Park in 1978, \$2.28 million in federal preservation loans have been distributed to 19 nationally significant historic resources in the Park and Preservation District, helping to transform crumbling 19th century buildings into crisp, rehabilitated structures contributing to the integrity of Lowell's historic core. These preservation loans generated over \$138 million in private investment. Private investment has helped to create an attractive urban environment to which visitors, tourists, and locals alike now come. Festivals, concert series, sports teams, museums and venues now complement this unique resource with programming that is developed independently and in cooperation with NPS.

Lowell continues to struggle with unemployment rates above the state average, though the gap between the city and state rates is much smaller than it was in the late 1970s when LNHP was conceived. Recently, the Bureau of Labor Statistics reported the City's annual average unemployment rate within the 7% - 9.9% range for the period of June 2008 – May 2009. During the current economic downturn the state as a whole has suffered an increase in unemployment from 4.9% to 8.2% (May 2008 – May 2009). The Boston-Cambridge-Quincy MA-NH NECTA region, of which Lowell is technically a part, experienced a similar increase in the unemployment rate, from 4.5% to 7.5% (May 2008 – May 2009). However, Lowell's high annual average unemployment level predates this overall decline in employment in the state.

The City of Lowell has made remarkable strides since its lows during the mid-1970s, but it still fights hard for all its economic improvements.

Visitor Experience

Initial orientation is key to a positive visitor experience at the Lowell National Historical Park. With a breadth of resources dispersed throughout the downtown; a variety of exhibits, tours, and programs led by NPS staff to choose from; a trolley system, boat tours, and an extensive Canalway network for pedestrians; the Market Mills Visitor Center is NPS' preferred first stop for its visitors. In addition to knowledgeable staff, the visitor center houses a series of interpretive exhibits in an historic rehabilitated mill building to orient visitors to the park and its story.

Most visitors arrive at the park by car or bus, approaching Market Mills via Dutton Street and crossing over the Merrimack Canal to the surface parking lot via the Broadway Street Extension. Currently visitors approaching from both directions have unobstructed views of the Market Mills building.

After orientation at Market Mills, most visitors proceed to the Boott Cotton Mills Museum, either by trolley, by walking on one of the two Canalways, or by finding their own way through the downtown on foot. Other visitors may choose to visit Swamp Locks first, either by foot or trolley, to access the boat tour landing. The variety of resources to visit and ways to get around the park allow visitors many possibilities while conducting their visits.

Park Operations

The Lowell National Historical Park relies on a full time staff of 81, 46 seasonal/part time staff, and over 2,000 volunteers a year to tell and interpret the stories of Lowell to the thousands who visit LNHP sites dispersed throughout the city's downtown each year.

LNHP operates and staffs interpretive sites at Market Mills and the Boot Cotton Mills Museum. Staff provide guided tours of the Moody Street Feeder Gatehouse, Suffolk Mills Turbine Exhibit, and Mill Girl and Immigrant exhibit.

NPS operates a seasonal trolley system to transport visitors between major LNHP sites as well as boat tours that take visitors around the park via canals.

NPS staff provide a variety of tours and educational programs at different sites throughout the park.

5.3 Summary of Key Differences Among the Alternatives

NO ACTION

5.3.1 Alternative 1 – No Action

Alternative 1 requires no major action by NPS regarding the existing Market Mills Visitor Center and any of its supporting facilities, though modest improvements to increase visibility and efficiency of operation could be implemented. The existing 161 space automobile and 11 space bus/rv surface parking lot to the southwest of the visitor center would remain.

NO ACTION

5.3.2 Elements Common to All Action Alternatives

- Full redevelopment of the Hamilton Canal District as detailed in the Hamilton Canal District Master Plan, including development of parcel 15, where NPS parking is now located.
- All action alternatives would eliminate the 161 space surface parking lot.
- All action alternatives would need to relocate RV and bus parking / layover space to a site elsewhere in the city, but the city is committed to working with LNHP on this issue and has identified a variety of possible choices for replacement bus and RV parking (See Appendix C).
- All action alternatives would include comprehensive signage improvements to make park entrance, visitor center, garage parking, and pedestrian routes more visible.
- All action alternatives would include extension of the trolley line across the Merrimack Canal to the Swamp Locks

5.3.3 Alternative 2 – Existing Visitor Center and HCD Redevelopment

- Visitor Center would remain in Market Mills.
- Parking
 - 161 spaces would be reserved in a new garage on parcel 14 or into an existing garage on Market Street, OR
 - Designated visitor parking would be eliminated under assumption that visitors and staff would pay for parking, as happens at other urban parks
- A new trolley stop would be developed adjacent to the visitor center on the south side of Market Street.

- The trolley line would be extended from its existing termination on Dutton Street across from parcels 16 and 17 to cross the Merrimack Canal, bringing visitors to the boat boarding dock adjoining the Swamp Locks.

5.3.4 **Alternative 3 – New Visitor Center on Parcel 17**

- Visitor center would be relocated to new NPS facilities on parcel 17.
- Market Mills Visitor Center could be renovated into space for new tenant(s) at market rate rents.
- Parking -- 161 spaces would be reserved in a new garage on parcel 14.
- The trolley system would be extended, if feasible, across the Lower Pawtucket and Hamilton Canals to the Gallagher Transportation Terminal.
- Trolley service would be expanded from a seasonal park tour to a year 'round transportation system with broader service to residents, visitors, and workers, which would require significant capital improvements.

5.3.5 **Alternative 4 (Preferred Alternative) – Retain Market Mills Visitor Center, Contact Station with Private Use on Parcel 17**

- Visitor Center would remain in Market Mills; potential to expand into NPS owned spaces in building to meet park's future programming and operational needs.
- Construction of at least three additional visitor orientation venues at key locations in park to provide supplemental contact with the public. These venues would provide:
 - Basic orientation to overall park, its transportation systems, and pedestrian connections
 - Additional outreach to residents and visitors not yet familiar with breadth of park
 - Resource interpretation about the park, both in general and specific to venue
 - Potential to develop partnerships with public or private entities for mutual benefit
- Venues would be between 500 and 2,000 sf and could be stand alone structures or part of a larger development
- Key locations to site venues are Parcel 17, Gallagher Transportation Terminal, and the U. Mass Lowell Inn and Conference Center at Lower Locks.
- Parking
 - 161 spaces would be reserved in a new garage on parcel 14 or into an existing garage on Market Street OR
 - Designated visitor parking would be eliminated under assumption that visitors and staff would pay for parking, as happens at other urban parks

- The trolley system would be extended across the Lower Pawtucket to parcel 17 and the site of the boat landing at the Swamp Locks. Extending it across the Hamilton Canals to the Gallagher Transportation Terminal would further enhance this alternative, though this additional extension is not required.
- If the extension to the Gallagher Transportation Terminal were made, trolley service would be extended from a seasonal park tour to a year 'round transportation system with broader service to residents, visitors, and workers, which would require significant capital improvements.

5.4 Methodology for Assessing Impacts and Determining the Need for an Impact Mitigation

This Environmental Assessment (EA) describes the potential environmental consequences of each alternative presented in Section 4 of this document. These alternatives offer various strategies for managing park operations and improving the visitor experience in response to redevelopment the Hamilton Canal District, encompassing 11 acres of underutilized land adjacent to and surrounded by the existing park.

The following terms are used in this document when comparing environmental impacts among alternatives:

Magnitude of Impact

Negligible – The impact is barely perceptible or not measurable.

Minor – The impact is slightly detectable and measurable, but is either localized or would not adversely affect resources.

Moderate – The impact is clearly detectable and could have appreciable effect on resources.

Major – The impact is substantial and highly noticeable or measurable.

Duration of Impact

Short-term – The impact is typically less than one year. Short-term impacts are often associated with construction of specific facilities that temporarily change environmental conditions.

Long-term – The impact lasts one year or longer.

Quality of Impact

Beneficial – The impact is generally positive on the resources being considered.

Adverse – The impact is generally negative on the resources being considered

Table 8: Definition of Magnitude Levels For Each Impact Category

Surface Water Resources	Parks, Trails, Open Spaces	Historic Districts & Structures	Land Use	Local Economy	Visitor Experience	Park Operations
NEGLECTIBLE IMPACT						
Impact barely detectable, not measurable.	Impact barely detectable and not measurable.	Impact barely perceptible and not measurable. Determination of effect for Section 106 would be no adverse effect.	Impact barely detectable with neither positive nor negative consequences.	Impact barely detectable with neither positive nor negative consequences.	Impact barely detectable, not in primary resource areas or would occasionally affect a few visitors.	Impact barely perceptible, no discernible effect on park operations.
MINOR IMPACT						
Impact slightly detectable and measurable.	Impact slightly detectable with neither positive nor negative consequences for visitors use.	<u>Negative Impact</u> would alter a feature or a limited amount of fabric in an historic structure but would not diminish overall integrity of the structure. Determination of effect for Section 106 would be no adverse effect. <u>Positive Impact:</u> preservation of a feature or some historic fabric in accordance with the Secretary of the Interior's standards. Determination of effect for Section 106 would be no adverse effect.	Impact would be detectable but use remains mostly the same with neither positive nor negative consequences.	Impact would be detectable, but with neither positive nor negative consequences discernable.	Impact would change experience for a few visitors, which would be noticeable but would result in little detriment to or improvements to the quality of the experience.	Impact slightly detectable but would not obstruct or improve overall ability to provide services, to manage resources, or to operate the park.
MODERATE IMPACT						
Impact clearly detectable and measurable, with either positive or negative impact on surface water quality.	Impact clearly detectable and would change visitors' movements through the park.	<u>Negative Impact:</u> alteration of a feature would diminish overall integrity of the resource. The determination of effect for Section 106 would be adverse effect. <u>Positive Impact:</u> rehabilitation of a property or considerable amount of fabric in accordance with the Secretary of the Interior's standards. Determination of effect for Section 106 would be no	Impact clearly detectable and with appreciably positive or negative consequences for use.	Impact clearly detectable with either positive or negative consequences for the local economy and nearby businesses.	Impact would change a large number of visitors' experiences and would result in a noticeable decrease or improvement in the quality of the experience.	Impact clearly detectable and could appreciably obstruct or improve the ability to provide services, to manage resources, and/or to operate the park.

Surface Water Resources	Parks, Trails, Open Spaces	Historic Districts & Structures	Land Use	Local Economy	Visitor Experience	Park Operations
		adverse effect.				
MAJOR IMPACT						
Impact would have substantial, measurable, potentially permanent positive or negative impact on surface water quality.	Impact would have substantial and highly noticeable, permanent impact on visitors' movements through the park.	<u>Negative Impact:</u> alteration of a feature would diminish overall integrity of the resource. The determination of effect for Section 106 would be adverse effect. <u>Positive Impact:</u> rehabilitation of a property or considerable amount of fabric in accordance with the Secretary of the Interior's standards. Determination of effect for Section 106 would be no adverse effect.	Impact would have substantial and highly noticeable, potentially permanent consequences.	Impact would have substantial, highly noticeable consequences for the local economy, affecting employment and local businesses.	Impact would have a substantial improvement in many visitors' experiences or a severe drop in the quality of many visitors' experiences, such as the addition or elimination of a recreational opportunity or a permanent change to an area.	Impact would have a substantial, highly noticeable, potentially permanent influence on the ability to provide services, to manage resources, or to operate the park.

5.5 Environmental Impacts

Table 9: Comparison of Impacts by Alternative

Alternative 1: Existing—No Action	Alternative 2: Existing Visitor Center & HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17	Alternative 4: (Preferred Alternative) Retain Existing Market Mills Visitor Center & Expand Visitor Contact Points & Program Facilities Through New Partnerships
Surface Water Resources			
No ground disturbing activities causing runoff would take place; therefore this alternative would have no impact on surface water resources	Extension of trolley line across the Merrimack Canal to Parcel 17 would require some site disturbance. Construction mitigation measures and practices would be required to obtain necessary permits, thereby limiting potential for reduction in surface water quality. Therefore this alternative would have minor, adverse, short-term impact .	Construction of a new NPS visitor center on parcel 17 would require substantial site disturbance. Extension of the trolley line across the Merrimack Canal to Parcel 17 (or further) would require some site disturbance. Construction mitigation measures and practices would be required to obtain necessary permits, thereby limiting potential for reduction in surface water quality. Therefore this alternative would have minor, adverse,	Extension of trolley line across the Merrimack Canal to Parcel 17 would require some site disturbance. New visitor orientation venues would typically be incorporated into public or private facilities. Construction mitigation measures and practices would be required to obtain necessary permits, thereby limiting potential for reduction in surface water quality. Therefore this alternative would have minor, adverse,

Alternative 1: Existing—No Action	Alternative 2: Existing Visitor Center & HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17	Alternative 4: (Preferred Alternative) Retain Existing Market Mills Visitor Center & Expand Visitor Contact Points & Program Facilities Through New Partnerships
		short-term impact.	short-term impact.
Parks, Trails, Open Spaces			
Existing trail networks, parks, and open spaces would remain; therefore this alternative would have no impact on these resources.	This alternative includes comprehensive signage improvements to make the park entrance and pedestrian routes more visible. This would have moderate, beneficial, long-term impacts on these resources.	This alternative includes comprehensive signage improvements to make the park entrance and pedestrian routes more visible. This alternative creates the opportunity to enhance the Lower Pawtucket Canalway and Swamp Locks point as part of an intra-park pedestrian gateway to a new NPS visitor center at “The Point.” This would have moderate, beneficial, long-term impacts on these resources.	This alternative includes comprehensive signage improvements to make the park entrance and pedestrian routes more visible. This would have moderate, beneficial, long-term impacts on these resources.
Historic Districts & Structures			
The existing visitor center would remain in Market Mills; therefore this alternative would have no impact on historic districts and structures.	The visitor center would remain in Market Mills, which would benefit from comprehensive signage improvements to make it more visible from Dutton Street and to adequately lead visitors from relocated parking. These improvements would have a moderate, beneficial, long-term impact on Market Mills, which is part of the Historic District.	The visitor center would be relocated to new NPS facilities on parcel 17 and the Market Mills Visitor Center could be renovated into space for new tenant(s). In Market Mills there would be a risk that new uses may not be viable; in that case, if spaces remain vacant or under-utilized this could cause a moderate, adverse, long-term impact on this important resource within the Historic District.	The visitor center would remain in Market Mills, which would receive comprehensive signage improvements to make it more visible from Dutton Street and to adequately lead visitors from relocated parking. Three new visitor orientation venues, two of which would be located within the park boundary, would increase NPS outreach to residents and visitors. Together these actions would have moderate beneficial, long-term impact on the historic resource within the park by making them more accessible to visitors.
Land Use			
NPS car and bus surface parking lots would remain. Such use would not constitute the highest and best use of	NPS car and bus surface parking lots would be relocated, allowing future development of the Hamilton Canal District	NPS car and bus surface parking lots would be relocated, allowing future development of the Hamilton Canal District to proceed.	NPS car and bus surface parking lots would be relocated, allowing future development of the Hamilton Canal District to proceed.

Alternative 1: Existing—No Action	Alternative 2: Existing Visitor Center & HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17	Alternative 4: (Preferred Alternative) Retain Existing Market Mills Visitor Center & Expand Visitor Contact Points & Program Facilities Through New Partnerships
<p>Parcels 15 and 16 and could retard other investment in other under-utilized properties in the HCD or in other areas of downtown. This would have a moderate, adverse, long-term impact on land use.</p>	<p>to proceed. When complete, these previously disturbed, currently vacant parcels would be more productively utilized as a mixed-use district.</p> <p>The NPS visitor center would remain within Market Mills; other existing cultural and commercial uses in the complex would be expected to remain as well.</p> <p>The development and intensification of uses on these now vacant parcels would have major, beneficial, long-term impacts on land use.</p>	<p>When complete, these previously disturbed, currently vacant parcels would be more productively utilized as mixed-use district.</p> <p>The NPS visitor center would be relocated to a new NPS facility on “the point,” giving the park a substantial presence in the redeveloped Hamilton Canal District. The Market Mills Visitor Center could be renovated into space for new tenants.</p> <p>The overall development and intensification of uses on these now vacant parcels would have an aggregate major, beneficial, long-term impact on land use.</p> <p>There would, however, be a risk that the increased distance of the visitor center from current downtown could a moderate, long-term adverse impact on some downtown businesses until residents and visitors adapt to changed patterns of use.</p>	<p>When complete, these previously disturbed, currently vacant parcels would be more productively utilized as a mixed-use district.</p> <p>The NPS visitor center would remain within Market Mills; other existing cultural and commercial uses in the complex would be expected to remain as well.</p> <p>The development and intensification of uses on these now vacant parcels, as well as the addition of several visitor orientation venues throughout the park would have major, beneficial, long-term impacts on land use.</p>
Local Economy			
<p>Retention of parking on Parcels 15 & 16 would not enable full redevelopment of the Hamilton Canal District. This would result in a major, adverse, long-term impact on the local economy, through potential loss of confidence in development felt in loss of employment opportunities in local businesses.</p>	<p>Relocation of NPS car and bus surface parking lots would allow future development of the Hamilton Canal District to proceed.</p> <p>This would have a major, beneficial, long-term impact on the local economy, through job creation and expansion of the commercial and residential sectors.</p>	<p>Relocation of NPS car and bus surface parking lots would allow future development of the Hamilton Canal District to proceed.</p> <p>The NPS visitor center would relocate to an NPS facility on “the point,” increasing the distance between visitors’ first stop and local businesses in the downtown. This could weaken the link between park users and downtown businesses.</p> <p>Overall, redevelopment allowed by this action alternative would, overall, have a major, beneficial, long-term impact on the</p>	<p>Relocation of NPS car and bus surface parking lots would allow future development of the Hamilton Canal District to proceed.</p> <p>This would have a major, beneficial, long-term impact on the local economy, through job creation and expansion of the commercial sector.</p>

Alternative 1: Existing—No Action	Alternative 2: Existing Visitor Center & HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17	Alternative 4: (Preferred Alternative) Retain Existing Market Mills Visitor Center & Expand Visitor Contact Points & Program Facilities Through New Partnerships
		local economy, through job creation and expansion of the commercial sector although moderate short-term adverse impacts could be felt by local businesses in close proximity to the existing visitor center.	
Visitor Experience			
<p><u>Sense of Arrival</u></p> <p>Entry to the park would remain unchanged. Signage to the visitor center would continue to direct traffic to the Broadway Street Extension. Visitors would continue to park in the Parcel 15 surface parking lot and walk or ride the trolley past undeveloped parcels to reach the Swamp Locks and boat tours.</p> <p><u>Visibility of Visitor Center</u></p> <p>Market Mills would remain visible from Dutton Street. Modest Signage improvements might be made to increase visibility of the visitor center. New roadway improvements will make Jackson Street a second entry to the city; the visitor center would not be easily visible from this entrance.</p> <p><u>Convenience for visitors</u></p> <p>Visitors continue to board trolleys at Mack Plaza.</p> <p>These minor changes would result in moderate, adverse, long-term impact, as the southernmost portion of the park, including</p>	<p><u>Sense of Arrival</u></p> <p>Entry to the park would remain unchanged, but visitors would park in a garage. New signage would lead to garage parking and would create/reinforce the NPS identity. Signage and streetscape improvements would create an identifiable pedestrian path from parking facility to the Market Mills Visitor Center.</p> <p><u>Visibility of Visitor Center</u></p> <p>New and improved signage at the Market Mills Visitor Center would increase the center's visibility.</p> <p><u>Convenience for Visitors</u></p> <p>Development of a new trolley stop on a parcel adjacent to Market Mills would improve visitor access. Trolley termination would be extended to the Swamp Locks boat boarding dock, improving linkage for visitors.</p> <p>Together these changes would result in moderate, beneficial, long-term impacts to visitors' experiences of LNHP, by allowing development of the HCD to move forward,</p>	<p><u>Sense of Arrival</u></p> <p>Entry to the park would remain unchanged, but visitors would park in a garage and visitor center would be relocated from Market Mills to "the point." New signage would lead to garage parking on parcel 14 and would create/reinforce the NPS identity. Signage and streetscape improvements would create identifiable pedestrian path along the Lower Pawtucket Canalway from the parking facility to the new visitor center at "the point." One disadvantage is that visitors would be "back tracking" to the visitor center.</p> <p><u>Visibility of Visitor Center</u></p> <p>Overlooking the Swamp Locks at "the point," the new two-story visitor center would be immediately visible across the canal to visitors approaching from Thorndike and Dutton Streets.</p> <p><u>Convenience for Visitors</u></p> <p>Though more visible to visitors, the relocated visitor center would be further from Lowell's downtown and its other major attractions at the Boott Mill and Mogan Cultural Center.</p> <p>Extension of the trolley line would link visitors from the GTT to both the new visitor center on parcel 17 and the Swamp Locks boat boarding</p>	<p><u>Sense of Arrival</u></p> <p>Entry to the park would remain unchanged, but visitors would park in a garage. New signage would lead to garage parking and would create/reinforce the NPS identity. Signage and streetscape improvements would create identifiable pedestrian path from parking facility to the Market Mills Visitor Center.</p> <p>Because of proposed extension of the trolley line to Gallagher Transportation Terminal, this alternative would include additional signage to create a sense of arrival for visitors coming via the trolley from the commuter rail station. Coordination of the information offered at the GTT visitor orientation venue and the Swamp Locks visitor orientation venue would make clear that neither of these venues was the primary LNHP visitor center, which would remain at Market Mills.</p> <p><u>Visibility of Visitor Center</u></p> <p>New and improved signage at the Market Mills Visitor Center would increase the center's visibility and refresh the NPS identity in the Lowell setting.</p> <p><u>Convenience for Visitors</u></p> <p>Market Mills visitor center</p>

Alternative 1: Existing—No Action	Alternative 2: Existing Visitor Center & HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17	Alternative 4: (Preferred Alternative) Retain Existing Market Mills Visitor Center & Expand Visitor Contact Points & Program Facilities Through New Partnerships
Swamp Locks and surrounding canals, would risk remaining surrounded by under-utilized parcels, thereby forgoing an opportunity to improve visitor experience at LNHP.	and improving the infrastructure by which visitors would be able to enjoy existing and future resources in the area.	dock, as well as Mack Plaza, Boott Mill, and Suffolk Wannalancit Mills, improving linkage for visitors. Together these changes would result in major, beneficial, long-term impacts to visitors' experiences of LNHP, by allowing development of the HCD to move forward, improving the infrastructure by which visitors would be able to enjoy existing and future resources in the area, and creating the opportunity to design and implement a revised and improved "second generation" visitor center.	would remain at the center of the park's constellation of resources, which could now be accessed via the modified trolley system. The Mack Plaza trolley stop would be relocated to a parcel adjacent to Market Mills to improve visitor access. Extension of trolley line would link visitors from the GTT to both the Swamp Locks visitor orientation venue and the Market Mills Visitor Center. Together these changes would result in major, beneficial, long-term impacts to visitors' experiences of LNHP, by allowing development of the HCD to move forward, extending the trolley system to improve linkage between park resources and the existing commuter rail transit system, and improving NPS outreach and information distribution through creation of network of visitor orientation venues.
Park Operations			

Alternative 1: Existing—No Action	Alternative 2: Existing Visitor Center & HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17	Alternative 4: (Preferred Alternative) Retain Existing Market Mills Visitor Center & Expand Visitor Contact Points & Program Facilities Through New Partnerships
<p>Park operations would continue as they are now.</p> <p>NPS would continue to maintain and monitor surface parking lots on parcels 15 and 16.</p> <p>Trolley operations would continue to be seasonal.</p> <p>The visitor center would remain at Market Mills, requiring no changes to operations</p> <p>Therefore, this alternative would have no impact on park operations.</p>	<p>Park operations would adjust in response to the removal of surface parking on parcels 15 and 16, as maintenance and surveillance of these parking lots would no longer be required.</p> <p>Minor adjustments by trolley operation staff would be required in response to the relocation of the Mack Plaza trolley stop to a parcel adjacent to the Market Mills Visitor Center and the extension of the trolley across the Merrimack Canal to parcel 17.</p> <p>These actions would result in moderate, beneficial, long-term impacts to park operations.</p>	<p>Park operations would adjust in response to the removal of surface parking on parcels 15 and 16, as maintenance and surveillance of these parking lots would no longer be required.</p> <p>The relocation of the Market Mills Visitor Center to a new facility on parcel 17 would require temporary modifications to operations during the transition period after the new visitor center is complete and exhibits / artifacts were being relocated.</p> <p>Trolley operations would potentially need to be revised in response to the greater distance (and subsequent potential increase in demand) between the visitor center from the park's other major resources, including the Boott and Suffolk Mill complexes.</p> <p>These actions would result in moderate, beneficial, long-term impacts to park operations.</p>	<p>Park operations would adjust in response to the removal of surface parking on parcels 15 and 16, as maintenance and surveillance of these parking lots would no longer be required.</p> <p>The possible extension of trolley line to the Gallagher Transportation Terminal would have major implications for NPS operations, as this would require expansion of the trolley service from seasonal to year round operations and major capital improvements to facilitate operation during winter months.</p> <p>These actions would result in major, beneficial, long-term impacts to park operations.</p>
Capital Costs			

Alternative 1: Existing—No Action	Alternative 2: Existing Visitor Center & HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17	Alternative 4: (Preferred Alternative) Retain Existing Market Mills Visitor Center & Expand Visitor Contact Points & Program Facilities Through New Partnerships
<p>This alternative includes:</p> <ul style="list-style-type: none"> minimal signage upgrades to existing facilities. <p>There would be minor capital costs associated with this alternative.</p>	<p>This alternative includes:</p> <ul style="list-style-type: none"> signage upgrades new trolley stop adjacent to existing visitor center Extension of trolley line across the Merrimack Canal to parcel 17 (including requisite bridge) <p>There would be moderate capital costs associated with this alternative.</p>	<p>This alternative includes:</p> <ul style="list-style-type: none"> signage upgrades New Visitor Center on parcel 17 Potential risks associated with finding new tenants for newly vacated Market Mills Extension of trolley line across the Merrimack Canal to parcel 17 (including requisite bridge) <p>There would be major capital costs associated with this alternative.</p> <p>In addition, Alternative 3 maintains the possibility of extending the trolley line through the Hamilton Canal District to the Gallagher Transportation Terminal. There would be major capital costs associated with this enhancement.</p>	<p>This alternative includes:</p> <ul style="list-style-type: none"> signage upgrades Three visitor orientation venues at key park locations new trolley stop adjacent to existing visitor center Extension of trolley line across the Merrimack Canal to parcel 17 (including requisite bridge) <p>There would be moderate capital costs associated with this alternative.</p> <p>In addition, Alternative 4 maintains the possibility of extending the trolley line through the Hamilton Canal District to the Gallagher Transportation Terminal. There would be major capital costs associated with this enhancement.</p>
Operational Costs			
<p>This alternative would produce no changes to operational costs.</p>	<p>This alternative would produce negligible increases to operational costs associated with the extension of the trolley to parcel 17.</p>	<p>This alternative would produce no changes to operational costs.</p> <p>Extension of the trolley system to the GTT would produce a moderate increase to operational costs.</p>	<p>This alternative would produce minor increase to operational costs, if NPS chose to provide part-time staffing to any of the visitor orientation venues.</p> <p>Extension of the trolley system to the GTT would produce a moderate increase to operational costs.</p>

Table 10: Tally of Each Alternative’s Impacts, by Magnitude and Duration.

TOTALS			
Alternative 1: Existing—No Action	Alternative 2: Existing Visitor Center & HCD Redevelopment	Alternative 3: New Visitor Center on Parcel 17	Alternative 4: Retain Existing Market Mills Visitor Center & Expand Visitor Contact Points & Program Facilities Through New Partnerships
ADVERSE			
Minor: 0 Moderate: 2 Major: 1 Long term: 2 Short term: 0	Minor: 1 Moderate: 0 Major: 0 Long term: 0 Short term: 1	Minor: 2 Moderate: 0 Major: 0 Long term: 0 Short term: 2	Minor: 1 Moderate: 0 Major: 0 Long term: 0 Short term: 1
BENEFICIAL			
Minor: 0 Moderate: 0 Major: 0 Long term: 0 Short term: 0	Minor: 0 Moderate: 4 Major: 2 Long term: 6 Short term: 0	Minor: 0 Moderate: 1 Major: 4 Long term: 5 Short term: 0	Minor: 0 Moderate: 2 Major: 4 Long term: 6 Short term: 0

Of the four alternatives, *Alternative 2* and *Alternative 4* have the fewest and least intensive negative impacts, with one minor, short term, adverse impact each. *Alternative 2* has four moderate and two major, long term, beneficial impacts, while *Alternative 4* has two moderate and four major, long term, beneficial impacts. With the most intensive number of beneficial impacts, *Alternative 4* was selected as the preferred alternative.

5.6 Environmental Justice

Executive Order 12898: “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” requires federal agencies to consider the impact of their actions on minority and low-income populations and communities, as well as the equity of the distribution of benefits and risks of those actions.

Massachusetts has four criteria by which it determines a community’s qualification as an Environmental Justice (EJ) population, including Income, Minority Population, Foreign-born, and English Proficiency. All of Lowell National Historical Park, and nearly all of the City of Lowell is classified as containing “Environmental Justice Populations” that meet at least one, if not all four criteria, by Massachusetts’ Executive Office of Energy and Environmental Affairs.

Despite the presence of such a disproportionate level of vulnerable communities, none of the actions proposed in the alternatives would have disproportionate health or environmental effects on minorities or low-income populations or communities as defined in the Environmental Protection Agency’s Draft Environmental Justice Guideline (July 1996), “Environmental Justice.”

5.7 Unavoidable Adverse Impacts

Under all of the action alternatives, short- and long-term disturbance and vegetation loss may result from construction activities relating to trolley stop relocation, trolley extension, and construction of new parking facilities or, under *Alternative 3*, a new NPS visitor center. Implementation of appropriate erosion control and re-vegetation measures would minimize the magnitude of these effects where they occurred. Additionally, construction activities would have short-term impacts on air quality due to dust and exhaust, and would cause short-term noise disturbance. Development of a new visitor center, under *Alternative 3*, would occur on a currently vacant parcel that has already been disturbed.

To the extent that enhancements to the park and possible development of the Hamilton Canal District would increase traffic in the area, there could be minor adverse effects to local air quality. An emphasis in all alternatives on multi-modal forms of transportation, especially in *Alternatives 3 and 4*, could potentially mitigate any adverse impacts from increased vehicular traffic.

Archeological resources could be impacted by the above development activities. At this time it is not suspected that significant archeological resources are present in this previously disturbed area. However, if such resources were found before or during construction activities, the archeological resources could be excavated to salvage artifacts. Under this scenario some impacts to archeological resources would be unavoidable.

5.8 Relationship Between the Short Term Use of the Environment and Enhancement of Long Term Productivity

NPS is required to describe actions in terms of the NEPA objective to maintain and enhance the long-term productivity of the environment. All action alternatives include elements that would enhance the long-term productivity of the environment.

Relocation of car and bus surface parking lots would allow future development of the Hamilton Canal District to proceed. When complete, these previously disturbed, currently vacant parcels would be more productively utilized as mixed-use district, which would draw even more people—residents, workers, business owners, and visitors—to the core of the park near Market Mills, where NPS would have an opportunity to engage them. In this way all action alternatives would increase the park's ability to carry out its mission of resource interpretation and public outreach, though *Alternative 4*, through creation of a network of visitor orientation venues, would increase productivity in these areas most substantially.

All action alternatives include comprehensive signage improvements to identify and re-brand existing and new NPS structures, which would allow NPS to reinforce its image and visibility within the City, and potentially draw more visitors to the park.

All action alternatives continue to support linkages among resources that encourage multi-modal forms of transportation, via trolley, boat and foot. While extension of the trolley system in *Alternatives 3 and 4* is not required, it is highly recommended, and such action would facilitate an even greater level of multi-modal linkage between park resources, thereby mitigating adverse effects caused by increase vehicle traffic, and increasing the park's ability to preserve its cultural landscape resources.

5.9 Irreversible & Irrecoverable Commitment of Resources

An irreversible commitment of resources is one that cannot be changed once it occurs; and irretrievable commitment means that the resource cannot be recovered or reused.

Any loss of undiscovered underground resources in areas undergoing construction would be an irreversible and irretrievable commitment of resources. However, because of the highly disturbed nature of sites within the immediate project area there is low potential that land within it would yield significant archeological remains. Surveys, avoidance through design, documentation and other mitigation would be accomplished before any construction occurred, so these impacts would be minimized.

5.10 Environmentally Preferred Alternative

National environmental policy, as expressed in NEPA [section 101(b)], sets out guidelines for determining an environmentally preferred alternative. In this study, the Environmentally Preferred Alternative is Alternative 4, which most effectively allows LNHP to further its mission by focusing on and expanding from existing core resources related to the interpretation of the nationally significant story of the rise of manufacturing in the United States and the immigration to Lowell that supported that development

Fulfills the responsibilities of each generation as trustee of the environment for succeeding generations. All action alternatives emphasize the preservation of resources for future generations. *Alternative 4* has a high potential for beneficial impact.

Ensures for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings. *Alternative 4* takes steps to ensure a safe, healthful, productive and accessible environment in the long term, promoting contextually appropriate development on now vacant land adjacent to key locations in the park. *Alternative 4* also preserves and promotes aesthetically and culturally pleasing surroundings.

Attains the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences. Beneficial uses of the environment are high in *Alternative 4*, as it calls for a network of visitor orientation venues at existing key park locations to better orient and reach out to residents and visitors, while further interpreting those location specific resources. As development of the Hamilton Canal District is approved and proceeds, environmental degradation and other undesirable consequences will be avoided, to the maximum extent possible, through a development review process and mitigation measures.

Preserves important historic, cultural and natural aspects of our national heritage and maintains, wherever possible, an environment that supports diversity and variety of individual choice. *Alternative 4* would potentially result in high levels of beneficial impacts on cultural and historic resources because it includes the most extensive measures for interpretation of LNHP's resources for the public. This high level of resource interpretation and improved linkages with the community, visually through improved signage and potentially physically by extension of the trolley system, would result in a diversity of choices in visitor experience and would attract a wide audience.

Achieves a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities. By maintaining the existing location of the park's visitor center at Market Mills and expanding outreach through a network of visitor orientation venues, *Alternative 4* would enhance the dynamic and beneficial relationship between the Lowell National Historical Park and the City of Lowell's downtown district. Also, by encouraging expansion of the trolley system, and the outreach network, *Alternative 4* would facilitate the exploration of the park and its resources by more people, both residents and visitors.

Enhances the quality of renewable resources and approaches the maximum attainable recycling of depletable resources. *Alternative 4* demonstrates a high potential for protection of natural resources, which are “renewable resources.” Nonrenewable resources, such as historic resources including the canals, would be afforded the highest level of protection and enhancement through improved interpretation under this alternative. Also, by maintaining the visitor center in the rehabilitated Market Mills building, *Alternative 4* encourages maximum use of existing resources.

5.11 Secondary & Cumulative Impacts

The Lowell National Historical Park GMP Amendment is being conducted as part of a larger public private partnership to redevelop the Hamilton Canal District, which is an area adjacent to key park resources, including Market Mills Visitor Center, Swamp Locks, Lower Locks, and the canals themselves. Building as they do on the past successes of LNHP and the private revitalization of the downtown that followed them and in conjunction with the redevelopment of the HCD, the actions described in these alternatives have the potential to create positive, city wide, cumulative effects.

Environmental impacts from the action alternatives in this GMP Amendment may cause the following cumulative positive and/or negative impacts.

In general, actions of this plan would bring about positive impacts, including:

- Potential for redevelopment of currently vacant post-industrial land in the Hamilton Canal District into a vibrant, mixed-use residential district, including removal of surface parking lots adjacent to the Market Mills Visitor Center. This urban revitalization would most likely result in long-term, beneficial cumulative impacts to the economic health of the area.
- Increased visibility of existing NPS resources to visitors arriving by vehicle from Dutton Street and an opportunity for LNHP to refresh its image for the public, could potentially result in more visitors and a further appreciation among the public for the historic and cultural resources that exist in Lowell.
- An expansion outwards from the Market Mills Visitor Center of NPS orientation and interpretation venues—at Swamp Locks, Lower Locks, and Gallagher Transportation Terminal—to residents and new visitors who might otherwise remain unaware of the breadth of resources maintained by LNHP and other cultural institutions throughout the City. This would improve access to and potentially expand appreciation of these cultural and historic resources, resulting in a long-term, beneficial, cumulative impact.
- The potential to expand the trolley system through a redeveloped Hamilton Canal District to the Gallagher Transportation Terminal, would improve regional access to all LNHP resources and would increase the opportunities for visitors and residents to use multi-modal forms of transportation. In addition to increasing appreciation for the park’s cultural and historic resources through increase access, this would improve access and reduce traffic congestion and accompanying emissions.

Aspects of this plan may increase the potential for adverse impacts and include:

- Increased automobile traffic congestion and emissions as yearly visitors increase. This impact may be significant, but has the potential to be mitigated by multi-modal transportation opportunities provided by an expanded trolley system.

6. Consultation & Coordination

6.1 Public Involvement

In cooperation with the City of Lowell and the Lowell National Heritage Park, Trinity Financial facilitated the public master planning process, which began in December, 2007 and finished in October, 2008. The process included well attended “charrettes,” as well as listening sessions, design sessions, and working group sessions. The five major visioning sessions were held December 5, 2007; January 5, 2008; March 15, 2008; May 29, 2008; and June 16, in Lowell.

Smaller working group meetings were held throughout this period, in Lowell, to address key elements of the plan. Topics and meeting dates are listed in the table below.

<i>Working Group Topic</i>	<i>Meeting Dates</i>
Traffic	December 12, 2007 May 7, 2008 May 21, 2008 June 18, 2008 August 7, 2008
Parking Garage	May 13, 2008 May 27, 2008
Form Based Code	May 1, 2008 May 8, 2008
Downtown Connections	December 12, 2007
Gentrification	December 18, 2007
Arts and Urban Design	December 18, 2007

In addition to these visioning and workshop sessions, a public meeting to discuss alternatives for the Lowell National Historical Park General Management Plan Amendment was held from 5:30 to 7:30 at the Park’s Visitor Center on June 16, 2009.

Approximately 25 community representatives attended as well as NPS staff and representatives of Trinity Financial (TF), the designated developer for the Hamilton Canal District (HCD). The meeting which was presented by the LNHP was facilitated by ICON architecture, inc. (ICON), who has developed the work so far in cooperation with TF and NPS.

The purpose of the meeting was to present key issues and alternatives for the park’s visitor center in relationship to the HCD as well as to solicit comments from the public on issues of environmental concern that should be dealt with in the Environmental Assessment (EA) of the GMP Alternative.

The meeting agenda and a list of environmental topics to be dealt with in the EA were distributed, as well as plans of the four GMP Amendment Alternatives. The agenda and the list of EA topics are attached to these notes.

A full record of visioning meetings held between December 2007 and September 2008 as well as the June, 2009 public review of LNHP General Management Plan Amendment Alternatives the can be found in *Appendix D, Visioning and Workshop Notes*.

6.2 Agency Contacts

City of Lowell

Bernard F. Lynch, City Manager

City of Lowell

Adam Baacke, Assistant City Manager

Trinity Hamilton Canal Limited Partnership

James Keefe, President

Massachusetts State Historic Preservation Office/Massachusetts Historical Commission

Brona Simon, State Historic Preservation Officer

Consulting Party: Lowell Historic Board

Stephen Stowell, Administrator

6.3 Planning Team

Consultants

ICON architecture, inc.

Jonathan S. Lane, Principal

Caitlin Bowler, Planner

38 Chauncy Street

Boston, MA 02111

(617) 451-3333

www.iconarch.com

Lowell National Historical Park

Michael Creasey, Superintendent

Peter Aucella, Assistant Superintendent

Christina Briggs, Community Planner

Sue Andrews, Director of Communications and Collaborations

Ted Davis, Chief of Maintenance

Paul Fontaine, Facility Operations Specialist

David Blackburn, Chief of Cultural Resources and Programs

Patricia Jones, Chief of Interpretation and Education

Donna Richardson, Supervisory Park Ranger

Charles Parrott, Historic Architect

Dave Redding, Chief of Visitor Protection and Resource Management

National Park Service Advisors

Robert Macintosh, Associate Regional Director, Construction and Facility Management,
NE Region

Terrence D. Moore, Chief of Planning and Compliance, Northeast Region

Sarah Peskin, Director of Special Planning Projects, Northeast Region
Ellen Carlson, Park Planner, Northeast Region
Rachel McManus, Deputy Realty Officer, Northeast Region
Nancy Cocroft, Architect, Division of Construction Program Management, Washington
Office
Chuck Smythe, NPS Regional Ethnographer

Appendices

A list of the appendices is provided below.

Appendix A: Environmental Screening Form—DO-12

The National Environmental Policy Act (NEPA) of 1969, as amended, calls on federal agencies to consider environmental issues as part of their decision making processes. As part of this process, this screening form determined the level of environmental review for this project. The subsequent Environmental Assessment was prepared to assess the impacts of each alternative on the affected environment.

Appendix B: Agency Correspondence

The correspondence included in Appendix B relates to the Environmental Assessment process.

Appendix C: Memorandum, Potential Replication Sites for LNHP Parking

Written by Adam Baacke, Assistant City Manager and DPD Director, this memorandum summarizes the city's own review of possible options for the replication of the parking uses that are currently located on the LNHP parking lot should the lot be eliminated for more intensive development.

Appendix D: Visioning and Workshop Notes

The NEPA process was initiated in June 2009 with a public information meeting soliciting issues and concerns on preliminary program plans. Comments from this meeting were used during preparation of the Environmental Assessment (EA). These notes are included here.

Appendix E: LNHP Legislation

This appendix includes the legislation that governs LNHP.

Appendix A: Environmental Screening Form—DO-12

DO-12 APPENDIX 1
ENVIRONMENTAL SCREENING FORM
(REVISED 28 JANUARY 2002)

This form must be attached to all documents sent to the regional director's office for signature. Sections A and B should be filled out by the project initiator (may be coupled with other park project initiation forms). Sections C, D, E, and G are to be completed by the interdisciplinary team members. While you may modify this form to fit your needs, you must ensure that the form includes information detailed below and must have your modifications reviewed and approved by the regional environmental coordinator.

A. PROJECT INFORMATION

Park Name Lowell National Historical Park

Project Number _____

Project Type (Check): Cyclic Cultural Cyclic Repair/Rehab ONPS
 NRPP CRPP FLHP
 Line Item Fee Demo Concession Reimbursable
 Other (specify) GMP Amendment

Project Location Lowell, Massachusetts

Project Originator/Coordinator Christina Briggs

Project Title Lowell National Historical Park GMP Plan Amendment and Environmental Assessment

Contract 978-275-1725

Contractor Name ICON Architecture, Inc.

Administrative Record Location Lowell National Historical Park, Lowell, MA

Administrative Record Contact Christina Briggs

B. PROJECT DESCRIPTION/LOCATION *[To begin the statutory compliance file, attach to this form, maps, site visit notes, agency consultation, data, reports, categorical exclusion form (if relevant), or other relevant materials.]*

The Lowell National Historical Park is undertaking a General Management Plan Amendment that will evaluate impacts of the City's Hamilton Canal District development on Lowell National Historical Park visitor entry and orientation experience and to conceptualize a visitor orientation experience that will serve as the gateway to the Park and City.

Preliminary drawings attached? Yes No

Background info attached? Yes No

Date form initiated 9/18/2009

Anticipated compliance completion date _____

Projected advertisement/Day labor start N/A

Construction start N/A

C. RESOURCE EFFECTS TO CONSIDER (Tailor the following to meet individual park/unit project needs.)

Are any measurable impacts possible on the following physical, natural or cultural resources?	Yes	No	Data Needed to Determine
1. Geological resources – soils, bedrock, streambeds, etc.		X	
2. From geohazards		X	
3. Air quality		X	
4. Soundscapes		X	
5. Water quality or quantity		X	
6. Streamflow characteristics		X	
7. Marine or estuarine resources		X	
8. Floodplains or wetlands		X	
9. Land use, including occupancy, income, values, ownership, type of use		X	
10. Rare or unusual vegetation – old growth timber, riparian, alpine		X	
11. Species of special concern (plant or animal: state or federal listed or proposed for listing) or their habitat		X	
12. Unique ecosystems, biosphere reserves, World Heritage Sites		X	
13. Unique or important wildlife or wildlife habitat		X	
14. Unique or important fish or fish habitat		X	
15. Introduce or promote non-native species (plant or animal)		X	
16. Recreation resources, including supply, demand, visitation, activities, etc.	X		
17. Visitor experience, aesthetic resources	X		
18. Cultural resources including cultural landscapes, ethnographic resources		X	
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure		X	
20. Minority and low income populations, ethnography, size, migration patterns, etc.		X	
21. Energy resources		X	
22. Other agency or tribal land use plans or policies		X	
23. Resource, including energy, conservation potential		X	
24. Urban quality, gateway communities, etc.	X		
25. Long-term management of resources or land/resource productivity		X	
26. Other important environment resources (e.g. geothermal, paleontological resources)?		X	

¹ Measurable impacts are those that the interdisciplinary team determines to be greater than negligible by the analysis process described in DO-12 §2.9 and §4.5(G)(4) to (G)(5).

D. MANDATORY CRITERIA

Mandatory Criteria: If implemented, would the proposal:	Yes	No	Data Needed to Determine
A. Have material adverse effects on public health or safety?		X	
B. Have adverse effects on such unique characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands; floodplains; or ecologically significant or critical areas, including those listed on the National Register of Natural Landmarks?		X	
C. Have highly controversial environmental effects?		X	
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		X	
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?		X	
F. Be directly related to other actions with individually insignificant, but cumulatively significant, environmental effects?		X	
G. Have adverse effects on properties listed or eligible for listing on the National Register of Historic Places?		X	
H. Have adverse effects on species listed or proposed to be listed on the List of Endangered or Threatened Species or have adverse effects on designated Critical Habitat for these species?		X	
I. Require compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act?		X	
J. Threaten to violate a federal, state, local, or tribal law or requirement imposed for the protection of the environment?		X	
K. Involve unresolved conflicts concerning alternative uses of available resources (NEPA sec. 102(2)(E))?		X	
L. Have a disproportionate, significant adverse effect on low-income or minority populations (EO 12898)?		X	
M. Restrict access to and ceremonial use of Indian sacred sites by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 13007)?		X	
N. Contribute to the introduction, continued existence, or spread of federally listed noxious weeds (Federal Noxious Weed Control Act)?		X	
O. Contribute to the introduction, continued existence, or spread of non-native invasive species or actions that may promote the introduction, growth or expansion of the range of non-native invasive species (EO 13112)?		X	
P. Require a permit from a federal, state, or local agency to proceed, unless the agency from which the permit is required agrees that a CE is appropriate?		X	
Q. Have the potential for significant impact as indicated by a federal, state, or local agency or Indian tribe?		X	
R. Have the potential to be controversial because of disagreement over possible environmental effects?		X	
S. Have the potential to violate the NPS Organic Act by impairing park resources or values?		X	

E. OTHER INFORMATION (Please answer the following questions/provide requested information.)

Are personnel preparing this form familiar with the site? Yes No

Did personnel conduct a site visit? Yes No (If yes, attach meeting notes or additional pages noting when site visit took place, who attended, etc.)

Is the project in an approved plan such as a General Management Plan or an Implementation Plan with an accompanying environmental document? Yes No

If so, plan name Lowell National Historical Park GMP, Preservation Plan and Preservation Plan Amendment

Is the project still consistent with the approved plan? Yes No (If no, prepare plan/EA or EIS.)

Is the environmental document accurate and up-to-date? Yes No (If no, prepare plan/EA or

EIS.) FONSI ROD (Check) Date approved _____

Are there any interested or affected agencies or parties? Yes No

Did you make a diligent effort to contact them? Yes No

Has consultation with all affected agencies or tribes been completed? Yes No
(If so, attach additional pages detailing the consultation, including the name, the dates, and a summary of comments from other agencies or tribal contacts.)

Are there any connected, cumulative, or similar actions as part of the proposed action? Yes No
(If so, attach additional pages detailing the other actions.)

F. INSTRUCTIONS FOR DETERMINING APPROPRIATE NEPA PATHWAY

Complete the following tasks: conduct a site visit or ensure that staff is familiar with the site's specifics; consult with affected agencies, and/or tribes; and interested public and complete this environmental screening form.

If your action is not described in DO-12 § 3.4 or if you checked yes or identified "data needed to determine" impacts in any block in Section D (Mandatory Criteria), you must prepare an environmental assessment or environmental impact statement.

If you checked no in all blocks in Section C (resource effects to consider) and checked no in all blocks in Section D (Mandatory Criteria) and if the action is described in DO-12 § 3.4, you may proceed to the categorical exclusion form. (Appendix 2 of DO-12 Handbook)

G. INTERDISCIPLINARY TEAM SIGNATORY (All interdisciplinary team members must sign.)

By signing this form, you affirm the following: you have either completed a site visit or are familiar with the specifics of the site; you have consulted with affected agencies and tribes; and you, to the best of your knowledge, have answered the questions posed in the checklist correctly.

Interdisciplinary Team Leader Name	Field of Expertise	Date Signed
	COMMUNITY PLANNER	10/8/09
Technical Specialists Names	Field of Expertise	Date Signed
	SECTION 106 COORDINATOR	10/8/09
	HISTORIC ARCHITECT	10/09/09

H. SUPERVISORY SIGNATORY

Based on the environmental impact information contained in the statutory compliance file and in this environmental screening form, environmental documentation for the subject project is complete.

Recommended:

Compliance Specialist	Telephone Number	Date
	978-275-1721	10/08/09

Approved:

Superintendent- Acting	Telephone Number	Date
	978-275-1700	10/8/09

Appendix B: Agency Correspondence

Fish and Wildlife

September 15, 2009

To: Henry Woolsey, Program Manager (Mass. Natural Heritage and Endangered Species Program)

From: Chris Briggs, Community Planner (LNHP)

Re: Absence of federally listed species located within the study area

January 2, 2009

To: Christina Briggs, Lowell National Historical Park

From: Mr. Thomas Chapman, US Fish and Wildlife

Re: Determination of Federally Listed Species

Environmental Affairs

May 15, 2009

Certificate of the Secretary of Energy and Environmental Affairs on the Final Environmental Impact Report

February 4, 2009

From: Michael Creasy, Superintendant (LNHP)

To: Ian A. Bowles, Jr., Secretary, Executive Office of Energy and Environmental Affairs

Re: Hamilton Canal District, Lowell, MA, DEIR EEA #14240

April 29, 2008

To: Ian Bowles, Secretary (EOEA)

From: Peter J. Aucella, Assistant Superintendant (LNHP)

Re: Support for Trinity Financial's Hamilton Canal District redevelopment proposal, as submitted in ENF form for MEPA review

April 24, 2008

To: Ian Bowles, Secretary (EOEA)

From: Stephen R. Stowell, Administrator (Lowell Historic Board)

Re: Support for Trinity's Hamilton Canal District redevelopment project

Historic and Cultural Preservation

April 4, 2009

Memorandum of Agreement Submitted to the Advisory Council on Historic Preservation Pursuant to 36 CFR 800.6(a) among:

Lowell National Historical Park
City of Lowell
Trinity Hamilton Canal Limited Partnership and
Massachusetts State Historic Preservation Office / Massachusetts Historical Commission

Regarding the Hamilton Canal District Project, Lowell, Massachusetts

April 2, 2009

From: Brona Simon, State Historic Preservation Officer, Executive Director (MHC)
To: Michael Creasy, Superintendent (LNHP)
Re: Hamilton Canal District Redevelopment, Lowell; MHC# 44290, EEA# 14240

February 13, 2009

From: Raymond V. Wallace, H.P. Technician, Federal Property Management Section, Office of Federal Agency Programs (Advisory Council on Historic Preservation)
To: Michael Creasy, Superintendent (LNHP)
Re: Proposed Hamilton Canal District Redevelopment, Lowell

January 15, 2009

From: Michael Creasy, Superintendent (LNHP)
To: John M. Fowler, Executive Director, Advisory Council on Historic Preservation
Re: Proposed Memorandum of Agreement regarding the Hamilton Canal District, Lowell, MA under Section 106 NHPA

January 8, 2009

From: Brona Simon, State Historic Preservation Officer, Executive Director (MHC)
To: Michael Creasy, Superintendent (LNHP)
Re: Hamilton Canal District Redevelopment, Lowell; MHC# 44290, EEA# 14240

December 19, 2008

From: Michael Creasy, Superintendent (LNHP)
To: Brona Simon, State Historic Preservation Officer, Executive Director (MHC)
Re: Proposed Memorandum of Agreement regarding the Hamilton Canal District, Lowell, MA

December 18, 2008

From: Michael Creasy, Superintendent (LNHP)
To: Brona Simon, State Historic Preservation Officer, Executive Director (MHC)
Re: Proposed Memorandum of Agreement regarding the Hamilton Canal District, Lowell, MA

February 22, 2007

To: Adam Baacke, City of Lowell

From: Peter Aucella, Assistant Superintendant (LNHP)

Re: Historic Preservation Issues re: Trinity Financial Proposal

Appendix B
Fish and Wildlife Correspondence



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Lowell National Historical Park
67 Kirk Street
Lowell, Massachusetts 01852-1029

September 15, 2009

Mr. Henry Woolsey, Program Manager
Massachusetts Natural Heritage and Endangered Species Program
1 Rabbit Hill Road
Westborough, MA 01581

Dear Mr. Woolsey:

The Lowell National Historical Park is in the process of developing a General Management Plan Amendment that will evaluate impacts of the City's Hamilton Canal District development of Lowell National Historical Park visitor entry and orientation experience and to conceptualize a visitor orientation experience that will serve as the gateway to the Park and City. The GMP Amendment will identify and assess a range of feasible options for addressing park visitor orientation and experience. An environmental assessment is being prepared in support of the study. A map identifying the project study area is attached.

Based on a review of existing list of federally listed species provided by the US Fish & Wildlife Service's New England Field Office, there appear to be no federally listed species located within the study area in Massachusetts. In compliance with the New England Field Office's guidance for completing Section 7 consultation for federal projects, I am writing to you seeking any additional information on federal and state listed species located within our study area.

Please do not hesitate to contact me if you have any questions about the project. I can be reached by phone at (978) 275-1725 or by electronic mail at christina_briggs@nps.gov. We look forward to your response.

Sincerely,

Christina Briggs
Community Planner

Enclosure

cc: David Clark, NEPA Compliance, NER
Tom Chapman, Supervisor, USFWS New England Field Office



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087
<http://www.fws.gov/northeast/newenglandfieldoffice>

January 2, 2009

To Whom It May Concern:

This project was reviewed for the presence of federally-listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

(<http://www.fws.gov/northeast/newenglandfieldoffice/EndangeredSpec-Consultation.htm>)

Based on the information currently available, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service (Service) are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under Section 7 of the Endangered Species Act is not required.

This concludes the review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Mr. Anthony Tur at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

Appendix B
Environmental Affairs Correspondence



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Deval L. Patrick
GOVERNOR

Timothy P. Murray
LIEUTENANT GOVERNOR

Ian A. Bowles
SECRETARY

Tel: (617) 626-1000

Fax: (617) 626-1181

<http://www.mass.gov/envir>

May 15, 2009

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Hamilton Canal District
PROJECT MUNICIPALITY : Lowell
PROJECT WATERSHED : Merrimack
EEA NUMBER : 14240
PROJECT PROPONENT : Trinity Hamilton Canal Limited Partnership
DATE NOTICED IN MONITOR : April 8, 2009

As Secretary of Energy and Environmental Affairs, I hereby determine that the Final Environmental Impact Report (FEIR) submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62I) and with its implementing regulations (301 CMR 11.00).

Project Summary

The proposed project consists of a transit-oriented, mixed use development on a 13-acre site in the Hamilton Canal District. The project includes housing (affordable and market-rate), commercial and retail space, restaurants, a theatre, and art gallery, and includes new construction as well as adaptive reuse of historic buildings. Based on the comments received and on consultations during the Integrated MEPA Review and Permitting process, it is clear that the proponent has worked cooperatively with federal, state, regional, and local entities on project design and development of mitigation plans. The proponent has also conducted numerous public meetings to obtain input through neighborhood charettes.

The project has made noteworthy commitments to green building and sustainable design. The project is being designed to meet Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND) criteria. All new buildings will be LEED for New

Construction (LEED-NC) certifiable and thirty percent of the project's gross square footage will be certified at the silver level under LEED-NC. The proponent has also committed to green roofs on thirty percent of the project's roof area and to incorporate renewable energy features into the project design.

The project is located within the boundaries of three historic districts including the Lowell National Historic Park and Preservation District, the Downtown Lowell Historic District and the Locks and Canals Historic District. The site is adjacent to the National Historical Park Visitor Center and the proposed new Lowell Trial Court. The City of Lowell has partnered with the proponent in developing a Master Plan for the project, which is considered a significant next step in the redevelopment and revitalization of downtown Lowell. The project site includes historic mill buildings associated with former textile manufacturing operations. It is a brownfields site, which is currently undergoing assessment and remediation in accordance with the Massachusetts Contingency Plan (MCP).

The total development proposed, approximately 1.8 million square feet, includes 767,000 gross square feet (gsf) of housing (623 units), 54,800 gsf of retail space, 424,000 gsf of commercial spaces and 627,000 gsf of parking (1,964 surface, above and below-grade spaces including a 980-car garage). The proponent has developed an alternative plan for Parcel 10, which consists of an additional 50 units of housing, if the proposed office space for this parcel is not marketable. According to the FEIR, the project will generate approximately 10,440 new vehicle trips on an average weekday and 10,450 new vehicle trips on an average Saturday. The project is being designed as a transit-oriented development with an expanded trolley system proposed from Dutton Street to the Gallagher Transportation Terminal, located a quarter mile south of the site. The transportation component of the project also includes a new four-way intersection and reconfiguration at the Lord Overpass, pedestrian linkages and canal walks, a new Jackson Street extension to Thorndike Street, and an extension of Broadway Street across the Merrimack Canal. The project includes new bridge construction across the Hamilton and Pawtucket Canals, rehabilitation of existing canal crossings, and a temporary bridge across the Hamilton Canal.

The project involves rehabilitation of mill buildings, including restoration of the majority of the Freudenberg building (an existing building addition is proposed for demolition), and retention of historic walls remaining from other structures, primarily the Appleton Manufacturing Company buildings.

While I find the FEIR to be adequate, and acknowledge the proponent's commitment to sustainable design and its intent to develop a model project, I also note that commitments to Transportation Demand Management (TDM), bus service, and renewable energy could have been stronger. I ask that the proponent consider additional measures to maximize the potential air quality benefits based on the project's proximity to public transit and opportunities for on-site renewable energy generation. I also expect that state agencies will consider these issues as part of the project permitting and state funding process, and I note that additional mitigation beyond what was proposed in the FEIR may be required.

Phase I

In a Final Record of Decision (FROD) dated July 11, 2008, I granted a waiver allowing the proponent to proceed to permitting for Phase I of the project prior to completion of the EIR for the entire project. Phase I consists of adaptive reuse of the Appleton Mill complex for 161 housing units and the Freudenberg Building for 50,000 sf of commercial space. A temporary bridge will be constructed across the Hamilton Canal to accommodate construction vehicles during Phase I.

Permits and Jurisdiction

The project is undergoing review and requires the preparation of a mandatory EIR pursuant to Section 11.03 (6)(a)(6) of the MEPA regulations because it will result in generation of 3,000 or more new average daily trips (adt) and Section 11.03 (6)(a)(7) due to construction of 1,000 or more new parking spaces at a single location. The project is also undergoing environmental review pursuant to: Section 11.03(1)(b) (3) because it involves conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97; Section 11.03(1)(b)(7) because it requires approval in accordance with M.G.L. c. 121B of a modification to an existing urban renewal plan; Section 11.03(3)(b)(6) because it involves reconstruction of a pile-supported structure of 2,000 or more square foot (sf) base area that occupies waterways; Section 11.03(10)(b)(1) because it involves demolition of a historic structure located in a Historic District listed in the State Register of Historic Places; and Section 11.03(5)(b)(3)(c) because it involves construction of one-half or more miles of new sewer mains.

The proposed project is being reviewed under the Integrated MEPA/Permitting Review pilot process and it is subject to the EEA/MEPA Greenhouse Gas Emissions Policy and Protocol. Permits and approvals required include a Vehicular Access Permit from the Massachusetts Highway Department (MassHighway); a Chapter 91 License and Sewer Connection/Extension Permit from the Massachusetts Department of Environmental Protection (MassDEP); and approval of an Urban Renewal Plan Amendment from the Department of Housing and Community Development (DHCD). The project involves disposition of property that is under the care and control of the Department of Conservation and Recreation (DCR). The disposition requires legislative approval pursuant to Article 97 of the Massachusetts Constitution and a conveyance from the Division of Capital Assets and Management (DCAM). An approval from the National Park Service is also required since land that is the subject of the disposition was acquired by the Commonwealth using federal Land and Water Conservation Funds (LWCF). The project is subject to review by the Massachusetts Historic Commission.

There are several ownership entities involved in the project, including the City of Lowell, the Lowell National Historic Park (LNHP), DCAM and DCR, Boot Hydropower, and the proprietors of the Locks and Canals. Implementation of the project will require conveyance of parcels of land from the City to the proponent and a conveyance or lease from the LNHP for redevelopment of existing parking lots. The City of Lowell will retain ownership of streets,

bridges, and rights of way connecting the project parcels. The City will also be conveying parcels to DCAM for the proposed Trial Court.¹

The project involves state funding; transportation funding, funding associated with the Executive Office of Housing and Economic Development's Growth Districts Initiative, and potentially State Historic Tax Credits. Therefore, MEPA jurisdiction is broad and extends to all aspects of the project with the potential to cause Damage to the Environment as defined in the MEPA regulations.

REVIEW OF FINAL EIR

Article 97 Land Disposition

The project requires easements over DCR property. DCR has care and control of Commonwealth-owned property and associated volumetric air rights on the project site, including narrow strips of abutting land along certain sections of the Hamilton Canal, Pawtucket Canal, and land to the easterly side of Merrimack Canal. DCR acquired the land in 1985 using federal Land and Water Conservation Funds (LWCF). In addition to the state approvals required for the land transfer, the project requires federal approval because the land was purchased using federal funds. The EEA Division of Conservation Services submitted a request to the National Park Service (NPS) for an amendment to the LWCF agreement to allow the proposed transfer of land to the City. The amendment has recently been approved by the NPS.

The FEIR includes an update on the Article 97 land transfer process. As noted in the FEIR, there are nineteen separate parcels to be conveyed, including seven bridge crossings, which are composed of multiple parcels. Seventeen of the parcels are associated with Phase One of the project. According to the FEIR, DCR property on the project site comprises approximately 5,969 square feet. As noted in the DCR comment letter, the current land transfer plan consists of conveyance of fee interests (and other volumetric rights) from the Commonwealth to the City of Lowell. The disposition was authorized under Section 25 of Chapter 312 of the Acts of 2008.

As mitigation for the land disposition, Parcel 3, a 12,307 sf area located at the confluence of the Hamilton, Pawtucket and Merrimack Canals, has been designated for open space purposes. This parcel will be owned and maintained by the City of Lowell, and dedicated as permanent parkland open to the general public. DCR believes that this replacement land, properly designed and developed as a public park, would be acceptable to meet the requirements of the Article 97 Land Disposition Policy.

Greenhouse Gas Emissions

The FEIR included an updated GHG analysis, as required by the Scope, that uses the October 18, 2008 revised 7th edition of the MA Building Code for the Base Case analysis. The analysis uses the Tech Environmental Energy Model and compares the base case with an

¹ The proposed new Lowell Trial Court is not part of the Hamilton Canal District Project but was considered in the traffic analysis included in the Expanded Environmental Notification Form (EENF) and Draft and Final EIR.

alternative that includes some energy saving design features, and a Mitigation alternative that includes additional energy saving elements. Based on the revised analysis, the project is estimated to achieve a Carbon dioxide (CO₂) emission reduction of 20.6 percent for direct and indirect stationary sources, and 5.0 percent for mobile sources. CO₂ emissions from project-related vehicle trips were analyzed using the EPA MOBILE6.2 Mobile Source Emission Factor Model. The overall CO₂ emission reduction for the project is estimated at 19.8 percent in the FEIR. The percentage reduction of CO₂ is less in the FEIR compared with the DEIR. This is primarily due to the correct use of the most recent building code, which increases the standards for energy efficiency for the base case analysis. The FEIR estimates that the project (without mitigation) would result in a 17,767 tons per year (tpy) increase in CO₂ emissions. The mitigation measures proposed in the FEIR are estimated to reduce CO₂ emissions by 3,515 tons per year (this estimate does not include potential additional reductions that may be achieved using on-site renewable energy generation).

The FEIR evaluates several options for renewable energy use including hydro-electric power, wind power, use of canal waters for heating and cooling, and photovoltaic (PV) systems. The FEIR concludes that PV systems may offer the best alternative to generate renewable energy on-site. The FEIR includes a feasibility analysis of the economics of a PV system and concludes that an owner-installed PV system is infeasible and that the economics for a third-party vendor may be more favorable. I note comments from the MassDEP (which incorporates Department of Energy Resources (DOER) comments) suggesting that the model be rerun using updated tools, which may result in a more favorable economic projection for the owner-installed PV system. The analysis in the FEIR indicates that the project's five percent renewable energy goal could be achieved with a 500 kilowatt (kW) PV array, which would require 50,000 sf of roof area and most likely be installed in several 100-200 kW sections on different building roofs. The proponent has committed to reserve 50,000 sf of the project's flat roof area as solar-ready space for a third-party PV installation. Implementation of a 500kW PV system would further reduce CO₂ emissions by 367 tons per year (for a total reduction of 3,882 tpy).

The site was historically used for water power generation. The proponent has committed to undertake a feasibility study in association with development of Parcel 8 to evaluate the potential for generation of hydro-electric power on-site. The proponent is also investigating solar thermal systems for residential buildings, which include Parcels 2, 4, 8, 9, and 11.

The proponent has committed in the FEIR to a range of mitigation measures to reduce GHG emissions, which include building design and operation measures and TDM measures as further detailed in the mitigation section below and in the FEIR. I refer the proponent to the MassDEP and EOT comment letters for recommendations on additional measures to consider.

The FEIR is generally responsive to the Scope and to agency comment letters on the DEIR. However, for certain TDM measures, the proponent will encourage project tenants to implement them (e.g. parking cash-out, guaranteed ride home, subsidized transit passes, use of pre-tax dollars for transit and vanpool commuting). The FEIR does not address the option of providing a funding commitment or identifying the responsible party (developer, landlord or tenant) that will implement and maintain these TDM measures. I note MassDEP's concern that

without a firm commitment by the proponent, the full potential air quality benefit of the TDM program remains tentative. I strongly encourage the proponent to consider how lease agreements or other means, including a funding commitment for transit pass subsidies for future tenants, could ensure implementation and maintenance of the TDM measures. I acknowledge the proponent's commitment to advocate for formation of a Transportation Management Association (TMA) at a later stage of the project and to provide a trip reduction coordinator in the meantime. MassDEP recommends that the proponent contact MassCommute for assistance and work towards early establishment of a TMA to facilitate greater participation by future tenants and employers in the area and success of the TDM program.

The proponent has indicated that TDM requirements for tenants would be a disincentive from a marketing perspective for the project. However, the transit-oriented location of the project, together with transportation improvements and other potential incentives that the proponent may provide, could be seen as an opportunity for cost-savings by tenants and employees. I encourage the proponent to develop a Tenant Manual that would include a set of guidelines that requires and/or encourages future tenants to adopt appropriate TDM, sustainable design, and GHG emission reduction measures to the extent feasible as part of their respective lease agreements. I note that MassHighway may require additional TDM commitments, such as tenant registration with MassRides, as a condition of funding and/or permitting.

Transportation

As required by the Scope, the FEIR includes revised draft Section 61 Findings for use by the Executive Office of Transportation and Public Works (EOT) and MassHighway during permitting. The revised draft findings identify the party responsible for funding and implementing proposed mitigation. The proponent is identified in the FEIR as the party responsible for funding transportation mitigation measures. The FEIR indicates that the City of Lowell will implement roadway, intersection, and other infrastructure improvements including bridges, canalwalks, and parks. The City of Lowell or MassHighway will be implement construction of the Lord Overpass, Jackson Street Extension and Thorndike/Jackson/Dutton Street intersection and other local off-site mitigation design and construction. The proponent will be responsible for implementing TDM measures.

Since the filing of the FEIR, the City of Lowell has submitted a request to EOT for the discontinuance of a section of State Highway in Lowell. Depending on the outcome of EOT's review and decision-making, it is possible that the project may not require a MassHighway Vehicular Access Permit. If a MassHighway Permit is not required, I expect that transportation and related GHG mitigation commitments will be incorporated as conditions of state funding and in MassDEP permits.

Since the filing of the DEIR, the proponent has entered into an agreement with the National Park Service and the Lowell Plan to proceed with the next phase of the Trolley expansion planning study. The study will identify the preferred trolley route linking the historic trolley line to the Gallagher Terminal as well as additional trolley service routes throughout Lowell, and include a feasibility analysis and explore funding opportunities.

The FEIR includes additional detail on the proposed pedestrian access improvements, which include sidewalks, canalwalks, and lighting. The proponent is coordinating with the City of Lowell and the National Park Service regarding construction of the Hamilton Canalwalk and related improvements to complete the pedestrian connection to downtown Lowell. The proposed improvements will enhance walking and connectivity between the Hamilton Canal District, downtown Lowell and the Kennedy Transportation Center at the Gallagher Terminal. The pedestrian improvements proposed by the proponent are outlined in the Mitigation section below.

The FEIR includes a revised transportation study prepared in conformance with EEA/EOT guidelines for the preparation of Traffic Impact Assessment. EOT indicates that the study addresses most of the concerns raised in its comment letter on the DEIR, and the proponent has committed to a comprehensive mitigation package to address the project's traffic impacts. The proposed mitigation measures include roadway improvements, traffic signal coordination, pedestrian, bicyclist and public transit improvements, and TDM measures. The proponent should work closely with MassHighway to design and construct the infrastructure improvements and work with the EOT Public/Private Development Unit and MassRides to implement the TDM measures.

The roadway improvements include the reconfiguration of the Lord Overpass to improve traffic flow and the extension of Jackson Street to create a new four-way intersection with Fletcher Street, Thorndike Street, and Dutton Street. The FEIR includes additional revisions to the concept plan for these improvements that reduces the proposed Thorndike Street cross-section under the Lord Overpass, thereby eliminating the need to reconstruct the Middlesex Bridge. The proponent has consulted with EOT and MassHighway to discuss these changes and EOT indicates in its comment letter that, with implementation of the proposed changes, the intersections in the vicinity of the project would continue to operate at acceptable levels of service.

The DEIR and FEIR identify traffic congestion issues and propose mitigation at the Thorndike Street/Gallagher Transportation Center Driveway. The traffic capacity analysis indicates that the intersection would operate at a level-of-service F with high levels of congestion under the future No-Build condition (PM and Saturday peak hours). The traffic associated with the proposed project would exacerbate conditions. The FEIR proposes as mitigation the restriping and widening of Thorndike Street northbound approach to provide a separate left-turn lane and two through travel lanes. These improvements will require additional right-of-way along South Common Park, which requires legislative approval for disposition of Article 97 land. The proponent is in consultation with EOT and MassHighway regarding an alternative mitigation proposal that would avoid the need to acquire parkland right-of-way. I note EOT's concerns that the alternative under consideration by the proponent may not adequately mitigate the project-related impacts at this intersection. Should the ongoing conversations concerning this intersection identify the need for material changes to the mitigation proposal reflected in the FEIR, the proponent is reminded that the submission of a Notice of Project Change in accordance with 301 CMR 11.10 may be required. The proponent should consult with the MEPA office to discuss filing requirements for any changes to FEIR mitigation measures that may be proposed based on the outcome of further discussions with MassHighway.

The proposed intersection and roadway improvements will provide new connections through the district, which provide opportunities to expand bus service to the site. The proponent has been in consultation with the Lowell Regional Transit Authority (LRTA) and the Northern Middlesex Council of Governments (NMCOG) to discuss bus service including modification of the existing downtown shuttle route to redirect it through the project site providing a connection between downtown Lowell, the Hamilton Canal District, and the Gallagher Transportation Terminal. The FEIR identifies potential route modifications and the proponent has committed to work with LRTA to explore the feasibility of providing new bus stops adjacent to the site. The FEIR indicates that the LRTA has agreed to review the potential route alternatives at the appropriate stage of project development. However, as noted in EOT's comment letter, the FEIR falls short on a specific commitment to provide on-site and off-site amenities to encourage the implementation of these services. EOT will require a revised letter of commitment from the proponent to address its comments, and indicates that the proponent should make a clear commitment to provide, at a minimum, all on-site amenities such as bus shelters, bus signage, and pullouts that would be necessary to accommodate potential routes identified in the FEIR.

As noted in the comment letter from EOT, some of the proposed transportation improvements would require programming through the Transportation Improvement Program (TIP). The proponent should consult with EOT to clarify the financing of the proposed transportation improvements. Subsequent to these discussions, the proponent should submit a revised letter of commitment to the EOT Public/Private Development Unit, which will serve as the basis for MassHighway to issue a Section 61 Finding for the project.

Stormwater

The proponent has re-evaluated the stormwater management system as recommended by MassDEP and has replaced the Stormceptor 450i units proposed in the Draft EIR with larger sized units that are more appropriate for the site.

As noted in the FEIR, the project design includes several Low Impact Development (LID) features. Impervious area is reduced through use of road widths of 22 feet (in lieu of the 24 foot typically required by the City of Lowell). Other measures to reduce impervious include decentralized parking, basement level parking, and a multi-story garage. The project includes cisterns to capture and store stormwater run-off, which will be used for irrigation. Bioretention/rain gardens and green roofs will be incorporated in project design to increase storage and evapotranspiration. Implementation of certain LID techniques, such as groundwater recharge, is restricted on-site due to the presence of contaminated soils and the potential for migration of contaminants.

The FEIR includes an Inspection and Maintenance plan, which should be amended to include maintenance requirements for green roofs. As noted by MassDEP in its comment letter, the Stormwater Pollution Prevention Plan (SWPPP) has been improved. The proponent should make further modifications to the SWPPP as necessary to eliminate items that are not applicable to the project (e.g. septic system maintenance) and to ensure all appropriate site-specific measures are included. In addition, the Stormwater Checklist should include the requirement for

an illicit discharge compliance statement to comply with the Stormwater Management regulations and performance standards.

Historic Resources

The FEIR includes an update on the status of federal and state historic tax credits, historic regulatory review requirements, and the Memorandum of Agreement for the project. The proponent has submitted Historic Preservation Certification Applications (HPCAs) to the Massachusetts Historic Commission (MHC) for Buildings # 1 and 4 and the office building of the Appleton Manufacturing Company mill complex, and is awaiting completion of MHC review. The proponent intends to file HPCA applications for the Saco-Lowell Shops Building #14 in the near future.

A Memorandum of Agreement (MOA) has recently been executed between the Lowell National Historic Park (LNHP), the MHC, the proponent, and the City of Lowell, with the Lowell Historic Board as a consulting party. The MOA outlines measures to avoid, minimize or mitigate adverse project impacts. The FEIR includes a copy of the draft MOA and a final version was circulated during the FEIR review. Mitigation measures stipulated in the MOA include mill building rehabilitation, attention to the design character of replacement bridges, and a commitment that Phase One of the project will have no adverse effect on the waterwheel and raceway in the Appleton Mill building (Mill #1) and will not preclude the future reuse of these structures for hydroelectric power generation. The MOA requires that buildings are rehabilitated in accordance with the Secretary of the Interior's Standards for Rehabilitation and outlines a process for review of rehabilitation of historic resources. The MOA also outlines a process for review of proposed open space and public realm improvements and design of new construction.

Wastewater

The project will include two new sewer lift stations; the South Station, which is located along Street D within Parcel 7 and the North Station located along Street G within Parcel 11. The FEIR includes revised sewer flow calculations based on Title V estimated flows. Sewage flows to the South lift station are estimated in the FEIR at 97,369 gallons per day (gpd). The North Station will receive flows of approximately 34,403 gpd. The South Station will be constructed as part of Phase One of the project, and the North Station during Phase Two. The City of Lowell will own the two sewer lift stations after completion of the project. MassDEP has issued a Sewer Extension Permit for South Station flows and is currently reviewing the proponent's permit application for the North Station.

The FEIR proposes a portable generator, which would be stored at the Lowell Regional Wastewater Utility (LRWWU) and transported to the South lift station to provide back-up power as needed. As noted in the MassDEP comment letter, both pump stations must be equipped with backup power facilities so that operations will not be interrupted during power outages. MassDEP has indicated that it will accept the use of portable generators under certain conditions, which I expect will be included as conditions for the Sewer Extension Permit. The proponent must also comply with any requirements of the LRWWU regarding facility design, since operation and ownership of the facilities will be transferred to the LRWWU.

The project will include replacement of the existing combined sewer system with a separate sewer and stormwater drain system, which will serve to reduce inflow and infiltration (I/I) to the sewer system. The proponent has also committed to using water conserving fixtures that exceed building code requirements and is evaluating appliances on the USEPA Watersense program list that may be used in residential buildings.

Wetlands and Waterway

The proposed development parcels abut three canals, which are considered wetland resource areas and include Land Under Water (LUW) and Bank. A large portion of the site is located within wetlands buffer zone (8.5 of the 13.5-acre site). Permanent impacts include approximately 2,600 square feet associated with concrete piers to be constructed within the canal. The project will result in temporary impacts on canal walls and LUW associated with cofferdams at the bridge abutments.

The project will require Chapter 91 Licenses from MassDEP for the construction of the vehicular and pedestrian bridges throughout the site, which include:

- Bridge B2-Swamp Locks Bridge, which extends over the Lower Pawtucket Canal between the northern and southern sections of the site and will provide pedestrian sidewalks and a potential trolley way;
- Bridge B3 is a proposed crossing which will be newly constructed to serve as a major vehicular and pedestrian access between the southern and northern portions of the site over the Lower Pawtucket Canal;
- Bridge B7, the Broadway Street Bridge, is an existing crossing that will be modified by adding new sidewalks on each side and will serve as a major access to the northern portion of the site from Dutton Street, crossing over the Merrimack Canal; and
- Bridge B8, the Thorndike Street/Dutton Street and Fletcher Street/Jackson Street Extension Bridge is located at the east end of the Jackson Street Extension and provides connections at the intersection of the Hamilton and Merrimack Canals.

The Draft FIR included details on the proposed bridge work and measures to avoid adverse impacts to wetlands and waterway. The FEIR reaffirms that the proposed bridge construction and modifications will not adversely affect navigation or the stability of canal walls. Proposed mitigation measures are summarized in the mitigation section below. The FEIR also includes a draft Chapter 91 permit application for the temporary bridge required during Phase I construction.

Massachusetts Contingency Plan (MCP)

The FEIR provides additional detail on the status of MCP sites located within and near the project site. The FEIR also describes proposed plans to evaluate vapor intrusion and related indoor air quality issues, as well as groundwater sampling and testing in areas where dewatering and excavation may occur. Response actions being considered by the proponent for potential indoor air quality impacts may include remediation of soil or groundwater, the design and

implementation of engineering controls such as barriers, ventilation or building design techniques, compliance with existing Activity and Use Limitations (AULs), or the implementation of new AULs.

I refer the proponent to the MassDEP comment letter for information on response actions, deadlines and relevant MCP regulatory requirements. As noted by MassDEP, some of the remedial response actions underway are being conducted by the City of Lowell. The proponent must determine the need to assess and remediate areas beyond their property boundary in accordance with M.G.L. c 21E section 5C as further detailed in the MassDEP comment letter.

Mitigation, Permit Applications and Section 61 Findings

The FEIR includes draft permit applications for review by state agencies as part of the Integrated MEPA Review/ Permitting pilot process. The FEIR also includes draft Section 61 Findings and a chapter on mitigation outlining specific measures proposed. A summary of the mitigation proposed for the project is provided below.

Mitigation Summary

Article 97 Land Transfer

- The proponent has designated Parcel 3 (12,307 sf) as an open space parcel, which will be under the ownership and control of the City of Lowell, and developed as a public park. Parcel 3 exceeds the area of land subject to the Article 97 disposition (5,969 sf).

Air Quality and GHG Emissions

The proponent has committed to a range of mitigation measures, as outlined below and in the FEIR, which are estimated to reduce CO₂ emissions from the project-related stationary and mobile sources by an estimated 19.8 percent overall compared to the base case. This constitutes a reduction of 3,515 tons per year (tpy), from 17,767 to 14,278 tpy. In addition, the proponent is committed to a goal of 5percent renewable energy generation from on-site sources, which is projected to reduce CO₂ emissions by an additional 367 tpy.

Building Design and Operation Measures:

- Renewable energy use – in order to achieve its goal of 5 percent on-site generation, the proponent has committed to reserve a total of 50,000 sf of flat roof area as “solar-ready” space for third-party PV installation. The proponent will also consider a solar hot water system for residential buildings and will conduct a feasibility study to evaluate the potential for on-site hydro-electric generation;
- The project will use third party building commissioning;
- Increased roof and wall insulation – the project will meet the most recent building code standard, which has increased the minimum R-values for roof and wall insulation. In

addition, roof and wall insulation values will be further increased to R-38 and R-25 respectively for the 30 percent of gross building area that is NEED-NC certified;

- Green Roofs will be established on 30 percent of the project's total roof area (approximately 1.8 acres of roof area);
- Cool Roof design – reflective white roofs will be used on those buildings that do not have a green roof;
- Duct sealing – HVAC supply ducts will be sealed with mastic and insulated;
- Programmable thermostats and an energy management system will be implemented to control and track energy for the commercial buildings;
- HVAC units with an Energy Efficiency Ratio (EER) of 11.4 to 14.0 will be used;
- Shallow floor plates and light shelves will be used to maximize interior day-lighting;
- Energy-efficient windows – fibreglassed frame units for residential buildings that can achieve a value of $U = 0.35$, which is higher than building code requirements. Other buildings will meet the revised building code U-values but may not exceed the standards due to historic replication and other design constraints;
- Energy efficient interior and exterior lighting will be used;
- Environmentally-preferable building materials including recycled content, rapidly renewable and regionally manufactured materials, will be used where feasible;
- Storage and collection of recyclable materials will be incorporated into the project design;
- Construction waste management – 50 percent of all construction debris from the site will be recycled. Recycled aggregate will be used in asphalt paving and recycled fly ash in concrete paving;
- Idling reduction signage will be posted on site, and all project contractors will be required to install appropriate diesel retrofit equipment;
- Water conserving fixtures that exceed building code requirements will be used in commercial and residential buildings; and
- Rainwater will be collected from roof run-off and used for irrigation.

Transportation Demand Management (TDM)

The project's location in an area with several public transit options will reduce the need for automobile trips to and from the proposed development. The site is located near the LRTA Gallagher Transportation Terminal, the Kennedy Bus Transfer Center, and the MBTA Lowell commuter rail station. In addition to its transit-oriented location, the project will incorporate and promote a range of TDM measures.

The proponent has committed to the following measures:

- The proponent will advocate for formation of a Transportation Management Association (TMA) once the proposed Lowell Trial Court and Parcel 1 office building are constructed. In the interim, the proponent will provide a trip reduction coordinator;
- The proponent will work with regional transit authorities to modify existing bus routes to enhance access to public transportation and avail of the new roadway connections created by the project;
- The proponent will comply with the MassRideshare Regulations, 310 CMR 7.16;
- The proponent will provide a dedicated trolley route right-of-way to expand the trolley system through the project site to the Gallagher Transportation Terminal, and is engaged in a feasibility study for the expansion of the trolley route;
- Multi-use paths will be incorporated to and through the site to encourage alternative walking and biking;
- Bicycle racks will be provided in secure, sheltered areas;
- Parking demand will be minimized by charging all tenants for parking spaces. Capacity will be sized to meet but not exceed local requirements. Preferential carpool and/or vanpool parking will be provided, and at least one space for third party vendor, such as a ZipCar;
- The project will include 130 live-work units with on site amenities including laundry and fitness services to reduce the need for commuting;
- The proponent has committed to roadway and traffic signal improvements to enhance traffic flow and reduce vehicle delays;
- The proponent will encourage future tenants to implement the following TDM measures:
 - Join MassRides and offer subsidized transit passes to employees;
 - Offer employees the option of using pre-tax dollars for non single-occupant vehicle commuting costs; and
 - Provide preferential carpool parking, a guaranteed ride home, and locker/shower room facilities.

Because the project is to be constructed over a period of years, the proponent's GHG-related mitigation commitments will be implemented in phases. Prior to the commencement of construction of each building, the Proponent will submit to the MEPA Office a list of proposed mitigation measures relating to GHG emissions for that particular building. This submission will list the applicable GHG mitigation measures outlined above relating to the proposed building or propose equivalent measures that collectively will achieve the GHG emissions reductions represented in the FEIR, which may be adjusted to account for changes in building use, project design or advances in technology. The submission shall also provide an update on implementation of GHG mitigation measures for any previous phases of the project. The proponent is reminded that major changes to a project or to its proposed mitigation may require the submission of a Notice of Project Change in accordance with 301 CMR 11.10.

Provided there is no objection from the MEPA Office within 30 days of its receipt of the proponent's pre-construction submission, the measures listed shall be deemed to satisfy the GHG emissions mitigation commitments for that particular building. Following completion of construction for each building, the Proponent shall file with the MEPA Office a certification signed by an appropriate professional (e.g. engineer, architect, general contractor) indicating that all of the mitigation measures listed in the pre-construction submission to the MEPA Office for the building have been implemented. The certification should be supported by as-built plans. For those measures that are operational in nature (i.e. TDM, recycling), the Proponent should provide an updated plan identifying the measures, the schedule for implementation and how progress toward achieving these measures will be obtained. Collectively, the mitigation measures for the project as a whole shall include all of the GHG emissions mitigation measures outlined in the FEIR, or equivalent measures that are designed to achieve the overall GHG emissions reductions represented in the FEIR.

Transportation

The proponent has committed to a comprehensive mitigation program to address traffic impacts associated with the project and to enhance future traffic operations and safety in the vicinity of the site. Traffic mitigation measures proposed in the FEIR are summarized below.

Proposed Intersection Improvements

- Reconstruction of the intersection at Thorndike Street/Dutton Street/Fletcher Street/Jackson Street extension to create a four-way intersection;
- Chelmsford Street/Westford Street intersection improvements (includes restriping for separate left-turn lane and general purpose lane, and traffic signal timing and phasing adjustments);
- Thorndike Street and Gallagher Transportation Center Driveway: widening and restriping to provide separate left-turn lane into the Gallagher Transportation Center and two through travel lanes. Modification of traffic signal timing and phasing;
- Reconstruction of Revere Street and Jackson Street intersection to provide separate left-turn lane and shared through/right turn lane;
- Revere Street/Revere Street Extension and Middlesex Street intersection improvements (includes conversion of three-way intersection into a four-way intersection);

- Revere Street Extension and Appleton Street intersection (includes a new three-way, T type intersection with Appleton Street);
- South Street and Appleton Street (includes geometric and traffic control improvements);
- South Street and Middlesex Street (includes restriping for separate left-turn and right-turn lanes);
- Dutton Street and Broadway Street (includes restriping for separate left and right-turn lanes, traffic signal timing and phasing adjustments, and new sidewalks);
- Dutton Street and Market Street (includes restriping for shared left-turn/ through lane and shared right-turn/ through lanes and traffic signal timing and phasing adjustments);
- Broadway and Fletcher Street (includes restriping/geometric improvements and traffic signal timing modifications);
- Merrimack Street, Bridge Street and Prescott Street (includes restriping for two through travel lanes and traffic signal timing modifications and coordination);
- Church Street and Lawrence Street (geometric and traffic control improvements);
- Gorham Street and Lowell Connector (geometric improvements including restriping of Gorham Street to provide two northbound travel lanes and one southbound travel lane between Lowell Connector and South Street);
- Gorham Street and Highland Street/Elm Street (includes geometric improvements and traffic signal timing modifications);
- Gorham Street and South Street (includes restriping of South Street southbound approach for right-turn movements only under yield sign control);
- Rogers Street/Wamesit Street and Lawrence Street (proponent will work with City of Lowell to develop measures to improve operations at this intersection);

Phase One Roadway Improvements

- Lord Overpass Improvements (includes short-term geometric improvements and traffic signal timing modifications to accommodate Phase One traffic);
- Revere Street Bridge - new temporary bridge over the Hamilton Canal to accommodate construction vehicles and demolition and replacement of existing bridge with a permanent two-way, two-lane bridge including 8-foot sidewalks on both sides and a 14-foot right-of-way for the future trolley);
- New site roadways (includes extension of Revere Street);
- Hamilton Canalwalk/Jackson Street Sidewalk (includes coordination with City of Lowell on canalwalk to complete pedestrian connection to downtown Lowell).

Transportation Demand Management (TDM)

The proponent has committed to a range of TDM measures, which are summarized in the GHG mitigation section above.

Proposed pedestrian improvements

- Refurbishment of existing pedestrian bridges over Hamilton Canal;

- Reconstruction of existing vehicular bridge over Hamilton Canal to provide trolley and pedestrian access;
- A new pedestrian bridge over the Lower Pawtucket Canal with sidewalks on both sides;
- Reconstruction of the Swamps Lock Bridge with six-foot sidewalks on each side and a 14-foot dedicated right of way for a future trolley connection;
- Addition of new 6-foot sidewalks on both sides of the Merrimack Canal Bridge;
- Construction of a new 8-foot sidewalk on the north side of Jackson Street from Marston Street to Center Street, which will connect to the proposed Hamilton Canal Walk, as designed by the Lowell National Historic Park; and
- Construction of a new 8-foot sidewalk on the east side of Thorndike Street Northbound on-ramp from Middlesex Street to the proposed Jackson Street Extension.

Wetlands and Waterways

- The vertical clearance under Bridge B2, the Swamps Lock Bridge, will be increased to further facilitate movement of canal boats operated by the National Park Service. All other bridges will maintain existing clearances;
- Bridges will be subject to design review by historic agencies to ensure design is complementary to local historic districts and resources;
- All bridge structures will be designed to avoid adverse impacts to the stability of the canal walls;
- The project will include physical barriers to prevent debris from entering canals, erosion and sedimentation controls, and a monitoring system to measure any displacement or movement of canal walls during construction;
- Excavation will be done by hand directly behind canal walls when required and the proponent will conduct a structural analysis of the potential load on canal walls associated with construction equipment; and
- Other measures to avoid and minimize impacts include use silt booms, permanent sheeting installed as forms of abutment footings, cofferdam configuration for dewatering, and use of siltation bags and approved filters prior to discharge of water back to the canals.

Wastewater

- Use of Best Management Practices during construction of sewer system and implementation of a stormwater management plan prepared in accordance with the MassDEP Stormwater regulations and performance standards; and
- Water conservation measures will be incorporated in project design.

Historic Resources

A Memorandum of Agreement has been executed among the Lowell National Historical Park, Massachusetts Historic Commission, the City of Lowell, and the proponent, that includes measures to mitigate the project's adverse impacts on historic resources. Measures include:

- Rehabilitation of a portion of the former Appleton Manufacturing Company mill complex and a portion of the Saco-Lowell Shops Building #14 (Freudenberg Building) as well as three bridges spanning the Hamilton Canal;
- Open Space and public realm improvements to enhance the setting of historic districts;
- Design review for new construction; and
- A commitment that Phase One of the project will have no adverse effect on the waterwheel and raceway in the Appleton Mills.

Construction

- The proponent has committed to development and implementation of a Construction Management Plan (CMP), which will be prepared and submitted to the Lowell Public Works Department for review prior to the start of construction. The CMP will include detailed information on demolition, removal, construction activities and mitigation measures, construction materials, access and staging areas, traffic routing plans, and noise and dust controls.

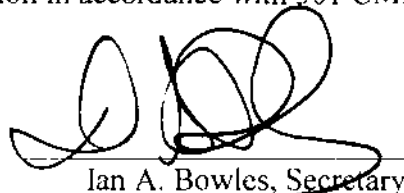
Sustainable Design

- The project will remediate and redevelop an urban brownfields site;
- The project will be designed to meet LEED-ND criteria. All new buildings will be certifiable under LEED-NC. The proponent will certify 30 percent of the overall building square footage of the project under LEED-NC;
- Low Impact Development (LID) principles will be incorporated in project design (including drought-tolerant landscaping, bioretention and rainwater harvesting, and other stormwater management techniques);
- The proponent has committed to a goal of 5 percent renewable energy use, which may include third-party photovoltaic systems, solar thermal, and hydroelectric power; and
- The proponent will implement a construction management plan, which will include recycling 50 percent of construction debris.

Conclusion

I am satisfied that the FEIR adequately and properly complies with MEPA. The project may proceed to permitting. I remind the proponent that a NPC may be required should the traffic mitigation plan change for the Thorndike Street/Gallagher Transportation Center area based on consultations with EOT/MassHighway. State agencies should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.

May 15, 2009



Ian A. Bowles, Secretary

Comments Received

5/07/09 City of Lowell, Office of the City Manager
5/08/09 Department of Environmental Protection, Northeast Regional Office
5/08/09 Northern Middlesex Council of Governments
5/11/09 Department of Conservation and Recreation
5/11/09 Executive Office of Transportation, Public/Private Development Unit

IAB/AE/ae



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Lowell National Historical Park
67 Kirk Street
Lowell, Massachusetts 01852-1029

February 4, 2009

Ian A. Bowles, Jr., Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114-2524

Attention: Aisling Eglington, MEPA Analyst

Re: Hamilton Canal District, Lowell, MA, DEIR EEA #14240

Dear Secretary Bowles:

Thank you for providing the opportunity for the Lowell National Historical Park to provide further comments on the Hamilton Canal District Project as described in the Draft EIR submitted by Trinity Hamilton Canal Limited Partnership on December 24, 2008. We wish to be recorded as very supportive of this development program.

The developers and the city government have actively involved us in all aspects of the planning for this project, from selection of the development team and the engineering consultants to be used for the infrastructure design to participating in the master plan itself. At many points along the way, we have had opportunities to guide the historic preservation aspects of this project and this input has been well received and adopted into the master plan and DEIR.

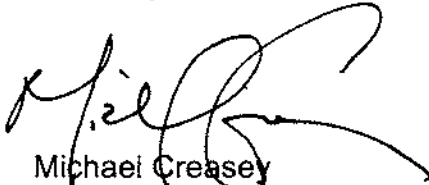
As a result, the first phase of development calls for rehabilitation of the historic Appleton Mills and the Saco-Lowell Mill to the Secretary of Interior's Standards for Historic Preservation. Numerous other concerns have been addressed and are documented in the draft Memorandum of Agreement that has been approved by the parties and by the Massachusetts Historical Commission. We are currently awaiting word from the Advisory Council on Historic Preservation as to their participation in the MOA, before that document is finalized with signatures.

The bridge information in the DEIR stimulated discussions among the local parties and generated a meeting of the developer, city, national park, historic board and engineering consultants yesterday (February 3, 2009) that provided an opportunity for the Park's concerns to be articulated. I am pleased to say that they were well received and will be incorporated into the design process ahead.

As is evident from the above, the collaboration among the local public agencies and the developers has been extraordinarily constructive and positive and continues to be so. I am therefore pleased to convey the support of the Lowell National Historical Park for this project as it is described in the DEIR.

Many thanks for the opportunity to provide these comments.

Sincerely,



Michael Creasey
Superintendent

cc: Trinity Hamilton Canal Limited Partnership
City Manager, City of Lowell
Lowell Historic Board



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Lowell National Historical Park
67 Kirk Street
Lowell, Massachusetts 01852-1029

April 29, 2008

Secretary Ian A. Bowles
Executive Office of Environmental Affairs
MEPA Office
100 Cambridge Street
Boston, MA 02114

Re: MEPA Submission for Hamilton Canal District

Dear Secretary Bowles:

This is to express the support of the Lowell National Historical Park for the Hamilton Canal District redevelopment proposal in Lowell, MA as submitted by Trinity Hamilton Canal Limited Partnership (Trinity) in ENF form for MEPA review.

The Hamilton Canal District is located in the Lowell National Historical Park and Preservation District and the Locks and Canals National Register District. The site is adjacent to the Lowell NHP Visitor Center, at the confluence of three National Engineering Landmark Canals (Hamilton, Merrimack and Pawtucket).

As the National Park Service's representative, I have had the opportunity to serve on the City's Hamilton Canal District Developer Selection Committee, which enabled me to review competing developer qualifications and redevelopment proposals for this important area. There is no question that Trinity and their design team led by Icon Architecture presented the best qualifications and plans for the area.

On February 22, 2007, during the selection process, I provided the attached letter to Trinity Financial and the City of Lowell outlining the historic preservation issues of concern to the National Park. I am pleased to say that since that time, Trinity and the City have held a series of meetings with staff of the National Park and the City's Historic Board to work out many of the historic preservation details for this area and that nearly all of the concerns listed in the February 22, 2007 letter have been addressed to our satisfaction.

The reuse of the Appleton Mills No. 1, 1A and 4 and related remnants has been a particular challenge. To their credit, the Trinity team set out to reuse as much of these structures as possible. Only recently did their structural engineering evaluations reveal that the cost of doing this made the project infeasible by a wide financial margin even if tax credits and incentive funds were available. They met with us recently to brief us on

their studies and seek our input. The National Park concurs that the condition of these properties - due to the prior owner's neglect and poor management – does necessitate replacement of the internal structure and that it is a reasonable plan to focus on the retention of the remaining historic facades on the south and west elevations as proposed in the ENF.

The loss of this historic fabric should necessitate a mitigation effort. The one element of the February 22, 2007 letter that has not been included in Trinity's ENF was the need to reconstruct the overhead bridge at Jackson Street connecting the Appleton Mills No. 4 and 5, which was demolished by the City after its acquisition under the JAM Urban Renewal Plan as part of the site assembly for the Hamilton Canal District.

The bridge had structural problems and its removal was documented to HABS/HAER standards. It is our view that an accurate reconstruction of this bridge would be appropriate mitigation for the loss of historic fabric at the Appleton the loss of other historic warehouse buildings acquired by the City under the JAM Urban Renewal Plan.

That said, we believe Trinity's proposal represents a superlative development plan and that they have brought an admirable level of community involvement to this project. We are eager to see Phase 1 commence and concur that an EIR should not be necessary given the vast level of community agreement on this plan.

Many thanks for the opportunity to provide these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter J. Aucella". The signature is fluid and cursive, with a large initial "P" and "A".

Peter J. Aucella
Assistant Superintendent for Development

Cc: Superintendent, LNHP
Trinity Hamilton Canal Limited Partnership
City of Lowell



LOWELL HISTORIC BOARD

City of Lowell · J.F.K. Civic Center
Fifty Arcand Drive · Lowell, Massachusetts 01852
phone (978) 970-4270 · fax (978) 970-4262

www.historiclowell.net



April 24, 2008

Ian A. Bowles, Secretary
Executive Office of Environmental Affairs
MEPA Office
100 Cambridge Street
Boston, MA 02114

Dear Secretary Bowles:

As the City of Lowell's historic preservation agency, this office has been working closely with Trinity Hamilton Canal Limited Partnership over the past several months on the development of their master plan for the Hamilton Canal District (HCD). The HCD presents exciting historic preservation and new development opportunities in an area that traditionally has not been a magnet for new development. Trinity's plans are ambitious and we are excited to be working with them on this important project.

The HCD area is within the boundaries of the Lowell National Historical Park & Preservation District, which is listed on the National and State Registers of Historic Places. It is also within the Downtown Lowell Historic District, a local historic and architectural review district under the jurisdiction of this agency. Finally, portions of it including the various canals and mill structures are in the Locks and Canals Historic District which is a National Historic Landmark, the country's highest level of historic designation.

Not only will Trinity's project rehabilitate remaining nationally significant historic structures, some of which are in an extremely distressed condition, but it will also address blighting influences that are presently a detriment to historic preservation and economic development efforts in the immediate vicinity. We look forward to working with you, your staff, and Trinity's team on the review and approval of this important project through the various required processes.

If you have any questions or if this office can be of assistance, please do not hesitate to call me at (978) 446-7200 x1443.

Sincerely,

Stephen R. Stowell
Administrator

cc: Senator Steven C. Panagiotakos
Representative Thomas A. Golden, Jr.
Representative Kevin J. Murphy
Representative David M. Nangle

Appendix B
Historic and Cultural Preservation Correspondence

RECEIVED

MAR 17 2009

MASS. HIST. COMM

**MEMORANDUM OF AGREEMENT
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 CFR 800.6(a)**

AMONG

**LOWELL NATIONAL HISTORICAL PARK
CITY OF LOWELL**

TRINITY HAMILTON CANAL LIMITED PARTNERSHIP

AND

MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICE/MASSACHUSETTS HISTORICAL COMMISSION

REGARDING THE

**HAMILTON CANAL DISTRICT PROJECT
LOWELL, MASSACHUSETTS**

This Memorandum of Agreement is entered into by and among the Massachusetts State Historic Preservation Officer/Massachusetts Historical Commission ("Massachusetts SHPO"), the National Park Service Lowell National Historical Park ("LNHP"), the City of Lowell ("City") and Trinity Hamilton Canal Limited Partnership ("Proponent").

WHEREAS, the Proponent proposes to develop the Hamilton Canal District ("Project"), which will revitalize 13 acres of underutilized land located in Lowell, Massachusetts into a mixed-use development featuring housing, commercial space, restaurants, and retail uses and will enliven the canals as the central component of the development and will provide new public access across the canals; and

WHEREAS, the Project encompasses portions of the Lowell Canal System including the Merrimack, Hamilton, and Pawtucket Canals and associated gates, control structures, bridges, and other canal related resources, which are contributing historic properties to the Locks and Canals Historic District, which is listed on the National Register of Historic Places and is a National Historic Landmark, the Lowell National Historical Park and Preservation District, which is listed on the National Register of Historic Places, and the Downtown Lowell Historic District, a local historic district listed in the State Register of Historic Places; and

WHEREAS, the Project encompasses a portion of the former Appleton Manufacturing Company mill complex and the Saco-Lowell Shops Building #14, which are contributing historic properties to the Locks and Canals Historic District, which is listed on the National Register of Historic Places and is a National Historic Landmark, the Lowell National Historical Park and Preservation District, which is listed on the National Register of Historic Places, and the Downtown Lowell Historic District, a local historic district listed in the State Register of Historic Places; and

WHEREAS, the Proponent proposes to rehabilitate a portion of the former Appleton Manufacturing Company mill complex (Building Nos. 1 and 4 and the Office Building) and a portion of the Saco-Lowell Shops Building #14 in accordance with the Secretary of the Interior's Standards for Rehabilitation; and

WHEREAS, the Proponent seeks to obtain the necessary financing for the rehabilitation for the proposed rehabilitation of a portion of the Appleton Manufacturing Company mill complex and the Saco-Lowell Shops Building #14; and

WHEREAS, the Project includes historic preservation, new construction, and open space and public realm improvements, including construction of multiple new mixed use buildings, bridges, parking structures and infrastructure, including parks, surface parking, streets, sidewalks, canal walks, pumping stations, electrical transformers and other above and below ground utilities and infrastructure; and

WHEREAS, funding from a variety of state and federal government sources may assist in development of aspects of this Project, and,

WHEREAS, the Proponent will have the right to undertake the maintenance of a portion of the public realm and open space improvements at its sole discretion; and

WHEREAS, the Project may require use of NPS land via ground lease, easement or acquisition to enable the development of the Project; and

WHEREAS, the Massachusetts SHPO and the Proponent acknowledge that LNHP has made a determination that portions of the Project will have certain adverse effects upon the historic properties, and therefore LNHP and the Proponent have consulted with Massachusetts SHPO pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and pursuant to 950 CMR 71.00 et seq, regulations implementing Massachusetts General Laws Chapter 9, Sections 26 through 27C; and

WHEREAS, Public Law 95-290, Title I, Sec 102 (Section 410cc-12), an act establishing the LNHP, contains the provision that "No Federal entity may issue any license or permit to any person to conduct an activity within the park or preservation district unless such entity determines that the proposed activity will be conducted in a manner consistent with the standards and criteria established pursuant to [this law] and will not have an adverse effect on the resources of the park or preservation district" and

WHEREAS, the Massachusetts SHPO and the Proponent acknowledge that LNHP has made a determination that certain elements of the Project will have an adverse effect upon the historic properties and that such adverse effects can be mitigated, and

WHEREAS, LNHP has identified adverse effects to historic resources to include:

- a. installation of a roadway bridge through the Dye House wall remnant of the Appleton Mill;
- b. replacement of the historic railroad and street bridges into the Saco-Lowell (Freudenberg) site over the Hamilton Canal;
- c. possible visual and contextual impacts on the Swamp Locks complex from the proposed high-rise building; and
- d. additional impacts on the Pawtucket Canal and related canal walls as a result of the creation of an extended Jackson Street roadway; and

WHEREAS, LNHP, the Proponent, and the Massachusetts SHPO have consulted and determined there are no feasible and prudent alternatives to the proposed Project, and

WHEREAS, the Project is located within the Downtown Lowell Historic District, an architectural and historic district under the design review, approval, and permitting authority of the Lowell Historic Board ("LHB"), pursuant to Chapter 566 Acts of 1983, and

WHEREAS, LNHP and the Proponent acknowledge that the LHB has ongoing review and approval authority on all proposed work on the historic resources, open space and public realm improvements, and new construction within the Project area; and

WHEREAS, the City has drafted and will be adopting a Form Based Zoning Code to regulate the buildings, open space, and public infrastructure within the Hamilton Canal District; and

WHEREAS, the LNHP and the LHB have reviewed drafts of the Form Based Zoning Code and the LHB will be amending its existing regulations and guidelines by adopting the Form Based Zoning Code adopted by the City; and

WHEREAS, the LHB has been invited to participate in the consultation and to concur to this Memorandum of Agreement; and

WHEREAS, the City of Lowell ("City") has assembled the development parcels that constitute the Project and has taken certain actions to further the goals of the Project and will continue to do so during the term of the Project.

NOW THEREFORE, LNHP, the Proponent, and the Massachusetts SHPO agree that the undertaking of the Project shall be implemented in accordance with the following stipulations in order to take into account the effect of the Project on historic properties.

STIPULATIONS

LNHP and the Proponent shall insure that the following measures are carried out in consultation with the LHB and the Massachusetts SHPO:

1. REHABILITATION OF HISTORIC RESOURCES

The Project includes the proposed rehabilitation of a portion of the former Appleton Manufacturing Company mill complex (Building Nos. 1 and 4 and the Office Building) and a portion of the Saco-Lowell Shops Building #14, as well as three bridges (loading dock bridge, vehicular bridge, and overhead stucco-clad pedestrian bridge) spanning the Hamilton Canal. The LNHP and Proponent will ensure that the buildings and bridges will be rehabilitated in accordance with the Secretary of the Interior's Standards for Rehabilitation.

The submittal to the Massachusetts SHPO for their review of the rehabilitation component of the Project will be in the form of a Historic Preservation Certification Application, Parts 1 and 2 for Building Nos. 1 and 4 and the Office Building within the Appleton Manufacturing Company mill complex and the Saco-Lowell Shops Building #14.

Review and approval of the proposed rehabilitation portions of the project will be undertaken by the LHB. The submittal to the LHB will be in the form of a submittal of a series of Historic Permit applications for specific Project elements. The Proponent will provide a copy of all proposed work on historic resources to the Massachusetts SHPO for its records. A copy of the LHB's approval letters will be provided to the Massachusetts SHPO.

2. OPEN SPACE AND PUBLIC REALM IMPROVEMENTS

The Proponent will undertake landscaping, park, and infrastructure improvements to enhance the historic districts, including: re-creation of a mill yard framed by residential housing, retention and repair of the remnant north elevations of the Appleton Manufacturing Company Mill No. 3 and the Dye House to be stabilized and maintained in place along the southern wall of the Pawtucket Canal, creation a right-of-way for a future trolley track connection to the Gallagher Terminal, and setting aside of land for three new district parks.

Review and approval of the proposed open space and public realm improvements within the Project area will be undertaken by the LHB. The submittal to the LHB will be in the form of a submittal of a series of Historic Permit applications for specific Project elements. The Proponent will provide a copy of all proposed work on open space and public realm portions of the Project to the Massachusetts SHPO for its records. A copy of the LHB's approval letters will be provided to the Massachusetts SHPO.

3. DESIGN REVIEW OF NEW CONSTRUCTION

Review and approval of proposed new construction within the Project area will be undertaken by the LHB. The submittal to the LHB will be in the form of a series of Historic Permit applications for specific Project elements. The Proponent will provide a copy of all proposed new construction to the Massachusetts SHPO for its records. A copy of the LHB's approval letters will be provided to the Massachusetts SHPO.

4. MITIGATION REQUIREMENTS

For those adverse effects already identified as applicable to this Project, the following mitigation will be implemented by the Project Proponent and the City:

- a) Attention to the design character of the replacement bridges from Jackson Street into the Saco-Lowell (Freudenberg) site and for the roadway bridge over the Pawtucket Canal through the Appleton Mills Dye House wall remnant.
- b) The rehabilitation of the Appleton Manufacturing Company mill complex (Building Nos. 1 and 4 and the Office Building) including the restoration of the existing overhead pedestrian bridge and the two pedestrian bridges from the Appleton Mills to Jackson Street. This restoration will not preclude the future ability for the restoration of the previously removed overhead bridge to be reattached to the Appleton Mills, should the funding and permitting be attained by the City and the LNHP.
- c) The rehabilitation of the Saco-Lowell Shops Building #14.
- d) The retention and repair of the remnant north elevations of the Appleton Manufacturing Company Mill No. 3 and the Dye House to be stabilized and maintained in place along the southern wall of the Pawtucket Canal.
- e) The commitment that Phase I of the project will have no adverse effect on the waterwheel and raceway in the eastern end/rear ell of Mill No. 1 of the Appleton Mills. Phase I activities will not result in the demolition of the raceway and waterwheel in the eastern end/rear ell of Mill No 1 of the Appleton Mills and will not preclude the future reuse of these structures for hydroelectric power generation.

5. PROJECT CHANGES

In the course of ongoing project design reviews, should any additional adverse effects become apparent, LNHP and the Proponent will consult with Massachusetts SHPO pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and pursuant to 950 CMR 71.00 et seq, regulations implementing Massachusetts General Laws Chapter 9, Sections 26 through 27C.

If material changes in elements of the Project design, which the LHB staff have reviewed and approved on are proposed, the LHB staff shall be afforded the opportunity to review and approval on the proposed changes, pursuant to Chapter 566 Acts of 1983.

6. DISPUTE RESOLUTION

Should the Massachusetts SHPO object within thirty (30) days to any actions proposed or carried out pursuant to this agreement, LNHP shall consult with the Massachusetts SHPO to resolve the objection. If LNHP determines that the objection cannot be resolved, LNHP shall forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation ("Council"). Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

- a. provide LNHP with recommendations, which LNHP will take into account in reaching a final decision regarding the dispute; or
- b. notify LNHP that it will comment pursuant to 36 CFR 800.6(b), and proceed to comment. Any recommendations or comment provided by the Council will be understood to pertain only to the subject of the dispute; LNHP responsibility to carry out all actions under the Memorandum of Agreement that are not subject to the dispute will remain unchanged.

At any time during the implementation of the measures stipulated in this agreement, should any objection regarding the subject matter of this agreement be raised by a signatory to this agreement, LNHP shall take the objection into account and consult as needed with the Massachusetts SHPO or the Council to resolve the objection.

Nothing contained in this document shall supersede the statutory authority of the LHB pursuant to Chapter 566 Acts of 1983.

7. MEMORANDUM OF AGREEMENT AMENDMENTS

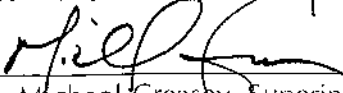
The language of the stipulations in this Memorandum of Agreement may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the Council.

8. DURATION

This Memorandum of Agreement will remain in force until such as time as the Project is completed.

Execution of the Memorandum of Agreement by LNHP, the City, the Massachusetts SHPO, and the Proponent, its subsequent filing with the Council, and the implementation of its terms, shall establish that LNHP has taken into account the effects of the Project on historic properties.

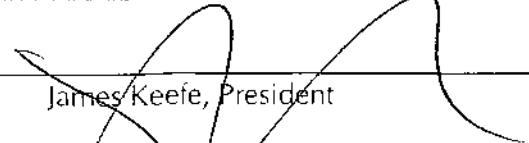
LOWELL NATIONAL HISTORICAL PARK

By:  Date: 3 March 2009
Michael Creasey, Superintendent

CITY OF LOWELL

By:  Date: 3/5/09
Bernard F. Lynch, City Manager

TRINITY HAMILTON CANAL LIMITED PARTNERSHIP

By:  Date: 3/9/09
James Keefe, President

MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICE/MASSACHUSETTS HISTORICAL COMMISSION

By:  Date: 4/2/09
Brona Simon, State Historic Preservation Officer

CONSULTING PARTY: LOWELL HISTORIC BOARD

By:  Date: 3/4/09
Stephen Stowell, Administrator



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

April 2, 2009

Michael Creasey
Superintendent
Lowell National Historical Park
67 Kirk Street
Lowell, MA 01852

RE: Hamilton Canal District Redevelopment, Lowell; MHC# 44290; EEA#14240

Dear Mr. Creasy:

Thank you for submitting six original Memoranda of Agreement (MOA's) to the Massachusetts Historical Commission, office of the State Historic Preservation Officer, which were received on March 17, 2009.

I have reviewed and have signed all six MOA's and have retained one MOA for our files.

Enclosed please find five, fully-signed MOA's for your distribution to the other signatories and the ACHP.

MHC looks forward to consulting with you in the future regarding the implementation of the stipulations that are specified in the MOA.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800) and Massachusetts General Laws, Chapter 9, Section 26-27C, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71.00) and MEPA. Please feel free to contact me if you have any questions.

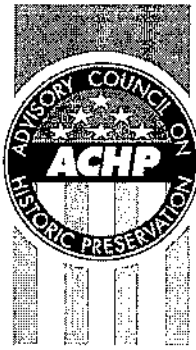
Sincerely,

A handwritten signature in cursive script that reads "Brona Simon".

Brona Simon
State Historic Preservation Officer
Executive Director
Massachusetts Historical Commission

Enclosures

xc w/o encl: Steve Stowell, Lowell Historic Board
Peter Aucella, Lowell National Historical Park
Adam Baacke, Division of Planning and Development, City of Lowell
Jim Keefe, Trinity Financial
Maureen Cavanaugh, Epsilon Associates
David Slagle, DEP (Proj # W09-2596 and W09-2597)
Bill Gage, MEPA Unit (EEA #14240)



Preserving America's Heritage

February 13, 2009

Mr. Michael Creasey
Superintendent
National Park Service
Lowell National Historical Park
67 Kirk Street
Lowell, MA 01852-1029

***Ref: Proposed Hamilton Canal District Redevelopment Project
Lowell, Massachusetts***

Dear Mr. Creasey:

The Advisory Council on Historic Preservation (ACHP) recently received your notification and supporting documentation regarding the adverse effects of the referenced project on properties listed on and eligible for listing on the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Massachusetts SHPO and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with the opportunity to review this undertaking. If you have any questions, please contact Kelly Yasaitis Fanizzo at 202-606-8583, or via email at kfanizzo@achp.gov.

Sincerely,

Raymond V. Wallace
Historic Preservation Technician
Federal Property Management Section
Office of Federal Agency Programs



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Lowell National Historical Park
67 Kirk Street
Lowell, Massachusetts 01852-1029

January 15, 2009

John M. Fowler, Executive Director
Advisory Council on Historic Preservation
Old Post Office Building, Suite 803
Washington, DC 20004

Re: Proposed Memorandum of Agreement regarding the Hamilton Canal District,
Lowell, MA under Section 106 NHPA

Dear Mr. Fowler:

In accordance with regulations contained in 36 CFR 800, the Lowell National Historical Park has determined there will be an "adverse effect" from the proposed Hamilton Canal District Project in Lowell, MA and by this letter is submitting to you a proposed Memorandum of Agreement and an invitation for the Advisory Council to participate in consultation.

The HCD is the largest single redevelopment project in the city Lowell's history. It involves the reuse of 13 acres of land owned by the City, now under agreement with Trinity Financial Co. of Boston. The master plan for the project envisions over 700 residential units, between 330,000 and 390,000 sq. ft. of commercial space, 50,000 sq. ft. of retail, 1700 parking spaces and new roads, bridges, canalside walkways and parks. Total build-out of this ten year plan is anticipated to be valued at \$800 million.

The Project encompasses portions of the Lowell Canal System including the Merrimack, Hamilton, and Pawtucket Canals and associated gates, control structures, bridges, and other canal related resources, which are contributing historic properties to the Locks and Canals Historic District, which is listed on the National Register of Historic Places and is a National Historic Landmark, the Lowell National Historical Park and Preservation District, which is listed on the National Register of Historic Places, and the Downtown Lowell Historic District, a local historic district listed in the State Register of Historic Places.

The Project also includes the remaining portions of the former Appleton Manufacturing Company mill complex and the Saco-Lowell Shops Building #14, which are contributing historic properties to the Locks and Canals Historic District, which is listed on the National Register of Historic Places and is a National Historic Landmark, the Lowell National Historical Park and Preservation District, which is listed on the National Register of Historic Places, and the Downtown Lowell Historic District, a local historic district listed in the State Register of Historic Places. The developers are proposing a full rehabilitation of these resources in accordance with the Secretary of Interior's Standards for Historic Preservation.

We at Lowell National Historical Park have played an active role in this process from its outset, including participation on their developer selection committee in 2006 and 2007, in the Master Planning process during 2007 and 2008 and, most recently, in the selection of designers for planned infrastructure projects. Park staff will participate in the design review process for each proposed building project, under the auspices of the Lowell Historic Board, the city's architectural review agency.

The Project will undoubtedly involve significant state and federal financial support. A Draft EIR is anticipated to be submitted to the state shortly by the developers. This proposed MOA has been the subject of discussions between the City's Division of Planning and Development, the Lowell Historic Board, the Lowell National Historical Park and Trinity Financial Corp. for some months, leading to the proposed draft agreement enclosed here. We are pleased with the developer's commitment to reuse the remaining historic mills in this area and are eager to see redevelopment efforts commence as soon as Spring 2009. Notwithstanding some "adverse effects," this will be a very beneficial project for the community and the National Park.

The proposed MOA contains an ACHP signature line and we would be glad to have your advice and input should the Advisory Council choose to consult on this document. Should the Advisory Council decline to participate, we will proceed to implement this agreement as presently stated. We look forward to your early reply.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Creasey", with a long horizontal flourish extending to the right.

Michael Creasey
Superintendent

Cc: James Keefe, Trinity Financial Co.
Bernie Lynch, City Manager
Adam Baacke, Asst. City Manager
Stephen Stowell, Lowell Historic Board
Peter Aucella, Lowell National Historical Park
Charles Parrott, Lowell National Historical Park
Ann Lattinville, Massachusetts Historical Commission



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

January 8, 2009

Michael Creasey
Superintendent
Lowell National Historical Park
67 Kirk Street
Lowell, MA 01852

RE: Hamilton Canal District Redevelopment, Lowell; MHC# 44290; EEA#14240

Dear Mr. Creasy:

The Massachusetts Historical Commission is in receipt of your effect determination for the above referenced project. The MHC concurs with your determination that the proposed redevelopment of the Hamilton Canal District area will have an adverse effect on historic properties.

The MHC also concurs with your determination that the adverse effects are unavoidable given the project site conditions and the complexities of the schedule and implementation of the proposed project and that these adverse effects can be adequately minimized and mitigated by the proposed stipulations in the draft Memorandum of Agreement (MOA).


The MHC has reviewed your proposed draft MOA and has no substantive changes to recommend. The MHC recommends that you submit your effect determination to the Advisory Council on Historic Preservation, as required by the regulations at 36 CFR 800. If the Advisory Council declines to participate in consultation, the MHC recommends that you add the following language to the MOA as a whereas clause: "WHEREAS, in accordance with 36 C.F.R. § 800.6(a)(1), LNHP has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and"

If the Advisory Council declines to participate, you do not need to include the acceptance line for the Advisory Council on the signature page and MHC recommends that this be deleted.

MHC recommends that you obtain the signatures of the other consulting parties and then send the document to the MHC for signature.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). If you have any questions, please feel free to contact me.

Sincerely,



Brona Simon
State Historic Preservation Officer
Executive Director
Massachusetts Historical Commission

xc: Peter Aucella, LNHP
Steve Stowell, LHB
Jim Keefe, Trinity Financial
Maureen Cavanaugh, Epsilon Associates
Bill Gage, MEPA Unit



United States Department of the Interior

NATIONAL PARK SERVICE
Lowell National Historical Park
67 Kirk Street
Lowell, Massachusetts 01852-1029

IN REPLY REFER TO:

December 19, 2008

Ms. Brona Simon, Executive Director
Massachusetts Historical Commission
Massachusetts Archives Building
220 Morrissey Boulevard
Boston, Massachusetts 02125

Re: Proposed Memorandum of Agreement re: Hamilton Canal District, Lowell, MA

Dear Brona:

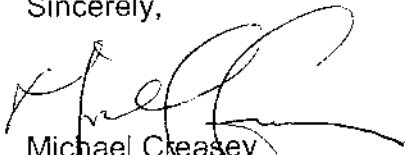
This is to follow up my letter of December 18, 2008 regarding the above-referenced project.

I wish to amend that communication to state that the Lowell National Historical Park has determined that the proposed project, as described in the Master Plan provided to you, will have an "adverse effect", as defined in 36 CFR 800.4, on the Locks and Canals Historic District and the Lowell National Historical Park and Preservation District, both of which are listed on the National Register of Historic Places.

In accordance with 36 CFR 800.5, we have consulted with the parties involved in the project – the City of Lowell, the Lowell Historic Board, Trinity Financial LLC and the Massachusetts Historical Commission – to develop the proposed MOA. We have greatly benefited from consultation with your staff at an on-site meeting on July 8, 2008 and thereafter.

In accordance with 36 CFR 800.6, the Park Service has determined to accept the adverse effects subject to the mitigation described in the MOA submitted to the SHPO on December 18, 2008.

Sincerely,



Michael Creasey
Superintendent

Cc: James Keefe, Trinity Financial Co.
Bernie Lynch, City Manager
Adam Baacke, Asst. City Manager
Stephen Stowell, Lowell Historic Board
Peter Aucella, Lowell National Historical Park
Charles Parrott, Lowell National Historical Park
Ann Lattinville, Massachusetts Historical Commission



United States Department of the Interior

NATIONAL PARK SERVICE

Lowell National Historical Park

67 Kirk Street

Lowell, Massachusetts 01852-1029

IN REPLY REFER TO:

December 18, 2008

Ms. Brona Simon, Executive Director
Massachusetts Historical Commission
Massachusetts Archives Building
220 Morrissey Boulevard
Boston, Massachusetts 02125

Re: Proposed Memorandum of Agreement regarding the Hamilton Canal District,
Lowell, MA

Dear Brona:

This is to submit to you a proposed Memorandum of Agreement regarding the Hamilton Canal District (HCD) in Lowell, MA.

The HCD is the largest single redevelopment project in Lowell's history. It involves the reuse of 13 acres of land owned by the City, now under agreement with Trinity Financial Co. of Boston. The master plan for the project envisions over 700 residential units, between 330,000 and 390,000 sq. ft. of commercial space, 50,000 sq. ft. of retail, 1700 parking spaces and new roads, bridges, canalside walkways and parks. Total build-out of this ten year plan is anticipated to be valued at \$800 million.

The Project encompasses portions of the Lowell Canal System including the Merrimack, Hamilton, and Pawtucket Canals and associated gates, control structures, bridges, and other canal related resources, which are contributing historic properties to the Locks and Canals Historic District, which is listed on the National Register of Historic Places and is a National Historic Landmark, the Lowell National Historical Park and Preservation District, which is listed on the National Register of Historic Places, and the Downtown Lowell Historic District, a local historic district listed in the State Register of Historic Places.

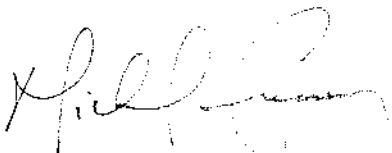
The Project also includes the remaining portions of the former Appleton Manufacturing Company mill complex and the Saco-Lowell Shops Building #14, which are contributing historic properties to the Locks and Canals Historic District, which is listed on the National Register of Historic Places and is a National Historic Landmark, the Lowell National Historical Park and Preservation District, which is listed on the National Register of Historic Places, and the Downtown Lowell Historic District, a local historic district listed in the State Register of Historic Places. The developers are proposing a full rehabilitation of these resources in accordance with the Secretary of Interior's Standards for Historic Preservation.

We at Lowell National Historical Park have played an active role in this process from its outset. The City invited me to serve on their developer selection committee in 2006 and 2007 and has involved me and other National Park staff in the Master Planning process during 2007 and 2008. I currently represent the Park on the City's Designer Selection Committee, which will select the designers for all of the public infrastructure projects in the project area. Park Architect Charles Parrott and I also play major roles on the Lowell Historic Board, the city's architectural review agency, which will have jurisdiction over the design of each of the individual buildings and planned infrastructure projects.

The Project will undoubtedly involve significant state and federal financial support. A Draft EIR is anticipated to be submitted to the state shortly by the developers. This proposed MOA has been the subject of discussions between the City's Division of Planning and Development, the Lowell Historic Board, the Lowell National Historical Park and Trinity Financial Corp. for some months, leading to the proposed draft agreement enclosed here. We are pleased with the developer's commitment to reuse the remaining historic mills in this area and are eager to see redevelopment efforts commence as soon as Spring 2009. We are also pleased with the active role the City has provided to us in the infrastructure design and construction phases of the project.

The quality of the historic rehabilitation work and new construction in the HCD is of utmost importance to us. We believe that this will be an excellent project and urge your review and approval of this proposal. My staff and I stand ready to meet with you and all of the proposed signatories as needed to move this proposed agreement toward final approval.

Sincerely,



Michael Creasey
Superintendent

Cc: James Keefe, Trinity Financial Co.
Bernie Lynch, City Manager
Adam Baacke, Asst. City Manager
Stephen Stowell, Lowell Historic Board
Peter Aucella, Lowell National Historical Park
Charles Parrott, Lowell National Historical Park
Ann Lattinville, Massachusetts Historical Commission



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Lowell National Historical Park
67 Kirk Street
Lowell, Massachusetts 01852-1029

February 22, 2007

To: Adam Baacke, City of Lowell

From: Peter Aucella, Assistant Superintendent

Re: Historic Preservation Issues re: Trinity Financial Proposal

With the receipt of the developer proposals for the Hamilton Canal District, it appears to be necessary for the National Park Service to provide more detailed guidance as to the historic preservation issues that will need to be addressed as part of any development program. Given the need to apply for state and federal grants in support of the infrastructure costs, we will need to see a project concept that enables us to endorse individual grant applications as well as the overall project. We believe that we can best help this process move forward by providing this guidance more clearly.

I want to preface these comments by noting that the Trinity Financial proposal contains many concepts we can work with:

- 1) The site for proposed the new Judicial Center makes great sense, giving it civic prominence and arterial roadway accessibility, while providing a good buffer from the roadway for the rest of the projects with their likely more privately focused uses.
- 2) The proposal generally presents a very appropriate level of urban density and appropriate building types and uses and architectural style. While we recommend some elements be adjusted or relocated, there is a lot to work with in this proposal.

There are a number of major concerns from the historic preservation and National Park perspective:

- 1) The expectation that the NPS parking lot can be used as a site for Nanotechnology at the front end of this development program is highly unlikely. There are numerous legal and procedural issues in making this land available and we are glad to work with the developers on a long-term

plan. A condition will be that the NPS parking needs are replaced in an acceptable manner and location as part of implementation of any new use.

- 2) The same applies to redevelopment of the Bus Parking Lot. A replacement location would need to be provided before reuse of this property could be agreed upon. The same approval process for a land transfer as for the Visitor Center Parking Lot would apply. We do think it would be desirable to remove both the automobile and bus parking from the immediate canal edge in any redevelopment plan that would include the federally owned property.
- 3) Appleton Mills is the most important preservation element of the Hamilton Canal District, especially given the likely demolition of the warehouses and stable building (Geoffroy's). Rehabilitation of the remaining mill buildings was a goal of the JAM Master Plan. However, replacement of the remaining floor areas of the buildings may be justified given their current condition. But the Park Service expects such replacement to be of similar mass, scale and material on approximately the same footprint as the remaining buildings and to retain their existing walls fronting on the Hamilton Canal as part of a new building, as well as the bridges over Jackson Street. Therefore, there would be no walkway on the mill side of the Hamilton Canal, which, of course, has been long planned for the opposite (southerly) bank.
- 4) The two Jackson Street overhead bridges attached to the Appleton Mill need to be retained and repaired in accordance with city design standards. They are key elements of this mill district's character and the historic streetscape of this area.
- 5) Pawtucket Canal Wall – The canal wall remnant along the Pawtucket Canal behind the Appleton Mill presents an opportunity for a stabilized arcade associated with the redevelopment of the Appleton Mills site, rather than a wider public walkway or park. Instead we envision an extension of the canal walk from its current dead end at the Swamp Locks along the opposite (northerly) bank on the 20 foot strip of DCR land.
- 6) Freudenberg Mill #1 can and should be retained. The roadway route in the proposal could still be accomplished by demolishing the non-contributing low-rise building attached on the southerly side of the original high rise building. The Trinity plan shows a walkway on the Pawtucket Canal side of Mill #1, which is located right on the canal wall, requiring its demolition, which we oppose.. Again, we recommend that the public canal walk be on the opposite bank in this area as noted in item 5.
- 7) Please review the Canalway plans for this area as prepared by the Park Service, as they indicate what we think remain the most functional locations for walkways, which were thought out years ago as part of the interconnected Canalway system. It is not necessary or appropriate to

have walkways along every canal edge. Some development can be right on the water's edge, as it was historically, if public accommodation is made on the opposite bank.

- 8) Parking locations are not adequately identified in the submitted plan. It is important to determine if the residential and office structures could be made to wrap around the parking or otherwise internalize it, which we see as an attractive alternative that could minimize the need for fronting parking structures on the canal edges. A parking structure closer to Canal Place III may be helpful in providing the replacement parking for the NPS Visitor Lot, which ideally would instead be given over to other uses directly along the canal edge.

I hope that this information is helpful to the discussion of the Trinity Financial proposal and will provide Trinity some additional guidance in their planning for this project.


***Appendix C: Memorandum, Potential Replication Sites for LNHP
Parking***

Adam Baacke
Assistant City Manager/Director

Anne Barton
Deputy Director

MEMORANDUM

TO: Michael Creasey & Christina Briggs, LNHP

FROM: Adam Baacke, Assistant City Manager/DPD Director 

CC: Bernard F. Lynch, City Manager
George Proakis, Planning & Permitting Director
Chuck Carney, Parking Director

DATE: August 14, 2009

RE: Potential Replication Sites for LNHP Parking

We would like to thank the Lowell National Historical Park for your continued support for the Hamilton Canal District project and your willingness to consider incorporating the existing Visitor Center parking lots into the development site. We look forward to working with you and Trinity to facilitate this tremendous redevelopment opportunity for the City in the heart of the National Park that sparked much of Lowell's renaissance.

As you requested, we have reviewed possible options for the replication of the parking uses that are currently located on these lots. The following should be considered at the current time but should not be viewed as an exhaustive list.

Passenger Vehicle Parking

It is our understanding that the LNHP currently has approximately 166 parking spaces for passenger vehicles. These spaces are used by staff and visitors to the park. We also understand that others not affiliated with the LNHP have often taken advantage of this "free" parking.

Options for the replication of these spaces include the following. It is likely that some combination of these would be most appropriate. Parking replication involving City facilities would be handled as a component of the real estate transaction with proper accounting for values consistent with applicable laws and regulations governing both federal and City real property transactions.

1. An allocation of parking spaces in the proposed Hamilton Canal District parking structure that will be constructed by Trinity as part of the build out of the northern portions of the Hamilton Canal District.
2. An allocation of available parking spaces in the Ayotte Parking Structure (presumably beneficial to staff whose workplaces are based in the Boott Mills and visitors to the Boott Mills Museum, Tsongas Industrial History Center, and related research facilities.
3. An allocation of parking spaces in either the Roy or Downes Parking Structures following construction of the Hamilton Canal District parking structure and the transfer of other users from

these facilities to the Ayotte or Hamilton Canal District parking structure. Both the Roy and Downes Parking Structures are fully subscribed at the present time and do not currently have availability without relocating other users.

Bus & Recreational Vehicle Parking

It is our understanding that the LNHP currently accommodates up to 12 buses or recreational vehicles at the south end of the existing Visitor Center parking area. These spaces are used to park school buses and tour buses after their passengers have been delivered to the various LNHP sites, with many of these vehicles discharging passengers along French Street for programs at the Tsongas Center. These spaces are also utilized by visitors who arrive in recreational vehicles that are too large for standard parking spaces. The RV activity is greatest during the summer months and shoulder seasons in late Spring and early Fall, when school bus activity is least frequent.

Options for the replication of these spaces include the following. It is likely that some combination of these may be appropriate. Parking replication involving City facilities would be handled as a component of the real estate transaction with proper accounting for values consistent with applicable laws and regulations governing both federal and City real property transactions. Parking replication involving facilities not owned by the City would involve additional negotiations with other third parties.

City-Owned Sites:

4. The surface parking lots near the Tsongas Arena may have some availability and would be convenient for access to the Tsongas Center and Boott Mills. However Lot A is close to capacity serving adjacent office users during business hours which would coincide with peak school bus demand periods and Lot B will likely be conveyed to the University of Massachusetts Lowell in the coming months. UML may be willing to allow this use of Lot B however since their stated objective for the portion of this site that will remain in parking use is VIP parking for Tsongas Arena events that will likely occur during weekend and evening hours that would complement NPS peak demand periods.
5. The Davidson Street parking lot may present an option. However, this lot is filled daily during the school year primarily with Middlesex Community College students, who are already being partially displaced from the Lower Locks Garage due to the UML acquisition of the former Doubletree Hotel. This lot is also filled for events at the Lowell Memorial Auditorium, but they are less likely to conflict with peak demand periods for bus parking. If a deck were added to this lot increasing its capacity overall, some additional opportunities might emerge.
6. The surface parking lots on Island Street, near the intersection of the VFW Highway and Aiken Street are underutilized during business hours when LNHP demand for bus and RV parking is at peak. They serve the recreational programs in the adjacent City park and are also utilized by fans who attend Lowell Spinners baseball games at LeLacheur Park during evening and weekend hours, but could be available for this purpose at other hours. Although this site is on the north side of the Merrimack River, it would be easily accessed from westbound buses after they discharge passengers at the Boott Mills using Father Morrissette Boulevard and the Oullette Bridge. The VFW Highway and Cox Bridge would provide a similarly efficient route for buses to return to French Street westbound to pick up passengers at the end of the day.
7. Father Morrissette Boulevard is an expansive roadway with significant capacity that dramatically exceeds its utilization. It presently provides two travel lanes in each direction and is divided by a concrete median. The surrounding land uses would likely benefit from a "calming" of this roadway that would allow safer and more comfortable pedestrian crossings between the primarily residential neighborhood to the south and mixed use area that has been enjoying significant redevelopment activity to the north. The City and the LNHP have been partners with others in a current study that is considering using a portion of this right of way for a trolley line.

It may be possible to also provide a westbound parking lane as part of a redesigned roadway that could be reserved for bus use during desired hours while still maintaining one travel lane in each direction and readily accommodating the traffic demand of the roadway. A westbound bus parking lane would also offer a similarly convenient pick up and drop off loop as is described above with the Island Street lots.

Other Publicly-Owned Sites:

8. The Lowell Regional Transit Authority owns and operates a bus maintenance facility with a large surface parking area located on Hale Street. This site is used to park their buses during evening hours when they are not in service but is generally underutilized during operating hours, which would coincide with peak periods of LNHP bus parking demand.
9. The Lowell Regional Transit Authority also owns a surface parking lot adjacent to the Gallagher Terminal which they use to stage paratransit vehicles. This lot has been identified as a potential location for trolley infrastructure, but in the absence of the trolley use may be available.
10. Although somewhat remote, UML owns an extremely large surface parking lot at the west end of Broadway Street near its intersection with Pawtucket Street. A portion of this lot might be made available for bus parking. This would not be a viable option for RVs due to its significant distance from the LNHP facilities.

Private Sites

11. 14 French Street is extremely convenient to the Boott Mills and adjacent National Park facilities. It is owned by the Lowell Five Cent Savings Bank.
12. 305 Dutton Street enjoys a very large surface parking lot that is across the street from the LNHP Visitor Center lots. This parking lot primarily serves a residential apartment building and therefore has significant available capacity during peak periods of LNHP parking demand.
13. Several churches in and around Downtown Lowell own large surface parking lots which are rarely used on weekdays and other periods of peak LNHP parking demand. These include the Transfiguration Greek Orthodox Church lot on Salem Street and the Immaculate Conception Church lot on East Merrimack Street.
14. 66 Broadway Street is currently the site of the Macheras Service Mart. It has been identified as an acquisition parcel in the Acre Urban Renewal Plan, but has not yet been acquired by the City. This large site is proposed for a mixed-use redevelopment, the planning for which could consider LNHP bus and RV parking needs.



10



City of Lowell Massachusetts GIS



Disclaimer
 The City of Lowell makes no warranty or representation as to the accuracy, timeliness or completeness of any of the data. The City of Lowell shall have no liability for the data or lack thereof, or any decision made or action taken or not taken in reliance upon any of the data.



Appendix D: Visioning and Workshop Notes

**Lowell National Historical Park
GMP Amendment
June 16, 2009 - Public Information Meeting
NOTES**

The public information meeting was held from 5:30 to 7:30 pm at the Park's Visitor Center. Approximately 25 community representatives attended as well as NPS staff and representatives of Trinity Financial (TF), the designated developer for the Hamilton Canal District (HCD). The meeting which was presented by the LNHP was facilitated by ICON architecture, inc. (ICON), who has developed the work so far in cooperation with TF and NPS.

The purpose of the meeting was to present key issues and alternatives for the park's visitor center in relationship to the HCD as well as to solicit comments from the public on issues of environmental concern that should be dealt with in the Environmental Assessment (EA) of the GMP Alternative.

The meeting agenda and a list of environmental topics to be dealt with in the EA were distributed, as well as plans of the four GMP Amendment Alternatives. The agenda and the list of EA topics are attached to these notes.

Comments and questions regarding key topics and issues as well as about each Alternative are summarized below:

Parking

- How will NPS parking needs be accommodated within the HCD parking garage? Will parking be reserved? Trinity and NPS responded that these items are not yet resolved and are, in part, related to the overall development agreement and transaction between the developer and the NPS.
- No one at the meeting advocated keeping the existing NPS parking lot, because developing the lot, as shown by the HCD plan, would be a higher use of the site.
- If visitor parking is located in the Market Street Garage, as suggested by some of the variations to the alternatives, there are user peaks that could stretch the capacity of the garage.

Market Mills

- What is NPS ownership of the Market Mills? Who can determine future use of the VC facility? NPS noted that it is not the owner of the property but has long-term agreement for the existing visitor center and can determine the use of this space.
- If the VC moved out of Market Mills, the Park could get a market rate rental for the Market Mills space, if new occupants could be found.
- Could the VC be rented to cultural organization if a new VC were built? This is possible, but it is unclear that local arts users could afford to pay for the space.

- The 125 seat theater is a real draw for the arts / theater community now. There is a potential to create a designated “Arts District” if NPS uses moved out.
- Market Mills is a “critical link” between downtown and the park / canal area.
- In the visioning sessions Market Mills was identified as a key link to downtown, but also somewhat of a “Great Wall of China,” acting to some extent as a barrier. Flow back and forth between downtown and HCD is critical.

Alternative 1

- Alternative 1, leaving the existing NPS parking lot undeveloped, will miss a huge opportunity for development of the site. There was a consensus at the meeting that it was a non-starter.
- The Park should find a way to move away from Alternative 1 and move forward in a flexible way.

Alternative 2

- Alternative 2 is the least disruptive and least costly approach, although it lacks some features of other action alternatives.

Alternative 3

- American Textile Heritage Museum (ATHM) thinks that it would be great to have the VC at the Point. It would be great to have new iconic building at the Point that would be a fresh face for the point and serve as a Gateway to the city/downtown.
- Possibility for synergy with the Textile museum
- The conceptual center of the Park is at the Boott. A new VC at the point is not necessary as a signature building and could also draw people away from the heart of the City.
- If the a new VC of 12,000 sq. ft. is built, as shown in Alternative 3, this site would be under-utilized, as it has the potential to accommodate 30,000 sq. ft.
- A new VC in a modern building in this location might be disassociated with the resources in the remainder of the park and lose the advantage of the current VC of being in an historic building.
- NPS noted that there are operational issues associated with relocating VC to the Point. Because of the increased distance between VC and Boott, trolley service would have to be increased to accommodate visitors 365 days a year—this is a big, capital intensive endeavor.
- This alternative is potentially the most expensive.

Alternative 4

- Intrigued by contact station concept. It could be a least cost approach and would engage more people throughout the city. We need to engage more people from the neighborhoods. Concept should be extended to sites in the neighborhoods.
- Many people live north of the canals who NPS does not engage as much as they could. This could be a great opportunity to achieve this.

- Alternative 4 is great but it is costly and has several other draw-backs. Worry that there would not be staffing for contact stations.
- NPS noted that “contact station” is a loose term – likely would be closer to “exhibit space,” or informational kiosk with, possibly, seasonal staffing in some locations.

Pedestrian Crossings / Environments

- ATHM asked what thought has been given to providing pedestrian access from the point to the ATHM? TF responded that there is no plan for a direct pedestrian crossing at Dutton/Thorndike due to traffic and grade changes.
- Has any thought been given to getting people over to Western Avenue? TF responded that Jackson Street will be connected to Fletcher Street with signalized crossing. It will be much more pedestrian friendly.
- The pedestrian crossing at Market Street needs to be improved.
- Applaud walkability along the canals.

Trolley

- Extending the trolley to Gallagher would be great.

Traffic

- ATHM noted that left turn off Dutton Street to their facility is dangerous and difficult today. Would there be an opportunity to improve this? TF said that this is not likely as Dutton Street has difficulty accommodating traffic movements. However, it is possible that traffic might come through the HCD, take a left on Dutton from the development, and then enter ATHM by a right turn.

Environmental Assessment and Topics of Concern

- TF noted that the MEPA process for HCD including possible consideration of the VC at the point took into account traffic volumes. They have been identified and mitigated through the MEPA process.
- ICON noted that traffic volumes in the various alternatives are not likely to be significantly different from one another.
- The list of environmental impact topics was discussed, including the impacts likely to be addressed and those likely to not be addressed. Attendees did not make any comment on these impacts, nor were any further comments on impacts received.

Time Frame / Moving Forward

- M.Creasey of NPS stressed that NPS has a commitment to the developers and the City to make a determination about proceeding with parking--- this is essential to move the HCD project forward as a first, necessary step.
- After that, there is probably a lot of room to consolidate elements of various alternatives, while maintaining long-term flexibility. NPS will be cautious so as not to preclude actions, and also to remain open should opportunities arise.

- When will construction begin? TF said that work is not likely to start for several years. TF's goal is to tee this project up so that when market conditions improve, Lowell can be front and center as a development project.

Other Issues

- Issue of parking for RVs has not been resolved and will require close consideration.
- Bus staging area has not been identified either and needs to be highlighted as a topic to be resolved. A number of possibilities might exist in the city, but would have to be worked out with the city and other uses.
- TF noted that parcel 11 is likely to be one of the last areas to be developed and might serve some interim use for parking.

A G E N D A

Public Meeting on General Management Plan Amendment Lowell National Historical Park June 16, 2009

- | | |
|--|------------|
| 1. Introduction
Michael Creasey, Superintendent LNHP | 5 minutes |
| 2. Recap of HCD Progress to date
Jim Keefe, Trinity Financial | 2 minutes |
| 3. Review of GMP Amendment Process
Chris Briggs, Park Planner | 3 minutes |
| 4. Alternatives Under Consideration and Comments
Jonathan Lane, ICON | 15 minutes |
| Comments, questions on Alternatives
Attendees | 20 minutes |
| Environmental Impact Concerns
Attendees | 10 minutes |
| 5. Final comments and Adjourn
Michael Creasey | 5 minutes |

Environmental Assessment Topics

The Environmental Assessment needs to consider potential significant impacts of alternatives. Likely topics include:

	Topics	Likely to be addressed	Likely to be not addressed
Natural and Recreational Resources	Physiography and soils		Physiography and soils
	Surface water resources	Surface water resources	
	Vegetation		Vegetation
	Fish and wildlife		Fish and wildlife
	Threatened and endangered species		Threatened and endangered species
	Air quality		Air quality
	Parks, trails, and open spaces	Parks, trails, and open spaces	
	Boating and fishing		Boating and fishing
Historic and Cultural Resources	Archeological resources	Archeological resources	
	Historic districts and structures	Historic districts and structures	
	Cultural Landscape		Cultural Landscape
	Ethnographic Resources		Ethnographic Resources
	Indian Trust Resources		Indian Trust Resources
Socio-economic Resources	Land use	Land use	
	Transportation and visitor access	Transportation and visitor access	
	Local economy	Local economy	
	Visitor experience	Visitor experience	
	Park operations	Park operations	

Appendix E: LNHP Legislation

Appendix E

Legislation

16 USC 410cc.



LOWELL NATIONAL HISTORICAL PARK

PART A—ESTABLISHMENT OF PARK AND PRESERVATION DISTRICT

§ 410cc. Congressional statement of findings and purpose

(a) The Congress finds that—

- (1) certain sites and structures in Lowell, Massachusetts, historically and culturally the most significant planned industrial city in the United States, symbolize in physical form the Industrial Revolution;
- (2) the cultural heritage of many of the ethnic groups that immigrated to the United States during the late nineteenth and early twentieth centuries is still preserved in Lowell's neighborhoods;
- (3) a very large proportion of the buildings, other structures, and districts in Lowell date to the period of the Industrial Revolution and are nationally significant historical resources, including the five-and-six-tenths-mile power canal system, seven original mill complexes, and significant examples of early

housing, commercial structures, transportation facilities, and buildings associated with labor and social institutions, and

(4) despite the expenditure of substantial amounts of money by the city of Lowell and the Commonwealth of Massachusetts for historical and cultural preservation and interpretation in Lowell, the early buildings and other structures in Lowell may be lost without the assistance of the Federal Government.

(b) It is the purpose of sections 410cc to 410cc-37 of this title to preserve and interpret the nationally significant historical and cultural sites, structures, and districts in Lowell, Massachusetts, for the benefit and inspiration of present and future generations by implementing to the extent practicable the recommendations in the report of the Lowell Historic Canal District Commission.

(Pub.L. 95-290, § 1, June 5, 1978, 92 Stat. 290.)

§ 410cc-1. Definitions

For purposes of sections 410cc to 410cc-37 of this title—

(1) the term "park" means the Lowell National Historical Park, established by section 410cc-11(a)(1) of this title;

(2) the term "preservation district" means the Lowell Historic Preservation District, established by section 410cc-11(a)(1) of this title;

(3) the term "Commission" means the Lowell Historic Preservation Commission established by section 410cc-11(a) of this title;

(4) the term "Secretary" means the Secretary of the Interior; and

(5) the term "report of the Lowell Historic Canal District Commission" means the report submitted to the Congress by the Lowell Historic Canal District Commission pursuant to an Act entitled "An Act to provide for a plan for the preservation, interpretation, development and use of the historic, cultural, and architectural resources of the Lowell Historic Canal District in Lowell, Massachusetts, and for other purposes", approved January 4, 1975 (88 Stat. 2330).

(Pub.L. 95-290, § 2, June 5, 1978, 92 Stat. 290.)

References in Text. An Act entitled "An Act to provide for a plan for the preservation, interpretation, development and use of the historic, cultural, and architectural resources of the Lowell Historic Canal District in Lowell, Massachusetts,

and for other purposes", approved January 4, 1975 (88 Stat. 2330), referred to in part. (5), is Pub.L. 93-645, Jan. 4, 1975, 88 Stat. 2330, and is set out as a note under section 461 of this title.

§ 410cc-11. Establishment of Lowell National Historical Park; establishment and administration of Lowell Historic Preservation District; establishment, publication, and revision of boundaries

(a) (1) To carry out the purpose of sections 410cc to 410cc-37 of this title, there is established as a unit of the National Park System in the city of Lowell, Massachusetts, the Lowell National Historical Park. There is further established in an area adjacent to the park the Lowell Historic Preservation District, which will be administered by the Secretary and by the Commission in accordance with sections 410cc to 410cc-37 of this title. The boundaries of the park and preservation district shall be the boundaries depicted on the map entitled "Lowell National Historical Park, Massachusetts", dated March 1978, and numbered "Low-80,008A". Such map shall be on file and available for inspection in the office of the National Park Service, Department of the Interior, and in the office of the city clerk, city of Lowell.

(2) The Secretary shall publish in the Federal Register, as soon as practicable after June 5, 1978, a detailed description and map of the boundaries established under paragraph (1) of this subsection.

(b) The Secretary may make minor revisions of the park and preservation district boundaries established under subsection (a)(1) of this section, after consulting with the Commission and the city manager of Lowell, by publication of a revised drawing or other boundary description in the Federal Register, but no waters, lands, or other property outside of the park or preservation district boundaries established under such subsection may be added to the park or preservation district without the consent of the city manager of Lowell and the city council of Lowell. A boundary

revision made under this subsection shall be effective only after timely notice in writing is given to the Congress.

(Pub.L. 95-290, Title I, § 101, June 5, 1978, 92 Stat. 291.)

§ 410cc-12. Consultations, cooperation, and conduct of activities by Federal entities; issuance of licenses or permits by Federal entities

(a) Any Federal entity conducting or supporting activities directly affecting the park or preservation district shall—

(1) consult with, cooperate with, and to the maximum extent practicable, coordinate its activities with the Secretary and with the Commission; and

(2) conduct or support such activities in a manner which (A) to the maximum extent practicable is consistent with the standards and criteria established pursuant to section 410cc-32(e) of this title, and (B) will not have an adverse effect on the resources of the park or preservation district.

(b) No Federal entity may issue any license or permit to any person to conduct an activity within the park or preservation district unless such entity determines that the proposed activity will be conducted in a manner consistent with the standards and criteria established pursuant to section 410cc-32(e) of this title and will not have an adverse effect on the resources of the park or preservation district.

(Pub.L. 95-290, Title I, § 102, June 5, 1978, 92 Stat. 291.)

§ 410cc-13. Authorization of appropriations

(a) **General authority; maximum amounts**

There are authorized to be appropriated such sums as may be necessary to carry out sections 410cc to 410cc-37 of this title, except that—

(1) the total of the amounts authorized to be appropriated for the purpose of acquisition and development under the park management plan established pursuant to section 410cc-21(b) of this title and emergency assistance under section 410cc-25(a)(1) of this title shall not exceed \$18,500,000; and

(2) the total of the amounts authorized to be appropriated for the purpose of carrying out section 410cc-32(b)(2) of this title, for the payment of grants and loans under section 410cc-33 of this title, for the acquisition of property under section 410cc-34 of this title, and for carrying out any transportation program and any educational and cultural program described in section 410cc-32(c) of this title shall not exceed \$21,500,000.

(b) **Commencement date**

No funds shall be authorized pursuant to this section prior to October 1, 1978.

(c) **Availability of appropriations**

Funds appropriated under subsection (a) of this section shall remain available until expended.

(d) **Aggregate amount of money expended; certifying statement to Congress as limiting availability of appropriated amounts**

(1) Within 60 days after June 5, 1978, and on each subsequent October 1 and March 1, the Secretary shall submit to the Congress a statement certifying the aggregate amount of money expended by the Commonwealth of Massachusetts, the city of Lowell, and by any nonprofit entity for activities in the city of Lowell consistent with the purpose of sections 410cc to 410cc-37 of this title during the period beginning on January 1, 1974, and ending on the date such statement is submitted.

(2) The aggregate amount of funds made available by the Secretary to the Commission from funds appropriated under subsection (a)(2) of this section may not exceed the amount certified by the Secretary in the most recent statement submitted to the Congress under paragraph (1) of this subsection.

(Pub.L. 95-290, Title I, § 103, June 5, 1978, 92 Stat. 292.)

§ 410cc-14. Funding limitations

Notwithstanding any other provision of sections 410cc to 410cc-36 of this title, no authority to enter into agreements or to make payments under sections 410cc to 410cc-37 of this title shall be effective except to the extent, or in such amounts, as may be provided in advance in appropriation Acts.

(Pub.L. 95-290, Title I, § 104, June 6, 1978, 92 Stat. 292.)

PART B—POWERS AND DUTIES OF SECRETARY

§ 410cc-21. Park management plan; submission date and contents of preparatory statement to Congress; establishment, submission date, contents, etc., of plan

(a) The Secretary shall submit a statement to the Congress, within two years after the date on which funds are made available to carry out sections 410cc to 410cc-37 of this title, which—

(1) reports on the progress that the Secretary has made in acquiring the properties identified under section 410cc-22 of this title, and describes the way the Secretary intends to use these properties;

(2) identifies the properties within the park and preservation district respecting which the Secretary has entered into or intends to enter into agreements relating to interpretive exhibits or programs under section 410cc-23(a) of this title;

(3)(A) reports on the progress of the Secretary in leasing a portion of the Lowell Manufacturing Company, located on Market Street, for the purpose of establishing a visitors' center in close proximity to parking and other transportation facilities, and (B) identifies any other property within the park which the Secretary has leased or intends to lease for purposes of the park;

(4) reports any other activities which the Secretary has taken or intends to take to carry out the purpose of sections 410cc to 410cc-37 of this title; and

(5) contains a tentative budget for the park and preservation district for the subsequent five fiscal years.

(b)(1) Not later than three years after the date on which funds are made available to carry out sections 410cc to 410cc-37 of this title, the Secretary shall establish and submit to the Congress a park management plan containing the information described in subsection (a) of this section. Such plan shall, upon request, be available to the public.

(2) After consulting with the Commission, the city manager of Lowell, and the Commonwealth of Massachusetts, the Secretary may make revisions in the park management plan established pursuant to paragraph (1) of this subsection by publication of such revisions in the Federal Register. A revision made under this paragraph shall be effective 90 days after written notice of the revision is submitted to the Congress.

(Pub.L. 95-290, Title II, § 201, June 6, 1978, 92 Stat. 292.)

§ 410cc-22. Acquisition of property

(a) Specified property; manner of acquisition

(1) The Secretary is authorized to acquire the properties designated in paragraph (2) of this subsection, or any interest therein, by donation, purchase with donated or appropriated funds, condemnation, or otherwise. Any property or interest therein owned by the Commonwealth of Massachusetts or any political subdivision thereof may be acquired only by donation. The Secretary may initiate condemnation proceedings under this paragraph only after making every reasonable effort to acquire property through negotiations and purchase, and consulting with the Commission (if established) and the city council of Lowell.

(2) The properties referred to in paragraph (1) of this subsection are the following:

(A) The Linus Childs House, 63 Kirk Street.

(B) The H and H Paper Company (commonly referred to as Boot Mill Boarding House), 42 French Street.

(C) Old City Hall, 226 Merrimack Street.

(d) Merrimack Gatehouse, 269 Merrimack Street.

(E) The Wannamancil Textile Company, 562 Suffolk Street.

(F) The structures containing the Jude Pagoda and Solomon's Yard Goods, 210 and 200 Merrimack Street.

(b) Other property within park or preservation district; criteria for acquisition; manner of acquisition

Until the date on which the Commission conducts its first meeting, the Secretary may acquire any property within the park or preservation district not designated in subsection (a)(2) of this section, or any interest therein, if such property—

(1) is identified in the report of the Lowell Historical Canal District Commission as a property which should be preserved, restored, managed, developed, or maintained in a manner consistent with the purpose of sections 410cc to 410cc-37 of this title;

(2) is listed in the National Register of Historic Places, as maintained by the Secretary pursuant to section 470a(a) of this title, and section 462(b) of this title; or

(3) is determined by the Secretary to be of national significance;

and would be subject to demolition or major alteration in a manner inconsistent with the purposes of sections 410cc to 410cc-37 of this title unless acquired by the Secretary. Such property may be acquired only as provided in subsection (a)(1) of this section.

(c) Easements; manner of acquisition

The Secretary may acquire easements within the park for the purpose of carrying out sections 410cc to 410cc-37 of this title. Such easements may be acquired only as provided in subsection (a)(1) of this section.

(Pub.L. 95-290, Title II, § 202, June 6, 1978, 92 Stat. 293.)

§ 410cc-23. Agreements and technical assistance

(a) The Secretary may enter into agreements with any owner of property with national historic or cultural significance within the park to provide for interpretive exhibits or programs. Such agreements shall provide, whenever appropriate, that—

(1) the public may have access to such property at specified, reasonable times for purposes of viewing such property or the exhibits or attending the programs established by the Secretary under this subsection; and

(2) the Secretary may make such minor improvements to such property as the Secretary deems necessary to enhance the public use and enjoyment of such property, exhibits, and programs.

(b)(1) The Secretary shall provide, upon request, technical assistance to—

(A) the city of Lowell to assist the city in establishing regulations or laws consistent with the standards and criteria established pursuant to section 410cc-32(a) of this title; and

(B) the Commission to assist the Commission in establishing the index and the standards and criteria required by section 410cc-32 of this title.

(2) The Secretary may provide to any owner of property within the park or preservation district, the Commission, the Commonwealth of Massachusetts, the city of Lowell, and any other Federal entity or any institution such technical assistance as the Secretary considers appropriate to carry out the purpose of sections 410cc to 410cc-37 of this title.

(Pub.L. 95-290, Title II, § 203, June 6, 1978, 92 Stat. 294.)

§ 410cc-24. Withholding of funds; criteria

The Secretary may refuse to obligate or expend any money appropriated for the purposes described in section 410cc-13(a)(1) or section 410cc-13(a)(2) of this title if the Secretary determines that—

(a) the city of Lowell has failed to establish regulations or laws consistent with the standards and criteria established pursuant to section 410cc-32(e) of this title within one year after the date such standards and criteria have been established, except that the Secretary may extend such one-year period for not

more than six months if the Secretary determines that the city has made a good faith effort to establish such regulations or laws;

(b) the city of Lowell has failed to notify the Commission of (1) applications for building permits or zoning variances respecting any property which is included in the index established pursuant to section 410cc-32(d) of this title, or (2) any proposals of the city of Lowell to change the regulations or laws described in paragraph (c)(1) of this subsection;

(c) (1) during the period before the city of Lowell has established regulations or laws consistent with the standards and criteria established pursuant to section 410cc-32(e) of this title, the city of Lowell has granted any building permit or zoning variance or has taken any other action respecting any property within the park or preservation district, which either the Secretary or the Commission consider to be inconsistent with such standards and criteria;

(2) after the city of Lowell has established the regulations or laws described in subparagraph (1) of this paragraph, the city of Lowell has granted any building permit or zoning variance or has taken any other action respecting any property within the park or preservation district, which either the Secretary or the Commission consider to be inconsistent with such regulations or laws; or

(d) the Commission has not made good faith efforts to (1) provide for the preservation, restoration, management, development, or maintenance of property within the park and preservation district or (2) carry out the park preservation plan approved under section 410cc-32 of this title.

(Pub.L. 95-290, Title II, § 204, June 5, 1978, 92 Stat. 294.)

§ 410cc-25. Administrative functions

(a) Implementation of park management plan; emergency assistance for protection of property owners; availability of funds for Commission

(1) The Secretary, acting through the National Park Service, shall take appropriate actions to implement to the extent practicable the park management plan established pursuant to section 410cc-21(b) of this title. In carrying out such plan, the Secretary shall administer the park in accordance with laws, rules, and regulations applicable to the national park system. Before the date on which the Commission conducts its first meeting, the Secretary may take any other action the Secretary deems necessary to provide owners of property with national historic or cultural significance within the park or preservation district with emergency assistance for the purpose of preserving and protecting their property in a manner consistent with the purpose of sections 410cc to 410cc-37 of this title.

(2) Subject to sections 410cc-24 and 410cc-32(h) of this title, the Secretary shall make available to the Commission any funds appropriated under section 410cc-13(a) (2) of this title for the purpose of carrying out sections 410cc-31 to 410cc-36 of this title.

(b) Acceptance of donations of funds, property, or services for implementation of park management plan

Notwithstanding any other provisions of law, the Secretary may accept donations of funds, property, or services from individuals, foundations, corporations, and other private entities, and from public entities, for the purpose of implementing the park management plan.

(c) Sponsorship or coordination of educational or cultural programs

The Secretary may sponsor or coordinate within the park and preservation district such educational or cultural programs as the Secretary considers appropriate to encourage appreciation of the resources of the park and preservation district.

(d) Acquisition of leases respecting property within park

The Secretary may acquire such leases respecting property within the park as may be necessary to carry out the purpose of sections 410cc to 410cc-37 of this title.

(Pub.L. 95-290, Title II, § 205, June 5, 1978, 92 Stat. 295.)

PART C—POWERS AND DUTIES OF PRESERVATION COMMISSION

§ 410cc-31. Lowell Historic Preservation Commission

(a) Establishment and administrative role; composition of membership

There is established within the Department of the Interior a commission to be known as the Lowell Historic Preservation Commission which shall administer the preservation district and provide certain services within the park in accordance with this part. The Commission shall consist of fifteen members appointed by the Secretary as follows:

(1) Three members who are members of the city council of Lowell, appointed from recommendations made by the mayor of Lowell.

(2) Three members appointed from recommendations made by the city manager of Lowell of persons who are representative of organized labor, the business community, local neighborhoods, and cultural institutions, and who are not elected officials.

(3) One member appointed from recommendations made by the president of the University of Lowell.

(4) Three members appointed from recommendations made by the Governor of the Commonwealth of Massachusetts.

(5) One member appointed from recommendations made by the Secretary of Commerce and who shall be an employee of the Department of Commerce.

(6) One member appointed from recommendations made by the Secretary of Transportation and who shall be an employee of the Department of Transportation.

(7) One member appointed from recommendations made by the Secretary of Housing and Urban Development and who shall be an employee of the Department of Housing and Urban Development.

(8) Two members who are qualified to serve on the Commission because of their familiarity with programs of the Department of the Interior involving national parks and historic preservation and who shall be an employee of the Department of the Interior.

(b) Continuation of status as appointed member for member leaving government office or becoming elected official of government; duration

If any member of the Commission who was appointed to the Commission under paragraph (1) or (4) of subsection (a) of this section as a member of the city council of Lowell or any other government leaves that office, or if any member of the Commission who was appointed from persons who are not elected officials of any government becomes an elected official of a government, such person may continue as a member of the Commission for not longer than the thirty-day period beginning on the date such person leaves that office or becomes such an elected official, as the case may be.

(c) Terms of office and reappointment of members

(1) Except as provided in paragraph (2) of this subsection, members shall be appointed for terms of two years. A member may be reappointed only three times unless such member was originally appointed to fill a vacancy pursuant to subsection (e)(1) of this section, in which case such member may be reappointed four times.

(2) Of the members first appointed pursuant to subsection (a) of this section, the following shall be appointed for terms of three years:

(A) The members appointed pursuant to paragraphs (2), (3), and (8) of such subsection.

(B) One of the members appointed pursuant to paragraph (4) of such subsection, as designated by the Secretary at the time of appointment upon recommendation of the Governor.

(d) Chairman; election by members; term of office

The chairman of the Commission shall be elected by the members of the Commission. The term of the chairman shall be two years.

(e) Vacancies: appointment and term of office; service by member after expiration of term

(1) Any vacancy in the Commission shall be filled in the same manner in which the original appointment was made.

(2) Any member appointed to fill a vacancy shall serve for the remainder of the term for which his predecessor was appointed. Any member may serve after the expiration of his term for a period not longer than thirty days.

(f) Quorum and holding of hearings

Eight members of the Commission shall constitute a quorum, but a lesser number may hold hearings.

(g) Meetings

The Commission shall meet at least once each month, at the call of the chairman or a majority of its members.

(h) Compensation; travel expenses and per diem

(1) Except as provided in paragraph (2) of this subsection, members of the Commission shall each be entitled to receive \$100 for each day (including travel time) during which they are engaged in the performance of the duties of the Commission.

(2) Members of the Commission who are full-time officers or employees of the United States, the city of Lowell, or the Commonwealth of Massachusetts shall receive no additional pay on account of their service on the Commission.

(3) While away from their homes or regular places of business in the performance of services for the Commission, members of the Commission shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703 of Title 5.

(i) Termination

The Commission established pursuant to sections 410cc to 410cc-37 of this title, shall cease to exist ten years from June 5, 1978.

(Pub L. 95-280, Title III, § 301, June 5, 1978, 92 Stat. 295.)

§ 410cc-32. Park preservation plan and index**(a) Submission by Commission and approval or disapproval by Secretary of draft and final plans; procedures applicable; revisions in approved plan**

(1) Within one year after the date on which the Commission conducts its first meeting, the Commission shall submit to the Secretary a draft park preservation plan meeting the requirements of subsection (c) of this section. The Secretary shall review the draft park preservation plan and, within ninety days after the date on which such plan is submitted to the Secretary, suggest appropriate changes in such plan to the Commission.

(2) Within eighteen months after the date on which the Commission conducts its first meeting, the Commission shall submit to the Secretary a park preservation plan which meets the requirements of subsection (c) of this section. The Secretary shall, within ninety days after the date on which such plan is submitted to the Secretary, approve or disapprove such plan. The Secretary may not approve such plan unless the Secretary determines that such plan would adequately carry out the purpose of sections 410cc to 410cc-37 of this title.

(3) If the Secretary disapproves a park preservation plan, the Secretary shall advise the Commission of the reasons for such disapproval together with the recommendations of the Secretary for revision of such plan. Within such period as the Secretary may designate, the Commission shall submit a revised park preservation plan to the Secretary. The Secretary shall approve or disapprove any revised park preservation plan in the same manner as required in paragraph (2) of this subsection for the approval or disapproval of the original park preservation plan.

(4) If the Secretary approves a park preservation plan, the Secretary shall publish notice of such approval in the Federal Register and shall forward copies of the approved plan to the Congress.

(5) Any park preservation plan or draft plan submitted to the Secretary under this subsection shall, upon request, be available to the public.

(6) No changes other than minor revisions may be made in the approved park preservation plan without the approval of the Secretary. The Secretary shall approve or disapprove any proposed change in the approved park preservation plan, except minor revisions in the same manner as required in paragraph (2) of this subsection for the approval or disapproval of the original park preservation plan.

(b) Funding availability and requirements for plan implementation, activities, etc.

(1) Except as provided in paragraph (2) of this subsection, the Secretary shall not make any funds available to the Commission to carry out section 410cc-33 or 410cc-34 of this title until a park preservation plan has been approved under subsection (a) of this section.

(2) Before a park preservation plan is approved under subsection (a) of this section, the Secretary may make available to the Commission such funds as the Commission may request to carry out any activity specified in paragraph (3) of this section. However, no funds shall be made available under this paragraph unless a proposal describing such activity is reviewed and approved by the Secretary.

(3) The Commission may request funds from the Secretary to—

(A) carry out activities to preserve, restore, manage, develop, or maintain any property identified in subsection (c)(1) of this section;

(B) take any action the Commission considers necessary to provide owners of property with national historical or cultural significance within the park or preservation district with emergency assistance for the purpose of preserving and protecting their property in a manner consistent with the purpose of sections 410cc to 410cc-37 of this title; or

(C) acquire in accordance with section 410cc-34 of this title, any property within the park which—

(i) is identified in the report of the Lowell Historic Canal District Commission as a property which should be preserved, restored, managed, developed, or maintained in a manner consistent with the purpose of sections 410cc to 410cc-37 of this title;

(ii) is listed in the National Register of Historic Places, as maintained by the Secretary pursuant to section 470a(a) of this title, and section 462(b) of this title; or

(iii) is determined by the Secretary to be of national significance;

and would be subject to demolition or major alteration in a manner inconsistent with the purpose of sections 410cc to 410cc-37 of this title unless acquired by the Commission.

(c) Requirements for plan

Any plan submitted to the Secretary under subsection (a) of this section shall—

(1) describe the manner in which the Commission, to the extent practicable in accordance with the recommendations in the report of the Lowell Historic Canal District Commission, proposes to provide for the preservation, restoration, management, development, or maintenance of—

(A) the Welles Block, 169 Merrimack Street;

(B) the Jordan Marsh Company Building, 153 Merrimack Street and 15 Kirk Street;

(C) the Yorick Club, 91 Dutton Street;

(D) the Lowell Gas Light Company, 22 Shattuck Street;

(E) St. Anne's Church and Rectory, 237 Merrimack Street;

(F) Lowell Institution for Savings, 18 Shattuck Street;

(G) the Ahepa Building, 31 Kirk Street;

(H) Root Mill, Foot of John Street;

(I) Lowell Manufacturing Company on Market Street; and

(J) the structure commonly referred to as the Early Residence, 45, 47, and 49 Kirk Street;

(2) identify the properties included in the index established pursuant to subsection (d) of this section;

(3) identify the properties which the Commission intends to acquire under section 410cc-34 of this title and specify how such properties shall be used;

(4) include the standards and criteria established pursuant to subsection (e) of this section;

(5) provide a detailed description of the manner in which the Commission intends to implement the grant and loan programs under section 410cc-33 of this title, including information relating to the estimated amount of such grants and the manner in which such grants shall be awarded by the Commission;

(6) provide for a transportation program by which the Commission shall provide, directly or by agreement with any person or any public or private entity, transportation services and facilities for park and preservation district visitors, including barge equipment, docking facilities, and local rail facilities;

(7) provide for educational and cultural programs to encourage appreciation of the resources of the park and preservation district; and

(8) include a tentative budget for the subsequent five fiscal years.

(d) Establishment and contents of index; modification of index

The Commission shall establish, within one year after the date on which the Commission conducts its first meeting, an index which includes—

(1) any property in the park or preservation district (except for any property identified in section 410cc-21(a)(2) of this title) which should be preserved, restored, managed, developed, maintained, or acquired by the Commission because of its national historic or cultural significance; and

(2) any property which should be preserved, restored, managed, developed, or maintained in a manner compatible with the purpose of sections 410cc-37 of this title because of its proximity to (A) any property referred to in paragraph (1) of this subsection, or (B) any property designated in section 410cc-21(a)(2) of this title.

The index may be modified only by a majority vote of the members of the Commission, taken when a quorum is present.

(e) Standards and criteria for construction, preservation, etc., of properties within preservation district and park; authorization; establishment; revisions; publication in Federal Register

(1) The Commission shall establish standards and criteria applicable to the construction, preservation, restoration, alteration, and use of all properties within the preservation district with the advice of the Commonwealth of Massachusetts and of the Secretary, and the consent of the city manager of Lowell.

(2) The Commission shall establish the standards and criteria described in paragraph (1) of this subsection for any property within the park with the advice of the Commonwealth of Massachusetts and the city manager of Lowell and subject to the review and approval of the Secretary.

(3) The Commission shall establish standards and criteria under paragraphs (1) and (2) of this subsection within one year after the date on which the Commission conducts its first meeting. Such standards and criteria may be revised in the same manner in which they were originally established.

(4) The Secretary shall publish the standards and criteria established under paragraphs (1) and (2) of this subsection, and any revisions thereof, in the Federal Register.

(Pub.L. 95-290, Title III, § 802, June 5, 1978, 92 Stat. 297.)

§ 410cc-33. Financial and technical assistance

(a) Loans to Lowell Development and Financial Corporation for loans for preservation, etc., of property; terms of loan agreement with corporation; determination of compliance by corporation with requirements for loans; repayment by corporation

The Commission may make loans to the Lowell Development and Financial Corporation (established under chapter 844 of the Massachusetts General Laws and hereinafter referred to as the "corporation") to enable the corporation to provide low interest loans for the preservation, restoration, or development of any property described in section 410cc-32(d)(1) of this title. The Commission may make any such

loan to the corporation only after entering into a loan agreement with the corporation which includes the following terms:

(1) The loan to the corporation shall have a maturity of thirty-five years. At the end of such period, the corporation shall repay to the Secretary of the Treasury (in a lump sum) for deposit in the general fund of the Treasury the full amount of the loan and any additional amounts accruing to the corporation pursuant to this subsection excepting those amounts expended by the corporation for reasonable administrative expenses.

(2) The money received from the Commission, and any interest earned on such money, may be obligated by the corporation only for low interest loans made under paragraphs (6) and (7) of this subsection, except that the corporation may use such money to the extent the Commission considers reasonable to satisfy the costs of the corporation in administering the loan or procuring loan guarantees or insurance.

(3) Within five years after receiving the loan from the Commission, the corporation shall make loans under paragraphs (6) and (7) of this subsection which, in the aggregate, obligate the full amount of money received from the Commission (minus any amount required to satisfy the costs described in paragraph (2) of this subsection).

(4) As loans made under paragraphs (6) and (7) of this subsection are repaid, the corporation shall make additional loans under such paragraphs with the money made available for obligation by such repayments.

(5) The corporation shall make available to the Commission and to the Secretary, upon request, all accounts, financial records, and other information related to loans made under paragraphs (6) and (7) of this subsection.

(6) Before the corporation approves any application for a low interest loan for which money has been made available to the corporation by the Commission, the corporation shall require the prospective borrower to furnish the corporation with a statement from the Commission stating that the Commission has reviewed the application and has determined that any loan received by the prospective borrower will be spent in a manner consistent with—

(A) the standards and criteria established pursuant to section 410cc-32(e) of this title, and

(B) the goals of the park preservation plan approved under section 410cc-32(a) of this title.

(7) The corporation may approve any application for a low interest loan which meets the terms and conditions prescribed by the corporation with the approval of the Commission and for which money has been made available to the corporation by the Commission if—

(A) the prospective borrower furnishes the corporation with the statement described in paragraph (6) of this subsection;

(B) the corporation determines that such borrower has sufficient financial resources to repay the loan; and

(C) such borrower satisfies any other applicable credit criteria established by the corporation.

In order to determine whether the corporation has complied with this subsection, the Commission, or such other appropriate person or entity as the Commission may designate, shall conduct an audit at least once every two years of all accounts, financial records, and other information related to loans made under paragraphs (6) and (7) of this subsection. If the Commission determines, after conducting a hearing on the record, that the corporation has substantially failed to comply with this subsection, the outstanding balance of any loan made to the corporation under this subsection shall become payable in full upon the demand of the Commission.

(b) Grants to property owners for preservation, etc., of property; grants to persons or public or private entities for educational and cultural programs or for necessary services; terms of grant agreements; recovery of amounts for inconsistent uses

(1) The Commission may make grants to owners of property described in section 410cc-32(d)(1) of this title for the preservation, restoration, management, development, or maintenance of such property in a manner consistent with the standards and criteria established pursuant to section 410cc-32(e) of this title.

(2) The Commission, with the approval of the Secretary, may make grants to any person or any public or private entity to provide for (i) educational and cultural programs which encourage appreciation of the resources of the park and preservation district, or (ii) any planning, transportation, maintenance, or other services the Commission considers necessary to carry out the purposes of sections 410cc to 410cc-37 of this title.

(3) Grants under this subsection shall be made under agreements which specify the amount of the grant, the installments (if any) by which the grant shall be paid to the grant recipient, the purpose for which the grant may be used, and any other condition the Commission considers appropriate. The Commission shall be entitled, under the terms of any grant agreement, to recover from the recipient any funds used in a manner inconsistent with such grant agreement.

(c) **Technical assistance to property owners, etc.**

The Commission with the advice of the Secretary may provide technical assistance to—

(1) owners of property within the park or preservation district to assist such owners in (A) making repairs to or improvements in any property included in the index established pursuant to section 410cc-32(d) of this title, or (B) applying for loans under subsection (a) of this section; and

(2) any other person or public or private entity to assist such person or entity in taking actions consistent with the purpose of sections 410cc to 410cc-37 of this title.

(d) **Availability to Secretary of all accounts, financial records, and other information relating to loans and grants**

The Commission shall make available to the Secretary, upon request, all accounts, financial records, and other information of the Commission relating to grants and loans made under this section.

(e) **Annual report to Congress: contents**

The Secretary shall make an annual report to the Congress describing the loans, grants, and technical assistance provided under this section and under section 410cc-23 of this title. Such report shall specify the amount, recipient, and purpose of any loan, grant or technical assistance so provided and contain such additional information as the Secretary considers appropriate.

(Pub.L. 95-290, Title III, § 303, June 5, 1978, 92 Stat. 300.)

§ 410cc-34. **Acquisition and disposition of property**

(a) **Acquisition of specified property: manner of acquisition**

(1) The Commission may acquire any property designated in paragraph (3) of this subsection, any property described in section 410cc-32(d)(1) of this title, or any interest therein, by donation, by purchase with donated or appropriated funds, or by condemnation in accordance with paragraph (2) of this subsection.

(2) Only properties within the park or property designated in paragraph (3) of this subsection may be acquired by the Commission by condemnation. The Commission may initiate condemnation proceedings only after making every reasonable effort to acquire any such property through negotiations and purchase and consulting with the city council of Lowell. No lands or interests therein may be acquired by the Commission by condemnation without the approval of the Secretary.

(3) The Commission may acquire in accordance with paragraph (1) of this subsection the following properties, or any interest therein:

- (A) World Furniture Building, 125 Central Street; and
- (B) The Martin Building, 102-122 Central Street.

(b) **Sale or lease of specified property: conditions**

The Commission, with the approval of the Secretary, may sell or lease any property which it acquires under subsection (a) of this section subject to such deed restrictions or other conditions as the Commission deems appropriate to carry out the purpose of sections 410cc to 410cc-37 of this title.

(c) **Agreement for disposal of specified property to Commonwealth of Massachusetts: purposes of transfers**

Pursuant to a written agreement between the Commission and the Commonwealth of Massachusetts, the Commission, with the approval of the Secretary, may sell, donate, lease, or in any other manner the Commission and the Secretary deem appropriate make available to the Commonwealth any property which the Commission has acquired under subsection (a) of this section in order to provide for the administration or maintenance of such property by the Commonwealth in a manner consistent with the purpose of sections 410cc to 410cc-37 of this title.

(Pub.L. 95-290, Title III, § 304, June 5, 1978, 92 Stat. 302.)

§ 410cc-35. **Powers of Commission**

(a) **Conduct of hearings, etc.**

The Commission may for the purpose of carrying out sections 410cc to 410cc-37 of this title hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence, as the Commission may deem advisable. The Commission may administer oaths or affirmations to witnesses appearing before it.

(b) **Authorization of action by member or agent**

When so authorized by the Commission, any member or agent of the Commission may take any action which the Commission is authorized to take by this section.

(c) **Receipt of necessary information from other Federal departments or agencies: information furnished upon request by Chairman**

Subject to section 552a of Title 5, the Commission may secure directly from any department or agency of the United States information necessary to enable it to carry out sections 410cc to 410cc-37 of this title. Upon request of the chairman of the Commission, the head of such department or agency shall furnish such information to the Commission.

(d) **Authorization to seek and accept donations of funds, property, or services**

Notwithstanding any other provision of law, the Commission may seek and accept donations of funds, property, or services from individuals, foundations, corporations, and other private entities, and from public entities, for the purpose of carrying out its duties.

(e) **Use of funds for obtaining additional moneys**

The Commission may use its funds to obtain money from any source under any program or law requiring the recipient of such money to make a contribution in order to receive such money.

(f) **Use of mails**

The Commission may use the United States mails in the same manner and upon the same conditions as other departments and agencies of the United States.

(g) **Purchase, rental, donation, etc., of property, facilities, and services: manner of acquisition: transfers to Department of Interior upon termination of Commission**

The Commission may obtain by purchase, rental, donation, or otherwise, such property, facilities, and services as may be needed to carry out its duties. Any acquisition of property by the Commission shall be in accordance with section 410cc-34 of this title: *Provided, however,* That the Commission may not acquire land or interests therein pursuant to this subsection by condemnation. Upon the termination of the Commission, all property, personal and real, and unexpended funds shall be transferred to the Department of the Interior.

(Pub.L. 95-290, Title III, § 305, June 5, 1978, 92 Stat. 302.)

§ 410cc-36. **Staff of Commission**

(a) **Appointment and compensation of Director**

The Commission shall have a Director who shall be appointed by the Commission and who shall be paid at a rate not to exceed the rate of pay payable for grade GS-15 of the General Schedule.

(b) Appointment and compensation of additional personnel

The Commission may appoint and fix the pay of such additional personnel as the Commission deems desirable.

(c) Applicability of civil service provisions to appointment and compensation of Director and staff

The Director and staff of the Commission may be appointed without regard to the provisions of Title 5 governing appointments in the competitive service, and may be paid without regard to the provisions of chapter 51, and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, except that no individual so appointed may receive pay in excess of the annual rate of basic pay payable for grade GS-15 of the General Schedule.

(d) Temporary or intermittent services; procurement and compensation

Subject to such rules as may be adopted by the Commission, the Commission may procure temporary and intermittent services to the same extent as is authorized by section 3109(b) of Title 5, but at rates determined by the Commission to be reasonable.

(e) Detail of personnel from other Federal agencies represented by members on Commission; reimbursement by Commission; administrative support services by Administrator of General Services Administration; reimbursement by Commission

(1) Upon request of the Commission, the head of any Federal agency represented by members on the Commission may detail, on a reimbursable basis, any of the personnel of such agency to the Commission to assist it in carrying out its duties under sections 410cc to 410cc-37 of this title.

(2) The Administrator of the General Services Administration shall provide to the Commission on a reimbursable basis such administrative support services as the Commission may request.

(Pub.L. 95-290, Title III, § 306, June 5, 1978, 92 Stat. 303.)

§ 410cc-37. Use of funds; maintenance of financial records; audits

(a) Any revenues or other assets acquired by the Commission by donation, the lease or sale of property or fees for services shall be available to the Commission, without fiscal year limitation, to be used for any function of the Commission authorized under sections 410cc to 410cc-37 of this title. The Commission shall keep financial records fully disclosing the amount and source of revenues and other assets acquired by the Commission, and shall keep such other financial records as the Secretary may prescribe.

(b) The Secretary shall require audits of the financial records of the Commission to be conducted not less frequently than once each year in order to ensure that revenues and other assets of the Commission are being used in a manner authorized under sections 410cc to 410cc-37 of this title.

(Pub.L. 95-290, Title III, § 307, as added Pub.L. 96-344, § 10, Sept. 8, 1980, 94 Stat. 1138.)

An Act

Oct. 16, 1987
[H.R. 2038]

To amend the Act establishing Lowell National Historical Park, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. AMENDMENTS.

The Act entitled "An Act to provide for the establishment of the Lowell National Historical Park in the Commonwealth of Massachusetts, and for other purposes", approved June 5, 1978 (92 Stat. 290; 16 U.S.C. 410cc et seq.), is amended—

16 USC 410cc-13.

- (1) in section 103(a)—
 - (A) by striking "\$18,500,000" and inserting "\$19,300,000" in paragraph (1); and
 - (B) by striking "\$21,500,000" and inserting "\$33,600,000" in paragraph (2);

16 USC 410cc-31.

- (2) in section 301(e)(2) by striking "for a period not longer than thirty days" and inserting "until his successor is appointed"; and
- (3) in section 301(i) by striking "ten" and inserting "seventeen".

16 USC 410cc-13
note.

SEC. 2. EFFECTIVE DATES.

(a) **IN GENERAL.**—Except as provided in subsection (b), the amendments made by section 1 shall take effect on the date of the enactment of this Act.

(b) **EFFECTIVE DATE OF AUTHORIZATION OF APPROPRIATION.**—The amendments made by section 1(1) shall take effect on October 1, 1987.

Approved October 16, 1987.