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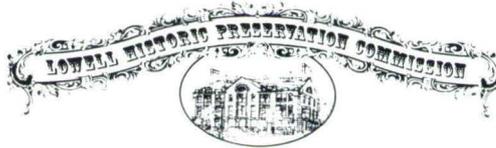
Preservation Plan Amendment

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Lowell Historic Preservation Commission
U.S. Department of the Interior, Lowell, Massachusetts

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May 19, 1990

Honorable Manuel Lujan
Secretary of the Interior
Washington, D.C. 20240

Dear Secretary Lujan:

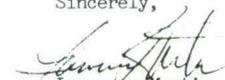
The Lowell Historic Preservation Commission is pleased to present you with a copy of its recently completed Preservation Plan Amendment prepared in accordance with its reauthorization, Public Law 100-134.

This action plan summarizes the accomplishments of the Lowell Historic Preservation Commission and outlines its proposed plans for historic preservation and cultural development initiatives for the next six years. The primary focus of the plan is on the Canalway and Folklife, two important elements of the early cultural park plan which have not yet received the attention they deserve. The programs set forth in this plan are essential to the fulfillment of the goals of the Lowell National Historic Park enabling legislation which call for the LHPC to "preserve and interpret the nationally significant historical and cultural sites, structures and districts in Lowell, Massachusetts" and to "tell the human story of the Industrial Revolution in a nineteenth century setting by encouraging cultural expression in Lowell".

Since the creation of the Lowell Historic Preservation Commission and Lowell National Historic Park in 1978, Lowell has gained a reputation both nationally and internationally as a model for historic and economic revitalization. The Lowell Historic Preservation Commission has played a vital role in this successful revitalization process through the development of extensive public programs aimed at preserving the city's cultural and historic resources. Several of the Commission's projects have received special recognition and important awards, such as the Lowell park trolley, which was recognized by the Secretary of Transportation and Advisory Council on Historic Preservation for outstanding public service to transportation and preservation, and the Market Mills, which received a Governor's Design Award.

We appreciate your consideration of the the Preservation Plan Amendment. Favorable review of the plan will allow us to continue our mission and help to insure the permanent protection of the city's nationally significant cultural and historic resources.

Sincerely,



Lawrence Martin
Chairman

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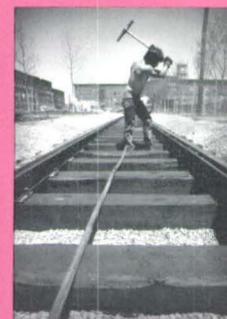




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Background





Lowell, Massachusetts, considered by historians to be America's most significant planned industrial city of the nineteenth century, has transformed itself from a depressed mill town into a vibrant community through a revitalization strategy based on the premise that economic development and historic preservation could be compatible.

In 1977, community leaders asked Congress to create the Lowell National Historical Park as the centerpiece of their efforts to preserve their rich cultural heritage and call attention to the phenomenon of nineteenth century engineering, human effort, and city planning that is Lowell. P.L. 95-290 established the National Park and the Lowell Historic Preservation Commission (LHPC), a 15-member board charged with implementing key components of the Park as well as acting in an advisory capacity to the Secretary of the Interior.

In 1987 legislation was enacted to extend the life of the LHPC until 1995, seven years beyond its original termination date in 1988. The extension contained in P.L. 100-134 was requested so that the LHPC could continue as an active member of a partnership which over the last ten years was responsible for the rehabilitation of over 130 historic structures and the creation of extensive public programs to preserve and interpret the city's cultural resources. In 1987, more than 800,000 people enjoyed canal boat tours, historical tours, trolley rides, and a wide array of cultural, recreational, and interpretive programs sponsored by the Parks. They have

helped to restore a sense of pride in a place termed by syndicated urban affairs columnist Neil R. Peirce, "an international model of a city risen from the grave."

Though the goals of early cultural park proponents have largely been met, a number of important elements have not yet received the attention they deserve. The LHPC reauthorization proposal focused on two of these: the Canalway and Folklife. This report, an amendment to the *Preservation Plan* (LHPC, 1980), describes why these programs are critical to meeting the goals of the Park legislation, and how the Lowell Historic Preservation

Commission would implement them.

The overall goals of the enabling legislation are "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. . . ." The *Preservation Plan* further articulates the Commission's central theme, which is "to tell the human story of the Industrial Revolution in a nineteenth century setting by encouraging cultural expression in Lowell."

Lowell's 5.6 miles of historic power canals and two rivers create a city of bridges, reflections, and



rushing water sounds. Spectacular lock chambers, stone walls, and channels invite comparison to places of natural wonder. Phrases like "industrial canyon" and "Venice of America" have been used to describe this unique man-made environment. Though toured by visitors and partially rehabilitated, the canal system has not yet reached its full potential as a historic resource or urban amenity. While boats can travel through large stretches of the system, their route is interrupted by an unrestored lock complex. Attractive walkways surround certain sites but do not connect with each other. Waterfront buildings

downtown and in the neighborhoods face away from the canals, treating them as hidden alleys.

The Canalway is a proposed system of walkways along the canals that will make them more attractive and accessible. It will offer great opportunities for cultural and recreational activities and promote further historic preservation and economic development. Portions of the Canalway have already been built but much remains to be done.

Other opportunities to fully meet the legislative goals exist in the areas of folklife and cultural affairs. The LHPC is proposing a folklife program

that will build on the research materials and current activities in Lowell. Congress singled out the cultural heritage of Lowell's neighborhoods as a national resource. More work is needed to document this resource and present it to the American people. The LHPC has been offering grants, technical assistance and educational programs through its cultural affairs division since it began. In the earliest federal planning documents, the concept of Lowell as an "educative city" was put forward. The staff experience, resources, and physical facilities of the Park and Commission will be made more accessible and available to city planners, historians, preservationists, teachers, and other interested parties.

The Lowell Historic Preservation Commission has been asked by the community to guide development of Canalway, folklife, and cultural affairs initiatives in much the same role it played in the evolution of the National Park. This report summarizes LHPC accomplishments and outlines its proposed activities for the next seven years. These proposals were developed by Commission staff and members after extensive consultation with Lowell citizens, public agencies, and other concerned parties. The information was published in several broadly-distributed newsletters and in the *Lowell Sun* newspaper as a special supplement. The Canalway proposal has been the subject of several workshops and press conferences. Public comments were incorporated into the text of the *Preservation Plan Amendment*.

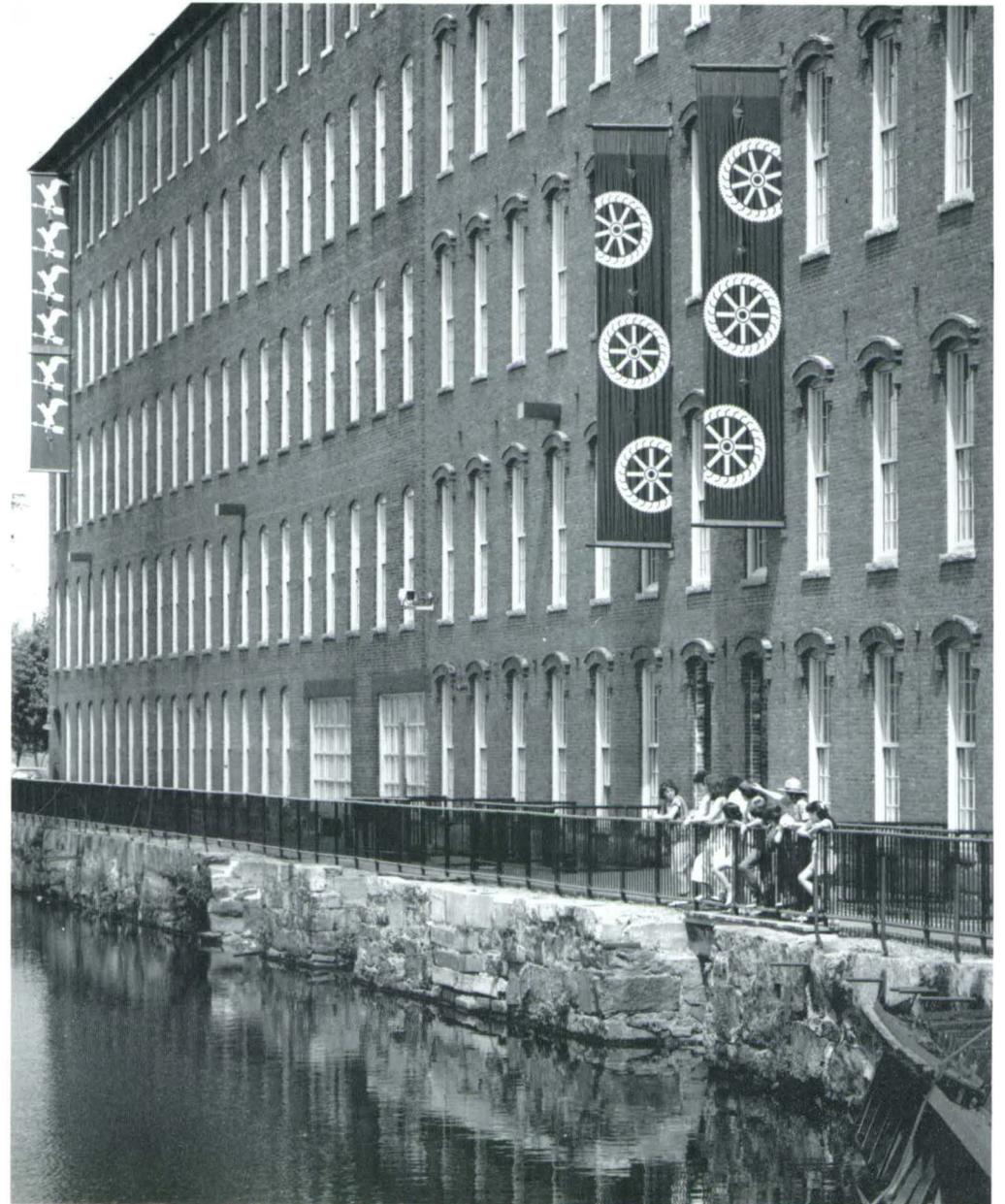
Market Mills before rehabilitation in 1980 and after conversion to a mixed use complex that is the gateway to Lowell National Historical Park. Located here are a visitor center, A Brush With History gallery, offices, restaurants, the New England Quilt Museum and apartments for low and moderate income families.





Above: Costumed interpreters help visitors understand how the canal system was operated in the nineteenth century.

Right: The Wannalancit Technology Center now occupies the Suffolk Mills. Inside, a working turbine and pulley wheel are featured on the Mill and Canal Tours.



The Lowell Historic Preservation Commission

Unlike traditional park advisory commissions, the Lowell Historic Preservation Commission (LHPC) was designed as an entity that would be funded to actively carry out its legislative mandate. With local, state and federal government, as well as private sector representatives, the LHPC was authorized by Congress to develop a number of properties within the Lowell National Historical Park and to ensure continuity with prior community efforts. LHPC responsibilities included administration of a 583-acre preservation district with the 137-acre National Park at its core. An agency of the Department of the Interior, it was designated to implement aspects of the legislation which differed from traditional National Park Service policies. The legislation recognized that new mechanisms would be necessary to develop a park where there was to be minimal federal ownership of land or buildings. Special tools provided for the LHPC included grant and loan programs for private developers, broad leasing and acquisition authorities, the capabilities to develop a rail transportation system, and cultural support programs. An early legislative amendment empowered the LHPC to collect rents and fees for use of its properties and to retain this income for Park-related purposes.

The *Preservation Plan*, approved by the Secretary of the Interior in 1981, devised detailed strategies for rehabilitating and using ten selected historic structures in the "intensive use zone," the heart of the National Park downtown. These ranged from

Market Mills, where the LHPC was to participate in a \$14 million development project, to the Merrimack Manufacturing Company Agent's House (Yorick Club), where only minor technical assistance was required to ensure protection of the historic building.

The Commission was to be a flexible entity, able to respond quickly when a building was threatened or when a cooperative development opportunity arose. Over the years that has varied from simply acquiring a building, such as a mill in the Boott complex for the National Park Museum, to taking complete responsibility for projects like the Patrick J. Mogan Cultural Center or the Canalway along the Pawtucket Canal at Central Street. All LHPC major projects were designed to incorporate a cultural component, whether it be historical exhibits, as at the Cultural Center, art studios at Market Mills, or commissioning public sculptures.

The *Preservation Plan* included:

- preservation strategies for ten important historic structures
- demonstration projects along the canal system
- grant and loan programs for historic preservation
- design and implementation of an electric trolley system
- cultural grants and support for Park-related community activities
- standards for preservation and new construction in the Preservation District

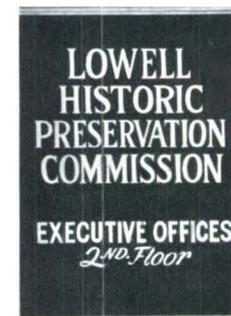
- technical assistance to the private sector and other agencies

In 1978, the LHPC was allocated \$21.5 million of the original \$40 million congressional authorization for Lowell National Historical Park development. This full amount had been appropriated by 1988, and nearly all the *Preservation Plan* projects were well on their way to completion. A summary and status report of the *Preservation Plan* is included as an appendix to this report.

Development Projects for FY 1979-1988

Mogan Cultural Center	\$ 5,100,000
Boarding House Park	1,800,000
Market Mills	1,100,000
Boott Mills	725,000
Trolley	2,800,000
Building Grants and Loans	4,300,000
Canalway Demonstrations	3,400,000
Exhibits	600,000
Planning/Land, etc.	1,675,000
	\$21,500,000

Day-to-day operations of the LHPC are carried out by a 14-person technical staff with expertise in historical architecture, cultural affairs, law, urban planning, landscape architecture, facility maintenance, and construction administration. During the course of the LHPC's ten years, staff members have acquired a wealth of practical knowledge on subjects as varied as installing works of public art, administering highly effective grant and loan programs, co-developing the reuse of a major mill complex, creating history exhibits, and reintroducing trolley service to Lowell.



The LHPC sponsored research and publication of the *Sign Book*, a study of early Lowell signage. Design standards for new signs were based on the research.

Key Partners



In order to understand the LHPC and how it operates, one must know more about its sister agencies – the Lowell National Historical Park and the Lowell Heritage State Park. Together these entities are responsible for implementing the urban cultural park envisioned in the early 1970's.

The National Park Service

The National Park Service (NPS) presence in Lowell has been significant since the Lowell National Historical Park began operations in the city shortly after passage of the enabling legislation in 1978. What began with a single uniformed ranger working out of a Merrimack Street storefront offering informal walking tours has evolved into a rich interpretive program in which hundreds of thousands of people participate each year.

Lowell National Historical Park operates a Visitor Center and will soon open a major museum in the Boott Mills where the themes of labor, power, the industrial city, machines, and capital will be presented to the public. The NPS also operates the exhibit on the Working People of Lowell at the Patrick J. Mogan Cultural Center. Other NPS programs include the popular Mill and Canal tours which tell the story of the Industrial Revolution using the actual sites and technological innovations that made it possible. The canal system is an integral part of the tour program. It is used and interpreted for transportation and as a historical resource. Visitors can see working water-powered turbines and experience the

sensation of being in a granite-walled lock chamber aboard a small boat as a wooden gate opens, raising it to the higher water level of the next canal reach.

Other functions of the Lowell National Historical Park are:

- development of five major interpretive sites
- visitor services, including extensive educational and tour programs
- maintenance and operation of visitor facilities (ranging from the Visitor Center at Market Mills to the trolley and canal transportation systems)
- technical assistance in historic preservation to state and local governments and others

The NPS has received \$18.5 million in development appropriations, and virtually all projects in its *General Management Plan* are underway or complete.

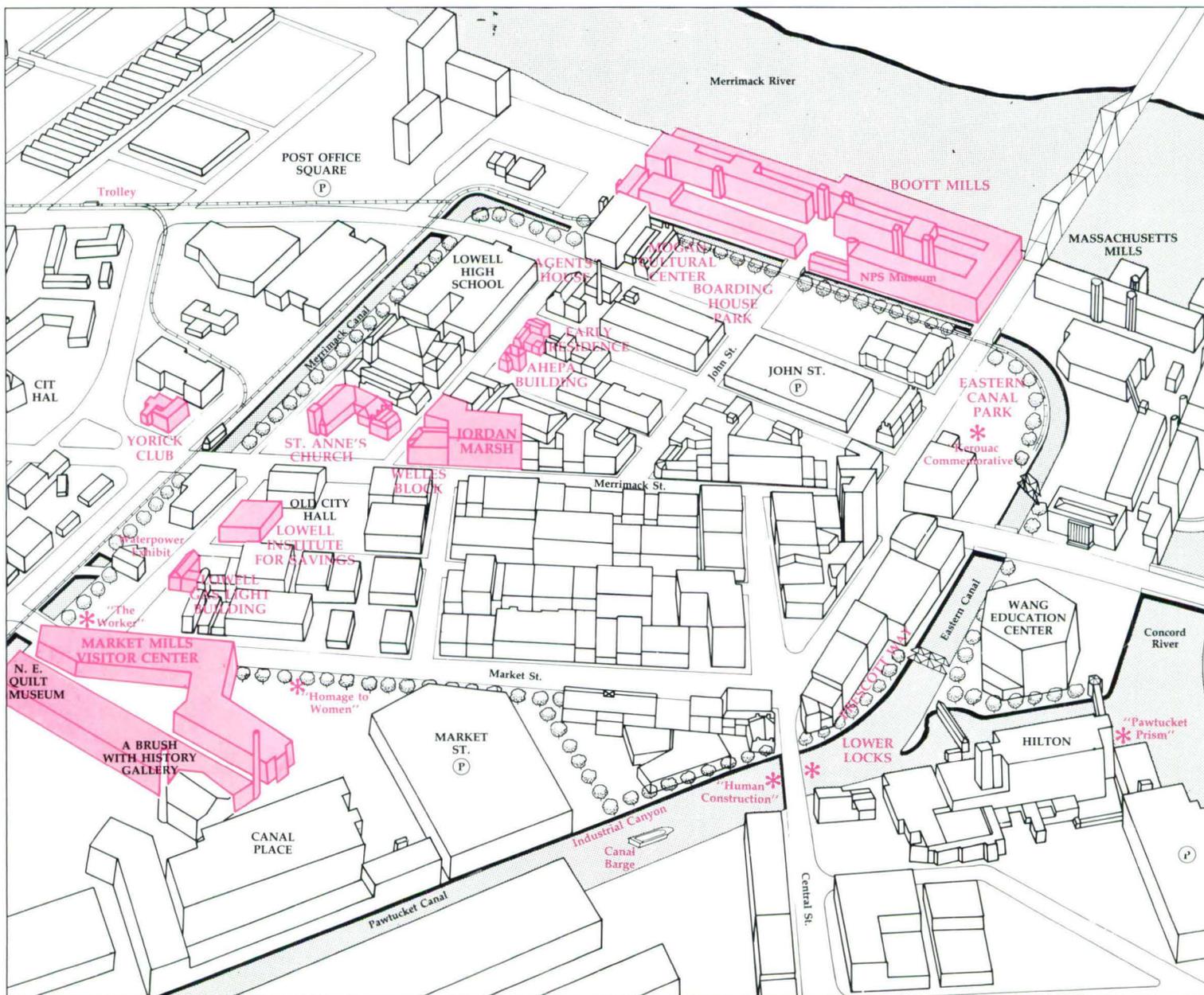
The Lowell Heritage State Park

The Lowell Heritage State Park of the Commonwealth of Massachusetts, Department of Environmental Management (DEM) also plays a key role in preserving the history of Lowell and has invested over \$16 million since it began work in Lowell in 1976. It has built a boathouse, renovated a bathhouse, and completed an extensive riverfront esplanade on the Merrimack River. Having selected the Lowell waterways as its main interpretive focus, the State Park runs an award-winning exhibit on waterpower at the Mack

Building near the Visitor Center downtown. In addition, the state provides costumed interpreters at various gate houses and lock complexes that recall for visitors the nineteenth century atmosphere of these still-operating historic landmarks.

Most important of all, though, are the Heritage Park activities unseen by the public. Since the late 1970's, DEM and Heritage Park staff had been negotiating with the owners of the canal system, the Proprietors of Locks and Canals on the Merrimack River, to acquire permanent rights to use the system for public purposes. A major goal of the Heritage Park was realized in 1986 when the acquisition of the recreational and air rights of the canal system was consummated. Tour boats may now operate and historic restorations be carried out without case by case reviews by the Proprietors. The sale transferred 24 acres of land to the state, mostly alongside the canals. This land, while not landscaped pathways now, will provide much of the right-of-way that is needed to complete the inner and outer loops of the Canalway. Strategies for developing these key canal-side parcels are described later in this document. Their availability was a major impetus behind development of the Canalway proposal.





The Historic Downtown

The *Preservation Plan* directed the Lowell Historic Preservation Commission to focus its efforts in the historic downtown area shown here. The shaded buildings were listed in the park legislation for LHPC involvement. All have been preserved or rehabilitated, although only a handful are owned in fee by the government. Most of the 45 LHPC grant and loan funded historic buildings are located here, as are the major demonstration projects. The Inner Loop of the Canalway connects points of interest.

LHPC'S Unique Role in The New Lowell



The Lowell Historic Preservation Commission is truly a one-of-a-kind agency. Its 1980 *Preservation Plan* laid out an ambitious program for an unusual national park where there was to be very little fee ownership of property. The LHPC authorities were to be critical in the successful implementation of the Lowell National Historical Park, which in turn stimulated the revitalization of the entire city. The following descriptions of Market Mills, the Patrick J. Mogan Cultural Center, trolley system, and grant and loan programs are included to explain how the LHPC operates. The same techniques and statutory authorities will be used to implement the *Preservation Plan Amendment*.

The LHPC bridges the gap between the Park agencies and the community. Through its demonstration projects and grant programs it deals with private developers and banks from a position of strength. With its mandate to set a standard of excellence in all its undertakings, the LHPC can take much of the credit for the high quality of Lowell's historic preservation and cultural programs.

Many other entities also deserve recognition for Lowell's phenomenal success in rebounding from decades of decline. Key players in this ongoing process include the City of Lowell, especially the City Manager, City Council, and Division of Planning and Development. Other principal actors are the state's Department of Environmental Management and local Heritage State Park staff, and the Lowell National Historical Park Superintendent and staff. The Lowell

Plan, Inc. is the most important private-sector group, and has been of critical value in the entire revitalization process. In its daily operations, the LHPC works closely with all the organizations mentioned here, as well as countless other individuals and groups who are committed to the continuing success of Lowell as an urban cultural park.

Market Mills

This complex, known historically as the Lowell Manufacturing Company, includes two buildings, one dating from 1882, the other from 1902. Together they contain 284,400 sq. ft. of gross building area. Located at the southern tip of the "intensive-use zone" of the National Park, these mills were identified in early plans as critical for the preservation and interpretation of the downtown. Although damaged by fire and abandoned by their owners who were unwilling to pay property taxes, the mills were recognized for their tremendous reuse potential.

Market Mills was co-developed by Market Mills Associates, private developers, and the LHPC. The developers created 230 units of subsidized housing for families and the elderly in the upper floors of the buildings while the LHPC was responsible for 42,000 square feet, most of the ground floor space in the complex.

Completed in 1982, Market Mills now provides a gateway to the National and State Parks and to the downtown. Visitors are directed there by signage that begins on major

highways. They park in an attractively landscaped parking lot, then walk through a passageway carved out of the facade where they might stop to visit the Brush With History gallery and studios, an art and craft center developed by the LHPC, or the New England Quilt Museum, a new private non-profit institution. Next they arrive in the courtyard, where the urban landscape provides an attractive yet unusual setting for eating lunch, listening to music, or conversation. The courtyard concept was developed and partially funded by the LHPC.

On the opposite side of the courtyard is the Visitor Center where a multi-image slide show, introductory exhibits, and National and State Park staff provide basic orientation in a two-story space artfully designed to show how functional and appealing a refurbished mill can be. Here the visitor is introduced to the Park themes — labor, power, machines, capital, and the industrial city — and daily tour offerings. Across the passageway is the Melting Pot, a food court with seven privately-owned, ethnic fast food restaurants. Most of these ground floor spaces are controlled by the LHPC under the terms of a 40-year lease with Market Mills Associates. The LHPC in turn rents the space to the respective tenants and also handles maintenance and management. A special provision of the legislation allows the LHPC to collect and retain revenues from the property for this purpose.

In an adjacent park, *Homage to Women*, a sculpture by Mico Kaufman, was unveiled in 1984 to commemorate

the contribution of women to the city. The work was the first installation of the Lowell Public Art Collection, an important LHPC initiative now being implemented in close cooperation with the Lowell Office of Cultural Affairs. There will soon be some 20 pieces in the collection, many along the inner loop of the Canalway. Private contributions are funding most of the fabrication costs with LHPC and City staff providing planning and technical assistance.

The total development cost for Market Mills was \$14 million. Since the buildings are in a National Register District, the developers were able to make use of federal tax incentives for certified rehabilitation. The LHPC contributed \$1.1 million to develop the commercial space and courtyard, and tenant improvements are estimated to total another \$500,000. The NPS spent \$1 million for the Visitor Center. Once considered for demolition by the City, Market Mills is now a downtown landmark.

The Patrick J. Mogan Cultural Center

The mission of the Patrick J. Mogan Cultural Center is to tell the human story found in the history of the United States as an industrial nation, especially by concentrating on the lives of the working people of Lowell. Named in honor of the educator and planner who developed the Lowell urban park concept, the Cultural Center houses history exhibits, classrooms, offices, and a library. In addition to the permanent exhibits and uses, a wide variety of programs

are associated with the Cultural Center.

Because of its proximity to the Boott Mills, the 1830's boarding house which is the home of the Cultural Center was considered the best place to show how early mill workers lived in the shadow of the factory. The permanent exhibit on the Working People includes a partially recreated boarding house interior in which "mill girls" of the mid-1800's lived; an exhibit about the social world created by the immigrants who have settled in Lowell over the past 150 years; and a film about the role of labor in American industrial society.

The organizations represented in the Center include the LHPC, Lowell National Historical Park, the University of Lowell, and the Greater Lowell Central Labor Council. Exhibits and programs began operation in 1988. Among the activities envisioned as part of the Cultural Center's future program are educational conferences, traveling exhibits, folklife programs, and performances. The front lawn of the Center will be Boarding House Park, a one-acre park for concerts, festivals, and theatrical performances.

The Center was developed in several phases as funds were made available through federal appropriations. During phase one the historic boarding house was acquired and its exterior accurately restored to its 1837 appearance. This involved reconstructing the top 1½ stories which had been removed in the twentieth century. In the second phase a new wing was added to the building to house the University's Center for

Lowell History, an archive and library, and the interior of the boarding house was fitted out for exhibits and classrooms. Maintenance of the Center will be performed by the NPS, which will also manage the exhibits under the guidance of a community advisory board. University lease funds, through the Lowell Development and Financial Corporation, were used for specialized tenant improvements.

Grant and Loan Programs

LHPC grants and loans for historic preservation and cultural projects have been instrumental in changing Lowell's image from that of a down-and-out mill town to an internationally acclaimed tourist destination.

The building grants and loan program has funded 45 historic rehabilitations of nationally significant structures. Very visible in a mid-sized city, the completed projects have established high standards for building preservation. In fact, a strategy originally proposed in the *Preservation Plan* has worked well with the building grants. This was to use federal funds as incentives for the first projects, then base future regulatory guidelines for unassisted projects on the examples set by the grant-funded rehabilitations. The LHPC was mandated by Congress to devise a system of enforceable standards, which it did by drafting state legislation to create the Lowell Historic Board in 1984. The grant projects serve as examples for owners who are about to have their proposals reviewed by the Board. The



"Mogan and his friends developed the vision of turning the derelict remnants of yesteryear into a prime asset of celebrating, and rebuilding, the fascinating 5.6 miles of stonewalled canals that lace the city, together with the gatehouses and locks of the water system that powered the textile mills." "Lowell's Unfinished Task," Neal R. Pierce, syndicated column December 29, 1986.

MAP 1
Boundary Changes

Preservation District
District Additions

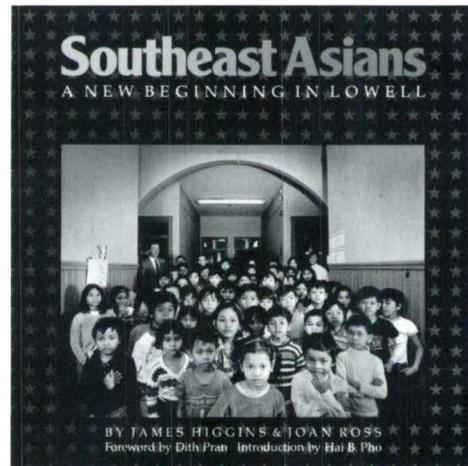


Lowell Historic Board regulates a downtown historic district which includes the National Park, the canal system, and the central business district.

Grants and loans may only be awarded to buildings ranked "A" on the *Preservation Plan's* index of nationally significant structures. Loans are administered by the Lowell Development and Financial Corporation (LDFC) and may be combined with grants. In most cases, owners use a variety of funding sources to help them put together financially viable projects. Because LHPC funds will not be released until the staff historical architect certifies the standards have been met, the LHPC provides quality assurance for the other funders. All buildings, structures, and sites in the original 583-acre Preservation District were evaluated and indexed. Some minor additions were made to the District in 1988 (see *Map 1*). These lands are now undergoing evaluation and will be added to the index soon.

While many of the nationally significant structures in Lowell have been preserved and restored, much still remains to be done. The Preservation District includes some 380 buildings in the "A" category as well as many more considered locally important. The completed projects are mostly commercial buildings downtown. Only a handful of canalside facades have been done. Several large mill complexes along the canals are still unrehabilitated, and will require attention if these historic resources are to be preserved and interpreted.

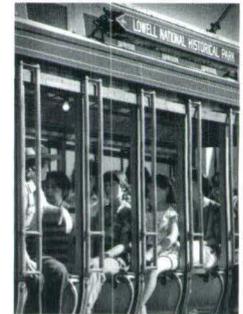
Cultural grants have been equally important. With support from the LHPC, dozens of persons and organizations have undertaken projects which might have been impossible without a cultural grant from the Commission. Examples of these projects include a photo exhibit of Lowell streetscapes from the nineteenth and twentieth centuries and a concert of folk music during Black History Month. Grant projects are a means of presenting, celebrating, and uncovering Lowell's cultural history. See the Cultural Affairs section for more on grants.



The Lowell Park Trolley

The *Preservation Plan* called for the LHPC to establish a transportation system using existing industrial railroad tracks. The goal was to allow Park visitors to enjoy the historic district and canals without adding more private cars to an already congested downtown. The Park Trolley system, through cooperative agreements with the Boston and Maine Railroad, began full operation in 1984. Two open-sided and one semi-convertible electric streetcars were built according to early plans of cars that ran in Lowell at the turn of the century. The trolleys are both practical and colorful, adding much to the Park ambiance as they move people from the Visitor Center to the canal boat landings and interpretive sites. The basic system was expanded in 1988 to connect to the Suffolk Mills and Eastern Canal Park, newly developed features of the National and State Parks (see *Map 2*).

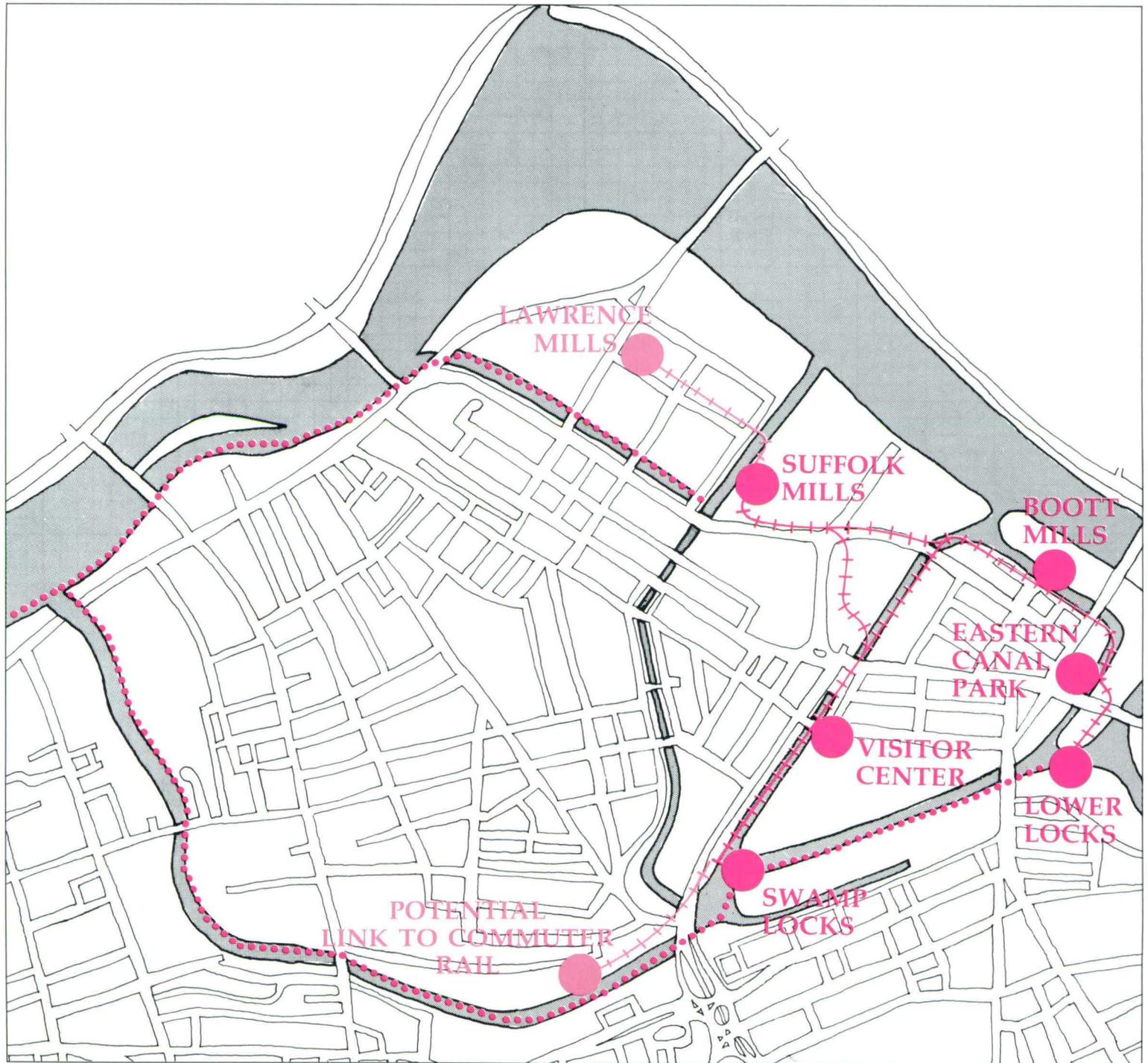
Development of the Park Trolley System on land not owned by the government has required a similar approach to that needed to complete the Canalway. The LHPC negotiated donations of over a dozen easements from private and public property owners to assemble the trolley right-of-way. Design and construction contracts were administered and the completed system was singled out by the Secretary of Transportation and Advisory Council for Historic Preservation for "Outstanding Public Service to Transportation and Historic Preservation" in 1986.



Above: The Lowell Park Trolley, a replica of Lowell's early rail transit vehicles is an important element in the parks interpretative program providing a critical transportation link with canal boat landings and sites of historic interest. **Left:** An important photo-documentary of Lowell's Southeast Asian community was published with the help of an LHPC cultural grant.

MAP 2
Transportation System

- Canal Boat
- Park Trolley +++
- Terminus ●
- Potential Trolley Extension +++



The remainder of this report describes the action items that the Lowell Historic Preservation Commission will undertake in the next seven years. The main program areas, the Canalway and Cultural Affairs, are not really new. Both were proposed in the original plans for the Lowell National Historical Park and are already underway, if only on a limited scale.

The first decade, by necessity, emphasized saving historic structures. The rationale was that if the physical remains needed to tell the story of the American Industrial Revolution were lost, there would be no reason for establishing a national park in Lowell. An enormous amount of effort was needed to prevent demolitions and change attitudes about the cultural heritage that many local people took for granted. Program initiatives were started in the first decade, and now is

the time to capitalize on that investment. With the basic preservation work under control, it is time to use it as intended, as the setting for cultural expression.

The programs proposed for the new agenda are all within the LHPC's legislative mandate. The canal system is included in the Preservation District administered by the LHPC and is listed as an important national historical resource for protection. Similarly, the legislation directed the LHPC to "provide for educational and cultural programs to encourage appreciation of the resources of the park and preservation district."

The Canalway and Cultural Affairs programs will ensure that Lowell National Historical Park truly carries out the original proposal of the Report of the Lowell Historic Canal District Commission, incorporated by reference into 16 USC 410cc.

Unfinished Tasks

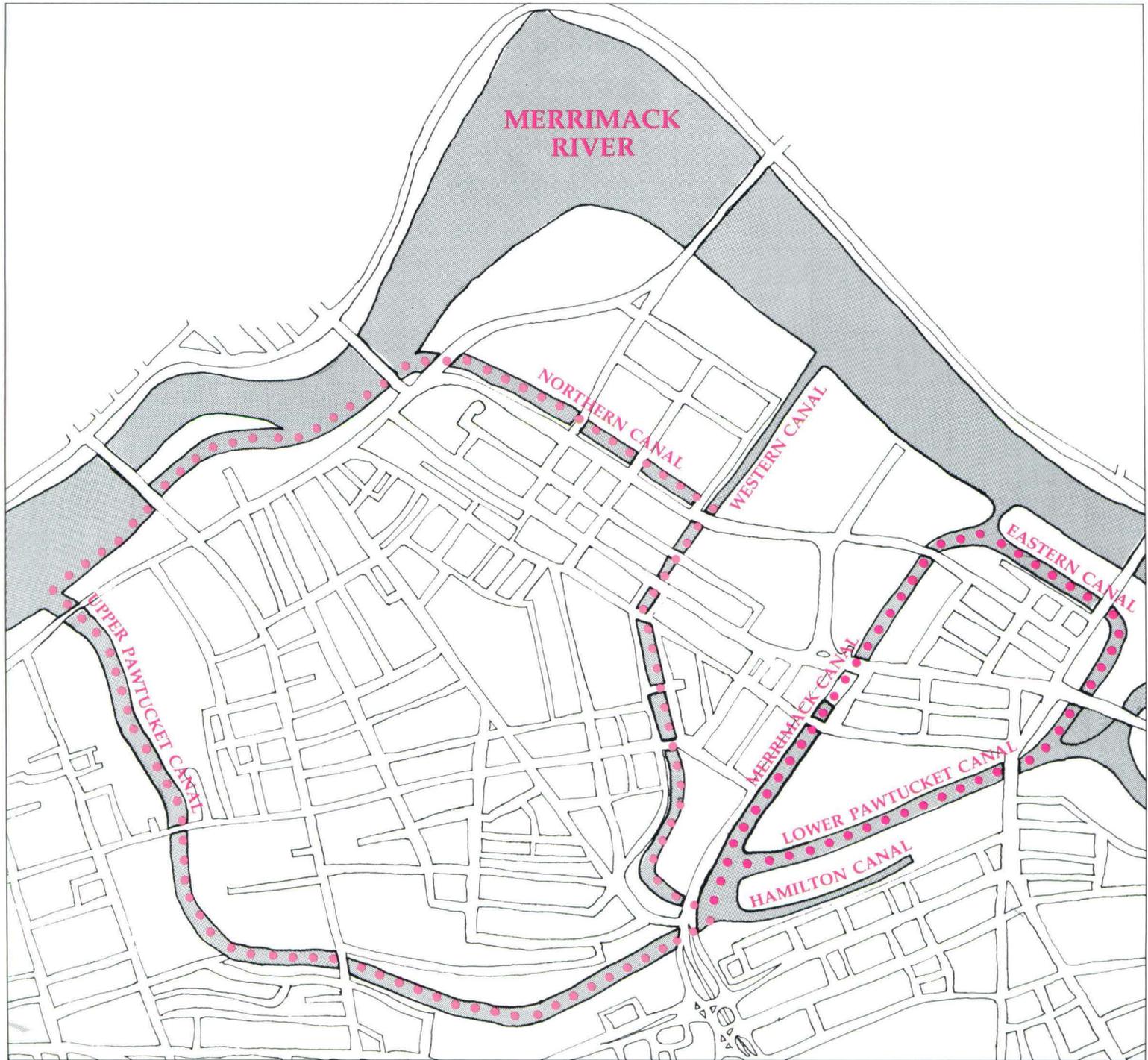


MAP 3

The Canalway

Inner Loop ● ● ●

Outer Loop ● ● ●



The Canalway

The Canalway is the farthest reaching proposal included in this report. Though based on development of a physical resource — the canal system — it is a broad concept that encompasses most of the recommendations for the next seven years. Many of the cultural programs described later, for example, will emphasize the Canalway.

The Canalway is a system of paths connecting all segments of the 5.6 mile Lowell canal system and portions of the Merrimack and Concord Rivers. Some parts of it already exist, but because the sections are not continuous they are used only by abutters. Most of the existing segments are on public land and have been created recently by the Park development agencies. When complete, the entire Canalway will have guaranteed public access with provisions made where feasible for handicapped accessibility.

The Canalway is organized into a downtown inner loop about one mile long and an outer loop that links up with a transportation system of canal boats and Park trolleys. Development of the Canalway will encourage greater use of the water for boating and the banks for cultural, interpretive, and commercial activity. The Canalway reaches out into the neighborhoods and reinforces the notion of the city as a park.

The inventory maps (*Maps 5-13*) at the end of this report show existing conditions in 1989 and where the proposed Canalway paths will be located.

How the Canalway Concept Evolved

Although preservation of the canal system was a critical element of the original Park plans, it had become clear by 1985 to those developing the Parks that while several major portions of the system had been beautifully restored and tour programs were in operation, the full potential of Lowell's waterfront was largely unrealized. A Canalway Task Force began meeting to pursue a shared vision of a canal system that could become a valuable urban amenity, similar to the San Antonio Riverwalk or Washington's C & O Canal or the Savannah riverfront where compatible new commercial development in historic settings has made for lively public spaces. Members visited other cities where urban waterfronts had been reclaimed for housing, arts institutions, and recreation. What surprised the Task Force most of all was that they found no other city with a resource as varied and impressive as the Lowell canal system. Nowhere else did they find a canal system so integrated into the landscape.

No other American city has anything like it. Besides being physically intact and having its complex power-generating equipment still operating, the system traverses an incredible variety of landscapes from urban wilds to industrial canyons. Its massive granite walls and great wooden lock gates are marvelous artifacts of nineteenth century engineering. Furthermore, it provides the structure that shaped the entire development of the city of Lowell.

Understanding how and why each section of the canal system was built gives clues to the evolution of a place that is considered by historians to be the finest example of a planned industrial city in the nation.

While the canal system had provided the basis for the original urban cultural park idea, it gradually became clear to many people that Park programs were concentrating too much on individual sites at the expense of the whole.

In June, 1985, the Task Force published a proposal that summarized its goals and advanced a vision of the Canalway as the development focus for the next ten years. The time was right. Although the Canalway term had been newly coined, it soon became common parlance among civic leaders. The *Lowell Sun*, the daily newspaper, published a special tabloid shortly thereafter entitled, "The Final Link: Canal Development the City's Next Frontier." The goals of the Canalway Task Force and of the LHPC in seeking to implement this proposal are:

1. to create a continuous path system along the Lowell canal system — to complete the Canalway;
2. to promote canal system waterfront sites for cultural and commercial use;
3. to cultivate the potential of the canal system as a unique city-wide resource;
4. to coordinate local planning and development activities to carry out the Canalway vision.



Unusual undiscovered spots abound on the canal system, like this one where the Western Canal joins the Lawrence Wasteway as it spills into the Merrimack River.



How the Canalway is Being Created

The Canalway has been started with public and private funds obtained to implement the Lowell National Historical Park and Heritage State Park. While those funds tend to be committed to very specific sites, when the projects are located by a canal the Park agencies are building in walkway treatments when they can. Some examples are the Mack Building entrance plazas where new railings and pavement encourage people to walk along the canal or the Lower Locks where an elaborate walkway system surrounds the converging waters of the Pawtucket and Eastern Canals and the Concord River, creating a dramatic setting for the Lowell Hilton Hotel and Wang Education Center.

For all recent projects, sponsors have been careful to allow connections to the emerging Canalway system. Private property owners along the routes have been alerted and are working closely with the LHPC to make sure their plans are consistent with Canalway goals. The Lowell Plan, a non-profit group representing the private sector, has been particularly active in Canalway development, having funded design costs for demonstration projects in critical locations along the Pawtucket Canal. One of these has resulted in a \$350,000 state grant to continue the Canalway from the Lower Locks to Market Mills, the location of the park visitor center.

The strategy is to set an example with these initial projects. It is intend-

ed that grant funds become less and less necessary as the concept catches on and owners are willing to initiate Canalway connections and waterfront rehabilitations on their own. A helpful ally in this approach is the Lowell Historic Board whose design review authority covers the entire canal system. The Board is active in the Canalway effort and makes sure owners do not inadvertently block the right-of-way or erect unsightly facades along the canals.

Why the LHPC?

As the Canalway concept was emerging, there was much discussion of how to implement such a complex undertaking. Planners knew that an entity would be needed that represented the major local and National Park interests, had a proven record in managing complex physical and cultural development projects, and had the flexibility to redirect its energies on the Canalway and related efforts for a period of years.

With its highly successful 10-year *Preservation Plan* program almost complete, the LHPC was the obvious candidate. It had the statutory authority, the technical staff, the experience, and the enthusiasm for the task. Now that the LHPC has been reauthorized by Public Law 100-134 to continue its activities for seven more years it will be able to direct these resources towards implementation of the *Preservation Plan Amendment*.

Historic Structures

The agents (managers) of the Boott and Massachusetts Mills once

occupied this two-family house at 63 Kirk Street, across from the Mogan Cultural Center. Built in 1846, the Agents house is owned by the government, having been acquired by the NPS in 1979. It was identified as the "Linus Child House" in the enabling legislation.

Several other Kirk Street buildings were also identified in the legislation for federal involvement, as the street includes buildings associated with each of the major social groups of nineteenth century Lowell in close proximity to one another. The Early Residence (middle income family) and AHEPA (former elementary school) buildings have been preserved, and a nearby mill workers boarding house has been restored and incorporated into the Mogan Cultural Center.

While Lowell National Historical Park has undertaken basic stabilization and preservation of the Agents house exterior, major work is needed on the interior if it is to be opened to visitors for interpretation and public programs. It is proposed that the LHPC work with Park staff to plan, design, and construct appropriate interior systems and finishes to make a portion of the building suitable for interpretation. When complete, the house will enable interpreters to better explain the theme of capital by showing visitors how and where the mill managers lived. Part of the house might also be used to exhibit works of art related to Park themes.

The fate of several other historic structures located in the Preservation District remains unresolved. Other pending issues include the B&M



Above: The agents of the Boott and Massachusetts Mills once occupied this house on Kirk Street.
Left: The Pawtucket Falls on the Merrimack.



Above: Boat tours through Lowell's operating locks are a highlight of the summer programs operated by State and National Park staff. Right: Mikhaela Reid, a second grader at the Arts Magnet School created this animated computer picture of the Park Trolley as part of a class project. An LHPC cultural grant helped purchase the school's computer equipment.

Railroad Depot on Central Street (The Rialto) and the Federal Building on East Merrimack Street (The Old Post Office). Buildings such as these are threatened either physically or in terms of proposed uses which are inconsistent with LHPC development plans. The B&M Railroad Depot was recently threatened by demolition. The owner has donated the building to the LHPC. Currently, the Commission is evaluating strategies for its rehabilitation. In the case of the Federal Building, long term plans for reuse of the building as a Cultural/Performing Arts Center are being threatened by the possible sale of the building to private parties. The Federal building, located on the Eastern Canal is already in federal ownership. The building could potentially be transferred from the GSA to the LHPC for development of cooperative cultural programs with the University of Lowell, the National Park Service and the City. In order to assure protection or proper reuse of key historic structures such as these, grant funds and use of acquisition authority, even if just land banking, may be necessary. The LHPC should, when necessary and under limited circumstances use its statutory grant and acquisition powers within the Commission's existing authorization level to insure protection and proper reuse of key historic structures. This issue applies only to nationally significant "A" rated buildings in the preservation district.

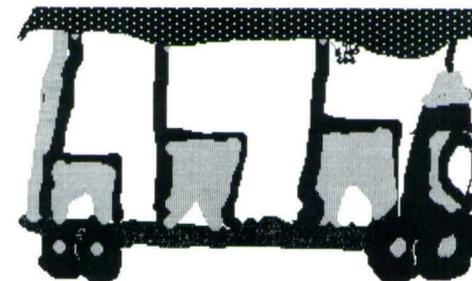
Transportation

Providing a good visitor transportation system has been one of the biggest challenges for Lowell National Historical Park. Because the park interpretive sites are dispersed along the 5.6 mile canal system which winds its way through a densely built city, the visitor experience might have been a very disjointed one. This issue was addressed in the early planning documents, where an integrated system of canal boats and trolleys was proposed. The idea was for the transportation system to let visitors experience the park as a whole, rather than requiring them to drive by private car to the various points of interest. Another goal was that the transportation itself become part of the interpretive program (*see Map 2*).

The system makes use of the network of canals and industrial railroad tracks that crisscross the city. Routes were devised to bring people within a few steps of the principal National Park facilities. With the restoration of historic boat locks, visitors will experience first hand what it feels like to drop the 32 feet from the Merrimack to the Concord Rivers. The canal boat route removes them from the hustle and bustle of the modern city, and with costumed interpreters at the gate houses along the way, helps evoke an earlier time. In order to accomplish this, several bridges were modified along the route to allow for passage underneath. The main route shown is now passable, with the exception of the Swamp Locks which are to be restored by the Heritage State Park.

Other portions of the canal system are not expected to be accessible by boat, except as still water basins between bridges.

The existing trolley system was designed and built by the LHPC and is operated by NPS personnel. Most of the track is owned by the Boston and Maine Railroad, a division of Guilford Transportation Industries, and is governed by a joint use agreement that allows park use during daytime hours. The railroad still serves one industrial customer whose deliveries occur at night. This agreement, while adequate for the start of operations, will become increasingly costly for the NPS over time. Currently, lease payments are only made during months when the trolleys operate (May - October). When year-round service begins, costs will increase dramatically. Acquisition of a long term interest in the right-of-way is recommended when appropriations become available.



Other areas which must be studied further are fee collection and administration. Trolley rides are now free but it is recognized that fees will need to be charged when service is expanded and the public has been notified that this will take place in 1989-90. It may prove beneficial for the LHPC to be the fiscal agent for these revenues.

While the existing trolley system is adequate in terms of capacity and routes for the time being, several alternatives exist for its expansion in the future. The rolling stock consists of two open-sided cars modeled after c. 1901 Brill trolleys and one semi-convertible, heated car, based on a 1914 St. Louis Car Co. vehicle. Both are close replicas of actual cars that ran in Lowell, slightly modified for strength and accessibility for the handicapped. An additional car may be needed as winter visitation increases.

The trolleys have become a key ingredient in the Park program since they began operation in 1984. Developed in cooperation with the Seashore Trolley Museum of Kennebunkport, Maine, they enable school children to touch, ride and listen to a vehicle very different from those they know. The trolleys make possible the Mill and Canal Tour, a comprehensive 2-hour overview of the city that is the heart of the NPS interpretive program. They are also a very visible symbol of the Park to local residents, who might not know that a particular building was rehabilitated by the Park agencies.

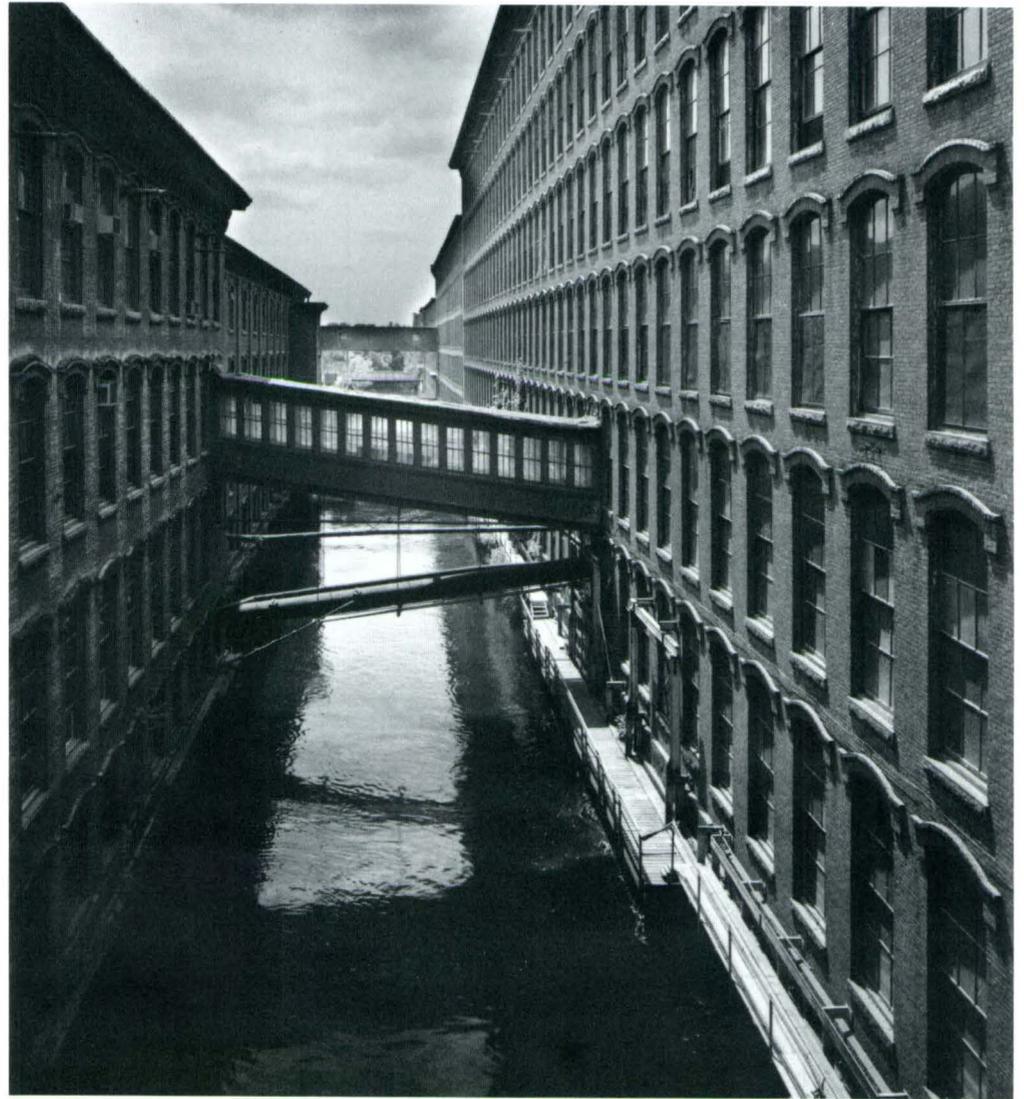
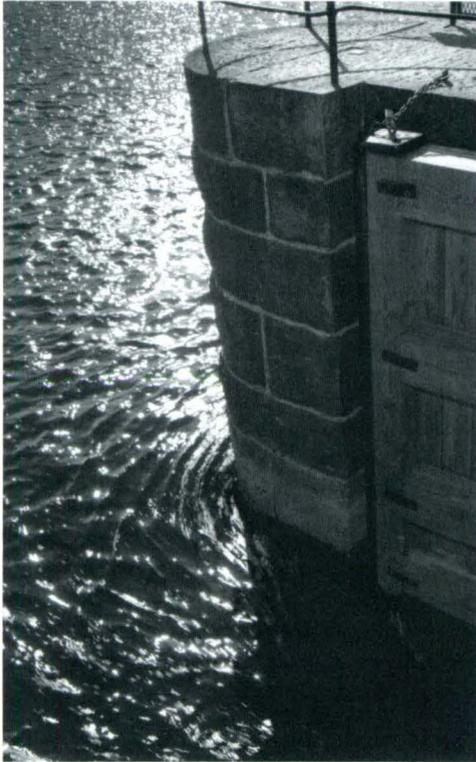


The first streetcar built for the Lowell Park Trolley system was based on a 1901 Brill car that ran in Lowell at the turn of the century.

Trolley routes might be expanded as shown on the map, if the adjacent sites are developed for public use. An opportunity worth further study is the proposed connection to the main commuter rail line between Boston and Concord, N.H. The Lowell industrial spur now meets the main line just north of the Lowell passenger station (Gallagher Terminal). If the rest of the spur were electrified, trolleys could meet scheduled passenger trains, allowing for much better access to the National Park by public transportation. Trolleys might also be used as a downtown shuttle from the terminal for general users as well. It is recommended that these alternatives be pursued in conjunction with the Northern

Middlesex Area Commission and Lowell Regional Transit Authority, who are considering involvement in year-round operation of the trolley system.

“The Lowell canal system is a gold mine of potential. Water has a very strong psychological appeal for very primitive reasons. It’s interesting as an amenity to design with. It changes light. It affects the environment. It changes people’s moods and attitudes.”
Sherry Wagner, 1985.



The Canalway Examined



The Setting



Gates on the Pawtucket Canal at Lower Locks.

The Lowell canal system is recognized for its historical significance. Listed as a National Historic Landmark in 1977, it has also been designated a Civil and Mechanical Engineering Landmark. Only in the last few years, however, have more people begun to notice how the canals enhance the city's character and attractiveness. The photographs and quotations give a glimpse of this unique national resource.

"The Lowell canal system is a gold mine of potential. Water has a very strong psychological appeal for very primitive reasons. It's interesting as an amenity to design with. It changes light. It affects the environment. It changes people's moods and attitudes. I'll lay you odds that there would never be a person who would walk through Lowell for the first time and who saw those canals and didn't walk over and look at them." Sherry Wagner, San Antonio planner, in the *Lowell Sun*, 1985.

"The river continued its slow thundering hush through the town, the cold white moonlight shone on the frozen canals and made its midnight glow between windswept desolate tenements on Rooney Street." *The Town and the City*, Jack Kerouac, 1950.

"Mogan and his friends developed the vision of turning the derelict remnants of yesteryear into a prime asset: of celebrating, and rebuilding, the fascinating 5.6 miles of stonewalled canals that

lace the city, together with the gatehouses and locks of the water system that powered the textile mills." "Lowell's Unfinished Task," Neal R. Peirce, syndicated column, December 29, 1986.

"The canal system in Lowell is unique because of its historical importance, its grand scale, and its technological complexity." Dr. Patrick Malone, Director, Slater Mill Historic Site, Pawtucket, R.I., testimony before Congress, 1977.

Inventory Summary

The Lowell canal system has been inventoried and recorded by several study teams during the planning processes for the National and State Parks. The 1974 - 1975 Historic American Engineering Record (HAER) recording project produced measured drawings of most of the major lock complexes, gate houses, and control structures as well as a complete inventory of the canal structures. That study referred back to the original construction documents for the system which fortunately are very complete and readily accessible to researchers in the files of the Proprietors of Locks and Canals in Lowell. The National Park Service is cataloguing this material now and it will become part of the permanent collection of the University of Lowell's Center for Lowell History at the Mogan Cultural Center.

Other surveys of the Lowell canals were done as part of the *Report of the Lowell Historic Canal District Commission* (1977), the *Lowell Cultural Resources In-*

ventory (NPS, 1979), the *Heritage State Park Plan* (Commonwealth of Massachusetts, 1975), the *Preservation Plan* index of nationally significant structures, (LHPC, 1980), and, most recently, the *Canalway Proposal* (Canalway Task Force, 1985). Their findings were reviewed and updated by the LHPC to reflect recent changes to the system, the most significant of these being the lock complex restorations at Lower Locks, Guard Locks, and the Northern Canal which have made the system navigable for Park tour boats.

Most important for the Canalway inventory was information about the land around the canals and analysis of current land use, regulatory controls, and planned waterfront development by private landowners and public agencies. Because much of this information is kept on large maps and in voluminous files, it is presented only in summary form here. The graphic presentations in this report should be understood as typical examples of the full inventory, selected to illustrate key concepts and sites (*see Maps 5-13*).

How Much of The Canalway is Complete?

A certain amount of the Canalway is complete or nearing completion through the efforts of the Heritage State Park, City of Lowell, National Park Service, Lowell Plan, and Lowell Historic Preservation Commission. The downtown inner loop infrastructure will be complete in the near future with several major projects already completed or under construction. These include: Boarding House Park and Boott Canalway,

Eastern Canal Park, Prescott Way at Lower Locks, and the Lower Pawtucket Canalway. The only major unfinished piece of the inner loop is the Swamp Locks area, although several other portions need additional work to make them more suitable for recreational use.

The outer loop and neighborhood reaches are far more problematic. While the outer loop boasts one of the most beautiful segments of the Canalway where it borders the Upper Pawtucket Canal, other portions are still blighted by junked cars, rotting fences, and rear views of industrial buildings that treat the canals as their back alleys. Fortunately a right-of-way bordering the south side of the Pawtucket Canal has recently been purchased by the Commonwealth of Massachusetts to become part of the Heritage Park. A major task facing the Park agencies is working with abutters to remove debris from the right-of-way and screen the properties from pedestrian view.

Another unfinished portion of the outer loop is the Northern Canal Walkway, one of the city's most unusual and dramatic places. Completed in 1848 when the Northern Canal was constructed parallel to the Merrimack River, the walkway tops the massive 36 foot high granite "Great River Wall" that holds the canal water above the lower rapids of Pawtucket Falls. It is the most impressive sight on the canal system. Closed to the public for the last several years, this portion of the Canalway needs railings and refurbishment to meet safety standards.

In addition to the Upper Pawtucket and Northern Canal segments, other sections of the outer loop needing attention are: the Thordike/Dutton Streets intersection where the Sampson Connector roadway makes difficult pedestrian connections between the Swamp Locks and the Upper Pawtucket; and the area around the junction of the Pawtucket Canal and the Merrimack River where there is a gap in the public right-of-way. These are identified on the accompanying maps.

Beyond the outer and inner loops of the Canalway are an additional mile and a half of canals that pass through historic residential and industrial neighborhoods. While not on the primary connected pathway system, these canals — part of the Western, the Hamilton, and Lawrence — should not be overlooked. Each offer recreational, cultural, and interpretive opportunities and need to be included in the development of signage and maintenance programs. Private and institutional owners bordering these canals will be encouraged to develop their water-facing building facades and to build connecting walkways and amenities for their users.

Land Use Regulation Along The Canalway

While a regulatory framework is already in place for the Canalway area, there remain several issues requiring further attention in the coming years. The Lowell Historic Board, a City agency that includes LHPC, National Park Service, and Heritage State Park representatives, now

regulates exterior design in a downtown district which includes all of the canal system and the adjacent portions of the Merrimack and Concord Rivers. Created as part of the revitalization effort, this new board has strong design review powers without cumbersome procedures. The board is already reviewing proposed developments along the Canalway and needs to update its review standards to include more specific guidelines for canalside sites.

Zoning is the other land use control regulating development along the Canalway. While the Historic Board controls the exterior appearance of structures within its districts, the zoning ordinance regulates how properties are used, along with setting standards for size and lot coverage.

The Canalway traverses several different zoning districts, which for the most part allow the uses proposed in this plan. The one exception is a stretch of the outer loop along the Upper Pawtucket Canal. Now zoned for light industry, this area is much more suitable for multi-family housing. It abuts residential neighborhoods. Residents could use the linear park to stroll and jog and to reach the riverfront with its broad expanses of lawn and soon-to-be swimmable waters. Although the construction of fences and screening as proposed in this plan will do much to upgrade the appearance of the Canalway along the Upper Pawtucket, without a zoning change to residential the area will not live up to its full potential.



Visitors at the Northern Canal gate house.



Management of The Canalway

The Canalway portions now accessible to the public are not maintained by a single entity. Walkways tend to be taken care of by whomever sponsored their development. This includes the City, Heritage State Park, and National Historical Park as well as a few private owners. Naturally, this multiplicity of caretakers can create a certain amount of confusion and result in a very uneven level of maintenance. This is particularly evident in the winter when adjoining sections may be handled so differently that one remains completely unshoveled after a snowstorm while another is nicely cleared. Security is handled by both Park Rangers and City Police who have overlapping jurisdictions.

With the Canalway in its current state of completion, this fragmented management is not a significant problem. But if the Canalway is to become a continuous path linking various historical and recreational sites, more thought will have to be given to permanent mechanisms for managing the walkways. In addition, signage and information on the availability and access to public restrooms will be provided. Maintenance of the Canalway cannot be separated from maintenance of the canal system itself, which is shared by three parties — the Heritage State Park, National Historical Park, and Boott Hydropower, Inc.

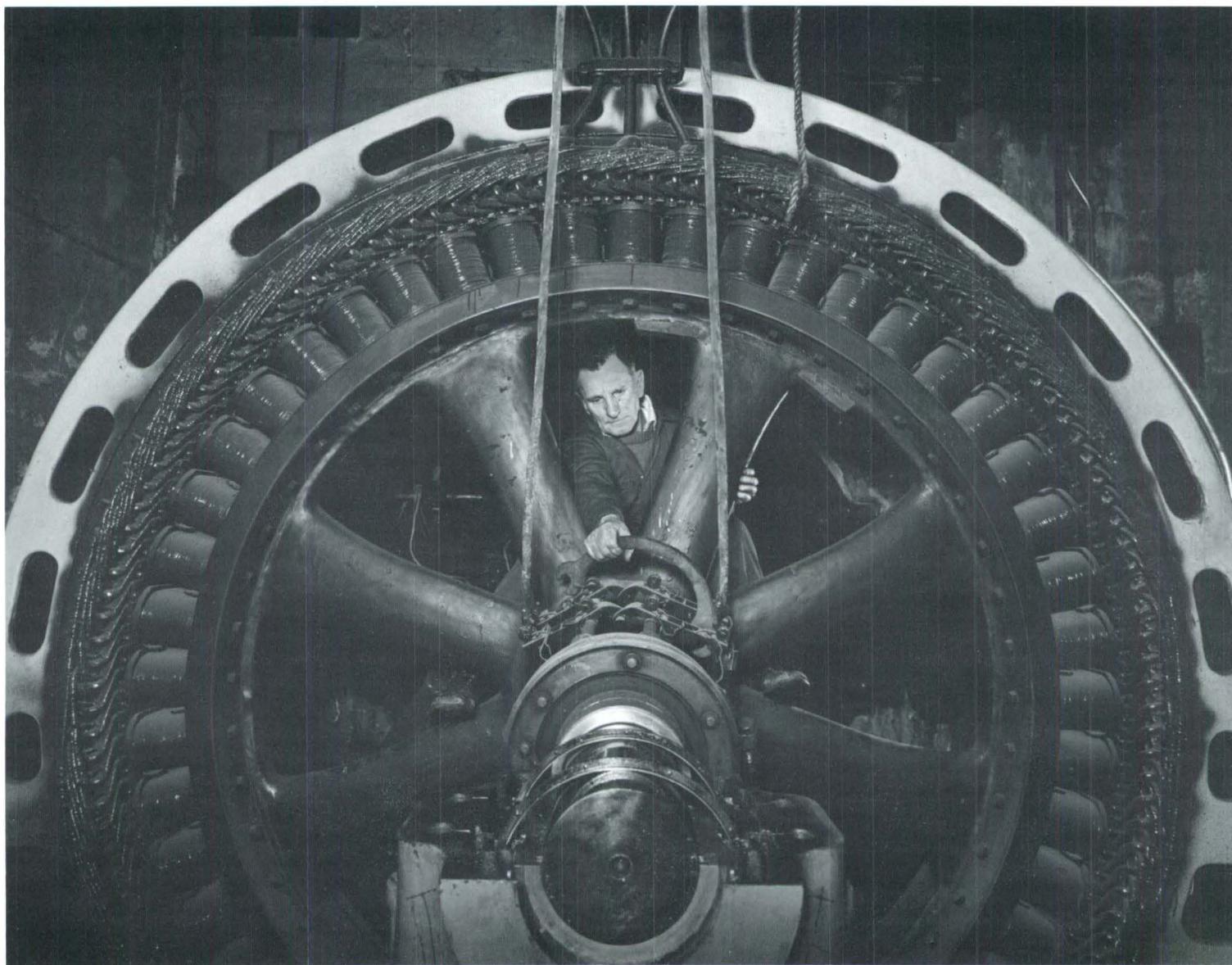
The canal system is still in active power production. Boott Hydro uses canal water to generate hydropower and performs all maintenance tasks

directly related to that end. This includes keeping up machinery like control gates and turbines located at various points along the system. While the Heritage State Park has a right to repair and maintain canal walls and other features of historical importance, it does not have the financial resources to handle the backlog of deferred maintenance problems. The capital improvement projects described in this report will address a number of these problem areas along the canal system, but it should be recognized that funding for maintenance will be an ongoing need. Although the Lowell canals are in a remarkably good state of repair considering their age, they will still require a fairly high level of maintenance into the future if they are to be used by greater numbers of people.

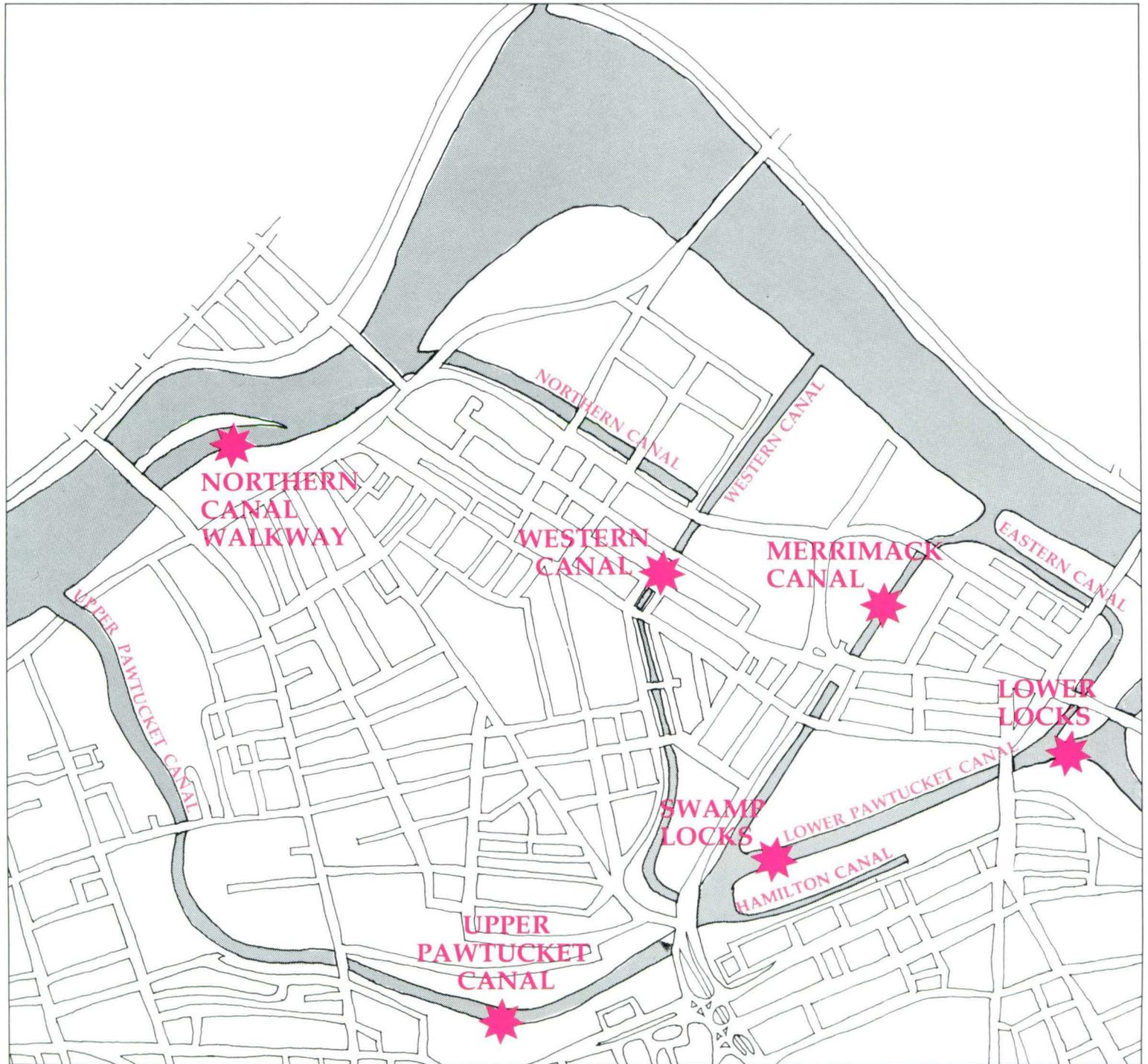
The National Park Service has been responsible for upkeep of Canalway sites frequented by its tour program participants. By removing overgrown brush and installing railings, they have greatly improved the appearance of areas like the Guard Locks and Swamp Locks. With adequate funding, the NPS would be the perfect long-term maintenance resource for the Canalway. The National Park already has a full-scale maintenance shop on the Northern Canal with tools and equipment including small utility boats. More important, NPS personnel are well-trained and knowledgeable about the maintenance of historic structures and landscapes. Its resources could supplement those of the Heritage State

Park whose highest maintenance priorities would likely continue to be the Merrimack River boathouse and esplanade and downtown park entrance plazas at the Mack Building. While the burden of responsibility for canalway maintenance will likely fall on the NPS, efforts will be made to involve the Heritage State Park and abutting private property owners where possible in a cooperative maintenance program.

Another important issue involves programming the parks and public spaces along the Canalway. As described in the section on cultural affairs, events along the Canalway will make it come alive. While there exist several means of controlling permanent developments along the Canalway and use of the water, there is currently no oversight group to sponsor programs. As part of its mandate, the LHPC is working on programs for its demonstration project sites and cooperating with other groups on public art and events. For example, The LHPC is cooperating with the City Office of Cultural Affairs in the management of its Canalway public art program. In addition the LHPC could help prepare an events calendar for Canalway programs and publish walking guides on the historic neighborhoods. Ultimately, the city may need one organization like the Paseo del Rio group in San Antonio which programs and manages the Riverwalk.



MAP 4
Key
Sites



Key Sites

While the entire canal system is extremely important and will continue to be monitored in its entirety, certain high priority sites are identified in this plan for public action within the next six years. Associated with these priority sites are important canal structures such as locks, dams, and gatehouses. The restoration and rehabilitation of these structures which represent significant elements of the Locks and Canal National Historic Landmark District have also been identified in this plan for public action.

Pictured on the pages that follow, these sites are recommended as the focus for the Lowell Historic Preservation Commission's planning, programming and development activities, and are reflected in the budget section at the end of this report.

It is intended that the LHPC use the tools at its disposal — funding for demonstration projects, grants, cultural programming, and technical assistance — to see these projects through to completion. Handicapped access will be an important element in the Canalway design. As in the past, the resources of other public agencies and private landowners will be necessary too.

Described in this section are the following sites:

SWAMP LOCKS

Gateway to the National and State Parks

UPPER PAWTUCKET CANAL

Linear Park

NORTHERN CANAL WALKWAY

Dramatic Historic Landscape

MERRIMACK CANAL

Still Water Activities Downtown

WESTERN CANAL

Neighborhood Walkways and Folklife Programs

Swamp Locks

Gateway to the National and State Parks

The Swamp Locks on the Pawtucket Canal are the last unrestored transportation locks on the canal system. Tour boat passengers travelling from the Lower Locks to the Merrimack River must disembark here and walk through an unembellished twentieth century industrial facility to reach another boat that travels along the upper level of the canal. This arrangement is unattractive, inefficient, and disruptive to the visitor experience (*see Map 6*).

The Swamp Locks are the first view most arriving visitors have of the canal system as they arrive at the Park Visitor Parking Lot. This is also the main transfer point between canal boats and the Park Trolley.

Though disrupted now with the construction of the Sampson Connector, this area will soon be highly visible to everyone entering the city from the interstate highways. As shown in the illustrations, it could be a wonderful visual announcement of the Park with colorful trolleys, a restored gatehouse, and paths providing fine views of ponded and rushing water.

Restoration of this lock complex is a major undertaking, estimated to cost some \$3 million. It is proposed that this cost be shared by the LHPC and state Department of Environmental Management. DEM would restore the

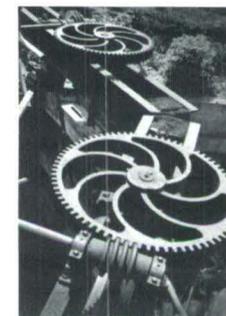
locks and the LHPC the gate house and create the walkways and landscaping. The state already owns sufficient land for the perimeter paths around the basin formed here at the juncture of the Pawtucket, Hamilton, Western, and Merrimack Canals. It is assumed that the present manufacturing use will remain at this location, but that landscaping will soften its somewhat inconsistent appearance with the nineteenth century lock complex.

There is one vacant site bordering the Swamp Locks. Any redevelopment plans for this parcel will be guided by Historic Board standards which call for careful attention to canalfront facades and maintenance of public access along future Canalway paths. Another issue requiring attention at this location is future pedestrian access around the Sampson Connector which bisects the Canalway route. A pedestrian overpass will be necessary if the inner loop is to be accessible to the outer loop of the Canalway which borders the Upper Pawtucket Canal. It is recommended that the LHPC undertake a planning study of this situation and develop alternative strategies for addressing the problem.

Upper Pawtucket Canal

Linear Park

The Pawtucket Canal pre-dates the development of Lowell. Completed in 1796 as a transportation canal, its original function was to permit barges to avoid the great Pawtucket Falls on the Merrimack River. Like other transportation canals of this era, it



Paddle gate worm gearing at Swamp Locks.

“We observe that the New (Northern) Canal has become a favorite resort for our citizens, on the afternoon and evening of the Sabbath. It is a delightful promenade, and we are glad to see so general a turn out of all classes, as there has been for several Sabbath evenings for several weeks past.”
The Lowell Advertiser,
 July 14, 1848.

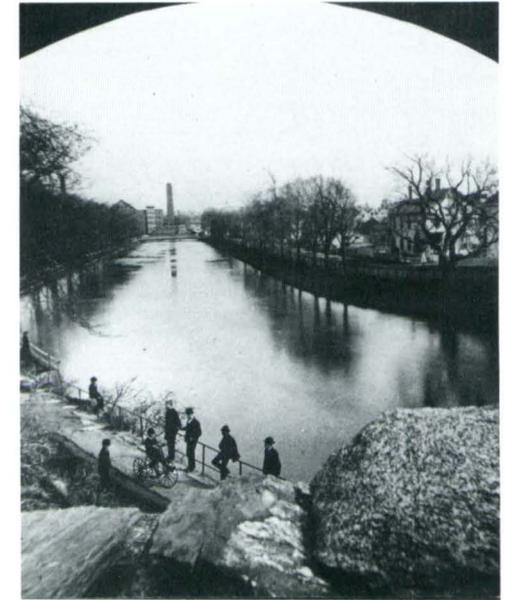
had a towpath along one bank from which mules pulled heavy timber-laden flat boats. Though its financial viability was to prove short-lived, the Pawtucket Canal was to become an important feeder of water to the textile mills that soon began to spring up in the growing city (see *Maps 7 and 8*).

Because of its history as a transportation canal, the Pawtucket has a very different character from the more rectilinear downtown power canals. It curves through wooded rocky terrain and seems more like a scenic river than an industrial artifact. Part of the original towpath, which extends along the south bank, has been transformed into a linear park. This area extends from the Guard Locks off Broadway Street northward to where it meets the Merrimack River. It is enjoyed by neighbors living in nearby single and multi-family housing such as the Francis Gate Apartments, a senior citizen complex in a tastefully converted mill. Although the full 1.7 mile towpath was recently acquired for the Heritage State Park, about half its length is blocked by fences and rear yard storage for the abutting light industrial users of this area. Reclaiming the towpath for recreational, cultural, and interpretive use will require major efforts in the coming years.

Several programs have been suggested for this portion of the canal which forms part of the outer loop. Already in operation is a fine interpretive program at the operating Guard Locks where the tour boats are raised and lowered as they change water levels from one level of the canal to

the next. Also at Guard Locks is the reknowned Francis Gate, a huge wooden portcullis installed in 1850 to protect the city from floods.

The two ideas that have been proposed for this area and adjacent lands are community gardens and folklife programs. The gardens would encourage Lowellians of many national and ethnic backgrounds to grow trees and plants of their native or ancestral lands. A greenhouse and utility building might be developed along with some basic site preparation at the start of the program, but the gardens would actually be planted and maintained by individuals in the community. A cross between a “victory garden” where people grow vegetables and flowers on individual plots and more traditional botanical experimental gardens, the program would encourage the development of new species able to grow in the New England climate but representative of vegetation from the lands of the city’s multi-ethnic population. Garden sites might be developed at several locations along the Canalway where neighborhood groups were able to co-sponsor them. Folklife programs, discussed in more detail in the folklife section of this plan, will be sites or activities dedicated to particular ethnic or national groups. They would help reveal the special character of neighborhoods along this part of the Canalway.



Lowell Historical Society

Northern Canal Walkway

Dramatic Historic Landscape

The Northern Canal Walkway is in need of a concentrated rehabilitation program to be brought back to its historic and original use. It is included in this plan because it is such a special part of the Canalway. As shown in the illustrations, the walkway runs along the top of the great river wall that separates the Northern Canal from the Merrimack River. It was built originally to include a lovely promenade along which the early mill workers were encouraged to stroll on their Sundays off (see *Maps 9 and 10*).

Design for the railing restoration will be provided by the NPS. Some of

the refurbishment will be performed by NPS maintenance and staff with the remainder contracted out by LHPC. Funds will be needed for the walkway and to restore the gate house over the Northern Canal waste gates and for signage. A study should also be undertaken of the historic landscape to aid in its restoration.

Merrimack Canal

Still Water Activities Downtown

The first of the power canals to be dug off the Pawtucket, the Merrimack Canal, headed straight for the Merrimack Manufacturing Company mills,

a downtown landmark demolished in the 1950's. This handsome planned vista can still be imagined though its much photographed terminus, the 1863 Dressing Mill, is gone. This same period of demolition removed the overflow weir and gate house known as the Merrimack Dam, once located at the head of the Merrimack Wasteway's upper level just north of French Street. (see *Maps 11 and 12*).

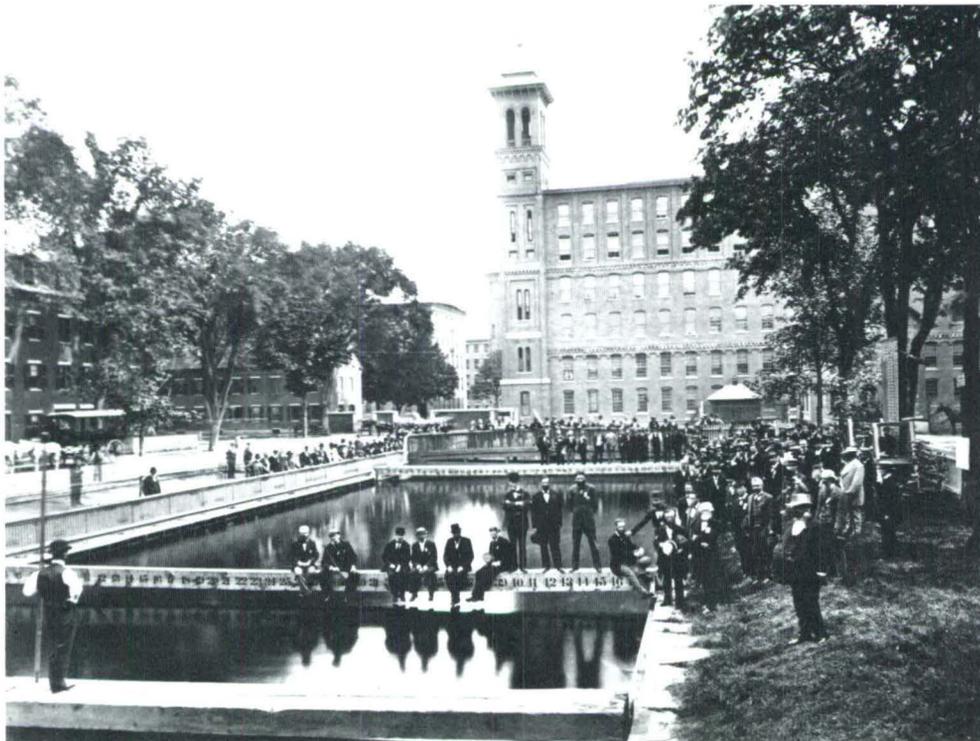
Today the Merrimack Canal is one of the few portions of the canal system where the water does not flow quickly, and where no below-surface penstocks create dangerous currents.

A still reflecting surface is created by the water. This is one of the few canals that freezes in winter. Bordered by Lucy Larcom Park and Lowell High School, the canal crosses Merrimack Street, Lowell's Main Street, and is in the heart of the historic downtown. The quiet water provides an ideal opportunity to increase recreational options. With minimal repairs to the nearby control gates, water levels could be kept very steady to allow activities like pedal boats, radio-controlled model boating, and maybe even ice skating.

Lucy Larcom Park, that portion of the Merrimack Canal north of Merrimack Street has been set aside for public purposes since 1844. Just after the turn of the century, it was upgraded to encompass a walkway along the canal edge. This walkway, no longer extant, should be replaced and made an integral part of the Canalway. The railings also require restoration, and the park needs general upgrading.

The Dutton Street portion of the Merrimack Canal also needs attention paid to canalside fencing, particularly along the railroad right-of-way where existing fences are deteriorated and unsafe and development and improvements of the walkway between Market Street and the Swamp Locks.

Society of Civil Engineers photographed in 1875 at the Merrimack Canal in front of the Dressing Mill.



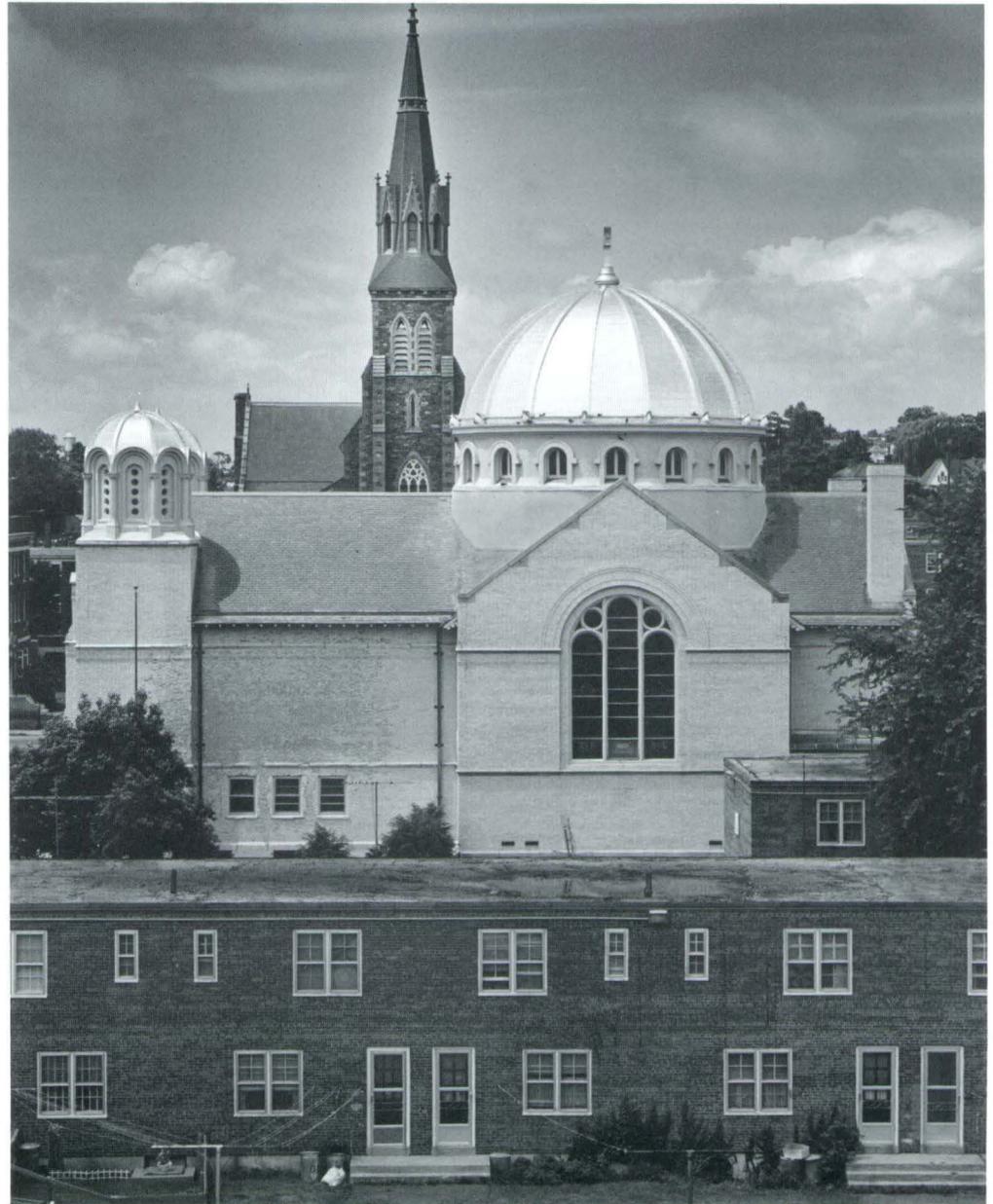
Ecumenical Plaza joins two landmark churches – St. Patrick’s and Holy Trinity Hellenic Orthodox. Facing page: With sensitive landscaping and rehabilitation of historic structures, special places like this one where the Western Canal and Lawrence Wasteway meet the river, could once again be enjoyed.

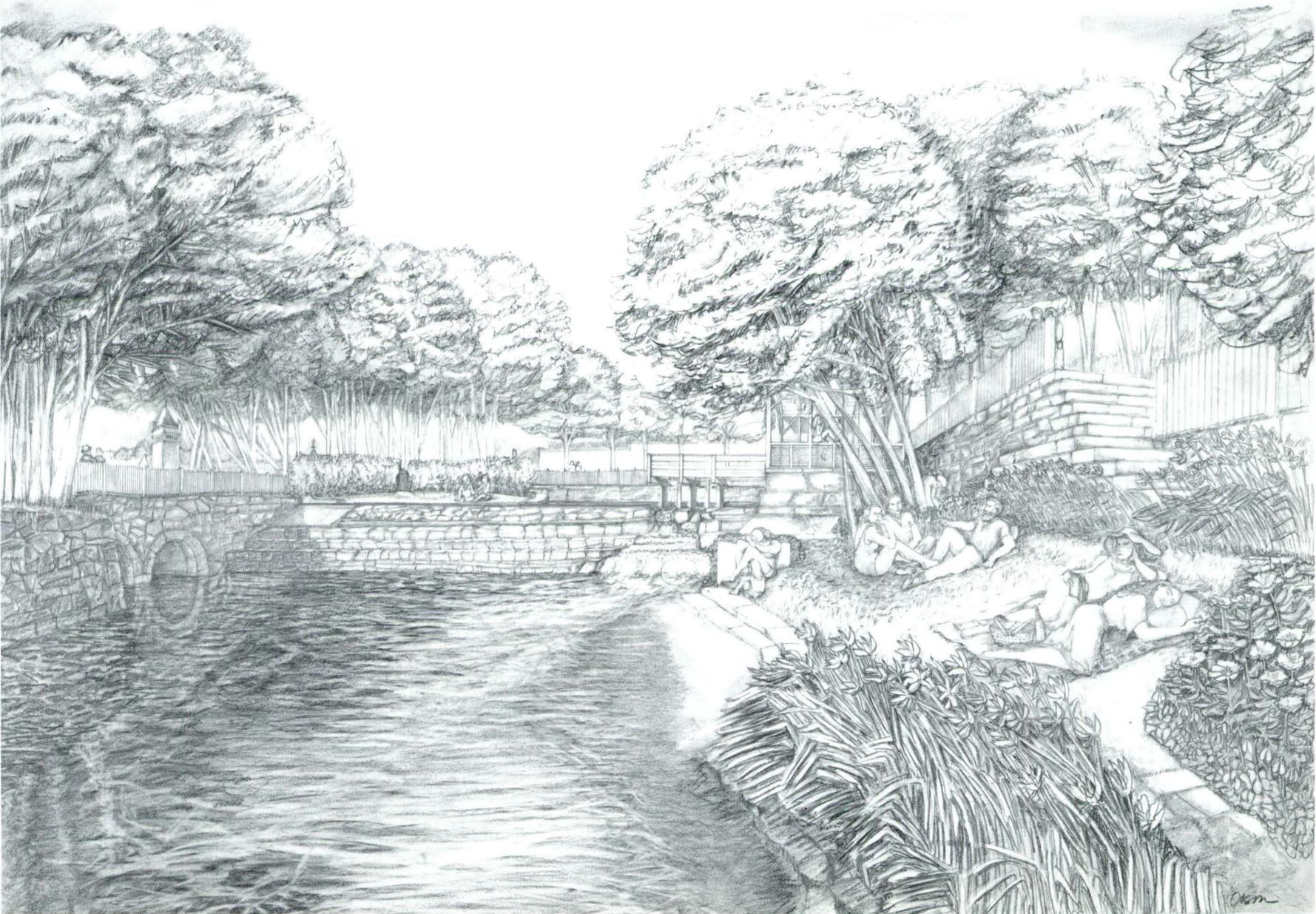
Western Canal

Neighborhood Walkways, Folklife Programs, and Community Gardens

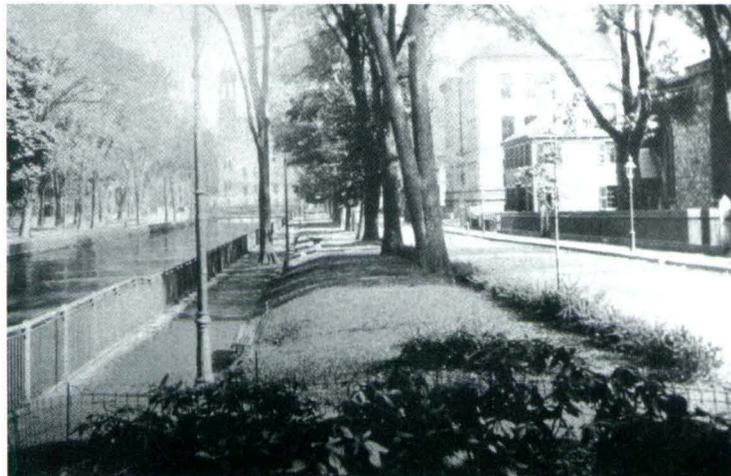
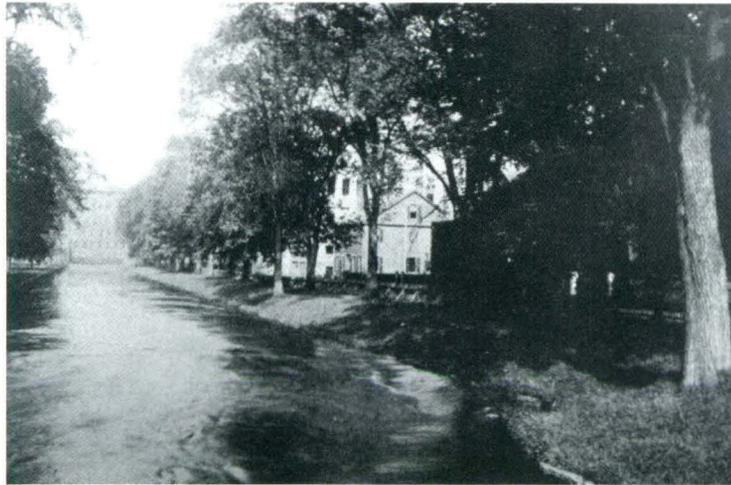
The Western Canal was the focus of an early City plan to create walkways and a linear park for the residents of the Acre neighborhood. It features Ecumenical Plaza which joins two landmark churches — St. Patrick’s (1853) and Holy Trinity Hellenic Orthodox (1908). Built in the 1970’s, the park is in need of upgrading. This will be increasingly noticeable as visitors are encouraged to explore the neighborhoods. Future maintenance needs to become a higher priority (see Map 13).

While a good portion of the canal is bordered by walkways, better connections need to be made to the rest of the Canalway system. This should be done through additions to the linear park and with new signage. In addition, a City-owned site along the Western Canal is now being used for community gardens, a project originally funded through the LHPC Cultural Grants Program. The Commission will evaluate the feasibility of continuing the community garden program and incorporating an area for public gardens in its design plans for this area. In addition, this is a fertile area for folklife programs. The tapestry of ethnic groups in this neighborhood ranges from French to Hispanic to Cambodian. A grassroots organization has already proposed creating a neighborhood exhibit about their heritage. Also, there are opportunities for still water recreation as part of the physical improvements.





The evolution of the historic landscape of Lucy Larcom Park. Clockwise from top left: 1908, 1909, 1909 and 1912.



As stated before, the mission of the Lowell Historic Preservation Commission is to tell the human story of the Industrial Revolution in a nineteenth century setting by encouraging cultural expression. The *Preservation Plan* explains that the LHPC desires to interpret the subtleties of cultural differences and to celebrate Lowell's everyday way of life — its culture.

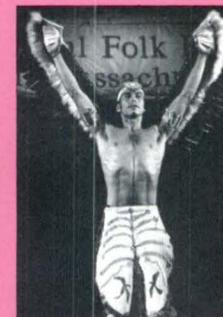
The Cultural Affairs staff works closely with staff architects, planners, and construction supervisors on all LHPC development projects. The *Preservation Plan* included site-specific projects and district-wide cultural programs. Since 1978, the LHPC has initiated, produced, presented, co-sponsored, and coordinated a wide array of activities. Among these are The Lowell Conference on Industrial History, an annual gathering of scholars; The Lowell Folklife Project, a folklife documentation project; a new

play about Lowell called "If The Falls Could Speak" by David Riley; a summer festival on the theme of Transportation called Antique Wheels; Youth Art Month in the Lowell public schools; and an exhibit about the French-Canadians of Lowell.

Through its Cultural Grants program for district-wide activities, the LHPC has funded 97 projects for a total of \$487,174. Grant projects have ranged from an illustrated history of the Greeks in Lowell and a photo-documentary of the Southeast Asians to a school project on urban planning, an Hispanic music radio show, a pamphlet on the canals, and an Irish cultural exchange program. See the appendix for a complete list of grants.

In the next seven years, the LHPC's Cultural Affairs program will emphasize cultural development along the Canalway; Folklife; and Educational/Technical Assistance.

Cultural Affairs



The Canalway



At the opening of the Lower Locks Canalway near the Hilton Hotel, many people commented that they had never realized downtown Lowell had a waterfront.

To enhance and interpret the canal system and related walkways and public spaces, the LHPC is proposing a series of Canalway Projects, public art, wayside exhibits, folklife programs, and recreational activities. The latter two areas are described in depth ahead.

Cultural Events

The purpose of the LHPC's Cultural Events program is to produce and present activities that stimulate cultural expression in Lowell. Through lectures, concerts, readings, festivals, demonstrations, exhibits, and special events the program encourages the community to celebrate its rich heritage while participating both as actors and audience in the midst of Lowell's most historic buildings and sites.

Working with the National Park Service, the LHPC will carefully balance the schedule of events to provide activities for both national visitors and area residents. The LHPC aims to generate strong interest in the themes of the Park and to cultivate community support for the Park. The community will be encouraged to use LHPC and Park facilities and resources on a regular basis. This repeated use will ensure that the dialogue with the community remains lively. The people of Lowell are a valuable resource for they can best tell their story.

In 1987, when the *Lowell Cultural Plan* was published, Lowell became the first city in the Commonwealth of Massachusetts to develop a comprehensive plan for cultural development.

One recommendation was to initiate an multiethnic festival that would combine neighborhood and downtown activities using the Canalway as the link. The Acre, Little Canada, Chapel Hill, Pawtucketville, Centralville, Belvidere, and other sections of the city border the river and canal banks. The festival will highlight the historic importance of the canal system and take advantage of this cultural resource.

The Canalway Festival and related projects would help enliven the Canalway and link the historic neighborhoods more closely to the downtown facilities of the Park. As Lowell attracts more and more visitors, the Park and City must provide more activities and places of interest. Canalway parks have been used successfully since the opening of

the Park in 1978. Lucy Larcom Park on the Merrimack Canal is known as the farmers' market park where local farmers sell produce every Friday during growing season; in Market Mills courtyard people enjoy Irish step dancers and displays of model railroads. Working with the community, city leaders created a yearly multiethnic festival on Ecumenical Plaza which spans the Western Canal in the Acre. Eastern Canal Park is the site of the *Jack Kerouac Commemorative* by sculptor Ben Woitena.

Another large-scale event proposed is an annual historical pageant or play at Boarding House Park on the Eastern Canal. The outdoor production will be offered on weekends during the peak visitor season. The productions will tell the story of "The Spindle City" and "El Dorado on the Merrimack."

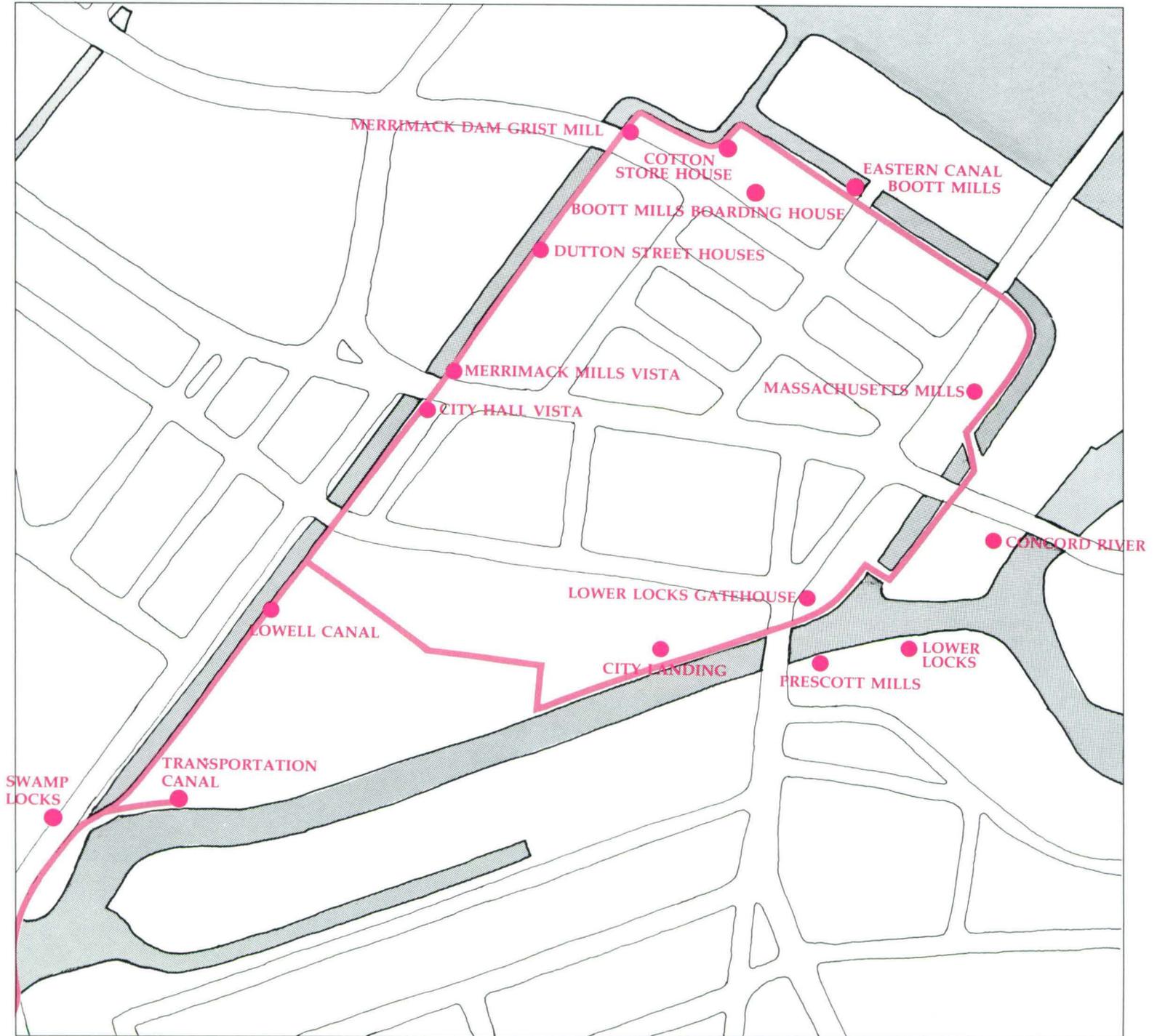




“The festival is similar to a marketplace. Not fruit to sell or buy; but so many ethnic groups to enjoy together. To exchange instruments, dances, knowledge. It helps the young people to respect the older people; to respect that natural knowledge. It makes it possible for all those people to come together with peace ideas, enjoyment ideas. People eat same things, drink same things; men and women can know each other. When I go to festival, see all those people together, I feel so proud for art.”

Djimo Kouyate
*Senegalese oral
historian*

MAP 5
*Proposed
Wayside
Exhibits*



Wayside Exhibits and Public Art

Two means of weaving together the significant areas, vistas, and structures along the Canalway are wayside exhibits and public art (see Map 5). Only a few canal buffs and preservationists know by name the many gate houses, small dams, architectural remains, and mechanical devices associated with the canals. There should be a simple, imaginative set of waysides which will identify the various features and explain their historical importance for the public.

Works of public art are another way of linking parts of the Canalway. The community has embarked on a ten-year campaign to commission works of public art with private and public monies for the downtown, many of these on sites along the inner loop of the Canalway. Since 1984, eight works of public art touching on themes and issues inherent in Lowell's heritage and culture have been installed on or commissioned for Canalway sites. The bulk of the funds are private donations. The Lowell community envisions some 20 works in place by 1994. Public art has proven to be a very dramatic and effective means of telling the Lowell story.

The LHPC proposes to commission new art works for sites along the outer loop of the Canalway with private matching funds whenever possible. The approach will be to involve artists with architects and planners at the earliest stage of development. Art works along the Canalway enhance the beauty and



meaning of the waterways. An example is Michio Ihara's sculpture, *Pawtucket Prism*, overlooking the junction of the Concord River and Pawtucket Canal at the Lower Locks.

A careful blending of forms, styles, and media will create an outstanding collection of work that will be a visitor attraction on its own.



Above: Sculptor Ben Weitena puts the finishing touches on the Jack Kerouac Commemorative at Eastern Canal Park. Left: Eastern Canal Park, framed by the Massachusetts Mills, was built in 1988.

The works of art may be quite subtle or functional as well as adding to the aesthetic experience of residents and visitors. Plazas, bridges, walkways, architectural details, interior spaces, landscape, and other elements of the environment will be considered as design projects for artists and other professional collaborators.

Folklife



A Canalway folklife program could occur in a storefront, a social club, a church hall, or elsewhere as long as the space is open to the public. Examples of the type of projects that might be undertaken are performance sites, house exhibits, memorial gardens, and neighborhood walking guides.

In its Findings and Purpose, the enabling legislation for the Commission and Park states that, "the cultural heritage of many of the ethnic groups that immigrated to the United States during the nineteenth and twentieth centuries is still preserved in Lowell's neighborhoods." The purpose of 16 USC 410cc. is to "preserve and interpret" the nationally significant aspects of Lowell's heritage.

American Folklife means the traditional expressive culture shared within the various groups in the United States: familial, ethnic, occupational, religious, and regional. Expressive culture includes a wide range of creative and symbolic forms such as custom, belief, technical skills, language, literature, art, architecture, music, play, dance, drama, ritual, pageantry, and handicraft. The American Folklife Preservation Act states that it is appropriate for the federal government to support research and scholarship in American folklife in order to contribute to an understanding of the complex problems of the basic desires, beliefs, and values of the American people in both rural and urban areas. Further, it states that the encouragement and support of American Folklife is in the interest of the general welfare of the nation, and that the diversity inherent in American folklife has contributed greatly to the cultural richness of the nation and has fostered a sense of individuality and identity among the American people.

Lowell was the first community to be involved with the nation's three main folklife agencies at the same

time. In 1987-88, the American Folklife Center at the Library of Congress conducted a year-long study of Lowell's ethnic and neighborhood life, including family traditions, social clubs, arts, gardens, belief systems, language, and social events. The archive of interviews, tapes and photographs is housed in the University of Lowell's Center for Lowell History at the Patrick J. Mogan Cultural Center and at the Library of Congress. The material gathered during the Lowell Folklife Project will be used by the LHPC and NPS for exhibits, performances, research, and other public programs. Another folklife project involved Lowell through the Commonwealth of Massachusetts, which was the featured state in the 1988 Festival of American Folklife sponsored by the Smithsonian Institution and National Park Service. Because of Lowell's rich folklife, it served as an example of urban ethnic culture when Massachusetts was featured on the Mall in Washington, D.C. The Commonwealth supported the Lowell Folklife Project through a grant from the Massachusetts Council on the Arts and Humanities. Finally, Lowell National Historical Park has been the host for the National Folk Festival produced by the National Council for the Traditional Arts for the past two summers. The "National" will end its Lowell run in July, 1989.

To reap the benefits of this enormous amount of folklife activity, the LHPC will establish the New England Folklife Center of Lowell. This region does not have a central folklife resource and research facility. The

Folklife Center will be directed by a team of professional folklorists who will plan and implement various research, exhibition and education programs. These programs and projects radiating from the Folklife Center will cover topics such as neighborhood traditions, occupational folklore, ethnic music, foodways, cultural mapping, and craft workshops. Activities will include collecting oral histories and artifacts, publishing a cultural journal, field surveys, and sponsoring community education programs. Educational folklife programs, to be organized by the new Folklife Center's director, will be designed for people of all ages. School programs will concentrate on public schools in Lowell as well as higher education.

The Folklife Center and LHPC will assist Lowell National Historical Park staff in producing a Lowell Folklife Festival modeled on the National Folk Festival. The theme of the Lowell Folklife Festival will be American Folklife, especially the urban ethnic culture exemplified by Lowell. The Lowell Folklife Festival will be staged in several small parks, all within a block of the Canalway.

Finally, the LHPC cultural staff proposes developing folklife programs and sites along the Canalway that will reflect the character of Lowell's more than 50 ethnic groups. The places and activities will offer various cultural experiences and provide way stations on the Canalway. The Working People Exhibit in the Mogan Cultural Center is not large enough to tell the whole story of Lowell's multi-ethnic heritage.

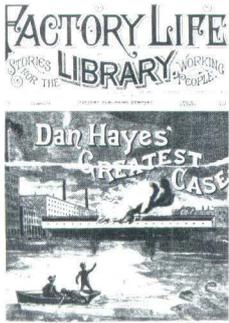


The Laurencio Family

“In Portugal, my father made medicine out of seaweed and sold it to the hospitals. Here he makes his own wine and cider. He works in the Lowell Cemetery during the week and fishes on weekends. He worked hard to bring all of us here.”

Freddie Laurencio

Education/Technical Assistance



Another major initiative over the next seven years is an education and technical assistance program whose antecedent is early Lowell, when the entire city was an urban laboratory and social experiment. Lowell was a large research and development center for hydraulics, mechanical engineering, labor organization, management techniques, and more. The revitalized Lowell of the 1970's and 80's is once again a model city for the nation. Imaginative urban planning, high technology, and creative cultural development are the new ingredients.

Since 1978, the LHPC has been involved in many educational and technical assistance activities — from an international conference on industrial archaeology to a window preservation workshop to the *Lowell Cultural Plan*. LHPC staff have been called on to brief numerous foreign delegations on State Department visits, city planners from around the country, National Park Service officials, and others. Among those seeking our insights have been scholars and even Charles, Prince of Wales.

In the area of Education/Technical Assistance, the LHPC will offer programs to encourage better public understanding of the human story of the Industrial Revolution and the nineteenth century architectural setting. With a goal of making Lowell an "educative city," the LHPC will initiate educational programs dealing with folklife, public art, the canal system, and other areas.

Lowell has a reputation as an urban laboratory. From science to the arts and humanities, to corporate

strategies and urban planning, the city has fostered the spirit of experimentation. With this in mind, the LHPC will encourage new approaches to understanding industrial history, the preservation and development of historic structures, and planning and urban design of the industrial city. The LHPC will produce educational and technical materials which address the issues and ideas made manifest in its projects. Handbooks, guidebooks, slideshows, videos, and other materials will answer the "how-to" question often posed to LHPC staff. Workshops and conferences will be used to reach larger audiences. The Lowell Conference on Industrial History, now in its ninth year, is an

example of a successful educational project.

The educational programs aimed at increasing the public's knowledge of an appreciation for the works of public art will be organized in close connection with the public art professionals working in the city. Educational programs might include field trips to artist's studios, exhibitions, classroom projects, slide presentations and lectures, and similar activities.

The LHPC will respond to requests for technical assistance in the areas of financial advice, architectural assistance, cultural assistance, and education and outreach. The *Preservation Plan* describes these programs in greater detail.



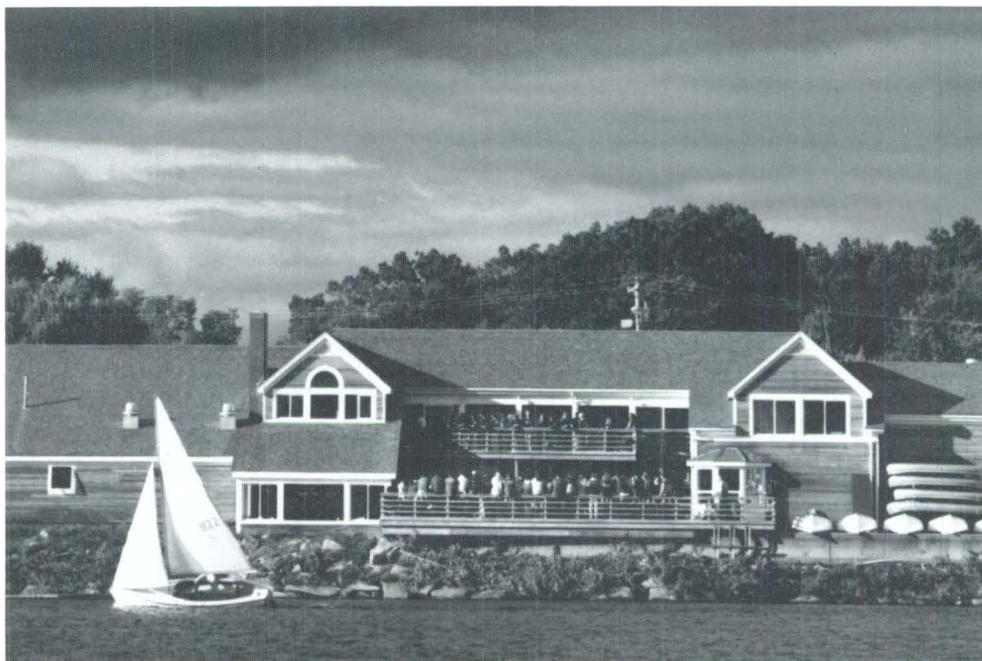
Dr. An Wang and Charles, Prince of Wales visit Lowell.

Recreation

Lowell's rivers and canals offer rich recreational opportunities to Lowell residents and visitors. These waterways and abutting lands provided enjoyment in the past, but years of neglect caused them to be forgotten. The Heritage State Park has taken the lead in making the Merrimack riverfront an attractive and popular park, with its Vandenberg Esplanade and boat house.

A bike trail extends along the north bank of the Merrimack and becomes part of the Esplanade. Plans exist to upgrade and extend the bike trail. The Canalway will provide an important link between the downtown historic areas and the river for cyclists, strollers, and joggers. The paths will be designed to accommodate these uses, and to connect the parks, picnic areas, and historic sites along the route. The Commission will also work with neighborhood and tenant groups to cooperatively develop active play areas for children where appropriate. Landscape improvements will be minimal and designed to require a low level of maintenance. Directional and interpretive signage will help orient users, and will begin at public access points in the neighborhoods surrounding the Canalway. Where feasible, existing parks and public open spaces will be tied to the path system.

The canals offer few boating opportunities beyond the Park's well-organized tour boat program. Because of swift water, lack of depth and width, low clearances, and other physical restrictions, water recreation is limited. If pleasure boating by indi-



viduals is to be considered, it should be kept to the Pawtucket Canal, and allowed mainly as a link to the Merrimack River. Paddle boating is possible if access, safety, and permitting are addressed. The Merrimack Canal at Lucy Larcom Park has been identified as the best place for still water activities such as this.

In general, water taxis, dinner boats, and other organized boating programs will be encouraged, subject to permission from the Heritage State Park which controls recreational boating rights on the canals. The Pawtucket and Northern Canals offer possible routes, and could become a feature of the Canalway through private concessions.

The Heritage State Park has taken the lead in making the Merrimack riverfront an attractive and popular park.

Programs are carried out here by the University of Lowell and the Lowell Regatta Festival Committee and include community sailing, kayaking and rowing.

Existing sailing and rowing programs on the rivers, including white-water rafting and kayaking on the Concord River, could be expanded so long as adjacent lands and public facilities are not overburdened. Organized canoeing and kayaking on the canals could also be expanded as a means of discovering Lowell's waterways.

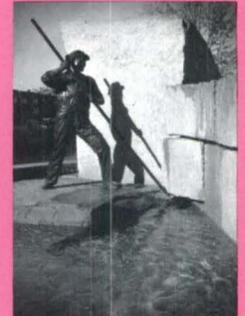
The LHPC's primary role will be to evaluate the suitability of proposed recreation facilities for the Canalway path system and to encourage those that are compatible with it. The LHPC will not develop any new recreational facilities beyond the pathways on the inner and outer loops of the Canalway, and the still water basin on the Merrimack Canal.



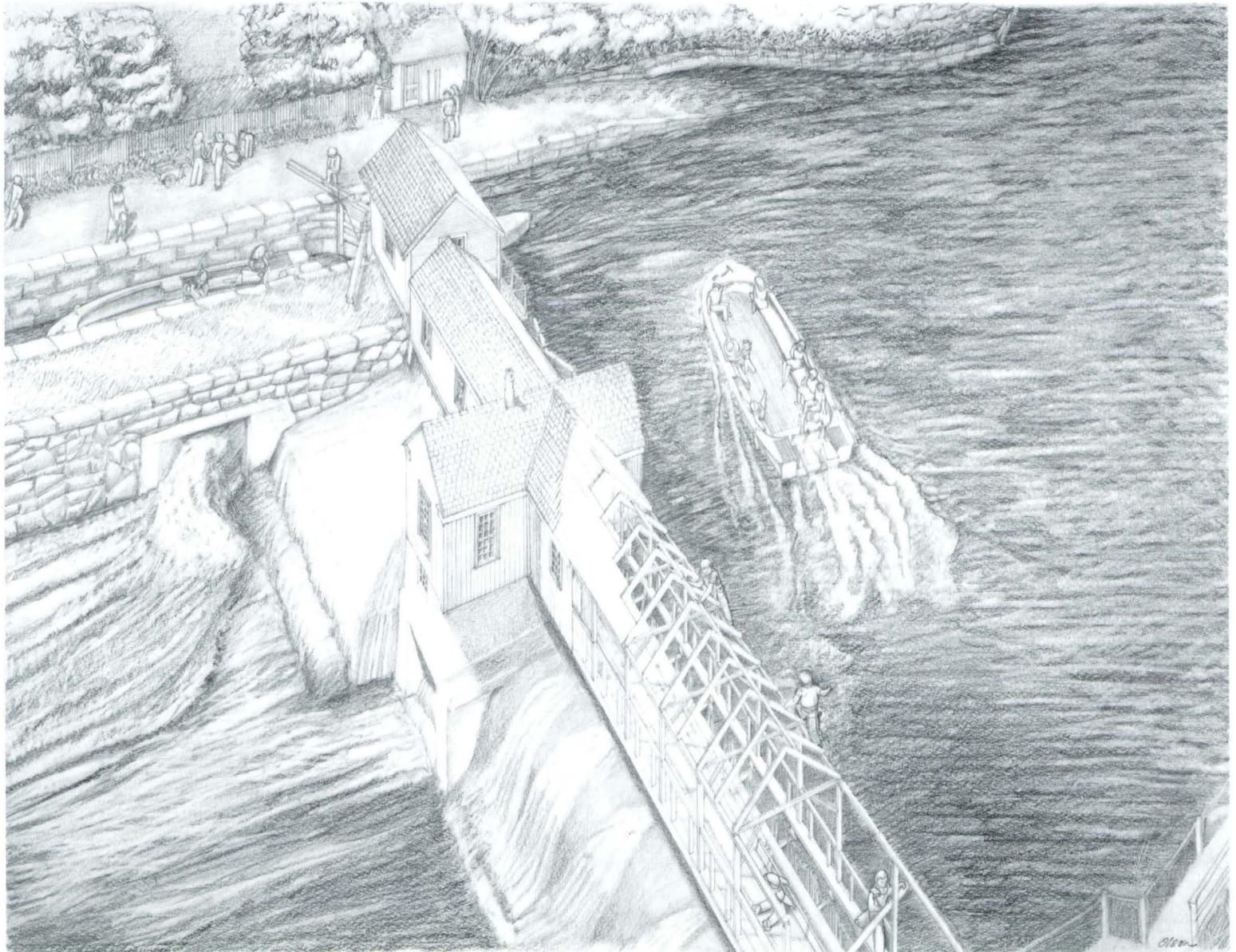
Many of the initiatives described in this *Preservation Plan Amendment* are already underway. This section summarizes the costs associated with the various new proposals.

As mentioned earlier, the LHPC intends to continue operating much as it has for the past ten years, with its professional and support staff of 14. As set out in its by-laws, the Commission meets as a whole each month to set policy and to vote on any proposed expenditures of \$3,000 or more.

Implementation and Budget



The Swamp Locks is the last remaining unrestored lock complex downtown. Much work needs to be done here where the Inner and Outer Loops of the Canalway meet. Plans include restoration of the gate house, repair of the gates, and landscaping and walkways around the site which is the first canal view visitors see when they arrive in Lowell.



Demonstration Projects

The LHPC will use its development and operating funds to implement the *Preservation Plan Amendment*. While grants for preservation and cultural development will be used when appropriate, there are some projects where more active involvement is necessary. In the *Preservation Plan* demonstration projects included the development of Market Mills, Mogan Cultural Center, and the Park Trolley, as well as sponsorship of major cultural initiatives such as the Folklife study.

In general, LHPC funds will be used to plan, design and construct the basic infrastructure of the Canalway and its programs. This will include building footpaths along the inner and outer loop, rehabilitating historic structures related to the canal system such as gate houses and railings, and sponsorship of the major cultural affairs programs.

Demonstration projects will be carried out directly by the LHPC or through cooperative agreements with others. A cooperative agreement might be used, for example, to restore a gate house owned by the Commonwealth with LHPC monies. The agreement would spell out the terms and conditions of the relationship between the parties and would be reviewed by the Regional Solicitor of the Department of the Interior before signing.

The LHPC's grant-making authorities also allow it to work with private or non-profit entities when this is the best means of implementing a project. A demonstration project would be carried out by a grant when

the scope or timing does not correspond with the basic grant program guidelines. This might be the case, for example, when a walkway is to be constructed on or adjacent to privately owned land. If the project has been identified as a LHPC priority and will become part of the public Canalway system, a private owner might be able to complete the work more quickly than the LHPC. A grant agreement would clarify how the monies are to be spent, how the improvements will be used by the public and the joint

responsibilities of the parties.

A demonstration project might involve funding for an important public event or undertaking such as the Lowell Folklife Festival. While this report describes the major activities of the LHPC, it is not intended to be a comprehensive list of every activity to be carried out over the seven years. It is very likely that new proposals will be made to the Commission members and that they will choose to support those which meet the goals of the *Preservation Plan and Amendment*.

Left: The Working People of Lowell exhibit at the Mogan Cultural Center tells the human story of the people who have lived and worked in Lowell since the 1830's. **Right:** The Park Trolley system is being extended to new interpretive sites so that visitors can leave their cars and enjoy the cultural park at a slower pace.



Canalway Development Standards



Above: Gates at the Boott Mills. Right: Canalway at the Lower Locks.

One of the most important sections of the *Preservation Plan* is its statement on standards for historic preservation and new construction in the Preservation District, the 583-acre zone which includes and surrounds the Lowell National Historical Park. The chapter begins:

One of the Commission's major responsibilities according to Section 302(e)(3) of the Act is to develop Standards for "construction, preservation, restoration, alteration, and use of all properties within the Preservation District." The purpose of the Standards is to provide guidelines to private rehabilitation and new construction so that the integrity of Lowell's nineteenth century setting is not disrupted.

The *Plan* included standards for the kinds of projects expected to be most common in the years immediately following its publication. It also outlined an approach for establishing a permanent regulatory agency to implement the standards. The Lowell Historic Board, a city agency which now reviews all exterior construction in a district based on the Preservation District boundaries, was created in 1984. The LHPC continues to play an active role in this entity and has a seat on the Board as does the National Park Service.

The *Preservation Plan* standards have become the guidelines under which the Historic Board reviews projects. They have been modified only slightly, mostly to turn their graphic illustrations into regulatory language. The standards also govern all LHPC demonstration projects and

all grants to building owners.

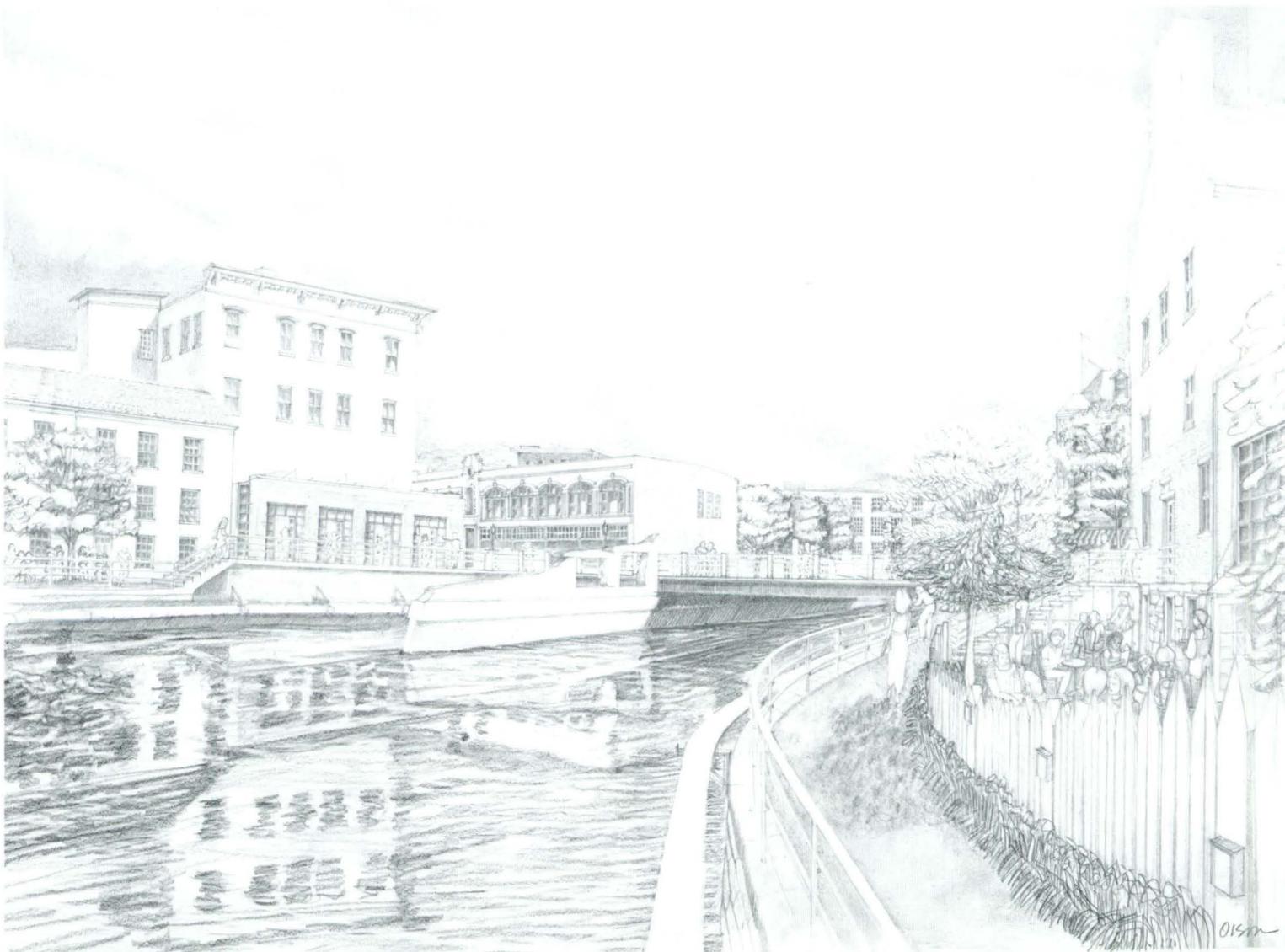
While the original standards included information on how to build and rehabilitate structures near the canals, they need to be expanded now that the Canalway is becoming a reality. Most important is an understanding of the significance of the canal system, and its seminal importance in the development of American hydraulic science and related mechanical and civil engineering works. The Canalway is becoming a pleasant place for people to enjoy walking near water, but it must not be forgotten that these lands are historically sensitive and that their industrial character should not be compromised. If successful, the Canalway will combine accurate restorations of the canal control structures (gate houses, dams, boat locks) with well-designed contemporary walkways, and parks. The standards and review process will control the "canalscape" of buildings bordering both sides of the canals, even though



the Canalway paths will extend along only one canal bank in most cases.

A detailed statement on Canalway standards may be found in the Appendix of this report. It will be used as the basis for an amendment to the Historic Board's review regulations. The Canalway standards address the following issues:

- Restoration of the Historic Designed Canalscape
- Rehabilitation of the Modern Designed Canalscape
- Maintenance of Existing Designed Canalscape
- Development of New Canalscape
 - Railings*
 - Walks*
 - Curbs, Steps, and Drainage*
 - Fences*
 - Lighting*
 - Canalside Furniture*
 - Plant Materials*
 - Historic Artifacts and New Public Art*



This view of Prescott Way on the Inner Loop of the Canalway shows the area when complete in 1989. It was designed as a demonstration project to show how to interpret the Canalway standards.

Grants – Building, Landscape, and Cultural

As stated earlier, the LHPC has fulfilled much of its legislative mandate through sound building and cultural grants programs. Both programs are clearly defined in the *Preservation Plan* and are administered by the LHPC in a streamlined fashion. Recipients must meet high standards, but the rules are explained at the outset and technical assistance offered to make sure grant agreements are understood from the start.

Grant programs will continue to be important in carrying out the Canalway agenda. They will be administered as described in the *Plan* except as described in the following sections of this report.

Building Grants and Loans

The LHPC offers reimbursable matching grants to owners of nationally significant historic buildings in the Preservation District. All buildings in the district were given an index rating in the *Preservation Plan*, after an assessment of their historical significance. An index rating of “A” qualifies the owner for a grant of up to \$75,000 for exterior rehabilitation, so long as this amount is matched by the owner. An additional grant of \$75,000 may be offered under special circumstances, when the project is considered extremely important or when the owner proposes to do restoration work above and beyond the basic preservation standards.

Low interest loans are also available to owners of “A” buildings through the Lowell Development and Financial Corporation (LDFC), which administers an LHPC fund. Applicants

must apply as for grants and adhere to preservation standards. The applicant’s credit-worthiness is evaluated by the LDFC. The maximum loan is \$75,000 per building.

It is proposed that the building programs remain basically unchanged, except that the Commission be authorized to increase the maximum grant and loan amounts, which have not been adjusted since 1980.

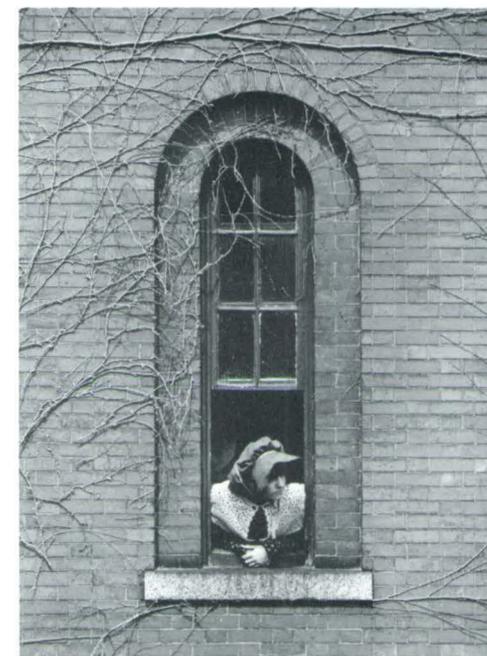
Landscape Grants and Loans

To date, grants and loans have only been used to rehabilitate facades of historic buildings. Upon adoption of this *Amendment*, the LHPC will begin offering matching grants to stimulate private investment in site work and landscaping associated with nationally significant structures along the canals. The program will be administered with the building grant program, and will have the same procedural requirements.

Landscape grants might be used for fencing, planting, walkways, or other improvements to the historic canal banks visible to the public. Design review will be carried out according to the Canalway Standards.

Cultural Grants

Since 1981 the Lowell Historic Preservation Commission has offered cultural grants on a competitive basis to qualified organizations, individuals, or agencies. All grants are intended to foster cultural expression related to Lowell’s historic themes.



Categories

While there are many kinds of projects and activities for which grants can be used, each must contribute to a better understanding of Lowell’s history and reflect the human story of the Industrial Revolution.

The LHPC will continue to support a wide variety of cultural programs throughout the Preservation District. These include: Festivals, Celebrations and Performances; Public Exchange Programs; Local Artisans Programs; Assistance to Interpretive Projects; Educational Programs; and Writing, Research and Publishing Projects. The *Preservation Plan* includes detailed descriptions of the categories.

Process

LHPC Cultural Grants are available to individuals, organizations and public agencies. There are currently two categories of grants: Basic Cultural Grants and Major Project Grants. The Basic Cultural Grants, ranging from \$3,000 to \$10,000, are available to individuals, organizations, and agencies. Major Project Grants, ranging from \$10,000 to \$25,000, are available only to non-profit organizations which exist for cultural purposes.

Grant proposals are evaluated on the basis of the benefits to the LHPC, Park, and community; the applicant's experience; the level of community support and other funding commitments; residency; the overall quality of the proposal; and the relevance of the proposal to LHPC and Park themes. Major Project Grant proposals include an evaluation of the organization. Grant program announcements are advertised in the local media.

The LHPC and staff review grant applications and the LHPC votes on awards. Following the vote, grant agreements are drawn up and signed. Grant projects are carried out on a reimbursable basis to insure that no funds are released until costs are incurred and the project is completed. Under special circumstances a cultural project may be carried out under the guidelines for demonstration projects or through the LHPC's grant-making authorities which allow it to work cooperatively with other entities. Major projects not covered in this *Amendment* would be submitted for approval to the Secretary of the Interior.



The Nesmith Block on Merrimack Street before and after rehabilitation. Partially funded through the LHPC grant and loan programs, the building serves as a model for nearby owners.



The Mogan Cultural Center is located in a restored former Boott Corporation boarding house. When the building was identified in cultural resources surveys, its original use was almost unrecognizable.



Budget

The following tables summarize the budget recommendations that have appeared in the previous chapters. The proposed development budget lists the principal capital projects envisioned for the LHPC's next seven years.

Operating Budget

The operating budget for the Lowell Historic Preservation Commission is based on the experience of the 1979-1988 period. The LHPC will have somewhat expanded responsibilities in developing and operating cultural programs as outlined in *Amendment*. This is reflected in the budget. In other areas, the figures simply represent current staffing and equipment needs projected over time. Operating budgets for FY '84 - '88 averaged \$530,000 per year.

Years	Estimated Average Budget Needs Per Year
FY 1989 - 1991	\$594,000
FY 1992 - 1994	\$687,000
FY 1995	\$750,000

Lowell Historic Preservation Commission Major Development Projects

Canalway Projects

(Project budgets include land acquisition, design, site improvements, and program facilities.)

<i>Upper Pawtucket Canal</i> — Build walkway to connect Canalway with Merrimack River along Pawtucket Canal; location for community gardens, public art, and folklife projects; restore gate house.	2,025,000
<i>Swamp Locks</i> — Restore gate house, build walkways around key historic lock complex to be made operable by Heritage State Park. Public art. Key location on inner loop.	1,030,000
<i>Western Canal</i> — Refurbish and extend existing walkways on outer loop; site improvements for community gardens, folklife, and public art projects.	1,545,000
<i>Merrimack Canal</i> — Repair canal gates to create still water recreation facility on inner loop; restore historic landscape.	745,000
<i>Northern Canal</i> — Rehabilitate railings and restore historic walkway on outer loop. Facilities for public art and folklife projects.	1,645,000
<i>Eastern Canal</i> — Rehabilitate gate houses on inner loop.	360,000

Other Site-Specific Projects

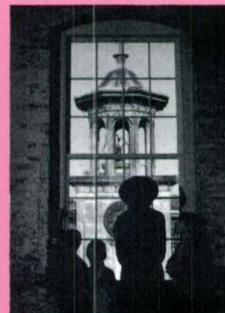
<i>Boott/Massachusetts Mills Agents' House</i> — Complete rehabilitation of federally owned Kirk St. building as interpretive site.	900,000
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Programmatic

<i>Grants</i> — Building, Cultural, Landscape.	1,650,000
<i>Cultural Affairs</i> — Folklife Center, Educational/Technical Assistance Programs, and Cultural Events in the National Park and Preservation District.	1,400,000
<i>Park Trolley</i> — Track extensions or additional car.	800,000

TOTAL \$12,100,000

Appendices



Los Pleneros de la 21 at
the 49th National Folk
Festival.



Appendix A.

Status of Preservation Plan Projects

This status report was prepared to give a summary overview of the projects proposed in the Lowell Historic Preservation Commission’s 1980 *Preservation Plan*. Expanded descriptions of many of the items listed below may be found in the text of the *Preservation Plan Amendment*, in the section entitled “Background.”

The main purpose of this status report is to highlight changes made to the original plan. These are presented in tabular form in the chart and annotated in the narrative section which follows it. In all cases, program changes were made by vote of the Commission. When these were considered major new policy directions, concurrence was sought from the Secretary of the Interior. Several such Secretarial approvals were obtained and are so indicated in the notes.

In a number of cases, projects were completed as outlined in the *Preservation Plan*, but took somewhat longer to finish than expected. This was due to a variety of reasons as the LHPC worked with many different agencies and private owners to implement the vision put forward in the *Plan*. Projects frequently had to be broken into phased segments during the appropriations process. While this prevented longer delays, it often increased administrative procedures, for example if two entirely separate sets of construction documents had to be produced, advertised, and awarded to complete the rehabilitation of one building.

LHPC staff were mindful of their responsibility to carry out a non-traditional agenda within the confines of federal procedures. Making sure that cooperating entities adhered to high standards of workmanship and record keeping was not always easy when the government did not have complete control of every project. As discussed in the *Amendment*, the LHPC often performed an important educational role as it worked with scores of organizations and developers, most of whom had never received a federal grant before. This additional step took time, but paid off in projects that worked smoothly once the ground rules were understood by all parties.

Another factor needs also to be mentioned here. As a new agency of the Department of the Interior, the LHPC had to formulate its own internal procedural guidelines for everything from its planning process to its grant programs. While Departmental regulations gave general direction, the agency often lacked a clear directive as to how a given problem should be resolved. When this happened, the enabling legislation and *Preservation Plan* were consulted, along with relevant National Park Service materials on cases of a similar nature. Finally though, the LHPC had to find its own course, weighing all the information and seeing each project through to successful completion. This too took time.

STATUS OF MAJOR PROJECTS - 1989

<i>Major Plan Components</i>	<i>Implemented As Planned (Completion Date).</i>	<i>Implemented With Changes (Completion Date, See Notes).</i>	<i>Implemented By Others (See Notes).</i>
Boundary Changes	—	1988 ¹	—
Index	1980	—	—
Standards	1980	—	—
Regulatory Framework	—	1984 ²	—
Financial Assistance Programs	1980-84	1985-88 ³	—
Transportation			
Trolley System	1984	1990-91 ⁴	—
Parking Garages	—	—	— ⁵
Canal Barges	—	—	1979 ⁶
Pedestrian Improvements	1982-88	—	—
District-Wide Cultural Programs	1980-88	—	—
Key Projects			
Gateway Exhibits (Market Mills)	1982	—	—
Labor Exhibits	—	1989 ⁷	—
Cultural Center	—	1988 ⁸	—
Boott Mill Park	1990	—	—
Boott Mill	—	1991 ⁹	—
Mandated Projects			
AHEPA Building	—	—	1984 ¹⁰
Jordan Marsh Co.	1985	—	—
St. Anne’s	1988	—	—
Welles Block	1979	—	—
Yorick	1983	—	—
Lowell Institution for Savings	—	—	1975 ¹¹
Lowell Gas Light Co.	—	1989	—
World’s & Martin’s	1984	—	—

NOTES ON THE STATUS CHART

1. *Boundary Changes*

The Preservation District boundary was expanded, as called for in the *Plan*, but the new area was somewhat smaller than originally proposed. The proposal to add the Chapel Hill neighborhood was dropped because LHPC goals could better be met through the folklife program initiatives.

2. *Regulatory Framework*

The regulatory framework was modified somewhat in the course of drafting legislation for enactment by the Commonwealth of Massachusetts. Rather than becoming part of the zoning ordinance as suggested in the *Plan*, the new local ordinance took the place of the existing historic commission ordinance which had been created under Ch. 40C of the Massachusetts General Laws. The recommended advisory board became an even stronger entity, the Lowell Historic Board, with direct permitting authorities based on the *Plan's* standards for preservation and new construction. As described in the *Amendment*, the LHPC appoints a voting member to the Historic Board as does Lowell National Historical Park. The Historic Board ordinance is one of the strongest such local review codes in the nation.

3. *Financial Assistance Programs*

LHPC grant and loan programs operated as described in the *Plan* from 1980 through 1984. In 1985 the Secretary approved a new grant program called the Special Incentive Program which allowed supplementary grants of up to \$75,000 per building for approved projects, to aid in the preservation of distinctive interior or exterior building features that might not otherwise be protected. See Appendix B for a complete listing of the 45 grant projects funded from 1979-88.

4. *Trolley System*

The basic system described in the *Plan* began operation in 1984 with a few minor modifications. Phase one allowed two electric streetcars to operate on existing tracks. Since the design and construction of new tracks was a much more involved undertaking, it was scheduled to occur later as funds became available. New tracks were installed in 1988 through Eastern Canal Park during its construction (through a cooperative agreement with the City of Lowell), and along French Street. Still in the design stage is one remaining extension, from Eastern Canal Park to the Lower Locks. Originally proposed to terminate at Merrimack Street, this system extension will improve connections between other park sites and the canal boat landing at the Lower Locks. Funding has been obtained to construct this extension which also involves the installation of a bridge over the Eastern Canal. The *Plan* also proposed extending the trolley system beyond the Swamp Locks

to reach a proposed maintenance facility to be constructed at this site. A better maintenance site emerged in the planning for the Boott Mills and has been built by Lowell National Historical Park as part of the Boott Mills rehabilitation.

5. *Parking Garages*

The Parking garages proposed in the *Plan* are being built by others at the locations suggested. City and State funding assistance is available and has been obtained by private developers with City and LHPC technical assistance. New garages must follow the design standards for new construction within the historic district. Parking garages constructed or under construction include: Market Street (1978), Lower Locks (1985), Post Office Square (1986), and John Street (projected 1991 completion).

6. *Canal Barges*

The canal boat program was implemented entirely by Lowell National Historical Park without LHPC assistance.

7. *Labor Exhibits*

The *Preservation Plan* called for labor exhibits to be installed in the Early Residence, a privately-owned building on Kirk Street named in the enabling legislation for possible federal acquisition. Two separate tasks had to be accomplished to achieve this goal: 1) the Early Residence had to be acquired and 2) the interpretive program and exhibit had to be developed with the Greater Lowell Central Labor Council (GLCLC). Difficulties arose during the acquisition process making it almost impossible to predict when the building would be available. At the same time (1984) plans were proceeding for the Mogan Cultural Center and a new option presented itself: moving the labor exhibit to the Cultural Center. When this option seemed viable, a planning grant was voted to the non-profit Committee for the American Workers Story (CAWS), an offshoot of the GLCLC. This grant was approved by the Secretary in 1985 and stated that CAWS would plan and develop a labor exhibit at the Mogan Cultural Center. As for the three-unit Early Residence building, only one third had been acquired by 1988 when a local bank seeking to expand approached the LHPC regarding the property. The bank offered to buy the government-owned unit as well as the additional units, and to rehabilitate the entire building according to strict historic preservation standards. Since this would fulfill the LHPC's responsibilities to preserve and protect the building, Secretarial permission was sought to sell the building to the bank. Approval was obtained in August, 1988. Despite our expectation that preservation grant funds would be sought for the building, the bank opted to pursue the project without LHPC subsidy.

8. Cultural Center

The original plan for the Cultural Center (H&H Paper Company/Boott Mill boarding house building) set out three basic objectives: 1) to acquire, rehabilitate, preserve and maintain the historic building, 2) to develop the site so as to highlight the classic nineteenth building type represented by the boarding house and 3) to develop an adaptive reuse of the interior that would allow for both historic interpretation and public programs to celebrate Lowell's distinctive heritage. These objectives were met with the opening in 1988 of the Mogan Cultural Center.

The *Preservation Plan* proposed a slightly different mix of programs for the rehabilitated space than was finally accomplished. The only proposed program that was not implemented was the "Boarding House Restaurant" because there simply was not enough space to accommodate it along with the exhibits, classrooms and library. It was also determined to be somewhat incompatible with spaces housing irreplaceable artifacts and documents, due to potential fire hazards that might be caused by cooking.

9. Boott Mill

The *Plan* stated that "the Boott Mill is architecturally, historically and culturally the most significant property in Lowell." The preferred approach presented a strategy for preserving and interpreting the mill complex "cooperatively with present owners." Between 1980 and 1988 control of the property was in flux as several private firms attempted to acquire and develop the Boott Mill. This situation ultimately made government acquisition of Mills #8 and 9 impractical as originally proposed. Instead, the LHPC purchased Mill #6 and the adjacent Counting House, and with Lowell National Historical Park, devised a strategy to locate a major interpretive facility there.

The final plans for Mill #6 and the Counting House were developed by Lowell National Historical Park and include: museum exhibits on cotton textile production, office and curatorial space for LNHP, New England Folklife Center, the Tsongas Industrial History Center (University of Lowell and LNHP), and the NPS Preservation Laboratory. A trolley storage and maintenance facility was developed in the Coal Pocket, an adjoining portion of the complex, permanent rights to which were acquired through easements. Rehabilitation is being phased, and the first phase is complete. It included installation of new electrical, plumbing and HVAC systems for the building and completion of the trolley barn. Construction of the final phase began in 1989 with an estimated two-year construction period.

Other objectives outlined in the *Plan* were to 1) rehabilitate, preserve, and maintain the exterior of the remainder of the complex 2) to restore the original appearance of key exterior features such as the clocktower and upper millyard and 3) to provide for public access to the millyards and the important turbine in Mill #4. These objectives were met late in 1988 when grants were authorized to the Boott Mills Limited Partnership which had recently acquired the entire complex with the exception of Mill #6 and the Counting House. The matching grants will ensure the preservation and

restoration of the four main stair towers in the upper millyard, including complete restoration of the clocktower. The grant funds were committed following review and approval of the overall plans for the complex. As with all grants, final payment will not be made until the project is carried out according to the approved grant agreement.

10. AHEPA

Preservation Plan objectives for the AHEPA building (the historic Kirk Street Primary School) included: 1) continued maintenance and repair of the exterior and 2) support for a more intensive public use of the building if desired by the owners. Shortly after publication of the *Plan*, the building was acquired by a local law firm for conversion to offices. Proposed exterior alterations were reviewed and approved by the Historic Board and no further LHPC involvement was deemed necessary to meet the stated objectives. The building is currently owned by the Lowell Five Cents Savings Bank.

11. Lowell Institution for Savings

The *Plan* proposed no action beyond supporting the continued preservation and use of the building as a bank. Lowell Institution for Savings continues to occupy the building and, with LHPC encouragement, has also acquired the nearby Lowell Gas Light Company which it is rehabilitating according to historic preservation standards.

*Appendix B.***Building Grants and Loans
1978-1988****COMPLETED PROJECTS**

<i>Building</i>	<i>Year Awarded</i>	<i>Grant Amount</i>	<i>Loan Amount</i>	<i>Private Investment*</i>
Welles Block	1979	\$ 26,000		\$ 447,000
Fairburn Building	1979	17,250		17,750
Howe Building (Kearney Sq.)	1979	25,000		540,000
Old Market House	1980	54,000		3,300,000
Derby Building	1980	32,000		564,000
Panagiatopoulos Block	1981	26,000		94,000
Simpson Block	1981	25,000		525,000
Nesmith Block	1981	90,000		993,000
Old Fire House	1981	36,000		824,000
Hadley Block	1981	1,500		3,700
Lawrence-Wentworth House	1982	4,275		4,275
Robbins Block	1982	12,000	\$ 55,000	12,000
Whistler House	1982	8,000		16,750
Hildreth Building	1983	12,000	75,000	1,900,000
Albion Block	1983		30,000	36,000
Mansur Building (Gemerde Jewelers)	1984	37,500**	75,000	90,000
Hamilton Blue Dye House (Lowell Sun Garage)	1984	8,740		65,260
Davis Block	1984	30,000	75,000	136,000
Davis Building (Major's Cafe)	1984	15,000		21,000
Executive Building	1985	60,000	50,000	1,153,000
Worthen Street Church (Lowell Girls Club)	1985	75,000	75,000	458,000
Ashton House (Lowell Girls Club)	1986	25,000		
Fellows Building	1985	75,000		110,500
Acre Triangle Buildings	1985			732,000
Building 1		30,000		
Building 2		43,000		
Building 3		75,000		
Building 4		125,000		
St. Joseph's Shrine	1985	25,000		
	1987	2,290		40,150
Holy Trinity Church	1985	25,000		25,000
St. Patrick's Church	1985	25,000		25,000
St. Anne's Church	1986	24,290		24,290
Old City Hall	1986	150,000		1,233,000
Mass Mills Boarding House	1986	150,000	75,000	1,058,000
Lawrence Agents' House	1982	11,020		
(Lowell Day Nursery)	1986	4,160		18,960
Bon Marche Building	1984		150,000	180,000
Subtotals	35 projects (Completed)	\$1,385,025	\$660,000	\$14,547,635

ACTIVE PROJECTS: These Projects Have Not Been Closed Out

<i>Building</i>	<i>Year Awarded</i>	<i>Grant Amount</i>	<i>Loan Amount</i>	<i>Private Investment*</i>
Cook and Taylor Building (Blaine Hair School)	1985	\$ 13,251	\$ 75,000	\$ 293,749
Enterprise Building	1985	70,000	75,000	957,000
Howe Building (Middlesex St.)	1986	52,750		335,165
Fox Building	1987	42,520	75,000	131,000
Napping Building (Massachusetts Mills)	1987	75,000		1,325,000
Dye House (Suffolk Mills)	1988	150,000	75,000	2,375,000
Nesmith House	1988	150,000	75,000	655,300
Section #8 Power House (Massachusetts Mills)	1988	20,000		180,000
St. Onge Building	1988	75,000	75,000	270,750
Stair Towers 1-4 (Boott Mills)	1988	300,000		431,000
Richardson Block	1989	75,000		351,000
Welch Building	1989	75,000		320,000
St. Anne's Rectory	1989	15,000		15,000
Boott Canalway (Boott Mills)	1988	1,500,000		45,000,000
Sub-totals (14 Active)		\$2,613,521	\$ 450,000	\$52,639,964
GRAND TOTALS (49 projects)		\$3,998,546	\$1,110,000	\$67,187,599

*Not including grant or loan

**Direct work by LHPC in lieu of grant

*Appendix C.***Cultural Grants 1978-1988**

CYCLE	AMOUNT AWARDED	PROJECTS
First - Spring, 1981	\$ 27,200	17
Second - Fall, 1981	\$ 11,500	7
Third - Spring, 1982	\$ 4,430	4
Fourth - Fall, 1982	\$ 6,000	4
Fifth - Spring, 1983	\$ 8,000	6
Sixth - Fall, 1984	\$ 6,000	8
Seventh - Spring, 1985	\$ 15,500	7
Eighth - 1985	\$122,600	11
Ninth - 1986	\$ 80,100	9
Tenth - 1987	\$105,845	13
Eleventh - 1988	\$ 99,999	11
<hr/>		
Total	\$487,174	97

Cultural Grant Summary

RECIPIENT	AMOUNT	PROJECT
<i>First Cycle – Spring, 1981</i>		
La Chorale Orion	\$1,000	Produced a concert at Lowell High School.
Arts Alive!	\$1,000	Organized demonstrations of arts and crafts during Spring Fling.
PTA Hellenic-American School	\$1,000	Designed and fabricated ten Greek costumes.
Franco-American Centre Committee	\$1,000	Organized workshops on folk dances of Quebec.
Pollard Memorial Library	\$2,000	Published a brochure entitled <i>Kerouac's Lowell Places, A Guide</i> .
The Word Works	\$2,000	Fabricated a travelling exhibit for a proposed printing museum.
Lowell Union of Portuguese	\$1,500	Exhibited photographs of the Portuguese community.
James Higgins	\$2,000	Printed a series of four photographic Lowell theme posters.
Charles Scullin	\$2,000	Published an illustrated pamphlet on the canal system entitled <i>Working the Water: Life and Labor on Lowell's Canals</i> .
Community Teamwork, Inc.	\$1,200	Researched the history of food and agriculture in Lowell.
Lowell Historical Society	\$2,000	Restored bindings of <i>Lowell City Atlases: 1879, 1882, 1896, 1906, 1924, 1936</i> .
Neighborhood Youth Corps	\$1,000	Made a mosaic mural depicting 19th century Lowell that is now installed at Market Mills.
University of Lowell Special Collections	\$2,000	Data from pre-1917 <i>City Directories</i> entered into a computer in retrievable format.
Susanne Robertson	\$2,000	Completed a manuscript entitled <i>Musical Activity in Lowell, 1825-1900</i> .
Lowell Cooperative Learning Center	\$1,000	Offered courses on Lowell called "The Lowell Experience."
University of Lowell, Liana Cheney	\$2,500	Researched graphics and text for a study of the churches of Lowell.
Lowell Museum Corporation	\$2,000	Published a book entitled <i>Surviving Hard Times: The Working People of Lowell</i> .
Total Amount Awarded First Cycle	\$27,200	
<hr/>		
<i>Second Cycle – Fall, 1981</i>		
Lowell Opera Company	\$2,000	Performed an ethnic opera.
Lowell Chamber of Commerce	\$1,500	Organized a series of hospitality seminars called "Ask Me, I Know Lowell."
Human Services Corporation	\$1,500	Inventoried documents related to the establishment of Lowell National Historical Park.
Lowell Public Schools	\$2,000	Exhibited children's photographs of the architecture in Lowell's neighborhoods.
Brian Mitchell	\$2,000	Published a book entitled <i>The Paddy Camps: The Growth of Community Among the Irish in Lowell</i> .
International Institute of Lowell	\$1,500	Established a foreign language reading room.
David Riley	\$1,000	Adapted his play entitled <i>If the Falls Could Speak</i> for a Lowell High School performance.
Total Amount Awarded Second Cycle	\$11,500	

RECIPIENT	AMOUNT	PROJECT
<i>Third Cycle – Spring, 1982</i>		
John Antonelli	\$1,000	Completed a draft for a film entitled “Jack Kerouac’s America.”
Leo Panas	\$1,500	Published a book entitled <i>The First Greek Immigrants in Lowell: A Photo Document 1900-1940</i> .
Lowell Museum Corporation	\$1,500	Published a children’s book depicting residential architectural styles in Lowell.
Merrimack Valley Textile Museum	\$430	Printed contact sheets and selected photo enlargements from the collection of negatives made by John Coolidge in the 1930’s.
Total Amount Awarded Third Cycle	\$4,430	
<i>Fourth Cycle – Fall, 1982</i>		
Nicholas Karas	\$1,500	Published a book of oral histories related to the Greek immigrant experience in Lowell entitled <i>The Greek Triangle of the Acre</i> .
University of Lowell, Liana Cheney	\$1,500	Published a two-volume study entitled <i>Churches of Lowell</i> , a social and architectural study of 30 churches.
Lowell Opera Company	\$1,500	Produced a concert entitled “Music of Lowell Area Composers.”
Lowell High School, Mill Towners	\$1,500	Presented 25 performances at Market Mills.
Total Amount Awarded Fourth Cycle	\$6,000	
<i>Fifth Cycle – Spring, 1983</i>		
Paul Ziavras	\$2,000	Completed technical refinements leading to the development of a film entitled “Greek and American Mosaic: Greek Immigrants of Lowell.”
Pollard Memorial Library	\$1,300	Produced a slide presentation of historic and contemporary views of Lowell people and neighborhoods entitled “The Immigrant Experience.”
JoAnne Preston	\$1,700	Completed a report based on original letters, poems, and documents of a pre-Civil War mill girl, Eliza Adams.
Lowell Firefighters Historical Society	\$1,000	Reprinted an historical book about Lowell fire service.
Lowell Museum Corporation	\$1,000	Exhibited photographs of 19th and 20th century Lowell streetscapes.
Jay Connolly/Lowell Arts Magnet School Parent-Teachers Organization	\$1,000	Organized art workshops at the Lowell Arts Magnet School and created a poster illustrating Lowell bridges
Total Amount Awarded Fifth Cycle	\$8,000	

RECIPIENT	AMOUNT	PROJECT
<i>Sixth Cycle – Fall, 1984</i>		
Karesande Players	\$1,630	Produced 33 performances of a Lowell history program for children.
Peter Richards	\$500	Published a brochure on the history of the Franco-American and French-Canadian communities in Lowell.
Unitas, Inc.	\$500	Translated and broadcast all Park press releases on the radio show "El Show Sin Nombre."
Kevin Harkins	\$620	Organized a photography exhibition entitled "A Day in the Life of Lowell."
Susanne Robertson	\$700	Performed a concert entitled "Charms of the Muse: Women in 19th Century American Music."
Paul Pearsall	\$750	Published a history of Lowell's chapter of the American Federation of Musicians.
Ancient Order of Hibernians	\$500	Produced performances of Irish music and demonstrations of folk step dancing.
Lowell Art Association	\$800	Published a brochure on the Whistler House Museum of Art.
Total Amount Awarded Sixth Cycle	\$6,000	

<i>Seventh Cycle – Spring, 1985</i>		
Leo Panas	\$3,000	Published a book entitled <i>The Irish Came to Lowell</i> .
Edith Nourse Rogers School	\$2,500	Implemented a curriculum dealing with urban design.
Marina Schell	\$3,000	Published the collected writings of <i>Lowell Sun</i> newspaper columnist Charles G. Sampas.
American Institute for Archeological Research	\$2,000	Excavated a significant historic site in Lowell.
Cambodian Mutual Assistance Association	\$3,000	Published a book entitled <i>Southeast Asians: New Beginning in Lowell</i> .
Unitas, Inc.	\$1,000	Produced an Hispanic festival in Lowell.
Lowell Art Association	\$1,000	Researched the paintings of Lowell artist Samuel P. Howes whose portraits included mill girls, boarding house keepers, and mill workers.
Total Amount Awarded Seventh Cycle	\$15,500	

RECIPIENT	AMOUNT	PROJECT
<i>Eighth Cycle - 1985</i>		
Donna Davis	\$3,000	Produced a new historical play about Lowell.
University of Lowell, Liana Cheney	\$2,500	Researched the stained glass windows in Lowell's churches for a national survey.
Lowell Irish Cultural Week Committee	\$1,600	Developed a cultural exchange program with Kilkenny, Ireland.
Black Heritage Committee	\$2,000	Sponsored the Beulah Pierce Memorial Concert during Black History Month.
Lowell Art Association	\$3,000	Exhibited works by Samuel P. Howes, a 19th century Lowell portrait painter.
Arthur L. Eno, Jr. and Frances Early	\$2,500	To publish the autobiography of Felix Albert, a French-Canadian immigrant to Lowell.
Lowell Museum Corporation	\$2,000	Designed a poster about the Lowell canals.
Lowell Arts Magnet School	\$2,000	Published a date book of student art work.
Human Services Corporation	\$2,000	Published a commemorative poster for Lowell's Sesquicentennial.
Museum of American Textile History	\$2,000	Published recent essays from the Lowell Conference on Industrial History.
Committee for the American Workers' Story, Inc.	\$100,000	Planned and produced an interpretive exhibit about labor history for the Patrick J. Mogan Cultural Center.
Total Amount Awarded Eighth Cycle	\$122,600	
<i>Ninth Cycle - 1986</i>		
The Lowell Plan	\$15,000	Commissioned bronze portrait busts by Mico Kaufman of Patrick J. Mogan for the Patrick J. Mogan Cultural Center and Paul E. Tsongas for the Paul E. Tsongas Industrial History Center.
Cambodian Arts Council Committee	\$3,000	Developed exhibits for a Cambodian Arts Museum.
University of Lowell, Liana Cheney	\$3,000	Completed documentation of the stained glass windows in Lowell's churches for a national survey.
The Lowell Plan	\$25,000	Commissioned a work of public art entitled <i>Human Construction</i> by Carlos Dorrien.
Flora Ormsby Smith	\$3,000	Created 12 works of fabric art on ethnic costumes
Lowell General Hospital	\$3,000	Researched the history of public health in Lowell.
The Lowell Plan	\$25,000	Commissioned a work of public art entitled <i>Pawtucket Prism</i> by Michio Ihara.
Catherine Goodwin	\$1,500	To publish an illustrated history of the Lowell Cemetery.
Laotian-American Organization of Greater Lowell	\$1,600	Formed a Laotian children's dance group.
Total Amount Awarded Ninth Cycle	\$80,000	

RECIPIENT	AMOUNT	PROJECT
<i>Tenth Cycle - 1987</i>		
University of Lowell, Mary Blewett	\$8,000	To publish a book entitled <i>The Last Generation: Work & Life in the Lowell Textile Mills in the Early 20th Century, 1910-1960</i> .
James Higgins and Joan Ross	\$6,000	Produced a photo-documentary on the rehabilitation of Boott and Massachusetts Mills.
McDonough Arts Magnet School, Dan Gaudette and Paul Katler	\$6,000	Supplied materials and equipment for an interdisciplinary arts project on the theme of trolleys, transportation, and the city.
The Lowell Plan	\$5,845	Installed <i>Pawtucket Prism</i> by Michio Ihara.
Salem State College, Stephen Matchak	\$7,000	Produced cultural maps and analysis depicting the demographic and historical change of Lowell neighborhoods.
YWCA/Coalition for a Better Acre/Big Brother-Big Sister	\$13,500	Developed a neighborhood garden along the Western Canal in the Acre and coordinated learning activities for a multi-cultural group of children.
James Cryan	\$4,000	Printed glass-plate negatives (1895-1932) from the City Engineer's collection and photographed corresponding contemporary views.
New England Quilt Museum	\$8,500	Produced a major exhibit, "Family Quilts: Labor of Love."
University of Lowell, Shirley Kolack and Mark Levine	\$7,500	Researched Lowell's Jewish heritage for temporary exhibits at the Mogan Cultural Center and in the Jewish community.
Paul E. Tsongas Industrial History Center	\$6,250	Developed a curriculum on industrial history.
Merrimack Repertory Theatre	\$13,500	Produced the world premiere of <i>Bertha, the Sewing Machine Girl</i> , an original musical based on a late 19th century melodrama.
Whistler House Museum of Art	\$13,500	Photographed and documented the Whistler House Museum of Art's collection.
A Brush With History Gallery	\$6,250	To produce a folk art exhibition in conjunction with the 1989 National Folk Festival.
Total Amount Awarded Tenth Cycle	\$105,845	

RECIPIENT	AMOUNT	PROJECT
<i>Eleventh Cycle - 1988</i>		
Open Campus/Middlesex Community College	\$13,340	To develop a Cultural Studies Institute with a pilot program in Irish studies.
Whistler House Museum of Art	\$13,333	To install exterior signage and interior interpretive panels about the house's history and museum collection.
Merrimack Repertory Theatre	\$13,333	To support MRT's First Annual Playwriting Competition and staged readings of scripts on labor and women's issues in industrial history.
New England Quilt Museum	\$13,333	To develop and install an exhibit "Through Attic Windows: Quilt Treasures from New England Historical Societies," including gallery guide and educational programs.
University of Lowell, Dr. Liana Cheney	\$10,000	To organize art exhibits and performances in conjunction with cultural agencies of Greece to celebrate the 1989 Greek Festival in Lowell.
Ruth Page	\$10,000	To produce a video documentary of the 50th National Folk Festival in Lowell with interviews and performances that will be offered for use in Lowell schools as well as for cable and public television.
Susan Scott	\$8,500	To survey and photograph stained glass in some 100 Lowell houses for slide presentations, a booklet and a walking tour brochure.
David McKean	\$6,750	To develop an exhibit about the Acre neighborhood at St. Patrick's Church that will be available for National Park tours.
City of Lowell Youth Film Festival	\$4,500	To produce student videos on Lowell's folklife and sponsor a film festival.
Ste. Jeanne D'Arc School	\$3,910	To develop an interdisciplinary curriculum on Lowell's history and culture emphasizing Franco-American heritage which will be made available to area schools.
Friends of Lowell High School, Inc.	\$3,000	To produce "Hands Across the City", a multi-cultural student performance program at Lowell High School.
Total Amount Awarded Eleventh Cycle	\$99,999	



Ethnic music festival at
Lucy Larcom Park.

Appendix D.

Standards for Canalway Development

The Lowell Canal System was developed as a power canal network between 1821 and 1848 to supply hydromechanical-power potential to the twelve major factories built during this period that were dependent on the water provided by the Locks and Canals Company. This 5½ mile long interconnected system, made up primarily of substantial granite masonry retaining walls, and its numerous control structures — largely dams, gate houses and boat locks - together comprise a major portion of Locks and Canals National Historic Landmark District. Its significance lies in its seminal importance in the development of American hydraulic science and related mechanical and civil engineering works. As such, the canal system is a major historic resource which should be preserved, protected, and interpreted for posterity.

Lowell's revitalization, which has been underway for several years, is increasingly focusing on the amenity potential of the land immediately adjacent to the canals because of the proximity of flowing and often falling water. Much of this effort is being undertaken by the LHPC through its Canalway program which is attempting to develop urban walkways along at least one side of the canals throughout the system, screen out undesirable views, and encourage compatible building rehabilitation and new building and site development on immediately adjacent lands.

Because of the historical sensitivity of these lands, it is important that this canalside development be in harmony with the contextual precedents of the historic built environment unique to the canal margins. The essential industrial character of the "canalscape" should be preserved and enhanced to the extent possible so that its historic function can be appropriately interpreted as part of the Lowell National Historical Park without hampering the development of the Canalway and adjacent rehabilitation and new building projects. At the same time, maintaining and enhancing the differing character the individual canals historically had should be an overall design objective.

To guide these various developments in their use of and exposure to the Lowell Canal System, the following Standards for Canalway Development are addressed.

Restoration of the Historic Designed Canalscape

The Northern Canal Walk, the Guard Locks, and Lucy Larcom Park are the three areas along the canal system that historically were designed landscapes. To the extent possible, these areas should be restored to their historic appearance and function. New elements, when required, should be modern but in the context of the historic design.

Rehabilitation of the Modern Designed Canalscape

The Western Canal Park, built just before the advent of the National Park, and exemplifying urban design values of its era, remains in good physical condition in spite of lack of maintenance in recent years. It should receive thorough compensatory maintenance to bring it back to a state of esthetic utility.

Maintenance of Existing Designed Canalscape

The recently completed segments of the Canalway currently consisting of the Lower Locks, the Lower Pawtucket Canalway, and Eastern Canal Park should be maintained in their current condition as parts of the Inner Loop of the Canalway.

Development of New Canalscape

Most canal frontage in Lowell historically was located within dense industrial or residential areas. A slight majority of the fronting industrial buildings survive, but a major portion of the immediately adjacent residential buildings have been demolished. The result is a canalscape that, in places, has lost the integrity of its historic edges resulting in a much more open and, in some cases, newly built or even derelict setting. Because the sense of urban enclosure was such a strong defining element of the canalscape, a major objective of new development is the redefinition of this walled environment in order to re-establish this characteristic where it has been lost to the extent possible. Ideally, this sense of containment should be done with hard-edged and generally formally arrayed forms such as building walls and obscuring fences above eye level, or, selectively, tall planting screens. Where new elements not a part of the historic canalscape are deemed desirable additions, they should be of plain, modern, but un-mannered design, avoiding the introduction of historical, period detailing which never existed along the canals. New Canalway should primarily focus on the canal itself; it should be readily apparent that the canal is the single most important element driving the design. To achieve this and to assist in developing an urban canal image, the walkway should form a strong strip directly at the edge of the canal, relating to the canal as a sidewalk does to a street and a towpath does to a transportation canal.

- *Railings.* Rehabilitate historic railings or provide new railings based on historic designs found on the Lowell Canal System, when appropriate, or modern designs that adapt or otherwise complement the historic precedents. Provide these sorts of wooden or metal railings with leaning rail cap along those canal margins where the walkway is immediately adjacent to the canal wall.
- *Walks.* Because the canal system was not used over most of its history as a traditional towpath transportation canal, this early characteristic of the canals was essentially lost over time, and much of the old towpath margin eventually given over to building or other transportation use. A narrow right-of-way equivalent to the towpath strip has mostly survived

and will be augmented where necessary and generally reinstated along one side of the canal system to provide a continuous canalside walkway, and, perhaps in part, bikeway. The finished surface should be a simple, uniform strip of monolithic paving material that visually relates to the generally unpaved nature of Lowell's historic industrial precincts. Exposed stone-gravel-impregnated bituminous concrete is currently being used for the Inner Loop, and compacted fine gravel or stone dust is generally recommended for the Outer Loop to achieve this appearance. Historically appropriate red brick pavers or granite setts and flush granite trim strips may be appropriate at higher traffic access or crossing points.

- *Curbs, Steps, and Drainage.* Historically, whenever the canal wall did not serve as a building foundation, the top of the wall was flush with the adjacent ground plane, allowing surface drainage to pitch over the top of the wall directly into the canal, obviating the costly and maintenance prone subsurface drainage caused by modern preferences for raised edge curbs in these situations. For reasons of reduced cost and maintenance, and contextual reference, this same approach should be taken along the water edge of the walkway and on other site walls and steps wherever possible. Steps should be rendered with granite treads whenever possible to maintain the historically typical treatment and these treads should be expressed on stair cheek walls for the same reason.
- *Fences.* Painted wooden vertical-board or closely-spaced picket fences of various heights were a common feature along the historic canal system. Provision of new fences based on these design precedents for use as upland screens on the walkway side or wall-edge screens on the opposite side to shield incompatible uses or provide privacy or security to adjacent lands is desirable and also helps recreate the historical sense of enclosure using historically-precedented devices.
- *Lighting.* Because no formal lighting was historically provided along the canals, every effort should be made to provide whatever lighting devices deemed necessary in as unobtrusive a manner possible. To help differentiate the inherent character of the Canalway from the city streets, use of a lower level of lighting is desirable. Some methods which should be considered to achieve lighting with these characteristics are: simple light bollards along the upland side of the walkway, perhaps incorporated into a fence; simple, shaded industrial fixtures mounted on plain poles along the edge of the right-of-way; plain fixtures mounted on adjacent buildings; plain, modern light poles of a more industrial character with modern cylindrical fixtures.
- *Canalside Furniture.* Benches, trash receptacles, and other canalside furniture should be kept to a minimum in the zone immediately adjacent to the canal, except where need at nodal points is firmly established, to prevent the proliferation of non-historical elements into the canalscape.

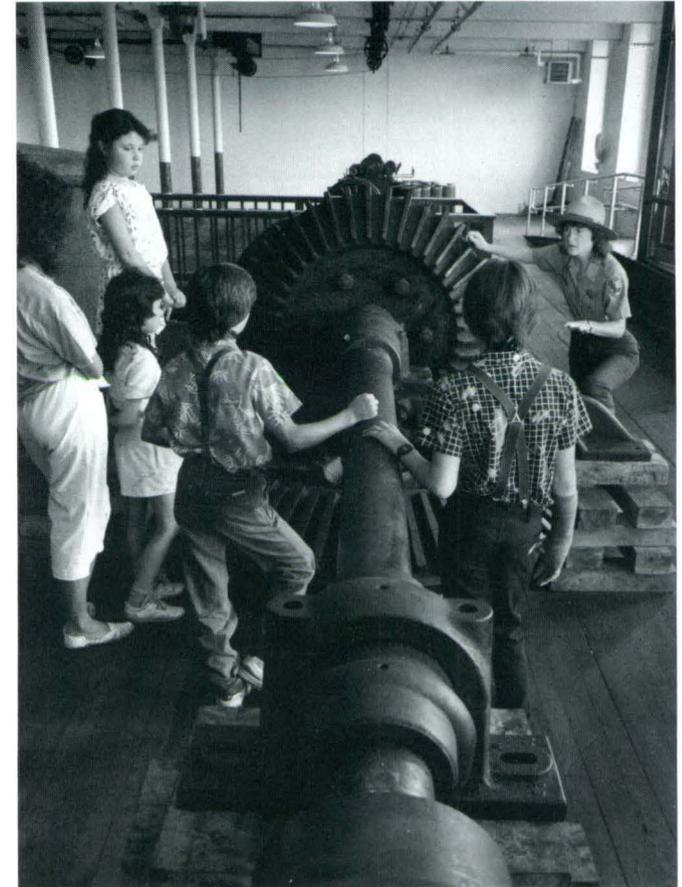
Those that are determined to be necessary or useful should be of a plain nature designed to withstand the heaviest abuse. Benches should generally be backless, to increase their vandal resistance and reduce their intrusion into the historic scene.

- *Plant Materials.* Historically, plant materials were only an occasional and localized part of the fully developed industrial canalscape in Lowell. However, the upper reaches of the Pawtucket and Northern Canals were bordered by open woodland and other parts of the system were bordered by city streets exhibiting formally arrayed rows of moderately-tall deciduous trees. The overall character of most canal reaches was treeless expanses of industrial buildings or factory yards occasionally counterpointed by formal treelines usually fronting the interspersed rows of residential buildings. This periodic alternation of hard building edges and formal patterns of deciduous trees should be the general Canalway design objective. In general, presentable building facades fronting the canals should not be obscured by low, intervening plant materials. In addition to tree reinstatement in historic locations, the use of trees between canal and building should generally be reserved to soften or obscure non-contributing buildings. Use of low trees and shrubbery should be minimized in preference to the historical precedents of taller trees set on lawn or pavement. Plant materials historically indigenous to the canal banks such as wild rose, columbine, blue bell, and other perennials may be used appropriately in beds along the Canalway.
- *Historic Artifacts and New Public Art.* The surviving historic locks, dams, locking and sluice gates, hydraulic gate houses and their gate hoisting equipment, and the remnants of the hydraulic-power use of the system such as arched penstock entrances and tailrace exits are all artifacts which, along with the surviving mill buildings, make up the interpretive industrial archeology of the canal system. These elements, along with the canal walls, together comprise the historic precinct which largely defines the Canalway; they should be preserved and appropriately restored and maintained. In addition, the Canalway will be the site of much new public art. Because the historic artifact and the new art must both share the same landscape, the addition of the new to the old must be harmonious. Siting of new public art should respect the historic setting of the industrial artifacts and have no tendency to overwhelm. Generally, the new art should not be sited immediately adjacent to these artifacts, but should be sited and help define a sense of place at many locations along the canal system where new nodal or focal points can be developed around these new features. Every opportunity should be taken to harmonize this new art with the new canalscape design by making it specific to its site.

Appendix E

Legislation

16 USC 410cc.
October 16, 1987



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-31(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 par. (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 "Lowe-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 5, 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 5, 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 Boott Mill Boarding House), 42 French Street.

(C) Old City Hall, 226 Merrimack Street.

(d) Merrimack Gatehouse, 269 Merrimack Street.

(E) The Wannalancit Textile Company, 562 Suffolk Street.

(F) The structures containing the Jade 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 5, 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(e) 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 5, 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(b) 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. 95-290, 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) Boott 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 to 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, § 302, 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. 1136.)

An Act

Oct. 16, 1987
[H.R. 2035]

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
- 16 USC 410cc-13 note. (3) in section 301(i) by striking "ten" and inserting "seventeen".

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.

Appendix F.

Amendment to the Environmental Assessment

Prepared by the Lowell
Historic Preservation Commission
September, 1989

For further information contact:
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Lowell Historic Preservation Commission
222 Merrimack Street, Suite 310
Lowell, Massachusetts 01852
(508) 458-7653



In accordance with the National Environmental Policy Act, 1969, as amended, Section 1508.13, the Lowell Historic Preservation Commission issues the following statement:

FINDING OF NO SIGNIFICANT IMPACT

Based on the Amendment to the Environmental Assessment, the Commission has made a determination that the programs and projects discussed in the Plan will not require further environmental documents. In compliance with the National Environmental Policy Act, the Commission issues a Finding of No Significant Impact for the reasons listed below.

The Commission's reasons are as follows:

1. The trolley extension is a reasonable expansion of the originally proposed transportation system providing an important linkage between canal boats and interpretive sites in the park.
2. Standards for Canalway development have been established to ensure that the historic character and integrity of the canal system are maintained and protected.
3. The actions in the Plan Amendment do not significantly affect public health or safety.
4. While the proposed actions concern unique cultural and historic resources in Lowell, projects in the Plan Amendment preserve these resources rather than damage them.
5. The Commission has included mitigating measures in its proposed actions to reduce adverse impacts.

Other Documents: In addition to the Commission's Amendment to the Environmental Assessment, the Environment Assessment (1980) which analyzes the impacts of the Preservation Plan of 1980. The National Park Service draft Environmental Impact Statement (May 1980) analyzes the overall impacts from the Lowell National Historical Park and covers all joint projects. This material has been incorporated into the Commission's assessment.


Peter J. Aucella
Executive Director

November 3, 1989

Amendment to the Environmental Assessment

In August 1980, the Lowell Historic Preservation Commission prepared an Environmental Assessment to analyze the impacts of the Preservation Plan of 1980 and alternatives not fully addressed in the Environmental Impact Statement prepared by the National Park Service, June 1980. The Commission has reviewed the information presented in the 1980 Environmental Assessment filed with the Preservation Plan of 1980. Based on this review, it was determined with two noted exceptions, that the Preservation Plan Amendment does not propose any new actions which would present new environmental impacts. Therefore, a comprehensive environmental assessment is not required. (For discussion of impacts of actions proposed in the 1980 Preservation Plan, see Environmental Assessment, 1980 and NPS/DEIS.)

The following is an assessment of those actions proposed in the Preservation Plan Amendment not previously addressed in the 1980 Preservation Plan. The intent of this assessment is to identify the newly proposed actions, discuss the reasonable alternatives that were considered and the probable environmental impacts, whether beneficial or adverse, that the proposed actions and the alternatives may be expected to have.

Lower Locks Trolley Extension/Eastern Canal Bridge

The proposed action involves the construction of a new trolley bridge over the Eastern Canal and tracks and overhead lines to bring the trolley system to the Lower Locks Terminus (*Map 12*). An integrated visitor transportation system of canal boats and trolleys has been a long standing goal of the Preservation Plan. The proposed bridge and track extension is a reasonable expansion of the originally proposed transportation system providing an important linkage between the Boott Mill and Eastern Canal Park sites and the canal boats and interpretive site at the Lower Locks.

The proposed action will have beneficial impacts in enhancing the park's historic interpretive program, facilitating the operation of additional trolleys to meet increased visitation demands, and reduction of visitor related automobile traffic.

The Eastern Canal bridge and trolley extension is not expected to have any significant adverse environmental impacts. Water quality and historic design issues related to the proposed trolley bridge have been addressed in a recently completed design study. The study presents design concepts which includes architectural detailing that will maintain the historic integrity of the area, and structural pier designs which eliminate any impediments to water flow in the canal. The No Action alternative would mean that visitors would have to walk or drive to interpretative programs at the Lower Locks. Walking may be difficult some, thus lessening the park experience. Driving would increase traffic on already congested downtown streets.

Canalway Program

The Canalway Program is a broad concept that encompasses most every aspect of the Commission's agenda for the next six years. The Canalway is a proposed system of paths connecting all segments of the canal system. The primary objectives of the Canalway Program are to preserve, protect, and interpret the historic structures and landscapes that comprise the historic canal system for the purpose of recreational enjoyment, educational enhancement, and cultural expression. The commission has established Standards for Canalway Development to ensure that the historic character and integrity of the canal system are maintained and protected. These standards are included in the Preservation Plan Amendment. A total of \$7,250,000 in Commission resources have been allocated to the Canalway Program.

Commission actions and commitment of resources are proposed in three areas:

- Canal Walkway Development
- Restoration of Historic Canal Structures
- Canalway Cultural Development Programs

The alternatives and probable impacts relating to these canalway projects are summarized below:

1. Canal Walkway Development

The proposed action involves the development of a continuous system of walkways connecting all segments of Lowell's 5.6 mile canal system, as well as sections of the Merrimack and Concord Rivers. The Canalway is organized into a downtown inner loop along the Merrimack, Hamilton, Lower Pawtucket, and Eastern Canals and an outer loop along the Western, Upper Pawtucket and Northern Canals. Capital improvements to be funded by the Commission will include, surface paving of walkways, rehabilitation of historic canal railings or installation of new railings, fencing, lighting, grading, landscaping, and canalside furniture.

The proposed action will have beneficial impacts in encouraging greater use of the canals and their banks for recreational, cultural, interpretive, and commercial activity, upgrading the physical appearance of the canal, and improving public access to the canalway. The canal walkway will be integrated into the park transportation system of boats and trolleys connecting all major points of interest along the canals and throughout the park system.

The Canal walkway is not expected to have any significant adverse environmental impact. The No Action alternative would mean that the resource potential of the Canalway as a major urban amenity and interpretive aid may never be realized. There currently is no other agency or local organization with the funds and capacity to undertake such a project on a canalwide scale. Thus, the No Action alternative would mean that any future development of the canalway would likely occur as isolated projects without any unified plan for integrating the system.

2. Restoration of Historic Canal Structures

The proposed action involves the restoration and rehabilitation of numerous canal structures, namely gatehouses and dams. Site specific capital improvement projects to be funded by the Commission may include restoration of:

- Swamp Locks Gatehouse
- Guard Locks Lock House
- Hydraulic Gatehouse on the Upper Pawtucket
- Boott Dam
- Rolling Dam/Boott Penstock Gatehouse
- Massachusetts Wasteway Gatehouse

The proposed action will serve to restore these historic canal structures to their original appearance.

The beneficial impact of the proposed action includes the rehabilitation of historically significant structures, enhancement of visitor tour and interpretative experience along the canal system, and the creation of an attractive canalscape. No adverse impacts are anticipated.

The No Action alternative would mean that these structures which represent significant elements of the Locks and Canals National Historic Landmark District would remain in a state of deterioration. Prolonged neglect may result in the eventual loss of these valuable cultural and historic resources.

3. Canalway Cultural Development Programs

In order to better enhance and interpret the canal system the Commission will support a variety of Canalway cultural, interpretive and recreational programs. The reader is referred to the Preservation Plan Amendment for details on these various programs. The major canalway programs include:

- Public Art along the Canalway
- Historical Markers and Interpretive Signage System
- Folklife Facilities

These programs are designed to tell the story of Lowell and its people using the canalway as the focus and setting for interpretation of Lowell's rich cultural and industrial heritage.

Through the development of these programs, the Commission expects to have a beneficial impact on the cultural, ethnic, and recreational activities that instill in Lowell a unique sense of quality and character. The Commission intends to work closely with the Lowell Office of Cultural Affairs, as well as other local cultural and educational institutions to coordinate its programs and thus, avoid any adverse impacts that may be created through possible conflicts.

There is no other agency currently active in Lowell that has designated the canalways as a focus for cultural activity. Thus, the No Action alternative would mean that fewer and possibly no programs would be developed to enhance and interpret the canal system.

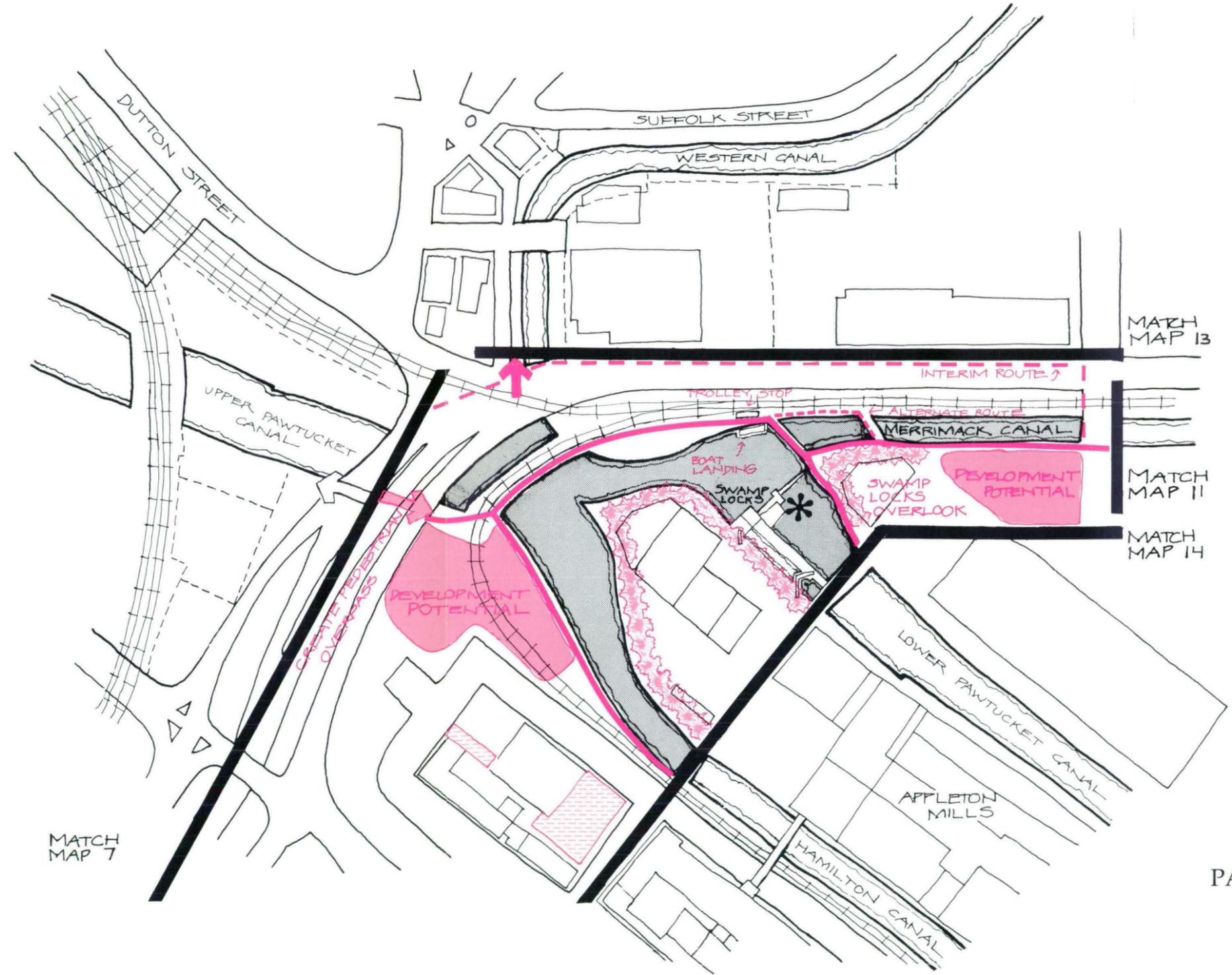
Consultation

The Preservation Plan Amendment and the Amendment to the Environmental Assessment were prepared in consultation with many individuals and agencies at the local, state, and federal level.

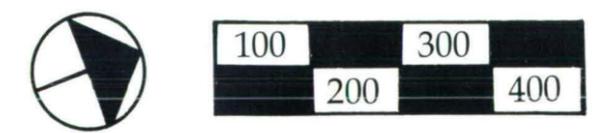
A public hearing was held on the Preservation Plan Amendment on June 19, 1989. Approximately 25 people attended including representatives of the following agencies and organizations: Lowell High School, Lowell National Historical Park, Lowell Historical Society, Lowell Office of Cultural Affairs, Congressman Chester Atkins Office, and the Lowell City Council. Public notices regarding the Public Hearing and Public Review Period were published in the *Lowell Sun*. In addition, copies of the Plan Amendment were mailed to over 200 people.



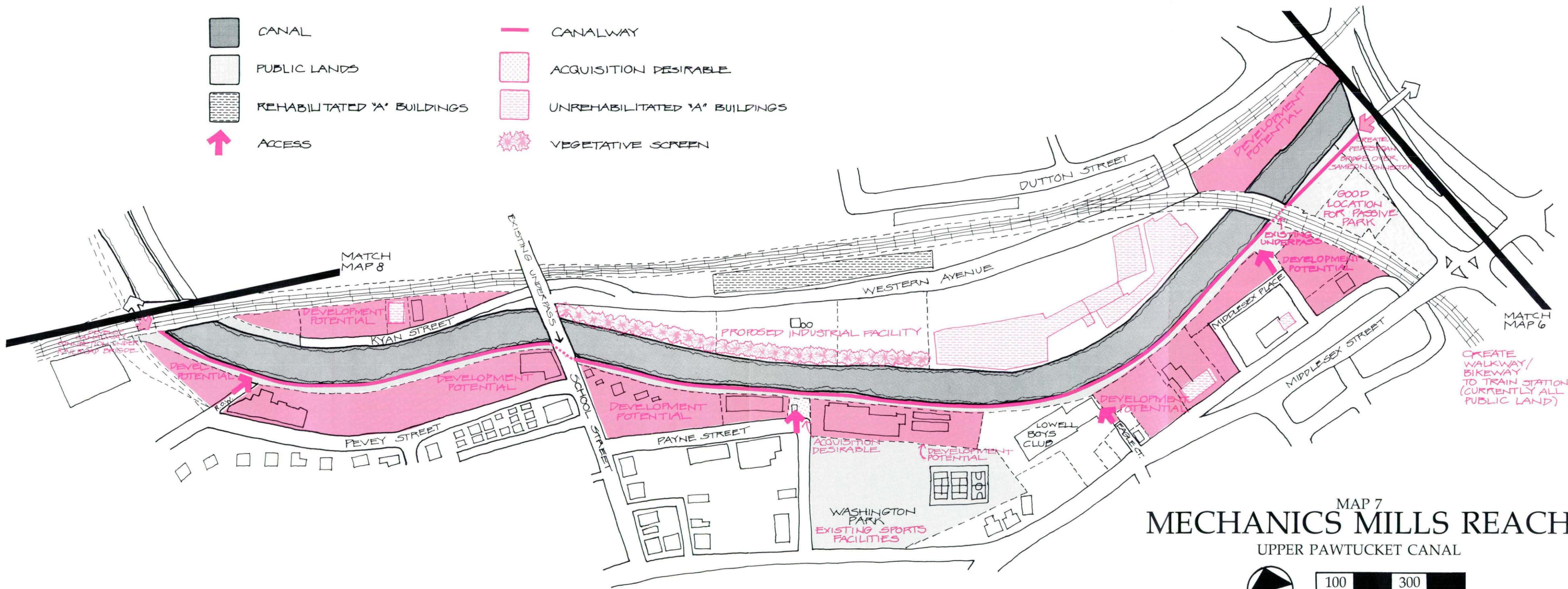
-  CANAL
-  PUBLIC LANDS
-  REHABILITATED CANALFRONT 'A' BUILDINGS
-  INTERPRETIVE SITE
-  CANALWAY
-  ACCESS
-  UNREHABILITATED CANALFRONT 'A' BUILDINGS
-  VEGETATIVE SCREEN



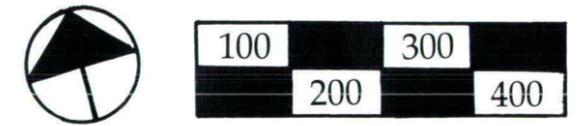
MAP 6
SWAMP LOCKS
 PAWTUCKET, HAMILTON, MERRIMACK CANALS

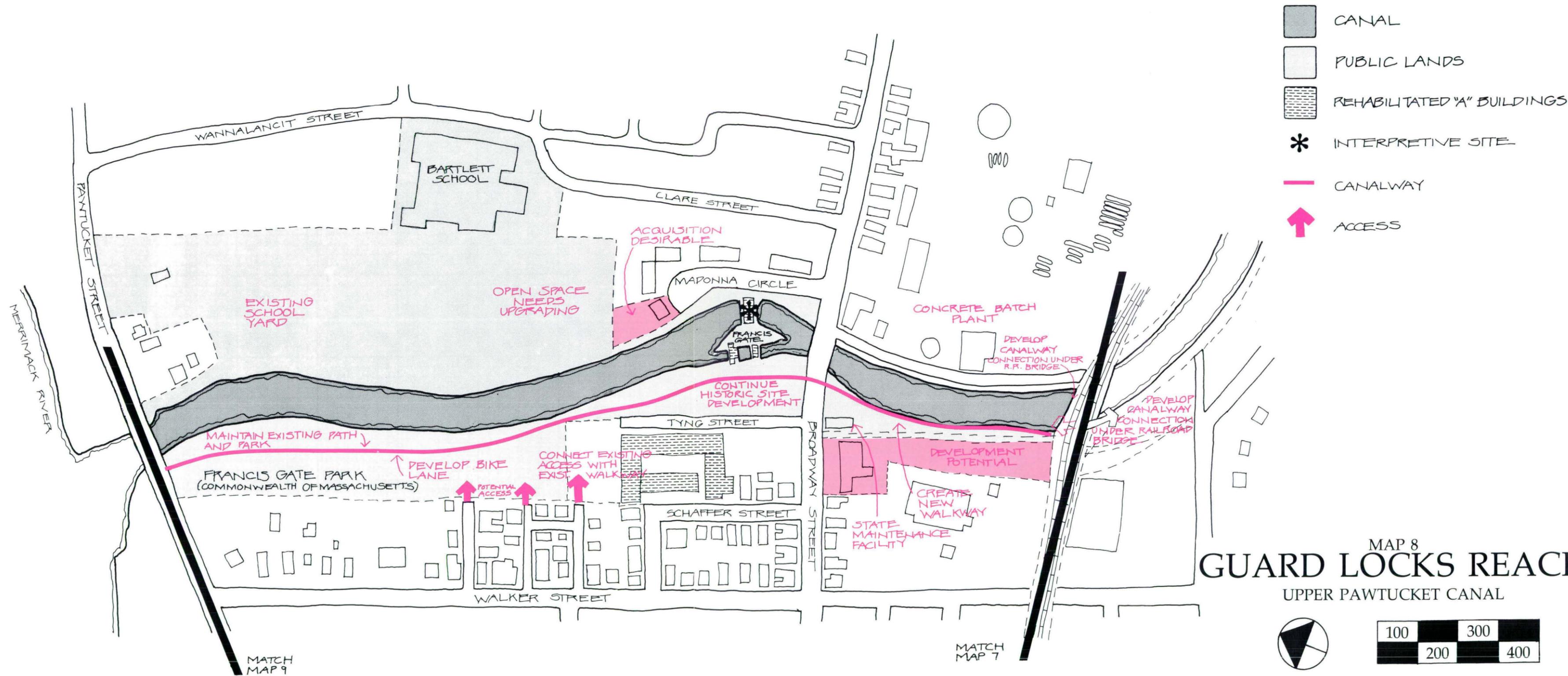


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-  PUBLIC LANDS
-  REHABILITATED 'A' BUILDINGS
-  ACCESS
-  CANALWAY
-  ACQUISITION DESIRABLE
-  UNREHABILITATED 'A' BUILDINGS
-  VEGETATIVE SCREEN



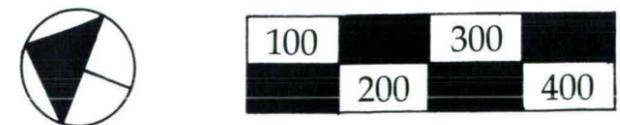
MAP 7
MECHANICS MILLS REACH
 UPPER PAWTUCKET CANAL





-  CANAL
-  PUBLIC LANDS
-  REHABILITATED 'A' BUILDINGS
-  INTERPRETIVE SITE
-  CANALWAY
-  ACCESS

MAP 8
GUARD LOCKS REACH
 UPPER PAWTUCKET CANAL



MATCH MAP 9

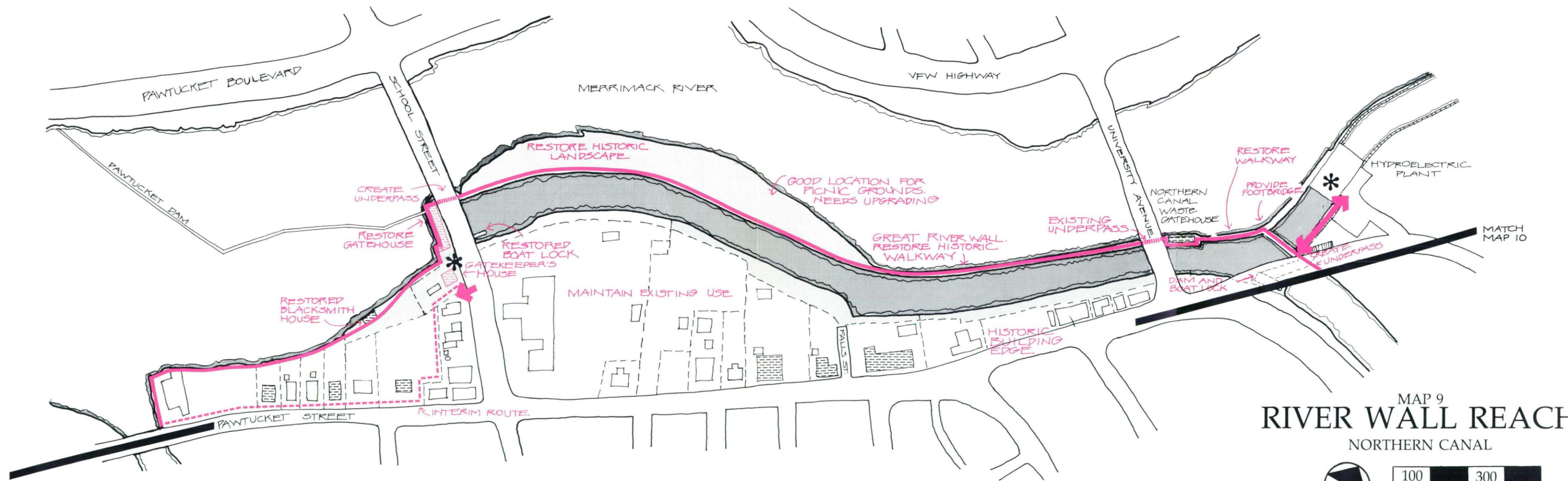
MATCH MAP 7

 CANAL
 PUBLIC LANDS

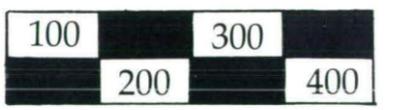
 REHABILITATED CANALFRONT 'A' BUILDINGS
 INTERPRETIVE SITE

 CANALWAY
 UNREHABILITATED CANALFRONT 'A' BUILDINGS

 ACCESS



MAP 9
RIVER WALL REACH
 NORTHERN CANAL



MATCH MAP 8

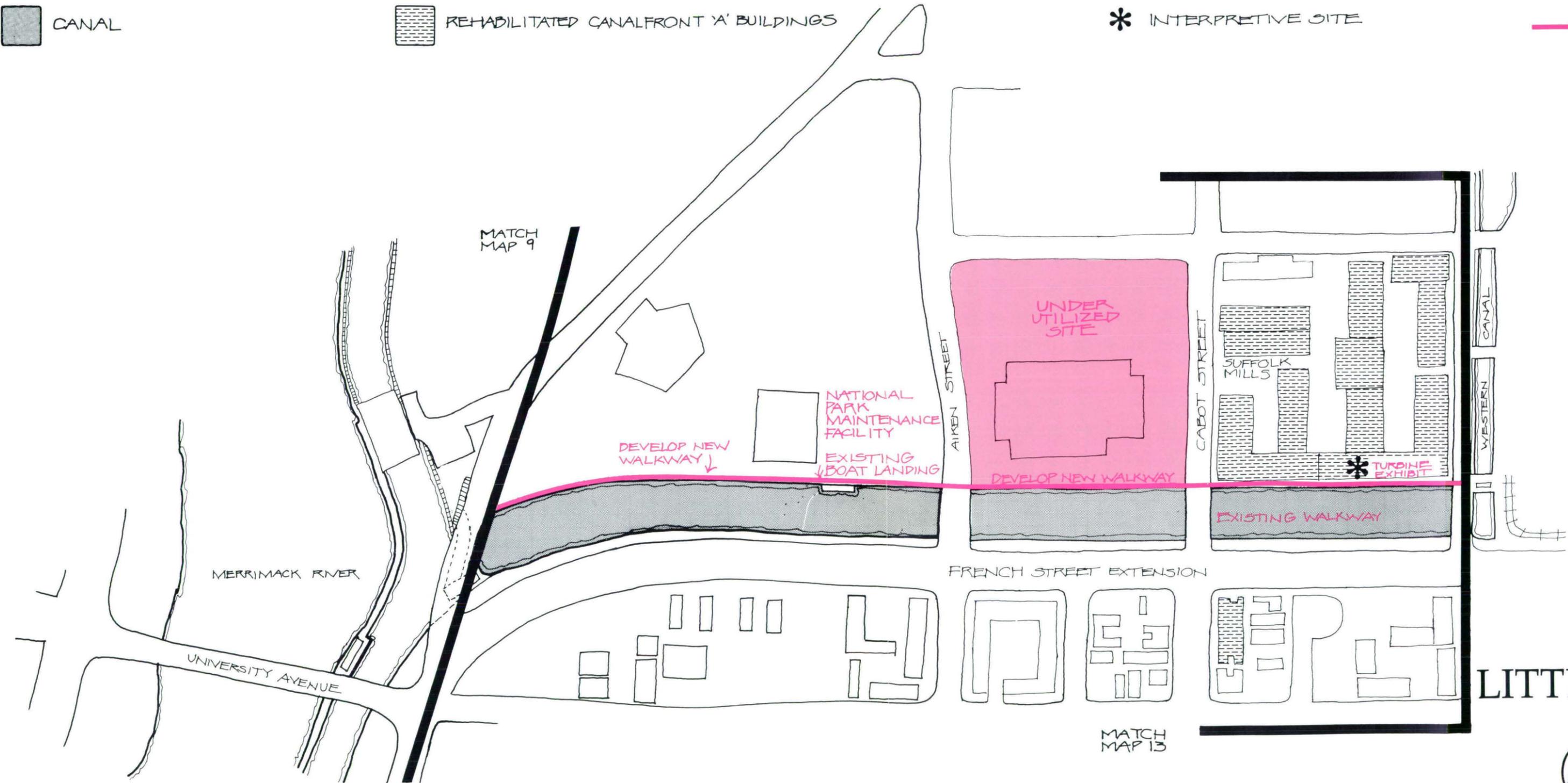
MATCH MAP 10

CANAL

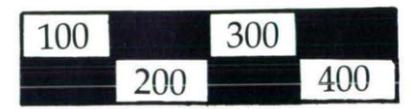
REHABILITATED CANALFRONT 'A' BUILDINGS

* INTERPRETIVE SITE

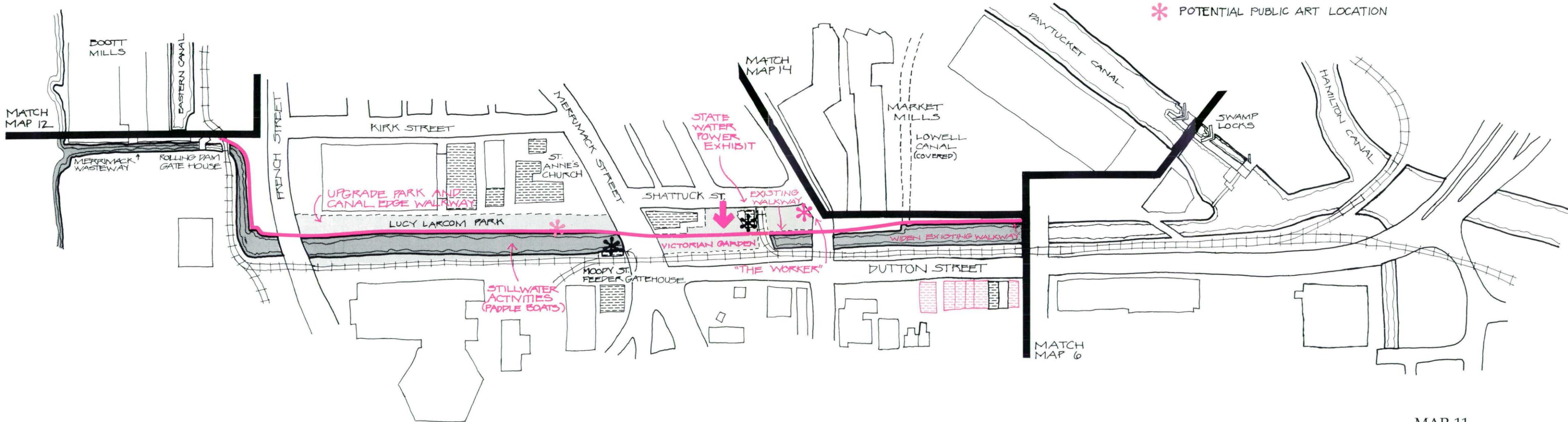
CANALWAY



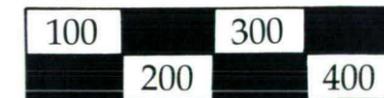
MAP 10
LITTLE CANADA REACH
 NORTHERN CANAL



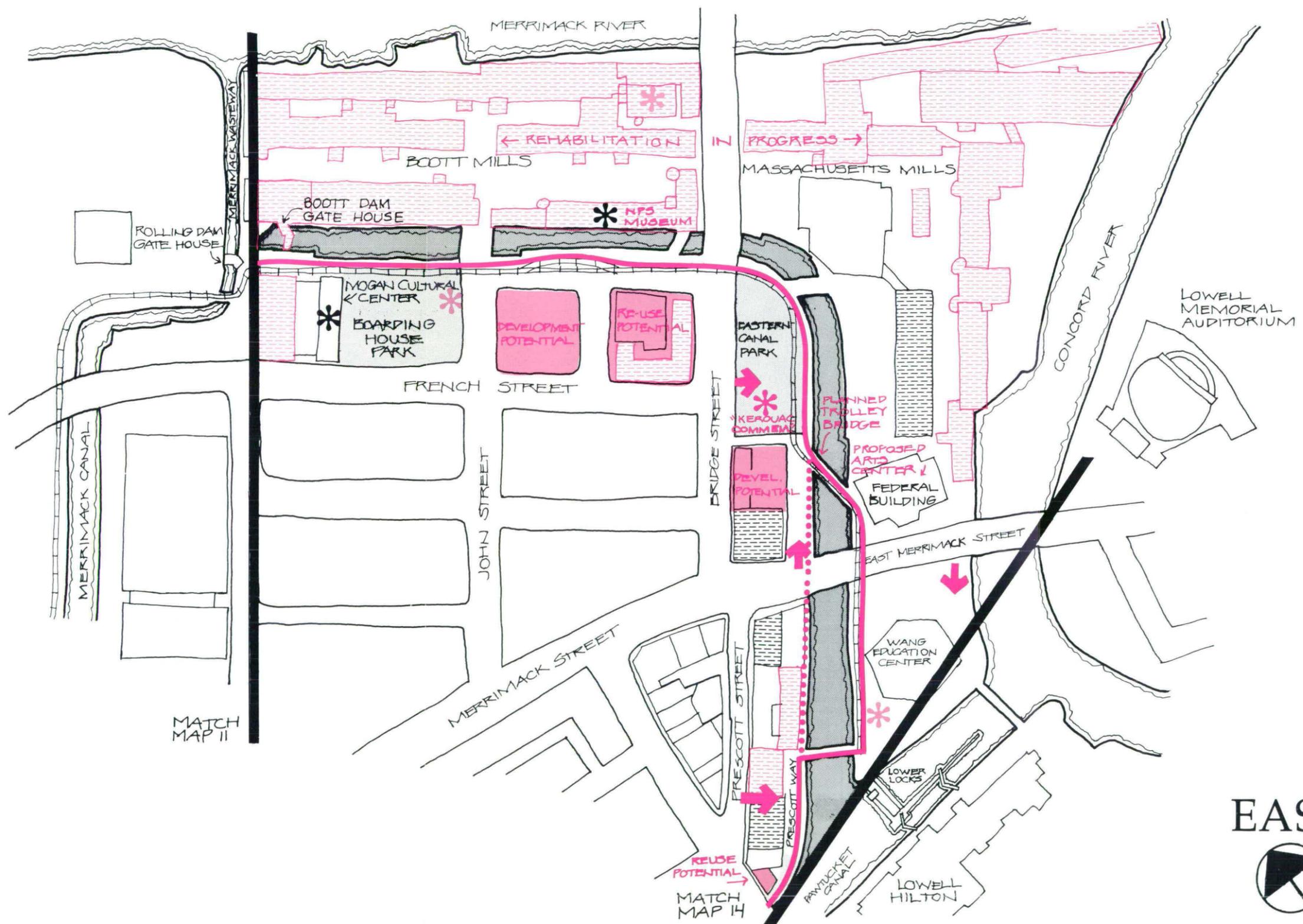
- CANAL
- PUBLIC LANDS
- REHABILITATED CANALFRONT 'A' BUILDINGS
- UNREHABILITATED CANALFRONT 'A' BUILDINGS
- ACCESS
- CANALWAY
- * PUBLIC ART
- * POTENTIAL PUBLIC ART LOCATION



MAP 11
MERRIMACK CANAL

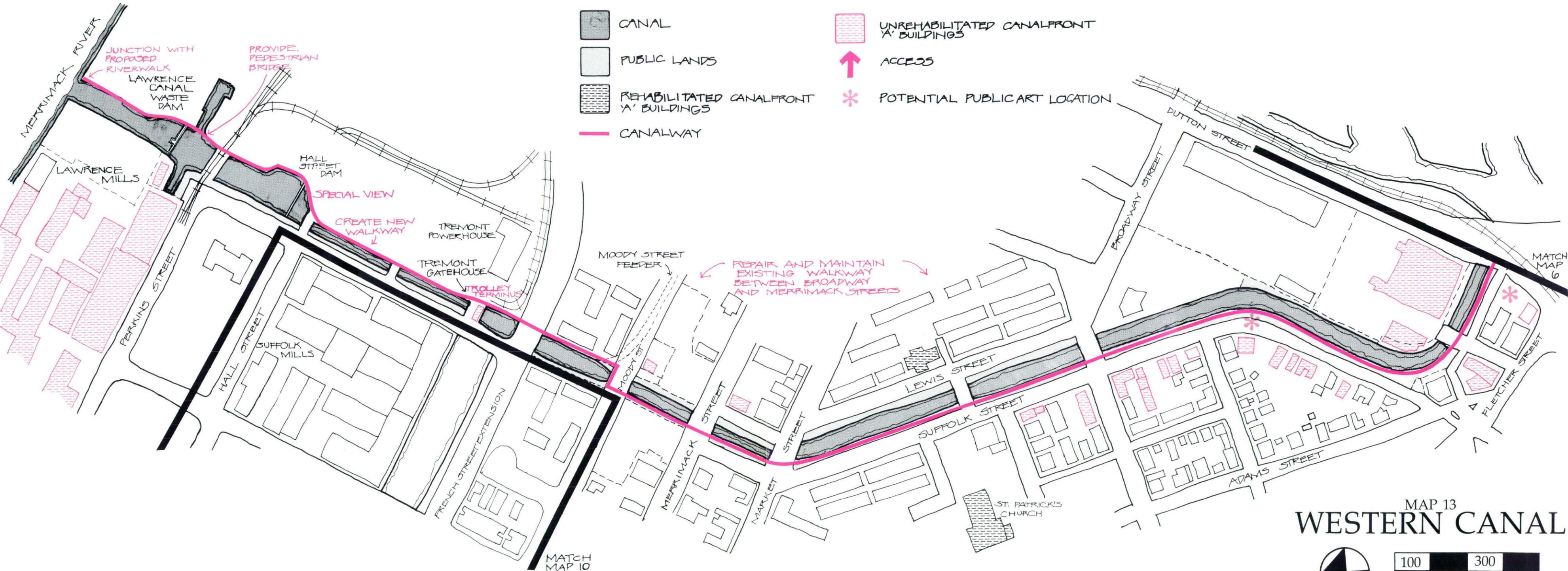


-  CANAL
-  PUBLIC LANDS
-  REHABILITATED CANALFRONT 'A' BUILDINGS
-  INTERPRETIVE SITE
-  CANALWAY
-  POTENTIAL CANALWAY
-  ACCESS
-  UNREHABILITATED CANALFRONT 'A' BUILDINGS
-  PUBLIC ART
-  POTENTIAL PUBLIC ART LOCATION



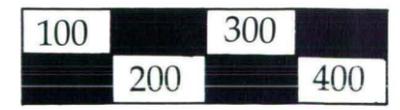
MAP 12
EASTERN CANAL

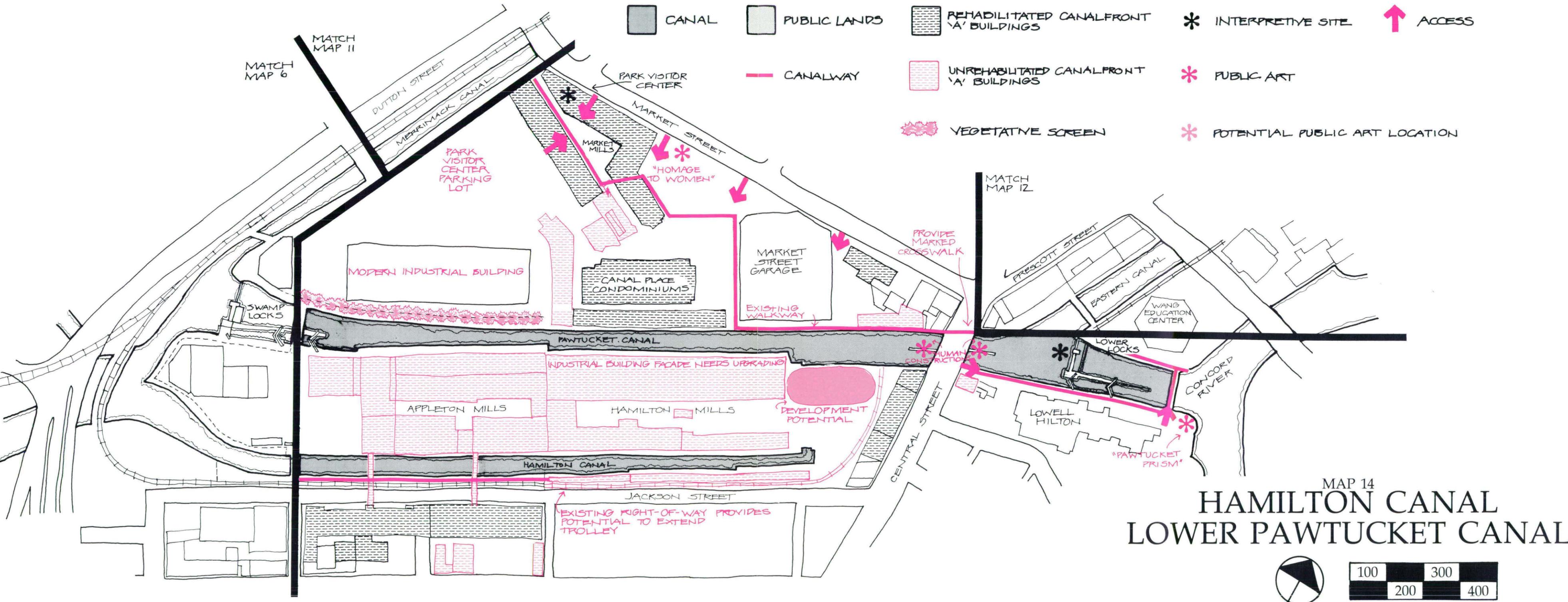




-  CANAL
-  PUBLIC LANDS
-  REHABILITATED CANALFRONT 'A' BUILDINGS
-  UNREHABILITATED CANALFRONT 'A' BUILDINGS
-  ACCESS
-  POTENTIAL PUBLIC ART LOCATION
-  CANALWAY

MAP 13
WESTERN CANAL





MAP 14
**HAMILTON CANAL
 LOWER PAWTUCKET CANAL**

